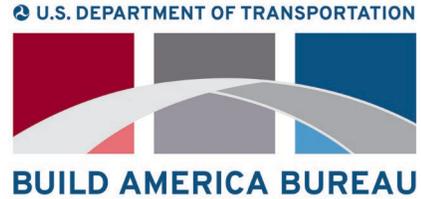




U.S. Department
of Transportation



Public-Private Partnership (P3) Procurement: A Guide for Public Owners

March 2019



U.S. Department
of Transportation

**Federal Highway
Administration**



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**Federal Transit
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Acronyms and Abbreviations

ADA	Americans with Disabilities Act
ADOT	Arizona Department of Transportation
AFC	alternative financial concept
APM	automated people mover
ATC	alternative technical concept
BAFO	best and final offer
BPPM	Best Practices Procurement Manual
BPW	Board of Public Works
BRT	Bus Rapid Transit
BUILD	Better Utilizing Investments to Leverage Development Transportation Discretionary Grants program
CCI	Construction Cost Index
CDOT	Colorado Department of Transportation
CE	Categorical Exclusion
CFR	Code of Federal Regulations
CHPE	Colorado High Performance Transit Enterprise
CIG	Capital Investment Grants
COI	Conflict of Interest
CONRAC	Consolidated Rent-a-Car
DBB	design-bid-build
DB	design-build
DBE	Disadvantaged Business Enterprise
DBF	design-build-finance
DBFM	design-build-finance-maintain
DBFOM	design-build-finance-operate-maintain
DBM	design-build-maintain
DEIS	Draft Environmental Impact Statement
DOT	department of transportation
EA/FONSI	Environmental Assessment and Finding of No Significant Impact
EDMS	Electronic Document Management System
EIS	Environmental Impact Statement
EMI	Electromagnetic Interface
ENR	Engineering News Record
ESRC	Evaluation and Selection Recommendation Committee
ESWA	Early System Work Agreements
FAR	Federal Acquisition Regulation
FAST Act	Fixing America's Surface Transportation Act



FASTER	Funding Advancement for Surface Transportation and Economic Recovery Act
FDOT	Florida Department of Transportation
FEE	functionality evaluation earthquake
FFGA	Full Funding Grant Agreement
FHWA	Federal Highway Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HASP	Health and safety plan
HOT	high-occupancy toll
HOV	high-occupancy vehicle
HPTE	High-Performance Transportation Enterprise
IFB	invitation for bids
INFRA	Infrastructure For Rebuilding America (Nationally Significant Freight and Highway Projects program)
ITP	instructions to proposers
ITS	Intelligent Transport System
LAX	Los Angeles International Airport
LLC	limited liability company
LRV	light rail vehicle
MDOT	Maryland Department of Transportation
MAP-21	Moving Ahead for Progress in the 21st Century Act
MARC	Maryland Area Regional Commuter
MPO	Metropolitan Planning Organization
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NPRM	Notice of Proposed Rulemaking
NTE	North Tarrant Express
NTTA	North Texas Tollway Authority
OCI	organizational conflict of interest
OIPD	Office of Innovative Program Delivery (FHWA)
OMPD	Office of Major Project Development (CDOT)
ORT	open road toll
O&M	operation and maintenance
P3	public-private partnership
PAB	private activity bond
PD	project development (phase)
PDA	pre-development agreement
PennDOT	Pennsylvania Department of Transportation
PIPP	Private Investment Project Procedures
PLTP	Purple Line Transit Partners
POMT	Port of Miami Tunnel
RFI	request for information



RFP	request for proposal
RFQ	request for qualifications
ROD	Record of Decision
ROW	right-of-way
RSA	revenue service availability
RRIF	Railroad Rehabilitation and Improvement Financing
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SBA	Small Business Administration
SEE	safety evaluation earthquake
SEP	Special Experimental Project
SHRP2	Second Strategic Highway Research Program
SOQ	statement of qualifications
SPE	special purpose entity (also known as special purpose vehicle (SPV))
SSGA	Small Starts Grant Agreement
STIP	Statewide Transportation Improvement Program
SUE	subsurface utility engineering
SWaM	small, minority, and women-owned
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century
TIP	Transportation Improvement Program
TIFIA	Transportation Infrastructure Finance and Innovation Act
TxDOT	Texas Department of Transportation
U.S.C.	United States Code
U.S. DOT	United States Department of Transportation
VDOT	Virginia Department of Transportation
VfM	Value for Money



1. Introduction

1.1. Guide Purpose and Background

This Public-Private Partnership Procurement Guide (Guidebook) has been developed in coordination with the U.S. Department of Transportation (U.S. DOT) Build America Bureau, the Federal Transit Administration (FTA), and the Federal Highway Administration (FHWA) to provide advanced guidance on procedures, issues, and considerations involved in public-private partnership (P3) procurement of surface transportation projects, with a focus on highway and transit investments. This Guidebook is part of the P3 Toolkit that consists of P3 guidance documents and tools to assist in educating Federal, State, and local policy makers, legislative and executive staff, and transportation professionals. The P3 Toolkit comprises the base of a broader P3 capacity-building program, which includes a curriculum of courses and webinars. The P3 Toolkit addresses four key phases in P3 implementation, as listed below:

- 1) P3 legislation and policy;
- 2) P3 feasibility analysis and project development;
- 3) P3 procurement; and
- 4) P3 monitoring and oversight.

Table 1 shows the core components of the FHWA P3 Toolkit:

Table 1. FHWA P3 Toolkit Core Components

Core Components of the P3 Toolkit	Description
Fact Sheets	<ul style="list-style-type: none"> ▶ FHWA P3 Toolkit ▶ Risk Valuation & Allocation ▶ Value for Money Analysis ▶ Financial Structuring ▶ Analytical Studies ▶ Conducting Procurements ▶ Monitoring & Oversight
Primers	<ul style="list-style-type: none"> ▶ Public-Private Concessions for Highway Projects ▶ Establishing a P3 Program ▶ Financial Structuring & Assessment ▶ Risk Assessment ▶ Value for Money Assessment
Guidebooks	<ul style="list-style-type: none"> ▶ Risk Assessment ▶ Value for Money Assessment ▶ P3 Project Financing ▶ P3 Procurement (this document) ▶ Toll Concession Contract Guide ▶ Draft Availability Payment Contract Guide ▶ Benefit-Cost Analysis Framework to Compare P3 and Conventional Delivery
Analytical Tools	<ul style="list-style-type: none"> ▶ P3-SCREEN ▶ P3-VALUE 2.1 <ul style="list-style-type: none"> ○ Excel Spreadsheet Tool ○ User & Concept Guide ○ Quick Start Guide ○ FAQs



This Guidebook is the first to address all aspects related to P3 procurements for highway and other transportation-related assets and investments. It may be used as a stand-alone reference or in conjunction with other publications and analytical tools in the FHWA P3 Toolkit.

The target audience for this Guidebook is FHWA and FTA staff as well as transportation staff at the State departments of transportation (DOTs), metropolitan planning organizations (MPOs), and other Federal, State, and local agencies that are involved with or considering P3 procurement for a transportation project. The objective of this Guidebook is to provide advanced guidance for the sequential development of a P3 project from the pre-procurement phase through financial close. While this Guidebook describes the overall process for development of a P3 project from beginning to end, it is also intended to be a resource for particular topics relevant to P3 feasibility analysis and project development that can be reviewed on a section by section basis. Consequently, some concepts may be addressed in multiple sections. For introductory guidance refer to the Fact Sheet and other publications on FHWA's P3 Toolkit website.¹ Refer to Appendix A for definitions of certain terms used in this Guidebook. This Guidebook is not legally binding in its own right and will not be relied upon by FHWA or FTA as a separate basis for affirmative enforcement action or other administrative penalty. Conformity with the Guidebook is voluntary only, and nonconformity will not affect rights and obligations under existing statutes and regulations.

This Guidebook highlights successful practices and lessons learned through the lens of real-world P3 procurements.

1.2. What Are Public-Private-Partnership Agreements?

Governmental agencies responsible for developing, operating, and/or maintaining transportation facilities frequently call on the private sector to assist in achieving the agencies' goals. The term "P3" may be used to describe various types of agreements between a public and private entity. For purposes of this Guidebook, a P3 procurement is defined as *procurement of a long-term contract for multiple elements that may include development (design and construction), operation and/or maintenance of a facility that involves a component of private financing*. In the context of infrastructure projects, P3s can be used to procure new-build facilities, including developing new transportation assets; or the upgrading or expanding an existing facility. These may be structured as a design-build-finance (DBF), design-build-finance-maintain (DBFM), design-build-finance-operate-maintain (DBFOM), or any other delivery method that combines design, construction, operations, or maintenance functions with a private finance component. A P3 concession can also be used to lease existing publicly financed, revenue-generating facilities to private sector investor operators for a specified period of time. During this time, the lessee has the right to collect revenues such as tolls on the facility in return for bearing operations and maintenance responsibilities and in select instances receive a lump-sum or periodic payment from the public owner.

One of the primary motivations for a P3 procurement is the ability to use private capital to implement much-needed projects in the absence of—or delayed availability of—adequate public funding and/or to advance future project revenues. While public funding may still be part of the plan of finance for the project—for example, in the United States, most highway P3 projects involve some level of public funding support—private equity and financing serve as critical sources to bridge gaps in available funding, enabling a project to be implemented and the resulting benefits to be realized sooner rather than later.

A P3 contract also provides a mechanism to allocate risks to the entity best suited to manage and mitigate them over an extended term that may include a post-construction operations and maintenance (O&M) period. Risk transfer is effected through contractual arrangements for the P3. A P3 engagement compels the agency to consider, evaluate, and seek industry feedback on major risks associated with the project, in

¹ Federal Highway Administration, Center for Innovative Finance Support, "FHWA P3 Toolkit" web page. Available at: <https://www.fhwa.dot.gov/ipd/p3/toolkit/>.



greater detail than in the case of a traditional procurement. Once risks are recognized, public agencies may conclude that the private sector, based on its specialized expertise, is better able to manage and mitigate certain project risks, or the agencies may wish to transfer risk as a matter of policy.² The concessionaire, in turn, may be willing to take on additional risk in exchange for greater reward combined with greater control over construction means and methods and responsibility for operating and/or maintaining the project for an extended term. Projects that are inherently difficult and complex, atypical for the agency, or that require a skill set outside of the agency's core mission, are often candidates for P3 project delivery. Projects with these characteristics tend to be the riskiest and most challenging to deliver on-time and on-budget if design-bid-build (DBB) delivery is used. Some P3 projects involve the risk that actual project revenues, such as tolls, may fall short of the forecasted amount. If the contract is not structured correctly for a project with a high level of risk, the public entity will be exposed to unnecessary risk and costs.

Special purpose entities (SPEs) entering into P3 agreements are typically formed by multiple firms that bring varied and extensive experience in managing particular types of projects and specific stages of project development from the United States and, often, around the world. It is also critical for the SPE's team to include members with the local knowledge and understanding necessary for successful project delivery. In contrast, public agencies may have limited experience with delivery of certain types of projects (i.e. large, complex, and/or fast-paced projects that need financing) or be subject to personnel constraints affecting their ability to effectively oversee and manage high-cost projects outside of the norm for the agency's program. Therefore, it is prudent for the public sector to retain advisors with P3 transaction experience in the legal, financial, technical (life cycle), insurance, and other areas that are critical to a successful P3 arrangement. This is especially true for large or complex projects. Use of a P3 approach enables public agencies to fill both the technical knowledge gap and the funding gap through private involvement. Private sector participation can also help spur technical and management innovation, which is critical for complex projects.

1.3. Project Examples

This Guidebook includes references to various projects to illustrate procurement concepts, successful practices, and lessons learned. Four of these procurements are described in significant detail in Appendix B. Details on other procurements can be found on the FHWA and Build America Bureau websites.³ The projects described in Appendix B were selected to represent a broad spectrum of experience concerning different concepts discussed in the Guidebook. Table 2 provides a summary of key aspects of the example procurements detailed in Appendix B.

Table 2. Project Examples Detailed in Appendix B

Example Project	Aspects					
	Mode	Type of Development	Project Concept	Development Stage at Procurement	Selection Process	Payment Mechanism
I-495 Capital Beltway High-Occupancy Toll Lanes, Virginia	Highway	Enhancements to existing facility	Defined based on unsolicited private sector proposal	Pre-development agreement	Formulaic approach	Revenue risk (toll concession)
Purple Line Light Rail Transit	Transit	New-build	Initiated by public sector	Well-defined project	Tradeoff approach	Availability payment

² U.S. Department of Transportation, *Guidebook on Financing of Highway Public-Private Partnership Projects*, FHWA-HIN-17-003 (Washington, DC: 2016). Available for download at: https://www.fhwa.dot.gov/ipd/pdfs/p3/p3-toolkit_p3_project_financing_guidebook_122816.pdf.

³ <https://www.fhwa.dot.gov/ipd/p3/> <https://www.fhwa.dot.gov/ipd/p3/> and <https://www.transportation.gov/buildamerica>.



Example Project	Aspects					
	Mode	Type of Development	Project Concept	Development Stage at Procurement	Selection Process	Payment Mechanism
System, Maryland						
North Tarrant Express (NTE) Project, Texas	Highway	Reconstruction and enhancement of existing facility	Initiated by public sector	Well-defined project (initial segments); Pre-development agreement (later segments)	Formulaic approach	Revenue risk (toll concession)
U.S. 36, Colorado	Highway	Enhancements to existing facility	Initiated by public sector	Well-defined project	Formulaic approach	Revenue risk (toll concession)

1.3.1. Virginia Department of Transportation I-495 Capital Beltway High-Occupancy Toll Lanes, Virginia

The procurement of the \$2 billion I-495 Capital Beltway High-Occupancy Toll (HOT) Lanes project started with an unsolicited proposal. In June 2002, Fluor Daniel (now Fluor Enterprises), a private engineering, procurement, construction, maintenance, and project management company based in Irving, Texas, submitted an unsolicited proposal to Virginia Department of Transportation (VDOT) to design, build, finance, operate and maintain HOT lanes on the Capital Beltway on a P3 basis. After issuing a request for competing proposals (and receiving none), VDOT negotiated the P3 agreement with Fluor. The project ultimately expanded and improved a 14-mile section of the Capital Beltway (I-495) in Fairfax County, Virginia. As well as adding four new HOT lanes (two in each direction) and reconstructing the existing general-purpose lanes, the project replaced over 50 bridges and instituted vehicle occupancy requirements on the managed lanes. Motorists that declare high occupancy vehicle (HOV) status with their transponder are required to have three or more people in the vehicle.

Initially, the plan was for Fluor to provide 100 percent of the financing. However, Fluor eventually partnered with Transurban to improve its position relative to toll road operation and its ability to finance the project. The I-495 procurement presents an example of how market conditions affect P3 procurements. The project faced significant challenges to its financing as a result of the global financial crisis.

1.3.2. Maryland Purple Line Light Rail Transit System

The Purple Line in Maryland is a new light rail transit system that will run 16.2 miles in suburban Washington, D.C., between Bethesda in Montgomery County and New Carrollton in Prince George's County. The project is funded in part with a Capital Investment Grant (CIG) grant from the Federal Transit Administration (FTA). The project will connect major activity centers located inside the heavily congested Capital Beltway and will provide direct connections to four branches of the Washington Metropolitan Area Transit Authority (WMATA) Metrorail system, as well as all three Maryland Area Regional Commuter (MARC) rail lines (linking Washington, Baltimore, and Frederick, Maryland) and Amtrak's Northeast Corridor.

The Maryland Department of Transportation (MDOT) and Maryland Transit Administration (MTA) undertook a joint solicitation for an availability payment concession for the project, with a 30-year operating period. MDOT/MTA used a tradeoff process in making the selection determination and awarded the concession agreement in early 2016. The project financing closed in mid-2016, benefiting significantly from low interest rates due to favorable market conditions. The FTA Full Funding Grant Agreement (FFGA) was executed in 2017.



1.3.3. *Texas Department of Transportation North Tarrant Express Project, Fort Worth, Texas*

The Texas Department of Transportation (TxDOT) North Tarrant Express (NTE) project includes the reconstruction, widening, and addition of tolled managed lanes along approximately 31 miles of roadway north and east of Fort Worth, Texas. TxDOT issued a procurement for a 52-year toll concession using a formulaic approach for source selection. TxDOT then awarded a toll concession agreement for the first two segments (Segment 1 and Segment 2W) and a pre-development agreement (PDA) for the remaining segments. The agency and the concessionaire have since entered into a separate facility agreement for an additional two segments and are currently negotiating an agreement for a third segment. Under State law, the concession for all of the additional segments will terminate 52 years after execution of the Segment 1 and 2W agreement.

1.3.4. *Colorado High Performance Transportation Enterprise, U.S. 36*

Phase 2 of the U.S. 36 project completes the reconstruction of four general purpose lanes and, when combined with Phase 1 of the U.S. 36 project, adds one HOT lane in each direction between Denver and Boulder. Although the project was controversial, the Governor implemented public transparency policies that ensured a more detailed public involvement process for future P3 projects. This project shows how the P3 structure can be used to facilitate transit approaches including bus rapid transit (BRT) service sharing managed lanes with specific BRT performance requirements. It also illustrates that consolidated responsibilities can help deliver projects within a fixed-cost budget and pre-set time frame, in spite of the major flooding that affected Colorado in September 2013.

1.3.5. *Other Referenced Projects*

Other projects referenced in this Guidebook are summarized in Table 3.



Table 3. List of Additional Projects Referenced in this Guidebook.

Agency	Project	Description
Arizona Department of Transportation	South Mountain Freeway	Highway DBM project
California Department of Transportation	Presidio Parkway	Availability payment roadway
	SR-91	Express lanes toll concession
City of Los Angeles (Los Angeles World Airports)	Automated People Mover and Consolidated Rental Car Facility	Availability payment
Florida Department of Transportation	Port of Miami Tunnel	Availability payment tunnel
	I-595	Availability payment express lanes
	I-4 Ultimate	Availability payment express lanes
Indiana Finance Authority	East End Crossing	Availability payment toll bridge
New Jersey Transit Corporation	Hudson-Bergen light rail transit system	DBOM transit system (finance component was removed by change order)
Ohio Department of Transportation	Portsmouth Bypass	Availability payment roadway
Pennsylvania Department of Transportation	Rapid Bridge Replacement	Multiple bridge replacements with availability payments
Regional Transportation District (Denver)	Eagle	Commuter rail availability payment P3
Texas Department of Transportation	I-635 (LBJ TEXpress Lanes)	Express lanes toll concession
	SH 288	Express lanes toll concession
	Grand Parkway	Toll road DB project
Virginia Department of Transportation	Transform 66 Outside the Beltway	Express lanes toll concession
	Elizabeth River Tunnels	Connector toll concession

Descriptions of the above projects can be found on U.S. DOT websites.⁴

1.4. Structure of the P3 Procurement Guidebook

This Guidebook walks through the significant stages of a P3 procurement from initiation through financial close (see Figure 1). While recent and ongoing examples provide valuable lessons learned, it is critical to understand that unique features of individual P3 projects require a customized procurement process for each project. Agencies need to be flexible and creative throughout the procurement process in order to realize the greatest value from it.

⁴ See <https://www.transportation.gov/tifia/projects-financed> and https://www.fhwa.dot.gov/ipd/project_profiles/.

Note that the Los Angeles World Airports projects are not yet listed on U.S. DOT websites at the time of writing. Information about those projects is available at: <https://www.lawa.org/en/connectinglax/automated-people-mover> and <https://www.lawa.org/en/connectinglax/consolidated-rent-a-car-facility>.



Figure 1. Procurement Phases



Chapter 2 provides an overview of the P3 procurement process, including a comparison to traditional contractor selection methods. This chapter describes, at a high-level, the tasks that a P3 procurement will typically include (as compared with traditional procurements), includes a table summarizing successful practices, identifies certain legal issues to be considered, and provides information regarding Federal requirements affecting P3s. Procurements initiated based on unsolicited proposals can follow a significantly different process from those initiated by the public entity and are discussed separately in Section 8.5.

Chapter 3 discusses the activities, considerations, and successful practices for the pre-procurement period. The activities performed at this stage can help create a strong business case for use of P3s and set the stage for the procurement activities and engagement with multiple stakeholders in the next phase.

Chapter 4 offers guidance on activities and considerations relevant to development of the procurement package through the request for qualifications (RFQ) phase, which is typically the first step of a two-step procurement process, resulting in selection of a “shortlist” of firms that will be asked to submit proposals.

Chapter 5 offers guidance on activities and considerations relevant to the second step in the procurement process—issuance of a Request for Proposals (RFP) and selection of the concessionaire based on proposals from the shortlisted firms. This chapter focuses on development of the RFP, including drafting the contract documents, the industry review process and other activities through issuance of the RFP.

Chapter 6 provides further guidance regarding the RFP step in the procurement process, presenting the activities and successful practices during the period between issuance of the solicitation package and the selection determination, including the accommodation of alternative technical concepts (ATCs) and alternative financial concepts (AFCs) in the process.

Chapter 7 gives an overview of activities from selection to financial close.

Chapter 8 provides information about various additional issues relevant to certain P3 projects, including issues related to managing unsolicited proposals.



2. Overview of Procurement Processes and Federal Assistance Issues Relevant to Public-Private Partnerships

2.1. Comparison of P3 and Traditional Project Delivery Procurement Processes

A public agency (agency) moving from traditional project delivery methods to using a P3 approach may find the need to make a number of substantive changes to its standard solicitation process to account for the complexity of a P3 procurement. The types of changes required may vary depending on the agency's legal authority for P3 procurements.

For P3 procurements, the agency should focus on development of performance-based contract requirements suitable to form the basis for a long-term relationship between the public and private sectors. Performance-based requirements are discussed in Section 5.2.4. Recognizing the inherent incentives associated with taking on responsibility for long-term services such as operations and maintenance and assuming performance risk during the contract term, the concessionaire is given greater flexibility to determine its approach to the design and construction of the project.

In contrast, for design-bid-build (DBB) procurements, the agency asks for bids based on a design developed by the agency (or a design consultant) and a standard form contract, with the agency responsible for ensuring that the project design meets the agency's requirements and for overseeing the construction process to ensure construction quality. Design-build (DB) delivery is similar to DBB in that both involve a relatively short-term relationship between the public and private sectors. In the DBB model, the agency retains a significant degree of control over the construction process, while the DB model involves transfer of certain risks and significant control to the design-build contractor. However, for both DBB and DB projects, the public sector retains complete control over post-construction operations and maintenance, and, most critically, the responsibility for funding or obtaining the project financing necessary to support design, construction, and operations and maintenance (O&M) of the project. In a P3 transaction, the concessionaire commits to a fixed public funds amount, date-certain delivery, and, for availability payment transactions, only receives compensation from the agency if the concessionaire meets the contractual performance obligations during each phase (for revenue risk deals, the concessionaire's compensation depends on revenues received). Only in very few circumstances can the concessionaire seek additional compensation, so each decision on the approach to the project should be carefully considered and monitored throughout the project life cycle. The concessionaire's decision-making will therefore be geared to minimize the occurrence of unintended consequences that may lead to future performance failures that could jeopardize its revenue stream.

A typical P3 project procurement includes (at a minimum) the following tasks differing in scope and nature from parallel activities for DBB and DB projects:

- ▶ *Determining the scope of work:* In addition to defining the project goals and scope, it is necessary to determine the respective roles to be played by the private sector and the public agency with respect to project elements such as financing, permitting, property acquisition, design, construction, operations, and maintenance of the P3 project. The scope of work for a P3 concessionaire is much broader than the scope of work for other delivery models and may encompass the whole life-cycle of a project.
- ▶ *Risk assessment, mitigation, and allocation:* Risk management for a P3 project differs significantly from other delivery models due to the increased complexity of the P3 approach as well as the concessionaire's greater ability to manage and mitigate risk than is the case for contractors in a traditional delivery method. In addition, each P3 project is unique, requiring detailed analysis relating to risk and making it



difficult to rely on programmatic documents to allocate risk. Risk allocation decisions often rely on the use of performance incentives as well as consideration of the concessionaire's responsibilities for project financing. Agencies planning to use a P3 approach should also consider measures they can implement during the pre-award period to mitigate post-award risk. Typically, these would include obtaining final survey and topographical reports, geotechnical reports, hydraulic reports, hazardous materials assessments, subsurface utility information, and right-of-way (ROW) information. The value that an agency receives for risk mitigation efforts during the period prior to award of the P3 contract means that such mitigation measures are among the agency's most cost-effective investments for the project.

- ▶ *Performance requirements:* Like DB projects, P3 projects primarily rely on performance specifications. However, unlike DB projects, most P3 projects include long-term operations and/or maintenance, and consequently P3 contracts should include performance requirements addressing long-term operations and maintenance. Contracts for toll concessions or other revenue risk projects often rely heavily on built-in performance incentives since the concessionaire bears the risk of lower revenues if the project must be shut down for repairs, as well as having to pay the cost of the repairs. Projects relying on payment of public funds during the operations period typically incorporate performance incentives in the form of deductions to fixed payments if the concessionaire fails to meet performance obligations under the contract.
- ▶ *Development of terms and conditions:* Agencies typically rely on standardized contract documents (general conditions, standard specifications, and special provisions) for DBB projects, and provide detailed design to define the project scope. Many agencies have also developed standard forms for DB contracts, thus reducing the level of effort required to produce procurement packages. For P3 procurements, the large number of variables associated with the P3 project requires a significant level of effort to produce the procurement package, including addressing issues relating to financing, risk allocation, performance requirements, and operations and maintenance over the extended term of the P3 agreement.
- ▶ *Selection criteria determination:* The process of selecting a DBB contractor is relatively simple, involving award to the lowest responsible bidder that has provided a responsive bid. For DB procurements, the selection criteria involve evaluation of technical proposals as well as price. P3 projects bring an additional level of complexity into the selection criteria and should account for the length of the agreement term as well as inclusion of new elements. Typically, the determination whether P3 proposers meet responsibility standards is made at the shortlisting phase and is subject to updated review at the proposal phase. Many agencies also include a responsiveness (or compliance) review as part of the proposal evaluation. As is the case for all procurements that involve selection on a basis other than low price, the procurement documents should include clear and well defined selection criteria and evaluation processes as well as relevant information regarding the process so that proposers understand the rules of engagement.
- ▶ *Selection and negotiation:* DBB procurements, by definition, result in award based on bids received, without negotiations. For DB procurements, many agencies reserve the right to use a competitive negotiation process, and some agencies engage in limited pre-award negotiations with the selected proposer. Although P3 procurements can be structured to fit within the equivalent of a low bid procurement process—an approach used in other countries, including Canada—agencies in the United States generally prefer using a best value selection process that permits them to consider factors such as the quality of the proposer's team, technical concepts, approach to financing, and management approach.⁵ Although the procurement documents often permit competitive negotiations to be used (a process that involves requests for proposal revisions, sometimes called best and final offers (BAFOs), that option is rarely exercised, as it lengthens an already lengthy procurement process and can add significantly to the costs incurred both by the agency and the proposers. It is more common for P3

⁵ Best value procurements are discussed in detail in Section 4.1 of this Guide. See also S. Scott et al., *NCHRP Report 561: Best-Value Procurement Methods for Highway Construction Projects* (Washington, DC: Transportation Research Board of the National Academies, 2006). Available at: <https://www.nap.edu/download/13982>.



projects to include a post-selection negotiation phase in the procurement due to the complexity of the project and the need to address issues that only become apparent after review of the proposals. To the extent possible, the agency should seek to address as many issues as possible regarding the project scope and requirements during the competitive pre-proposal period, thus avoiding the need for extensive pre-award negotiations and conforming to constraints on pre-award negotiations in Federal procurement integrity requirements, such as the FHWA Design-Build Rule.⁶

- ▶ *Financing:* Unlike DBB and DB procurements, P3 procurements involve additional considerations relating to private sector and government financing that are often new to transportation agency procurement personnel.
- ▶ *Contract administration:* The long-term nature of P3 projects requires a different approach to the contract administration process than is the case for DBB or DB projects, which have a much shorter term.

The nature of the P3 delivery method will also dictate use of certain provisions not commonly included in the agency's other contracts. For example, for P3 projects involving transfer of revenue risk, the agency should consider what limitations to include for setting toll rates or other user fees and include appropriate provisions in the contract to ensure the requirements are clear over the long term. For P3 projects involving payments to the concessionaire by the agency, the agreement should include performance requirements to ensure the project will achieve operational and policy objectives, specify processes to resolve performance failures, and provide sufficient incentives to assure compliance and performance throughout the term of the contract. Agency counsel should be consulted regarding the availability payment regime to ensure that provisions for deductions from payments are legally enforceable.

2.2. State and Local Laws Affecting Public-Private Partnerships

Analysis of State and local laws affecting use of a P3 approach is a key first step for an agency considering use of P3 as a tool for project delivery, especially if the agency has not previously used P3 delivery approaches, or if the particular project presents unique issues that the agency has not faced in the past. If an agency does not have explicit P3 authority, it must determine whether it has the ability to proceed with a P3 procurement under existing legislative authority. The agency should also consider whether existing laws (including case law as well as statutes, ordinances, and regulations) present issues for a P3 that could be resolved through the legislative process. Issues to consider in this legal analysis are provided in Table 4.

⁶ U.S. Government Publishing Office. 23 CFR part 636 - DESIGN-BUILD CONTRACTING. Available at: <https://www.gpo.gov/fdsys/granule/CFR-2011-title23-vol1/CFR-2011-title23-vol1-part636>.



Table 4. Aspects to Consider in Legal Analysis

Topics for Legal Consideration	Questions/ Issues
Procurement	Do existing laws allow practices such as a two-step (shortlisting followed by RFP) best value procurement, payment of stipends, confidential meetings with proposers, discussions and requests for revised proposals, and pre-award negotiations?
	Do existing laws impose restrictions affecting the agency's preferred approach to risk allocation?
	Do existing laws impose constraints on the structure of the concession that may affect project feasibility, for example: <ul style="list-style-type: none"> ▶ Requirements relating to appropriation of funds and limitations on multi-year contracts. ▶ Ability to accept performance and payment guarantees in forms other than 100% payment and performance bonds. ▶ Contractor licensing laws that are inconsistent with complex teaming structures. ▶ Open records laws. ▶ Privacy laws.
Right-of-way (ROW) acquisition	Requirements of State condemnation laws, including availability of "quick take" authority. Estimated timelines for property acquisition and capability to manage the acquisitions with the agency's existing resources. Agency's ability to pay for utility relocations without a title review to determine whether the utility owner has "prior rights" or has the obligation to relocate at its own expense.
Debt Limitations	Whether constitutional or statutory debt limitations apply to the transaction and, if so, how these may be addressed. Can an agency commit to payment of compensation on termination (rarely exercised but critical to proposers interested in the project and their lenders)
Dispute resolution procedures	Legal constraints and policies affecting use of alternative dispute resolution procedures.
Anti-indemnity laws	Legal constraints on indemnities affecting the transaction.
Other considerations	Effect on project of matters such as: <ul style="list-style-type: none"> ▶ Statutes of limitations (requiring a claim to be brought within a specified time after the cause of action arises). ▶ Statutes of repose (requiring a claim to be brought within a specified time after completion of the project). ▶ Other laws affecting project feasibility; for example, the possibility that a long-term concession might be considered a "possessory interest" subject to an ad valorem tax.

A number of the issues identified above are discussed in reports published by the National Cooperative Highway Research Program (NCHRP) and Transit Cooperative Research Program (TCRP), including:



- ▶ *NCHRP Report 561: Best-Value Procurement Methods for Highway Construction Projects* (hereafter referred to as the NCHRP Best Value Report) provides information regarding best value procurements and certain legal issues relating to such procurements.⁷
- ▶ A 2012 TCRP legal digest entitled “Legal Issues Involving Surety for Public Transportation Projects” examines various legal issues relating to surety bonds for complex projects.⁸
- ▶ A 2015 NCHRP legal digest entitled “Liability of Design-Builders for Design, Construction, and Acquisition Claims” discusses legal issues relating to right-of-way acquisition, utility relocations, indemnities, and statutes of limitations and repose.⁹

A number of States have adopted procurement legislation based on the American Bar Association’s Model Procurement Code, which allows agencies to use a competitive sealed proposal process for procurement of contracts.¹⁰ Although the Model Code allows competitive negotiations, it does not permit post-selection negotiations with a single proposer. Therefore, in Model Code States, an agency may have the authority to procure P3 contracts without the need for additional legislation.

2.3. P3 Procurement Successful Practices

A successful P3 procurement requires the agency to consider a number of issues that are different in scope or in scale from requirements on traditional procurements. This variation has an impact on roles and responsibilities as well as processes throughout the procurement process. Table 5 provides a summary of successful practices at each stage of the procurement process with a focus on practices unique to P3 procurements.

⁷ See S. Scott et al., *NCHRP Report 561* (TRB 2006).

⁸ Loulakis et al., *Transit Cooperative Research Program (TCRP) Legal Research Digest 40: Issues Involving Surety for Public Transportation Projects* (Washington, DC: Transportation Research Board of the National Academies, 2012). Available at: <https://www.nap.edu/download/22738>.

⁹ M. Loulakis et al., *NCHRP Legal Research Digest 68: Liability of Design-Builders for Design, Construction, and Acquisition Claims* (Washington, DC: Transportation Research Board of the National Academies, 2015). Available at: <https://www.nap.edu/download/22074>.

¹⁰ According to the American Bar Association website, 17 States have adopted the principles in the Model Procurement Code. See <http://apps.americanbar.org/dch/committee.cfm?com=PC500500>. Refer to the NCHRP Best Value Report identified in note 5 for additional discussion regarding the Model Code.



Table 5. Select P3 Procurement Successful Practices

P3 Procurement Phase	Successful Practice
Pre-procurement	Feasibility Analysis: The P3 feasibility analysis helps determine whether a project can or should be implemented as a P3 project and, if so, the type of P3 to use and the related contractual and risk arrangements for project implementation. As part of this analysis the agency develops the detailed scope, performance requirements, evaluation factors and financial model and performs initial risk assessment. Value for Money analysis is then used to support moving forward with the project.
	Selection of Advisors: Due to the unique and complex structure of a P3 project and the need to develop a contract that will be scrutinized by multiple entities, including private sector investors and lenders, it is very important for the agency to engage its technical, legal, and financial advisors early in the procurement process, and for those advisors to have relevant U.S. P3 project finance experience.
	Market Soundings /Request for Information: Many public agencies considering a P3 project will begin by advertising a request for information (RFI) to get input from a variety of interested parties both locally and nationally to assist in determining the best procurement approach for the project. In lieu of, or in addition to, an RFI, the agency will often set up informal market sounding meetings or phone calls with interested firms to obtain information that firms may be reluctant to share in written responses to an RFI.
	Federal Support: For projects utilizing Federal funding, grants and/or credit assistance programs such as the Transportation Infrastructure Finance and Innovation Act program (TIFIA), Railroad Rehabilitation and Improvement Financing (RRIF) or Private Activity Bonds, it is suggested that prior to procurement, the agency reach out to the Build America Bureau at the U.S. DOT in Washington, D.C. and the regional DOT modal office (e.g., the FHWA Division Office or FTA Regional Office) with jurisdiction, if applicable. Early engagement and coordination, prior to procurement, has been found to significantly help in ensuring efficient access to Federal programs and resources without impacting the desired procurement schedule.
	Local Support: Approval from or cooperative efforts by State or local agencies and other entities may be required for a P3 procurement. The agency may need to consult with representatives of the State Treasurer, Attorney General, Governor's Office, and/or key legislative committee chairs, other otherwise involve such individuals in the procurement process early on.
	Industry Forum: For complex projects, an industry forum or workshop prior to issuing the procurement documents helps to obtain comments and input from the private sector regarding the proposed procurement process. One-on-one meetings are also a valuable tool to obtain bidder and industry feedback. This can result in significantly higher value to the State and a procurement strategy that can help the project obtain the required financing.
	Establish procedures ensuring confidentiality of information and documents received during the procurement process.
Initiation of Procurement	A two-step selection process , with the issuance of an RFQ followed by an RFP issued to the shortlisted proposers.
	An industry review process prior to issuing the final RFP to obtain input and comments from the shortlisted proposers, including one-on-one meetings with proposers, is particularly important for the agency's first project as well as for subsequent projects that include elements differing significantly from earlier projects.
Pre-selection	An opportunity for proposers to submit Alternative Technical Concepts (ATCs) .
	Establishment of Evaluation Committees: Enlisting qualified individuals to participate on specialized committees and subcommittees to evaluate technical and financial proposals on a pass/fail and qualitative basis.
Selection/ Negotiation	A best value selection process to select the preferred proposer (unless the P3 will use a pre-development agreement (PDA), in which case the agency may elect to use a qualifications-based selection process).
	Reservation of the right to engage in discussions with proposers (often limited to proposers within a competitive range) and to request proposal revisions.
	Reservation of the right to hold negotiations with the selected proposer prior to final award.
	Payment of stipends to unsuccessful proposers and to pay stipends to all shortlisted firms if the procurement is cancelled.



P3 Procurement Phase	Successful Practice
Other	<p>Maintain leadership continuity: It is important to develop a transition plan from procurement to contract management. Continuity can greatly help the agency as it moves into the project delivery phase. Key personnel involved in the procurement (including outside advisors) should remain involved through financial close and, if practicable, contract administration.</p>
	<p>Public involvement and transparency: Agencies using Federal funding and credit assistance are required to adopt appropriate measures to ensure that the public interest is served by the use of a P3 delivery method and enabling the public to learn about the details of P3 procurements and projects—including conducting a VfM analysis, publicly disclosing the terms of the P3 agreement and amount of Federal participation and conducting a performance review. The agency should also prepare a public outreach plan to keep the general public apprised of the major project stages.</p>
	<p>Monitoring: During the procurement period, the agency should develop protocols and assign responsibility for performance of appropriate project oversight that enforces the contract requirements during design and construction and throughout the operations period.</p>



2.4. Overview of Federal Programs Providing Funding and Financing for Public-Private Partnerships

Many transportation P3 projects rely on Federal funding and financing programs, such as TIFIA or RRIF loans and/or Federal grant assistance. Where Federal funding is part of the equation, whether in the form of grants or loans, the procurement will be subject to Federal requirements associated with the grant or loan.

In addition to Federal grant or credit assistance, many transportation P3 projects rely on private activity bonds (PABs). PABs are tax-exempt bonds issued by or on behalf of a local or State government for the purpose of providing special financing benefits for qualified projects. The ability to issue PABs can also be important for achieving project feasibility.

The process for obtaining Federal funds for State and local P3 projects varies depending on the source of funds. FHWA, FTA, the Federal Railroad Administration (FRA), and the Office of the Secretary of Transportation (which includes the Build America Bureau and various grant programs) administer specific programs differently because of different legal requirements. Congress created the Build America Bureau to centralize the application processes of the credit programs administered by U.S. DOT most commonly used for surface transportation P3 projects, namely the TIFIA, Railroad Rehabilitation and Improvement Financing (RRIF) and PABs programs, which are described in the Glossary (see Appendix A).

Interested agencies must apply to the Build America Bureau for credit assistance under the TIFIA and/or RRIF programs and for a PAB allocation. Each such action is discretionary and is made on a project-by-project basis. Early (and continuing) engagement with the Build America Bureau is important for projects that are considering the use of TIFIA, RRIF, and/or PABs.

This section provides general information about certain Federal programs. In addition to the programs described below, U.S. DOT administers multiple different grant programs that may be beneficial for P3 projects, such as the Infrastructure For Rebuilding America (INFRA) program (also known by the statutory name, the Nationally Significant Freight and Highway Projects program) and the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program. Refer to chapters 3 through 5 for information about the steps the agency should take at different phases of the P3 procurement to ensure that the project will be able to benefit from these programs. Refer to chapters 6 and 7 for information relevant to the period from issuance of the RFP through financial close.

2.4.1. Funding from the Federal Highway Administration

Apportioned Federal-aid highway funds are those authorized under the Federal-aid highway formula programs, including the National Highway Performance Program¹¹ and the Surface Transportation Block Grant Program.¹² Such funds are apportioned to the States on a formula basis for eligible capital improvements, and it is up to each State to decide how such funds may be used on eligible projects.¹³ Apportioned funds play an important role in highway P3 projects, where the transportation agency may use the funds to make availability or progress payments to the concessionaire or for any other eligible activity for which the State would use its own funds.

FHWA's Design-Build Rule, at 23 CFR part 636, primarily addresses procurement-related issues. Projects relying on FHWA funding will also be subject to requirements that apply to all FHWA funded projects.

¹¹ 23 U.S.C. §119.

¹² 23 U.S.C. §133.

¹³ 23 U.S.C. §145.



2.4.2. Tolling of Federal-Aid Highway Facilities

Many highway P3 projects rely upon tolls as the source of revenue by which the private concessionaire recovers its investment in the construction and operation of a P3 facility. In some cases, the agency may retain the revenue risk and agree to compensate the concessionaire with availability payments. Public agencies may permit the assessment of tolls on certain Federal-aid highways, tunnels, bridges, and ferries, but must comply with 23 U.S.C. §§ 129 and 166 and/or non-codified tolling provisions in law such as the Value Pricing Pilot Program (VPPP). These provisions describe the types of facilities and projects that may be subject to tolls, and how toll revenues may be used.

2.4.3. Federal Transit Administration Funding

An agency seeking to use FTA funding for a P3 project may also pursue Capital Investment Grants (CIG) funding. The Maryland Purple Line and Denver EAGLE projects were both New Starts projects, one of three types of eligible projects under the CIG Program. As of the date of this Guidebook, CIG grants are governed by the Major Capital Investment Projects regulation and the CIG interim final policy guidance.¹⁴

Projects proposed for CIG program funds are required to follow a multi-step, multi-year process defined in Federal Public Transportation law at 49 U.S.C. § 5309. For New Starts and Core Capacity projects, this process includes three phases: Project Development (PD), Engineering, and Construction. For Small Starts projects, this process includes two phases: PD and Construction. For information on advancing into and through the CIG program, including the details of the statutory project evaluation and rating process, please see the FTA Interim Final Policy Guidance on the FTA website.¹⁵

CIG funds are eligible to be awarded at the end of the multi-year, multi-step process either in a Full Funding Grant Agreement (FFGA) or a Small Starts Grant Agreement (SSGA) depending on the project type. In advance of the award of an FFGA or SSGA, FTA may also issue “Letters of Intent,” indicating an intention to obligate future CIG funds to the project, or award Early Systems Work Agreements (ESWA), committing CIG funds for construction work following final completion of the environmental review process, as long as FTA determines the project is likely to receive an FFGA and that issuance of an ESWA is likely to result in earlier project delivery and a cost savings.

2.4.4. Transportation Infrastructure Finance and Innovation Act Financing

The ability to obtain loans and other forms of credit assistance under TIFIA has been a critical component for the plan of finance for numerous surface transportation P3 projects in the United States. As discussed in chapters 3 through 5, agencies should take appropriate measures to ensure that the project will be eligible for TIFIA financing.

TIFIA was enacted as part of the Transportation Equity Act for the 21st Century of 1998 (TEA-21) to address a finance-related problem identified by agencies looking at successful P3s in other countries and interested in gaining the same benefits in the United States. One major obstacle to the use of P3s was the inability of the private sector to tap into traditional sources of public financing for construction and long-term loans, resulting in a higher cost of funds for private sector partners than for a public agency borrowing money for the same project. It became apparent that P3s would be feasible only if the rules changed.

¹⁴ The CIG program is governed by 49 CFR Part 611 and the Final Interim Policy Guidance for Federal Transit Administration Capital Investment Grant Program (June 2016), which can be accessed at https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FAST_Updated_Interim_Policy_Guidance_June%20_2016.pdf.

¹⁵ <https://www.transit.dot.gov/funding/grant-programs/capital-investments/final-capital-investment-grant-program-interim-policy>



The FAST Act provided nearly \$1.5 billion in TIFIA subsidy authorization for fiscal years 2016 through 2020.¹⁶

TIFIA provides three types of credit assistance: direct loans, loan guarantees, and standby lines of credit. TIFIA direct loans provide credit assistance at Treasury rates with maturities up to 35 years after substantial completion for up to 33 percent of anticipated project costs (or up to 49 percent if applicants provide a strong rationale for requiring the higher level of assistance). TIFIA standby lines of credit provide a contingent loan that may be drawn upon after project substantial completion at Treasury rates.

The TIFIA program has proved to be critically important in enabling P3s to proceed because the P3 concessionaire can borrow directly (rather than the public sponsor), loans are provided at attractive rates of interest to help reduce the cost of borrowing, and because the program provides flexible loan provisions such as deferred payment periods. All four of the projects described in Appendix B relied on TIFIA financing, as well as many other projects. Some notable P3s financed by TIFIA include:

- ▶ TxDOT North Tarrant Express: \$531 million loan.
- ▶ VDOT Transform 66 Outside the Beltway: \$1,299 million loan.
- ▶ Florida DOT (FDOT) I-4 Ultimate: \$950 million loan.
- ▶ Port Authority of New York and New Jersey Goethals Bridge Replacement: \$474 million loan.
- ▶ Capital Beltway High-Occupancy Toll Lanes: \$588.9 million loan.
- ▶ Maryland Purple Line: \$874.6 million loan.
- ▶ Colorado High-Performance Transportation Enterprise (CHPTE) U.S. 36: \$55.4 million loan for Phase 1 (CHPTE as original borrower, assumed by concessionaire upon project completion) and \$60 million loan for Phase 2 (concessionaire as direct borrower).
- ▶ CHPTE, Central 70: \$416.0 million loan.

For TIFIA assistance, the applicant must, among other statutory eligibility criteria:¹⁷

- ▶ Demonstrate the creditworthiness of the project, including, in certain circumstances, obtaining two investment-grade ratings on the project's senior debt.

An article about the I-4 Ultimate P3 project discusses the agency's role in the loan process.

“The I-4 Ultimate Project was ... the first project to implement the new streamlined TIFIA process, which involved the development of a baseline term sheet upon which shortlisted proposers based their assumptions for the terms of the TIFIA loan in their proposals. FDOT facilitated the feedback of comments from shortlisted proposers to U.S. DOT on the proposed baseline term sheet during the RFP development process, thus reducing the likelihood of unanticipated issues arising post-award that could have undermined the ability to reach financial close in a timely manner.

...

[This effort] facilitated a smoother process on the back end to allow the parties to close the TIFIA loan in a timely manner.” (emphasis added)

Source: Y. Kojima and P. Harder, “I-4 – The ultimate project,” *PFI Yearbook 2015*, accessed at <http://www.pfie.com/i-4-the-ultimate-project/21177339.fullarticle>.

¹⁶ The TIFIA subsidy authorization is used to fund the capital reserve required to be established for each TIFIA credit instrument. The capital reserve must be sufficient to cover the estimated long-term cost to the Federal Government of a Federal credit instrument, including any expected credit losses. The credit subsidy is calculated based on a credit evaluation performed by the Build America Bureau and the U.S. Office of Management and Budget. Congress funded this subsidy amount so each TIFIA loan borrower would not be required to pay the credit subsidy, thereby helping to reduce the cost of borrowing for TIFIA loans.

¹⁷ See 23 U.S.C. §601 *et. seq.*



- ▶ Identify a dedicated source of funding to repay the TIFIA loan.
- ▶ Otherwise demonstrate the extent to which the project generates economic benefits, leverages private capital, and promotes innovative technologies.

In addition, when a P3 project is proposed for TIFIA financing, the agency and project concessionaire must be prepared to work with the Build America Bureau and U.S. DOT operating administrations, including FHWA or FTA, as applicable, which will assist with project oversight and compliance with Federal requirements. Projects receiving TIFIA financial assistance are generally subject to the same requirements as all other Federal grant-funded projects. Thus, TIFIA financed projects must comply with Federal design criteria, program requirements such as DBE, Buy America, Form FHWA-1273, Davis-Bacon, NEPA, and many other requirements.

Refer to the Credit Programs Guide published by the Build America Bureau for additional information about the TIFIA program and the steps that the agency should take to ensure that its concessionaire will have access to TIFIA assistance.¹⁸

2.4.5. *Private Activity Bonds*

The Build America Bureau also administers the PAB program allocation, which provides the use of tax-exempt private activity bonds for eligible surface transportation projects. Surface transportation PABs were first authorized in 2005 in SAFETEA-LU.¹⁹ The PAB program authorizes U.S. DOT to allocate up to \$15 billion in tax exempt PABs for qualified highway and rail-highway freight transfer facilities. In order to qualify for a PAB allocation, the activity must include a project receiving some level of Federal assistance under Title 23, U.S. Code (which may include receiving credit assistance under the TIFIA program) or be a freight transfer facility receiving funding under Title 23 or 49, U.S. Code.²⁰ Once the allocation decision is made, the recipient of the allocation must comply with the provisions of the terms of the U.S. DOT allocation approval letter, which may include a time period for the use of the allocation, as well as the Internal Revenue Code requirements applicable to PABs.

As with any tax-exempt debt, PABs must be issued by or on behalf of a public entity authorized under applicable State law and regulations of the IRS to issue these types of bonds.²¹ PABs cannot be directly issued by the private sector partner. Depending on State law, the agency, an economic development authority, or a nonprofit “63-20” corporation could be the issuer. (One method of reducing the borrowing costs to a private partner is to issue debt through a nonprofit public benefit corporation pursuant to Internal Revenue Service (IRS) Rule 63-20 and Revenue Proclamation 82-26. The nonprofit corporation is able to issue tax-exempt debt on behalf of private project developers.) Even though issued by a public entity or nonprofit, the issuer typically serves only as a “conduit” for purposes of issuing the bonds—the private sector partner is liable for repayment of the obligation.

PABs are particularly important to help reduce the cost of borrowing for P3 projects, especially for larger projects that will be financed from a stream of revenue during the operations and maintenance term of the P3. Again, PABs were part of the financing for all four of the projects described in Appendix B, as well as various other projects, with PABs amounts as follows:

- ▶ TxDOT North Tarrant Express: \$274 million.

¹⁸ The Credit Programs Guide (Transportation Infrastructure Finance and Innovation Act/Railroad Rehabilitation & Improvement Financing) is available at: https://cms.dot.gov/sites/dot.gov/files/docs/policy-initiatives/programs-and-services/tif/Bureau%20Credit%20Programs%20Guide_March_2017.pdf. For an overview of the TIFIA program, see <https://www.transportation.gov/tif/tif-credit-program-overview>.

¹⁹ See §11143, Pub. L. 109-59 (August 10, 2005).

²⁰ 26 U.S.C. §142(m)(1).

²¹ 23 U.S.C. §§103(b)(1) and 141(e)(1)(A).



- ▶ TxDOT IH 635 Managed Lanes: \$615 million.
- ▶ VDOT Capital Beltway High-Occupancy Toll Lanes: \$589 million.
- ▶ Maryland Purple Line: \$313 million.
- ▶ CHPTE U.S. 36: \$20 million.
- ▶ Indiana Finance Authority Ohio River Bridges East End Crossing: \$677 million.
- ▶ VDOT Elizabeth River Tunnels: \$675 million.
- ▶ PennDOT Rapid Bridge Replacement Project: \$721 million.
- ▶ CHPTE Central 70 Project: \$121 million.

As with the TIFIA program, if the agency believes that the plan of finance for a proposed P3 project may rely on issuance of PABs, it is critical for the agency to engage with the Build America Bureau early in the procurement process to discuss the reasons a PAB allocation is appropriate. The Build America Bureau is also available to consult with the agency throughout the procurement process.

2.4.6. Railroad Rehabilitation and Improvement Financing

The RRIF program was established by the Transportation Equity Act for the 21st Century (TEA-21) and amended by the Safe Accountable, Flexible and Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU). Under this program the FRA Administrator is authorized to provide direct loans and loan guarantees up to \$35.0 billion to finance development of railroad infrastructure. Not less than \$7.0 billion is reserved for projects benefiting freight railroads other than Class I carriers.

The funding may be used to:

- ▶ Acquire, improve, or rehabilitate intermodal or rail equipment or facilities, including track, components of track, bridges, yards, buildings and shops;
- ▶ Refinance outstanding debt incurred for the purposes listed above; and
- ▶ Develop or establish new intermodal or railroad facilities

Direct loans can fund up to 100 percent of a railroad project with repayment periods of up to 35 years and interest rates equal to the cost of borrowing to the government.

Eligible borrowers include railroads, State and local governments, government-sponsored authorities and corporations, joint ventures that include at least one railroad, and limited option freight shippers who intend to construct a new rail connection.

2.5. Federal Environmental and Regulatory Requirements

Refer to section 3.3 for a description of general requirements relating to Federal approvals required for transportation projects, as well as information regarding how to integrate the P3 process with the process for obtaining such approvals.



3. Pre-procurement Phase

This chapter presents the activities to undertake in the pre-procurement phase. Table 6 provides a summary of key goals of this phase and successful practices to help achieve them.

Table 6. Goals and Activities for Pre-Procurement Phase

Pre-Procurement Phase Goals	Key Activities
Structure a procurement team to provide overall project management	<ul style="list-style-type: none"> ▶ Engage technical, legal, and financial advisors as necessary to assist in the pre-procurement phase and if approved, the subsequent procurement. ▶ Establish a communications strategy. ▶ Establish procedures ensuring confidentiality of information and documents.
Establish a project delivery strategy	<ul style="list-style-type: none"> ▶ Aim to maximize flexibility to encourage innovation. ▶ Define project goals, scope, and term of concession. ▶ Conduct initial risk assessment and allocation. ▶ Perform agency due diligence (technical and financial). ▶ Develop a business case/conduct a Value for Money (VfM) analysis to determine project value and affordability and finalize project delivery approach. ▶ Consider early contractor outreach and involvement
Set the stage for stakeholder engagement and required approvals	<ul style="list-style-type: none"> ▶ Advertise an RFI to solicit market input and hold market sounding meeting with interested firms. ▶ Organize Industry forum or workshop to obtain input from private sector on proposed procurement process. ▶ Identify applicable laws, procedures and requirements. ▶ Develop strategies for environmental and regulatory reviews and approvals. ▶ Consider how the project may gain maximum benefit from TIFIA, RRIF, and/or PABs ▶ Begin to engage Federal Government. ▶ Conduct public engagement. ▶ Conduct stakeholder engagement. ▶ Early focus/negotiation on utility and railroad agreements to set expectations with respect to facilities that may impact the project.

3.1. Structuring a Procurement Team

3.1.1. Leadership and Decision-Maker Involvement

Each P3 project is unique in terms of the project scope and the expertise it requires throughout the procurement process. In some cases, P3s are procured by an independent office and in others the agency runs the procurement with existing staff resources. In some States, the agency is responsible for the procurement but is subject to approvals and/or oversight by a separate agency or governing body. In all cases the agency's pre-procurement activities should include establishing a framework for involving leadership and decision-makers in the procurement process.

Colorado's High-Performance Transportation Enterprise (HPTE) is an example of a government-owned business established especially for the purpose of pursuing infrastructure projects as P3 procurements. The Commonwealth of Virginia previously established a separate P3 office with dedicated staff, which is now an integral part of the VDOT organization. The organizational structure of the P3 office can define the channels for leadership and decision-maker involvement. Regardless of whether a separate P3 office exists, if an agency is preparing to procure a P3 project, it will need to identify the appropriate number of personnel that will be dedicated to the procurement and delivery of the project. P3 procurements likely will require much of the available time of at least one full time staff person in a leadership role to oversee the



process from beginning to end and likely will require significant amounts of time from other support staff with specific expertise in disciplines important to the project.

A P3 procurement requires participation, support, and agreement where applicable from agency senior managers, and a number of governing and legislative entities. In some cases, State legislation requires agencies using P3s to report to the legislature or to obtain legislative support and in some cases, approval of projects. The agency should also coordinate with State, regional, and local jurisdictions and the Federal Government. While interagency agreements may be necessary to address project-specific issues, the process of engaging leadership and decision-maker involvement can be established in advance. This could be articulated in the form of a mission or vision statement of the specialized P3 office, if one exists, or laid out in the form of jurisdiction-wide guidelines, issued pre-procurement, specifying decision-making authority and roles of leadership at different stages of the P3 procurement process.

It is important to note that the teams representing the various leadership roles for the procurement are not mutually exclusive. The P3 procurement management team can and often does include members from key leadership positions within various entities that bear the ultimate responsibility for the project, such as the transportation agency, the P3 office, or specialized P3 entity, if one exists.

The importance of involving leadership in the process does not eliminate the need to delegate decision-making authority to the P3 procurement team that is responsible for the day-to-day direction of the procurement process. Throughout the procurement process, a number of important decisions may need to be made relatively quickly; in many ways, these decisions are precedent-setting to the agency and may also apply to other governmental entities in the same State, and thus the agency should establish appropriate approval processes within its hierarchy to ensure efficient decision-making. Most recent P3 procurements point to the need for both greater flexibility and innovation on the part of the agency along with the ability to be responsive to both the opportunities and challenges that come with the involvement of a private entity in the development of a complex project. Well-defined guidelines for reporting to, and otherwise involving leadership, can help ensure that key decision-makers are kept informed of developments without compromising the agility and decision-making authority of the P3 procurement team. The guidelines also need to be flexible so that they can accommodate unanticipated situations, which are common in P3 procurements.

3.1.2. Staffing Considerations

The procurement of a major project as a P3 requires specialized skills and expertise in addition to those needed for a more standard procurement. These skills are typically provided by a combination of in-house staff and consultant resources. In general, the following skills are a critical part of all P3 procurements.

- ▶ **Project Management:** to undertake day-to-day management of the project. The project manager/management team will be responsible for planning and developing the project as a proposed P3 procurement. Section 3.1.3 discusses project management responsibilities through the procurement process. It is important to note that this assignment requires unique program management skills encompassing a wide range of skillsets, including knowledge regarding project specifics, technical issues, legal issues, and financial issues, extending beyond the procurement through a long-term project implementation process. The manager must also be capable of addressing complex issues that may be new to the agency, often requiring interaction with senior management and other key staff.
- ▶ **Technical expertise:** to conduct project due diligence relating to technical matters, develop technical specifications, evaluate technical proposals and provide assistance with technical considerations (such as evaluation of ATCs) throughout the procurement process. The required technical expertise largely depends on the scope of the project, but typically includes environmental review, estimating, scheduling, design, engineering, procurement, construction, and operations and maintenance experience with infrastructure projects of comparable scope and complexity. The technical team



normally includes in-house and outside consultant expertise selected to match the required technical elements for the project goals and scope.

- ▶ **Legal expertise:** to research legal issues relevant to the procurement and contract documents; assist with due diligence issues involving legal matters; develop administrative and legal requirements for the proposers and the terms of contractual agreements involved in the procurement; evaluate proposal compliance; and provide legal counsel throughout the procurement process. The legal team typically includes the agency's general counsel (or his or her representatives) or the Attorney General's Office (depending on the agency) as well as outside specialized counsel.
- ▶ **Financial expertise:** to perform financial due diligence, assist the technical team in developing shadow bids and the VfM analysis, perform cost-benefit analyses, develop financial specifications, manage interactions with the Build America Bureau during the pre-award phase if Federal financing assistance (TIFIA or RRIF) is involved, evaluate financial proposals, and assist with financial considerations throughout the evaluation and procurement process. The financial team typically includes agency financial staff and an expert P3 financial advisor.

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In identifying the P3 Project Team members, the HPTE Director, in coordination with the applicable Region Director, will consider the following key elements:

- ▶ Project scope, including the project phases and elements such as design-build, operate and maintain, toll operations/services, etc. to be included in the project.
- ▶ Thoughts on the initial risk allocation among the HPTE/CDOT and the proposer/private partner, project subsidies and/or funding approach.
- ▶ Key elements of the Value for Money (VfM) analysis.
- ▶ Anticipated funding partners.
- ▶ Anticipated public involvement and outreach approach and effort.

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Requires project management to maintain costs and schedule for each phase for both a traditional project delivery approach and the P3 approach. Cost management per the manual also involves assumed risk allocation for major elements of the proposed P3 project and the cost/cost savings and schedule/schedule savings for each project delivery approach and for the development of the initial risk matrix.

- ▶ **Communications and public outreach expertise:** to provide communications and outreach expertise for communicating with the public, interfacing with media, and putting into effect the transparency policy of the P3 organization.
- ▶ **Other specialized expertise:** Expertise from other specialty areas will likely be needed, depending on the type and scope of the P3 project, including staff/consultant resources to determine insurance and performance security requirements, traffic and revenue analysis, and advice regarding contract requirements relating to ROW acquisition, hazardous material identification, environmental resources, and other specialized

areas.

In addition to subject matter expertise, the procurement team must recognize the importance of flexibility and the ability to innovate – including willingness to consider creative solutions provided by the private sector and the experience to be able to make sound decisions in the best interest of the public in the face of ever-changing information. Prior experience with P3 projects and procurements is highly desirable to avoid inefficiencies and delays in the overall management of the procurement process.

The technical, financial and legal teams work together to bring the three core elements of the procurement into a cohesive whole through the project development phases (see Figure 2 on the next page). However, the perspectives and recommendations of the team members can diverge on occasion, and the agency's decision-makers may have to base their decisions on recommendations from different points of view that may not always agree. For instance, an action in the proposal development phase, such as ROW acquisition

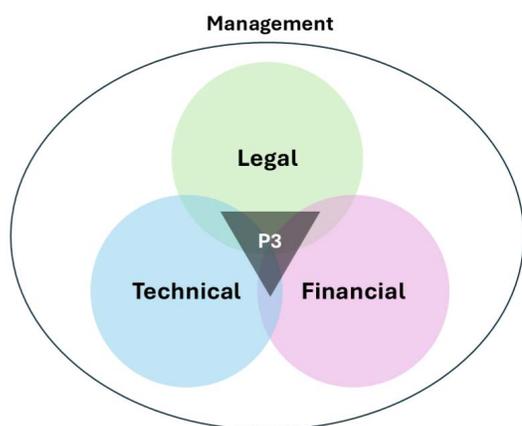


can be performed in whole or in part by agency staff and consultants or transferred to the concessionaire. While the legal and technical teams may recommend transferring the risk to the private entity, the financial team would be in the best position to assess the financial implications and feasibility of the risk transfer. The agency's management team would have to decide which recommendation to adopt.

The technical, financial, and legal teams normally include both agency staff and advisors, with at least one public employee in a leadership or coordination role within each team. The ultimate responsibility for managing the project rests with the agency. The P3 Management Manual for the High-Performance Transportation Enterprise (the "HPTE Manual")²² provides information regarding the management structure of that organization, which may be useful to an agency seeking to use P3s for the first time. The HPTE Manual contemplates having a management team comprised largely (if not solely) of agency staff members with support as needed from specialized advisors. Since the agency bears the ultimate responsibility for the project, it is good practice for agency staff to be actively involved in the day-to-day process of the procurement.

In addition to coordination between the technical, legal, and financial teams, the management team can also serve as the "face" of the procurement team, interfacing with administrative leadership and other stakeholders and involving leadership on significant decisions as the procurement progresses.

Figure 2. Technical, Financial, and Legal Teams



Source: HPTE Manual

3.1.3. Management of the Team

Project management is a critical and complex function in the procurement of a project as a P3. In comparison to a traditional procurement, a P3 project typically involves more stakeholders, greater complexity of project tasks, a larger team including both specialized advisors and internal staff, and a higher degree of vulnerability to external and internal factors that could impact the procurement schedule. Furthermore, most P3 projects, especially the first such procurement for an agency, typically attract a higher level of interest and scrutiny from the public, media, and elected officials, requiring seasoned management of the procurement process. It is therefore essential for the agency to have an experienced project manager. While it would be preferable for the project manager to have experience with P3 project development and

²² A copy of the HPTE P3 Manual can be accessed at <https://www.codot.gov/programs/high-performance-transportation-enterprise-hpte/procurement/p3-management-manual>.



procurement, it is possible that the agency may not have access to such expertise, in which case a project manager with design-build procurement experience becomes essential.

The following are some of the key aspects of the project manager/management team's responsibilities:

Schedule Management: The project manager (or management team) develops and manages the schedule throughout the procurement process. The schedule should identify the procurement phases and activities involved in each phase, their timeline and dependencies, key decisions points and activities on the critical path. Schedule management also involves risk identification and management of activities that have the potential to negatively impact the procurement schedule (such as a late decision to pursue TIFIA funding, legislative approvals, political considerations, legal challenges, and others.)

Cost Management: The project management team typically develops and manages costs for each procurement phase. Other key considerations involved in cost management include cost of financing, cost of engaging specialized advisors, conducting a VfM analysis and initial and ongoing analysis of cost of alternative project delivery options as prescribed by guidelines and/or in response to specific project needs. Payment of stipends to unsuccessful bidders is a successful practice and should be included in the cost considerations of a P3 procurement.

Staff and Consultant Management and Engagement: As noted in section 3.1, the P3 procurement team involves a diverse set of expertise and potentially several sub-teams to successfully deliver the project. The project management team is typically responsible for the establishment and ongoing management of the various teams, including activities such as staffing, appointing team leads, delegating tasks, and ensuring coordinated functioning of the teams.

Leadership Engagement: In addition to providing periodic briefing updates on the progress of the P3 development, the project management team also makes decisions regarding the need to "bump-up" key issues to leadership and decision-makers. These may occur at scheduled or unscheduled points during the procurement.

Industry/ Proposer Engagement: This involves an industry forum and one-on-one sessions, communications and negotiations with the proposers through the RFQ and RFP process, determining stipends for unsuccessful bidders, and other activities involved with engagement of proposers through the procurement process.

Training: The success of a P3 procurement will depend in large part on the personnel involved in the procurement process and the expertise and training they have and receive in advance of the procurement. Appropriate training can help educate stakeholders, including agency staff and contractors, in setting procurement expectations, address risk and foster innovation.

Public Outreach: As with some of the other project management tasks, this may be delegated to a specialized group within the P3 project team. However, the project management team may be ultimately responsible for education of the public and elected officials on the P3 approach, conducting workshops and public hearings, meeting with elected officials and other stakeholders, and conducting other outreach to the public and media.

For the Purple Line procurement, Maryland DOT (MDOT) and Maryland Transit Administration (MTA) established a leadership team during the development of the RFP specifically to provide oversight on the risk allocation decisions and provide guidance on how issues should be addressed. This team included agency leadership from MDOT and MTA along with financial and technical advisors. As this was the first P3 project for both agencies, there was no formal process to budget for consultant costs. The final costs for engaging advisors were significantly higher than initial estimates.



3.1.4. *Securing External Contractor/Advisor Support*

State law may designate a specific public entity to engage specialized legal or financial and investment advisors to help guide the State's legal and investment decisions or may permit individual agencies to engage such advisors. The entity thus empowered may hire specialized consultants for specific programs or on an on-call basis. Although some agencies have indicated an interest in procuring a single contract to obtain technical, financial, and legal expertise within a single team of advisors, experts generally recommend separate procurements for each area of specialty. By procuring each service separately, the agency retains the ability to obtain the best consultant in each sub-area. Furthermore, with respect to legal services, agencies should consider whether a sub-consultant arrangement might create a barrier to attorney-client communications or affect the agency's ability to rely on the attorney-client privilege.

Successful Practice

Advisors engaged to support a P3 procurement should have prior experience advising P3 deals. Advisors with only traditional procurement experience are not likely to be sufficiently qualified to support a P3 procurement.

Organizations that have procured multiple P3 contracts often maintain a bench of consultants with agreed-upon rates that can be engaged on a task order basis as needed through the procurement. Such an arrangement enables agency staff to participate heavily in the upfront tasks and engage consultants on an as-needed basis as the procurement proceeds. The consultants can be called upon to augment the P3 office staff as needed for each P3 project procurement. The VDOT P3 Office follows this strategy. States such as Florida and Texas, which have had a pipeline of P3 procurements and several P3 projects proceeding simultaneously, typically maintain a pool of consultants with a variety of specialized expertise who are engaged based on the type of expertise required for a specific procurement. An "on-call" or "bench" model for consultant engagement is suitable for agencies that have significant in-house expertise with the P3 procurement process. An agency with little to no prior experience with P3 project delivery could gain by early and more well-defined engagement of seasoned consultants or commercial advisors or by acquiring expertise through strategic hiring.

The level of engagement of expert advisors depends both upon the staff capacity of the agency as well as the volume of P3 procurements that the agency delivers annually. A number of agencies with experience in P3 procurements have noted that specialized consultants can be expensive and that their involvement needs to be actively managed. Having a very well-defined scope for expert advisors and a solid in-house management and monitoring process can ensure that the advisors are well managed and cost-effective, reducing the risk that the agency may spend money on activities that become redundant as the procurement proceeds.

In managing external advisors, agencies should consider how best to:

- ▶ Strike a balance between timeliness or productivity and best value.
- ▶ Ensure that advisors work towards the common goal of the procurement process, and reduce built-in financial incentives for advisors to delay the schedule.
- ▶ Ensure that advisors have the permission and confidence to flag agency positions that may be unrealistic or detrimental to the project value, such as decisions to transfer a risk to the private sector that the latter is likely to price very high.

External advisor support is typically a significant portion of the predevelopment budget. As such, the scope, budget, and schedule for the advisors/consultants should be well-managed with knowledgeable and dedicated staff.

The HPTE Manual directs the HPTE Director to identify the following for advisory services contracts:

- ▶ Contract manager for the expert advisor contract.
- ▶ Budget manager for the expert advisor contract.



- ▶ Funding and budget for the expert advisor contract.
- ▶ Term and amount for the contract and/or task order.
- ▶ Monitoring of the contract budget, work, invoices, and overall performance of the expert advisor.

The P3 Project Manager is required to coordinate the expert advisors' efforts throughout the project development phase.

3.1.5. Establishing Confidentiality and Organizational Conflict Policies

Confidentiality

P3 procurements involve the need to balance the public interest in having an open and transparent process against the public interest in holding a fair and open competition for the P3 contract. Private sector participants in P3 procurements are highly concerned about the possibility that their proprietary ideas may be disclosed to competitors over the course of the procurement process, and often prefer to avoid public disclosure of their concepts even after the contract is awarded.

Many agencies have adopted policies requiring all agency staff and consultants that have, or will have access to confidential data, to execute a non-disclosure agreement during the pre-procurement phase that will remain in effect throughout the procurement and thereafter.

As discussed in sections 4.2 and 8.3, the public interest in transparency regarding procurements has resulted in a significant level of disclosure, often by posting information on project websites. The final RFQ and RFP, and any addenda, are normally posted after issuance. Some information regarding proposals may be posted shortly after receipt of proposals, but the proposals themselves typically are not posted. The final contract documents are usually posted in their entirety.

Organizational Conflicts of Interest

Federally funded contracts are subject to rules requiring agencies to take appropriate measures to avoid organizational conflicts of interest (OCI). For example, 23 CFR 1.33 provides that no person performing services for a State or government instrumentality in connection with a project shall have directly or indirectly a financial or other personal interest other than employment in any contract or subcontract in connection with such project. Additionally, 2 CFR 200.317 and 2 CFR 1201.317 provide that States and subrecipients of States, respectively, follow the same policies and procedures used, or authorized to be used by a State, as would be applied for procurements with non-Federal funds. Most States have developed internal conflicts of interest procedures that must be adhered to under the above government-wide uniform requirements. FTA's Best Practices Procurement Manual (BPPM)²³ includes an extensive discussion regarding OCI issues,²⁴ which are specific to FTA-related financial assistance (but include TIFIA credit assistance for transit projects); and FHWA's Design-Build Rule includes specific OCI requirements,²⁵ which are specific to FHWA Federal-aid highway funding (including TIFIA credit assistance for highway projects). Agencies must also comply with any OCI requirements imposed by their own State law.

²³ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, FTA Report No. 0105 (Washington, DC: 2016). Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.

²⁴ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, "2.6 Organizational Conflicts of Interest," FTA Report No. 0105 (Washington, DC: 2016). Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.

²⁵ 23 CFR § 636.116.



For example, the FHWA rule on Federal-aid highway funded design-build projects defines OCI as follows:

Organizational conflict of interest means that because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the owner, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage.²⁶

Situations raising potential OCI issues include:

- ▶ Consultants in a position to provide project recommendations to the agency while also seeking to join proposer teams – which may create a bias affecting the consultant's advice to the agency.
- ▶ Proposer team members with information about the project not available to other proposers—which may create an unfair competitive advantage.
- ▶ Agency consultants involved in the procurement who have a financial interest in a proposer team member or other business or personal relationship with a team member—which may create an appearance of impropriety due to potential loss of objectivity.

If a procurement is affected by a potential OCI, it may be possible to adopt mitigation measures to avoid the conflict. However, if the OCI is not identified early, a problem may arise that cannot be cured, and in some cases the validity of the procurement may be affected, requiring the entire procurement to be re-done. As a result, it is vital that agencies consider how to deal with OCI issues as early in the procurement process as reasonably possible. Measures that agencies can take during the pre-procurement phase include:

- ▶ Identifying existing agency consultants who will be precluded from participating on proposer teams.
- ▶ Considering whether current or former agency consultants have access to information about the project that should be made available to all of the proposers.
- ▶ Adopting an OCI policy establishing the rules (early in the process) applicable to proposers, consultants, and agency personnel involved in the procurement.

The agency should consider the advantages and disadvantages of allowing consultants to participate on P3 teams despite their prior involvement in various aspects of the project. If all advisors involved in the planning and initial design process are precluded from joining P3 teams, that will reduce the pool of qualified firms eligible to submit proposals. The OCI policy should provide guidance regarding how different types of assignments will be treated and means of mitigating potential conflicts.

Refer to sections 4.3 and 4.4 for a discussion of additional OCI issues that should be addressed in putting the procurement package together and in evaluating statements of qualifications (SOQ) and proposals.

3.2. Setting the Stage for Successful Project Delivery

A project's success is dependent upon the implementation of an effective project delivery strategy. The delivery strategy will impact, among other things, project cost, quality of design, construction, long-term maintenance, and the schedule for completion of construction. Agencies planning large projects can improve their chances of success by performing a thorough assessment of the key objectives for the project and the delivery strategies available to it. Not all projects are appropriate for P3 delivery. The most appropriate delivery strategy will depend on the project owner's objectives as well as the specific project characteristics and circumstances (including project scope, corridor tolling, cost estimates, funding sources, traffic, ridership and revenues). This section discusses certain steps to be followed to assess whether a project is suitable for P3, as well as measures that can be implemented to ensure that the procurement will be successful.

²⁶ 23 CFR § 636.103.



3.2.1. *Project Suitability*

Generally, the following project characteristics indicate that it may be appropriate for an agency to consider P3 delivery for a particular project:

- ▶ Project has strong political support.
- ▶ Opportunities exist for significant economies of scale.
- ▶ Project involves significant interfaces with existing facilities or other planned projects.²⁷
- ▶ Project complexity can be managed less through regulated methods than through performance requirements.
- ▶ Expedited delivery will benefit the public and can be facilitated through innovative delivery methods.
- ▶ Project affords opportunities for innovation in design, construction, operation, maintenance, or financing of the transportation infrastructure.
- ▶ Project is unusual, technically challenging, complex and/or very large, and may therefore benefit from innovation.
- ▶ Private investment would fulfill a critical financial need to advance and/or complete the project.
- ▶ Significant Federal, State and/or local resources, which may include rights-of-way or air rights, are available to leverage with private investment.
- ▶ Project is conducive to significant private investment.
- ▶ Project is revenue positive, enabling access to new private capital to deliver other critical transportation projects.
- ▶ Project is consistent with State and local long range transportation plans and has strong local support.
- ▶ Project can benefit from risk transfer to the private sector.
- ▶ If the agency is interested in an availability payment structure, the agency has access to revenues and financial strength sufficient to support the payments.

In determining suitability, the agency should be mindful of the ability of the project to attract financing and equity investor interest.

²⁷ As examples, transit projects typically involve interfaces with other transit systems and may share track or otherwise interface with freight rail operations. Highway projects involve interconnections with streets and highways as well as interfaces with other modes of transportation. Bridge projects—particularly those over navigable waters—must account for nautical traffic. Projects involving tunnels beneath developed areas present significant risk of impacts to above-ground facilities.



3.2.2. Project Screening, Value for Money and Financial Viability Assessment

In some cases, it may be readily apparent that P3 delivery is not appropriate for a particular project despite the existence of some of the above characteristics; in other cases, the agency should conduct an initial screening to assess which projects in the agency's capital program may be appropriate for P3 delivery (that is, where P3 delivery likely offers best value for limited public funds). For major projects, Federal law requires the agency to assess in its financial plan whether a P3 would be appropriate to deliver the project.²⁸

The business case study typically includes a VfM analysis comparing ways to deliver a project to determine which project delivery approach is most likely to meet the requirements and objectives for the lowest cost over the project's life. The business case analysis helps the agency determine the most suitable delivery method and can also be used as a tool in seeking political support and stakeholder consensus.

Highway and transit project sponsors receiving Federal assistance are required to conduct a VfM analysis **in certain circumstances**. Federal law requires the procuring agency of a P3 project seeking a loan or credit assistance under TIFIA or RRIF, a PAB allocation, or a grant under the INFRA program to conduct a "value for money analysis or a comparable analysis prior to deciding to advance the project as a public-private partnership."²⁹ Furthermore, the U.S. DOT, on request, may provide "technical assistance [to an agency delivering a Title 23 project] ... in analyzing whether the use of a public-private partnership agreement would provide value compared to traditional public delivery methods."³⁰ For public transportation projects governed by Title 49, the U.S. Code requires the U.S. DOT to "encourage sponsors to conduct assessments to determine whether use of a public-private partnership represents a better public and financial benefit than a similar transaction using public funding or public project delivery."³¹ The Build America Bureau has responsibility for developing and monitoring best practices, of which this guide is a part, to help public agencies considering and developing P3 projects. In addition, FHWA has delivered workshops on key areas of P3 project development at different stages of the P3 process to assist public agencies as they consider, develop, procure and implement P3 projects.

VfM analyses typically rely on a "public sector comparator" and either a "shadow bid" or actual bid that enables the agency to assess the pros and cons of a range of traditional and P3 delivery methods. The public-sector comparator is a project life-cycle estimate of the cost of traditional project delivery using a DBB or DB method, including the costs of agency-delivered operations and maintenance. A shadow bid provides a similar project life-cycle cost estimate for the alternative delivery method. In addition to project costs, the analysis considers costs of financing and the allocation of project risks between the agency and the concessionaire, and assesses the effect of different delivery methods on exposure to such risks. It also may take into account differences in procurement and oversight costs, Federal financing subsidies, and/or the taxes that would be paid by private entities but not by a public agency. The goal is to undertake an "apples to apples" comparison to the maximum extent possible to help the agency evaluate the project delivery

Successful Practice

Following the initial screening, the agency should proceed with a business case analysis for those projects, analyzing the project scope, size, and complexity to determine whether a public private partnership can deliver the best value to the traveling public. Additional information regarding the screening process and development of a business case can be found on FHWA's website.

See the "P3 SCREEN Analytical Tool" web page, which is part of FHWA's P3 Toolkit, available at:

https://www.fhwa.dot.gov/ipd/p3/toolkit/analytical_tools/p3_screen/.

See also the 2016 Peer Exchange report for the "P3 Peer Exchange: San Francisco Bay Area, California" at

https://www.fhwa.dot.gov/ipd/p3/p3_training/peer_ex_san_fran_mar2016/

²⁸ 23 U.S.C. 106(h)(3)(D).

²⁹ 49 U.S.C. § 116(e)(3)(A).

³⁰ MAP-21 § 1534.

³¹ 49 U.S.C. § 5315.



approach for the project under consideration. The analysis is complex and is typically provided by a team that includes financial, technical, and legal advisors with expertise in traditional and P3 project delivery.

The FHWA P3-VALUE Toolkit includes a guidebook concerning VfM assessments.³² The Toolkit also includes the Public-Private Partnership Value for Money Analysis to Learn and Understand Evaluation tool (P3-VALUE 2.1) and other resources.³³

3.2.3. *Articulating Project Goals and Scope*

The agency should clearly articulate the policy goals of the project as these will inform the development of procurement specifics such as scope, terms, and risk allocation as well as the subsequent evaluation and selection decisions, and will be relevant in administering the procurement. At various stages of the procurement, these goals should be reviewed to confirm that the project is proceeding in the right direction. Most agencies set out their project goals in the procurement documents to ensure the proposers understand the agency's goals and will submit proposals that support achievement of these goals.

3.2.4. *Maximizing Flexibility for Innovation*

One of the major benefits to P3 project delivery is that it offers significant opportunities for innovation by allowing the private sector flexibility to develop efficient methods to meet project goals combined with incentives that align the concessionaire's interests with the public interest.³⁴ In structuring the procurement and developing contract documents, the agency should make sure that opportunities for innovation are offered at appropriate points in the process. This includes:

- ▶ Focusing on performance requirements, allowing private sector proposers to use their experience to develop potential alternatives that can meet project requirements and also serve to protect the agency from inadvertently retaining risk or liability that may originate from prescriptive design requirements.
- ▶ Using selection criteria that consider technical quality as well as lifecycle costs, providing incentives for private sector innovation to reach technical/financial feasibility and/or to lower capital and operating costs.
- ▶ Incorporating ATCs into the process, including potential use of ATCs submitted by unsuccessful proposers for the project upon payment of a stipend, thus encouraging proposers to invest in research and analysis regarding innovative approaches that reduce project costs, accelerate delivery, enhance project quality, etc.
- ▶ Integrating design, construction, operations and/or maintenance, and financing into the concessionaire's scope, incorporating performance requirements to be met during operations as well as specifying conditions to be met upon handback, resulting in:
 - Transfer of design, construction and schedule risk to the private sector, requiring the concessionaire and its team members to consider the most efficient way to deliver the project and develop creative solutions to problems that arise during the project development phase.
 - Focus on performance of the asset over an extended period, both during the initial development phase and ultimate operations phase.
- ▶ For revenue risk projects, relying on the built-in incentive for the concessionaire to seek means of reducing lifecycle costs while maintaining customer satisfaction so as to avoid adverse impacts on the revenue stream.

³² Available for download at: https://www.fhwa.dot.gov/ipd/pdfs/p3/p3_guidebook_vfm_1213.pdf.

³³ See: <https://www.fhwa.dot.gov/ipd/p3/toolkit/>.

³⁴ For information regarding innovation in Canadian P3s, see X.X. Yuan and J. Zhang, *Understanding the Effect of Public-Private Partnerships on Innovation in Canadian Infrastructure Projects* (Ryerson Institute for Infrastructure Innovation, 2016). Available at: <https://www.ryerson.ca/content/dam/riii/ryerson-construction-innovation-2016.pdf>



- ▶ For availability payment projects, developing a payment scheme that encourages the concessionaire to meet performance requirements and reduce payments if the project fails to meet the requirements.

3.2.5. *Determining Scope and Term of Concession*

Once the agency decides to use a P3 approach to develop a specific project, it will need to determine the scope of the concession, including defining the project, determining the respective roles and responsibilities of the agency and concessionaire, deciding whether the concession will include a lease or other form of property interest, and setting the term of the concession. As discussed in the Second Strategic Highway Research Program (SHRP2) report entitled “Effect of Public-Private Partnerships and Nontraditional Procurement Processes on Highway Planning, Environmental Review, and Collaborative Decision Making,”³⁵ these decisions must be coordinated with the environmental review process for the project. Technical, financial, legal, and political considerations should be factored into the decision, along with the agency’s goals relating to the project. Furthermore, the VfM is typically built based on assumptions regarding scope, and it may be necessary to revisit the VfM if the final decision differs from those assumptions.

As part of this analysis, the agency should consider the extent of an asset’s useful life and determine the point in an asset’s lifecycle where significant capital renewal might be required. It may not be cost effective to require the concessionaire to price major renewal work or to replace critical equipment towards the end of the project term because of the cost uncertainty and difficulty of pricing major works 30 to 50 years into the future. It might prove more efficient for the public sector to procure the work as part of a separate contract when the P3 term is complete or seek to replace the asset as part of a new procurement at or near the end of the asset’s useful life. Agencies also should evaluate how to most effectively use warranty periods to ensure the performance of equipment and technology.

The agency’s initial determinations regarding the scope of a concession require assessment of technical considerations, such as logical project boundaries, costs of acquiring rights of way, interfaces with other facilities, and major risks affecting design, construction, operation and maintenance of the project. These initial determinations will form the basis for the high-level financial assessment discussed below. For projects in colder areas, one issue to be considered is whether snow and ice management should be included in, or excluded from, the scope. Although it is preferable to make this decision early in the procurement process, since it is relevant to proposers in forming their teams, agencies may opt to defer this decision until later in the procurement process, as the answer may change depending on factors not yet known when the initial P3 decision is made.

For revenue-financed projects, such as Virginia’s I-495 Capital Beltway HOT Lanes project described in Appendix B, traffic and revenue studies for different configurations, as well as projected costs of project development, are critical factors in establishing the project scope. For projects that primarily rely on public funding, such as the Purple Line availability payment project described in Appendix B, determining the availability and timing of the grant and other public funds that will support the availability payments over the project’s life takes the place of revenue projections in the analysis. In all cases, the term of the concession must be long enough to allow projected revenues and/or availability payments to fund repayment of debt plus a reasonable return on capital.

Legal issues to be considered in the process of setting scope and term include any constraints that may apply to concessions under applicable law. For example, if the agency’s enabling legislation only permits concessions for projects that can self-fund operations, it will need to be factored into the scope. In many cases, the concession term will be subject to statutory or constitutional limitations. As an example, the

³⁵ Second Strategic Highway Research Program, *Effect of Public-Private Partnerships and Nontraditional Procurement Processes on Highway Planning, Environmental Review, and Collaborative Decision Making*, S2-C12-RR-1. (Washington, DC: Transportation Research Board of the National Academies, 2015). Available at: <https://www.nap.edu/download/22643>.



statute that authorized the Purple Line concession states that a P3 agreement may not exceed 50 years, including all renewals and extensions, unless an exception applies.

Public policy considerations are crucial to decisions regarding project scope. It is important to ensure that the project has the reliable support of stakeholders, including local and State-level leadership and the general public. In setting the scope of the project, the agency should consider whether adding or removing different elements from the scope will affect political support for the project.

If the agency is using a pre-development agreement (PDA) approach, discussed in section 3.5, the scope of the project—as well as the term—will be informed by the feasibility analysis studies undertaken by the concessionaire during the initial phase and the environmental review process. Appendix B describes the process followed for the North Tarrant Express project.

3.2.6. *Initial Risk Assessment and Allocation*

Successful P3 project delivery is dependent on efficient and effective risk assessment and allocation. To be most effective, risk assessment should begin well before a project delivery method is chosen to enable a more accurate business case analysis and provide the agency with the ability to determine and optimize project delivery alternatives. Proper risk assessment also will assist the agency with structuring the P3 contract because it allows the agency to optimize risk allocation by ensuring that the risks are transferred to (or retained by) the party in the best position to handle them. The FHWA “Guidebook for Risk Assessment in Public Private Partnerships” describes in detail how an agency can utilize risk management to ensure the successful delivery of a P3 project.³⁶

3.2.7. *Legal Compliance Analysis*

Section 2.2 described certain issues to be considered by an agency in its threshold legal analysis relating to use of P3s. Further legal analysis is needed once the agency has made the decision to proceed with a P3 procurement and is in a pre-procurement mode. In addition to revisiting the legal issues identified in section 2.2, the agency should consider how the procurement and contract will be affected by:

- ▶ Federal requirements potentially applicable to the project include, by way of example:³⁷
 - FHWA’s Design-Build requirements.³⁸
 - FTA’s Master Agreement, FTA Circular 5010.1E Award Management Requirements, FTA Circular 4220.1F Third Party Contracting Guidance, and FTA’s Best Practices Procurement Manual.
 - Form FHWA-1273.³⁹
 - Disadvantaged Business Enterprise requirements, generally discussed in section 5.1.4 and 5.2.6.
 - Davis-Bacon requirements.
 - Buy America(n) requirements.⁴⁰
 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.⁴¹

³⁶ Federal Highway Administration, *Guidebook for Risk Assessment in Public Private Partnerships* (Washington, DC: 2013). Available at: https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/guidebooks/risk_assessment/.

³⁷ This is a partial list. In addition to specific requirements for P3 projects, projects receiving Federal grant or loan assistance are subject to all the Federal requirements applicable to that funding source, as discussed in section 2.4.2.

³⁸ 23 CFR part 636.

³⁹ 23 CFR 633.103.

⁴⁰ For FHWA’s Buy America requirements, see 23 U.S.C. 313 and 23 CFR 635.410.

⁴¹ 2 CFR part 200, FTA Circular 4220.1F.



- Requirements relating to TIFIA, RRIF and PABs.
- Requirements for Federal grant programs (e.g., the FTA CIG Program, and the INFRA and BUILD grant programs).
- Project planning and environmental analysis requirements, generally discussed in section 3.3.
- ▶ Specific requirements imposed by State and local laws and regulations that must be addressed in the procurement package.

In order to ensure that applicable legal requirements are identified, the legal team should review the agency's standard contract and procurement documents to identify standard provisions that may need to be added to the documents.

It may be useful to develop checklists identifying applicable local, State, and Federal requirements so as to facilitate a compliance review as the procurement package is being developed.⁴²

3.2.8. *Establishing Communications Strategy*

As noted in section 3.1, the internal communications strategy between the P3 procurement sub-teams and between the procurement team and leadership should be identified in advance of procurement and should involve flexibility to allow for decision-making by the P3 procurement management team. The guidelines for internal communication with agency leadership can be outlined in P3 guidance documentation and normally include:

- ▶ Frequency of periodic communication with leadership.
- ▶ Nature of project updates to be provided. Depending upon the audience, this typically involves a summary of the current status of the project, major activities conducted in the reporting period and those planned for the following period.
- ▶ Summary and timing of the next major decision-points.

Aside from periodic updates, it may be important to involve leadership at critical unscheduled decision-points and when important issues or risks arise. These determinations may be made by project leadership in consultation with project staff.

The agency also should develop a strategy for communications with stakeholders, the media, and the public, including initial agency outreach as discussed in section 3.1 and outreach efforts delegated to the concessionaire.

As discussed in section 4.4.5, the agency also should establish rules applicable to communications with proposers.

3.2.9. *Market Sounding*

Prior to issuance of an RFQ, and at various stages thereafter prior to submission of proposals, the agency may wish to hold meetings to solicit private sector input into the proposed approach to delivering the proposed project and/or more specific comments regarding the draft RFQ documents, as well as any other available draft documents relevant to the project and the overall procurement process and schedule.

A market sounding may be informal, such as the exercise conducted by the Indiana Finance Authority in 2010 for the Ohio River Bridges Project or another recent process involving a series of 1-hour calls with a cross-section of industry participants with a specific list of questions seeking industry feedback.

⁴² In developing a checklist, it may be useful to review information available on Federal agency websites, such as FHWA's list of contract provisions for Federal-aid construction and service contracts, available at: <https://www.fhwa.dot.gov/construction/contracts/provisions.cfm>.



The agency may also conduct a more formal sounding, which could include:

- ▶ Issuing a request for information (RFI) to solicit input from industry representatives regarding the proposed P3. Through responses to the RFI, an agency will be able to evaluate how interested the market is in the proposed project, as well as receive input regarding the form of commercial structure or payment mechanism that the market may accept.
- ▶ Holding an industry forum/workshop in which the agency describes the project and the expected project delivery method, funding sources and procurement schedule. Private entities are invited to gather, ask questions and provide input about the project and may also begin to form partnerships and teaming arrangements for the bidding process. Agencies sometimes take advantage of the opportunity presented by an industry forum to hold one-on-one meetings with potential proposers. It is also common for agencies to share the list and contact information of attendees at the forum to facilitate teaming in the days after the event. This can be particularly helpful to local firms including small and disadvantaged businesses as they try to find potential partners with P3 experience that they may not otherwise be familiar with.
- ▶ In connection with an RFI, an industry forum, or other form of market sounding, issuing a preliminary information memorandum describing the proposed project to ensure that all potential proposers have consistent and relevant information about the project.⁴³
- ▶ Discussing the likelihood that proposers will rely on TIFIA, RRIF and PABs so that the agency can plan and develop a strategy to maximize benefits from these Federal programs.

3.3. Strategies for Environmental and Regulatory Approvals

The following discussion concerns post-procurement activities as well as issues directly affecting a P3 procurement, as the agency must have a full understanding of the issues in order to make appropriate decisions regarding how to proceed with a P3 procurement. Much of this discussion and additional discussion regarding the relationships between P3 project development and the environmental review process can be found in a report prepared for the Second Strategic Highway Research Program entitled “Effect of Public-Private Partnerships and Nontraditional Procurement Processes on Highway Planning, Environmental Review and Collaborative Decision Making.”⁴⁴

3.3.1. Transportation Planning Process

To appropriately address the issues raised by the environmental review process for projects proposed for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53, it is necessary to begin with the transportation planning process required by Federal law.⁴⁵ The statewide transportation improvement program (STIP) and the metropolitan planning organization (MPO) transportation improvement program (TIP) must include capital and non-capital surface transportation projects within the boundaries of the State proposed for funding under title 23 U.S.C. and title 49 U.S.C. Chapter 53 (23 CFR 450.218(g) and 450.326(e)). The project must also be consistent with the long-range statewide transportation plan and, if it is in a metropolitan planning area, the metropolitan transportation plan (MTP) (23 CFR 450.218(k) and 450.326(i)). Urbanized areas with populations of more than 50,000 individuals must have an MPO to carry out the transportation planning process. That metropolitan planning process results in an MTP that covers a planning horizon of at least 20 years, and a TIP, which sets forth the projects which are to be implemented

⁴³ This is a standard practice for the Florida DOT. See https://www.fhwa.dot.gov/ipd/p3/p3_training/peer_ex_san_fran_mar2016/. An example of such a memorandum, issued by the Pennsylvania Turnpike Commission, can be found at <https://www.paturnpike.com/pdfs/business/pim.pdf>.

⁴⁴ Second Strategic Highway Research Program (SHRP 2) Report S2-C12-RR-1, Transportation Research Board (2015)

⁴⁵ See 23 U.S.C. §§ 134 and 135, and corresponding regulations at 23 CFR part 450, and 49 U.S.C. §§ 5303 and 5304, and corresponding regulations at 49 CFR part 613 (which refer back to 23 CFR part 450).



over the next four years.⁴⁶ The STIP MTP, and TIP must be “fiscally constrained.” That means that the funding for a project is identified in the MTP and STIP/TIP and is reasonably expected to be available within the time period contemplated for completion of the project (23 CFR 450.218(o), 23 CFR 450.326(k)), 23 CFR 450.324(f)(11). For P3 projects, this also means that the State or other project sponsor has or is likely to obtain the legal authority to carry out a P3 project. Private investment and any needed public subsidy will need to be reasonably expected to be available at the time the project is included in the STIP/TIP for the time-period when the project is implemented. The FHWA and FTA will jointly look at whether the current cost estimate remains consistent with the MTP, STIP and TIP, and the level of commitment of potential private investors.⁴⁷

In nonattainment areas and maintenance areas,⁴⁸ funding for projects proposed for the first two years of the STIP/TIP must be “available” or “committed.” (23 CFR 450.218(m) and 450.326(k)).⁴⁹

3.3.2. NEPA Process

The NEPA process and compliance with other environmental requirements for P3 projects is the same as for non-P3 projects. Once the project sponsor (State or local agency) identifies a project to implement, it contacts its regional U.S. DOT modal office (e.g., the FHWA Division Office or FTA Regional Office) to begin the environmental review process required by NEPA.⁵⁰ Additionally, highway, transit, and rail projects are covered by a DOT-specific environmental review process under 23 CFR 771/774 and 23 U.S.C. § 139. Typically, the project sponsor, such as the State department of transportation (DOT) for highway projects or a local transit agency for transit projects, conducts early studies to identify the general environmental conditions, potential socio-economic issues, and other considerations. This information and the scope of the project assist the agency in determining the appropriate NEPA class of action, either a categorical exclusion, environmental assessment (EA), or environmental impact statement (EIS). FHWA, FRA, and FTA’s joint NEPA implementing regulations provide lists of CEs, which allow simplified review of

⁴⁶ Although it must be updated every four or five years, the addition of major new projects or significant changes require updates as well. Thus, a major new P3 project not anticipated in the last update does not have to wait four years to be added to the plan and TIP.

⁴⁷ The way in which the planning process requirements interact with P3 project development is explained in FHWA’s P3 Tool Kit, “Public-Private Partnership Oversight: How FHWA Reviews P3s,” (January 2015), see particularly pages 8-10.

⁴⁸ Maintenance area means any geographic region of the United States that the Environmental Protection Agency (EPA) previously designated as a nonattainment area for one or more pollutants pursuant to the Clean Air Act Amendments of 1990, and subsequently redesignated as an attainment area subject to the requirement to develop a maintenance plan under section 175A of the Clean Air Act, as amended (42 U.S.C. 7505a). National Ambient Air Quality Standard (NAAQS) means those standards established pursuant to section 109 of the Clean Air Act (42 U.S.C. 7409). Nonattainment area means any geographic region of the United States that EPA designates as a nonattainment area under section 107 of the Clean Air Act (42 U.S.C. 7407) for any pollutants which an NAAQS exists.

⁴⁹ Available funds means funds derived from an existing source dedicated to or historically used for transportation purposes. For Federal funds, authorized and/or appropriated funds and the extrapolation of formula and discretionary funds at historic rates of increase are considered “available.” A similar approach may be used for State and local funds that are dedicated to or historically used for transportation purposes. Committed funds means funds that have been dedicated or obligated for transportation purposes. For State funds that are not dedicated to transportation purposes, only those funds over which the Governor has control may be considered “committed.” Approval of a TIP by the Governor is considered a commitment of those funds over which the Governor has control. For local or private sources of funds not dedicated to or historically used for transportation purposes (including donations of property), a commitment in writing (e.g., letter of intent) by the responsible official or body having control of the funds may be considered a commitment. For projects involving 49 U.S.C. 5309 funding, execution of a Full Funding Grant Agreement (or equivalent) or an Expedited Grant Agreement (or equivalent) with the DOT shall be considered a multiyear commitment of Federal funds. (23 CFR 450.104)

⁵⁰ 42 U.S.C. §4321, *et seq.*



projects that neither individually or cumulatively have a significant effect on the quality of the human environment.⁵¹ An EA is prepared for projects that are not categorically excluded but may not require an EIS. If the EA demonstrates no significant impact the process is concluded with a finding of no significant impact (FONSI). If, at any point in the EA process, the agency determines that the action is likely to have a significant impact on the environment, the preparation of an EIS is required. (23 CFR 771.119(i)).

When a project requires an EIS, a Notice of Intent (NOI) to prepare an EIS is published in the Federal Register to notify the public of the general nature of the proposed project and solicit public input on the scope of the project and the significant issues for further study in the EIS. For highway and transit projects, the transportation planning process should be the primary source for identifying the project purpose and need and potential project alternatives.

The draft EIS (DEIS) is the next formal step. The DEIS must evaluate all reasonable alternatives to the action and discuss the reasons why other alternatives, which may have been considered, were eliminated from detailed study. The DEIS must also summarize the studies, reviews, consultations, and coordination required by environmental laws or Executive Orders to the extent appropriate at this stage in the environmental process (23 CFR 771.123(c)). Public involvement must be included as a part of the DEIS as prescribed under 23 CFR 771.111(h) for highway projects and under 23 CFR 771.111(i) for transit projects. The agency coordinates and requests comments from other affected agencies and the public (including resource agencies). All public comments and comments from interested stakeholders should be addressed in the final EIS (FEIS). This includes comments on both the natural and human environment, and comments as they relate to consideration of alternatives and selection of the preferred alternative. When all of these comments are considered and (usually) disagreements with resource agencies are resolved, the lead agencies to the maximum extent practicable will issue a single document (combined FEIS/record of decision (ROD)) pursuant to 23 U.S.C. 139(n), or will issue the FEIS. The FEIS responds to all substantive comments received, may include project changes that may have occurred in response to comments or other considerations, etc. The ROD provides the agency decision and may be issued no sooner than 30 days after completion of the FEIS if a single document (combined FEIS/ROD) is not used. The single document (combined FEIS/ROD) will contain the same type of information found in separately issued FEISs and RODs. Once the single document (combined FEIS/ROD) or ROD is issued, highway projects may be approved for the next phase of project development, typically final design and right-of-way acquisition. For transit projects, after the combined FEIS/ROD or ROD is issued FTA may issue a Letter of No Prejudice⁵² or the FFGA, if appropriate, and project can proceed to final design.

The EIS also documents agency compliance with a myriad of other Federal laws that apply to a Federal transportation project. These may include but are not limited to: Section 404 of the Clean Water Act (relating to the dredging and filling of Waters of the United States); Section 4(f) requirements (relating to the preservation of historic sites and publicly owned parks);⁵³ Section 106 of the National Historic Preservation Act; Section 7 of the Endangered Species Act; and many others. Most of the requirements are resolved at approximately the same time as the issuance of the ROD. If full compliance is not possible by

⁵¹ The regulations provide a list of railroad, highway and transit projects that, absent extraordinary circumstances, qualify for a CE. 23 CFR §§ 771.116(c), 771.117(c), and 771.118(c). Other projects that meet the definition for a CE but are not listed in this subsection may also be processed with a CE, albeit with more comprehensive documentation. 23 CFR §§ 771.116(d), 771.117(d), and 771.118(d).

⁵² FTA's Full-Funding Grant Agreements Guidance describes Letters of No Prejudice as follows: "Letter of No Prejudice (LONP) authority allows an applicant at its own risk to incur costs for a Project using its own funding sources with the understanding that the costs incurred subsequent to the issuance of the LONP may be eligible for Federal reimbursement or as credit toward the Grantee's local match should FTA award an FFGA for the Project at a later date." Full-Funding Grant Agreements Guidance, Circular C 5200.1A, 12-05-02, ch. III, § 2. Available at: <https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/full-funding-grant-agreements-guidance>.

⁵³ 23 USC § 138 and 49 USC § 303.



the time of the final EIS, the final EIS should reflect consultation with the appropriate agencies and provide reasonable assurance that the requirements will be met.⁵⁴ However, if a specific permit is required, it is often left to the concessionaire to obtain such permits. The FEIS must include any necessary required mitigation measures, which will be enforced as part of the conditions for FHWA/FTA approval (23 CFR 771.125(a)(1)).

The concerns that are specific to P3 projects and strategies for dealing with them are discussed in the following sections.

3.3.3. *Timeline for NEPA Process*

Potential concessionaires and their lenders are highly interested in the timeline for obtaining NEPA approvals for potential P3 projects, particularly if the project will require an EIS, due to the uncertainties associated with the process until the ROD is issued. Until the process is complete, it remains unknown which alternative will be adopted, or if the project should be built at all. The private investor may have to forego other opportunities during this period, and the period of uncertainty regarding the project could be extended even further if there is litigation. As a result, proposers may be reluctant to participate in a procurement for a project that is in the early stages of the NEPA analysis.⁵⁵

FHWA has provided information regarding the amount of time it takes to complete the EIS process from the NOI to issuance of the ROD. The time has declined between 2011 and today. Thus, in 2011 the median time to complete an EIS was 79 months, while in recent years, this number has hovered around 45 months. The numbers for FTA are not readily available.⁵⁶

In considering the time it takes to complete the NEPA process, the following factors should be considered:

- ▶ By design, NEPA is an interactive process involving resource agencies, project sponsors, the public, and other interested parties. The likelihood of active project opponents can affect the time needed to complete NEPA.
- ▶ The NEPA document also provides the information needed to issue various environmental permits and coordination requirements under other Federal laws. While this is far more efficient than having resource agencies prepare their own NEPA documents, it may make completing the NEPA analysis more complex.
- ▶ Sometimes the NEPA process raises difficult issues requiring extended analyses. These issues can arise from coordination with resource agencies, the general public, or internal review by the project agency itself.
- ▶ Effective public involvement, a cornerstone of the NEPA process, simply takes time.

On August 15, 2017, President Trump issued Executive Order 13807 (E.O. 13807), which encourages agencies to reduce the average time needed to complete the EIS process to approximately two years and establishes the One Federal Decision policy.⁵⁷ FHWA has worked with the U.S. Coast Guard, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Services to develop a Written Agreement, committing to work together to achieve the E.O. 13807 goals.⁵⁸

⁵⁴ 23 CFR 771.123

⁵⁵ It may nevertheless be possible to engage a concessionaire during early stages of the NEPA process, through use of a “pre-development agreement” (PDA) as discussed in section.

⁵⁶ See https://www.environment.fhwa.dot.gov/nepa/timeliness_of_nepa.aspx.

⁵⁷ See E.O. 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects.

⁵⁸ See https://www.environment.fhwa.dot.gov/nepa/oneFederal_decision.aspx.



3.3.4. *The Potential Role of the Concessionaire in the NEPA Process*

The NEPA process is designed to inform the public and decision-makers of the environmental and related consequences of a particular Federal action. A private party with a stake in the outcome of the NEPA process may not prepare an EIS; however, a third-party contracting mechanism may be used. However, for PDA concessions, the agency may ask the concessionaire to provide studies that will inform the NEPA process. This can be very useful because the expertise of the concessionaire's team and any innovative plans the concessionaire may have for the project can be incorporated into the project.

FHWA's Design-Build Rule specifically permits award of P3 agreements prior to completion of the NEPA process (subject to conditions), but prohibits performance of final design and most other project activities until after completion of the NEPA process.⁵⁹ A number of agencies have entered into "pre-development agreements" (PDAs)⁶⁰ with concessionaires to obtain the benefit of early involvement by the private sector. The use of pre-development or comprehensive development agreements are generally a function of State law and State policy. These agencies should consult with agency counsel for consistency with State and local procurement procedures. However, as noted above, the concessionaire likely will price the risk of timely completion of the NEPA process into the concession agreement due to the complexities involved in NEPA analysis and the time required to complete the analysis for a large, complex project.

Another feature of P3 RFPs is the ability to propose ATCs that can save cost and improve project function. These ATCs, if too different from the project described in the RFP, can also lead to additional NEPA work. This issue is discussed further below.

3.3.5. *NEPA Discussion of Tolls*

If tolling is planned or being considered, it should be documented in the NEPA document and its potential impacts analyzed.

- ▶ First, tolling may change the operational characteristics of a highway, as motorists may choose to use other, non-tolled facilities.⁶¹
- ▶ Second, by explaining the need for tolls, the EIS can anticipate some of the potential sources of public opposition.
- ▶ Third, there are cases⁶² where a court has found an EIS sufficient even though only tolled alternatives were discussed in the EIS. Such decisions relied on a showing that sufficient funding for the project could only come from non-governmental sources.

Transit projects will likely have user fees in the form of fares rather than tolls, and use of a P3 approach for a transit project might result in a higher fare or require a public subsidy. Consequently, transit projects may require an analysis comparable to that undertaken for toll projects.

For both highway and transit projects, private sector involvement in transportation facilities can be controversial. Future difficulties may be averted if the agency makes it apparent early on that a project is

⁵⁹ 23 CFR §636.109.

⁶⁰ Under a PDA process, private contractors or consortia compete for the right to develop a project in collaboration with the procuring agency and then have the right of first refusal to implement the project.

⁶¹ Content no longer available online.

⁶² See for example, *Coalition for Advancement of Regional Transp. v. Federal Highway Admin.*, 574 Fed.Appx. 477, 490 (6th Cir. 2014)



being considered for implementation through a P3 delivery approach, and the reasons for consideration of P3 delivery.

3.3.6. *The Concessionaire's Flexibility After Completion of the NEPA Process*

Should the agency decide to pursue a P3 RFP for the construction or modification of a transportation facility following the NEPA process, the selected proposer would be subject to constraints based on the final NEPA documents. In most EISs, completion of the ROD is considered acceptance of the general project location and concepts described in the environmental review documents unless otherwise specified by the approving official.⁶³ The project is generally described in broad terms, giving the winning proposer considerable flexibility in the design of a new facility. Any changes post-NEPA may be subject to additional analyses⁶⁴ and re-evaluation. In urban areas where the project is to be built in a very confined area, the level of design needed in the EIS can be much greater than is typical for more rural areas, resulting in less flexibility for a potential P3 partner.

3.3.7. *Private Investors and Mitigation*

The NEPA process and requirements in related statutes⁶⁵ often result in specific mitigation measures that become conditions to the approval(s) of the project. Mitigation may include costly features that require constant maintenance to be effective. For example, a newly created wetland may require considerable care until it becomes self-sustaining. Thus, the addition of costly and difficult mitigation measures can make a project less attractive to private investors.

The ability of a Federal agency to participate in mitigation measures or project changes is governed by law. An agency must have a legal basis for all expenditures it makes. Thus, while a range of mitigation measures are considered legitimate project expenses, unrelated betterments could not be approved without additional legal authority. Once an agency identifies such legal authority, that authority would apply generally. There is no such thing as a one-time Federal approval. This policy concern might also limit the kinds of mitigation measures an agency can consider.

Government agencies also may be reluctant to agree to new or novel mitigation measures, especially when the measures are only marginally related to the impacts caused. Indeed, such mitigation measures may be outside of the limits of what the Federal Government can impose on a grantee, and the Federal agency may be precluded by applicable law from implementing such measures or believe that it is not in the agency's interest to fund or otherwise implement them. For example, in order to resolve local concerns on the Central Artery/Tunnel Project in Boston, Massachusetts, the State agreed to provide a wide array of local improvements. Many of these went significantly beyond reducing adverse impacts attributable to the federally funded transportation project. FHWA took care to note that these improvements were not to be treated as mitigation in the EIS because that would have put FHWA in the position of having to ensure their implementation.

Private investors and the public sector have different viewpoints relating to prospective mitigation measures. A concessionaire's primary concerns may be whether the mitigation measures are so expensive as to jeopardize the profitability of the project and whether the delay cost in arguing about a particular mitigation measure is more or less expensive than simply accepting it. These considerations may lead a proposer to incorporate a measure into a project that a government agency could or would not accept. Staying on

⁶³ 23 CFR 771.113(b)

⁶⁴ See 23 CFR §§ 771.129 and 771.130

⁶⁵ There are more than 40 different statutes, regulations, or Executive Orders that a project may trigger and may be integrated into the NEPA process. Lists of these statutes can be found at the following two links: https://www.environment.fhwa.dot.gov/legislation/other_legislation/human_environment.aspx and https://www.environment.fhwa.dot.gov/legislation/other_legislation/natural_environment.aspx. While issues raised by these statutes are usually resolved during the NEPA process, they can result in additional conditions being imposed on the project.



schedule and avoiding delay may be critical to the success of a P3 project. Delays cost money and extend the time required to open the project for revenue service. Thus, a concessionaire might advocate inclusion of mitigation measures that will resolve a controversy, with the goal of avoiding project delays, without regard to precedent set for future projects. Project sponsors and private investors should clearly identify measures that may expedite the schedule to FHWA/FTA, but recognize that the measures may be excluded from Federal participation.

3.3.8. *Issues Related to Obtaining Permits*

Typically, P3 agreements require the concessionaire to obtain any necessary permits. This could include permits under Sections 401 (discharge of pollutants, usually during construction) and 404 (dredge and fill) of the Clean Water Act, and many other State and Federal permits. Under current law and practice, these permits require a level of design detail not available at the EIS stage, or they depend on matters within the control of the contractor. There are times when difficulty regarding a particular permit may arise. If the difficulty arises from an issue within the control of the agency, or if it can cause significant delay, it may be in the agency's interest to assist with or intervene in the matter.

3.3.9. *The Role of State and Local Agencies in the NEPA and Permitting Processes*

The concessionaire typically is under considerable economic pressure to expedite project delivery in order to accelerate the revenue start date. Extensive delays or tardy responses to requests for information or comment can significantly increase the project costs. This is different for a government transportation agency, that may have any number of projects under development at any given time. The dedicated concessionaire project team typically has only one project at issue. The government sponsor of a project should monitor the development and execution of the required permits and be prepared to support the concessionaire in its efforts to obtain necessary permits in a timely manner if an issue arises with which the agency can help.

3.4. Due Diligence and Activities of State and Local Project Sponsors

“Due diligence” is a term commonly used to describe the steps taken by a person seeking to acquire, invest in or lend money to a business, ensuring that the buyer, investor, or lender has reviewed all material information relevant to the transaction. In the case of a P3 project, the agency should conduct its own due diligence process to ensure that all relevant information is considered in making decisions regarding the procurement, as well as to assist equity investors and lenders in deciding whether to invest in the project. The agency should also work to ensure that all documents that should be included in the procurement package are assembled and available for review prior to issuance of the RFP.

Due diligence efforts form the foundation of each of the project activities.

3.4.1. *Project Definition*

High-level issues relating to defining the scope of the project are discussed in Section 3.2.3. Project definition is also interrelated with the environmental review process discussed in section 3.3 and may be affected by discussions with industry.

Once the high-level decisions are made about the scope of the project, the agency's technical team will need to start (or continue) the process of assembling and drafting documents serving to define the project in sufficient detail to enable potential proposers to make reasonable assessments of project costs and risk allocation and to minimize contingencies. Steps to be taken include review of available data regarding the project area and deciding whether to invest in additional surveys and studies to provide more reliable information to the proposers or to simply provide the existing documents as reference documents. The technical team should establish a process for drafting technical provisions, which typically involves



assignment of responsibility for individual sections to staff or advisors with relevant expertise, with a single individual responsible for compiling the specifications into a set of provisions that describe the project scope.

In addition to describing requirements for design, construction, and operations, and maintenance work, the provisions will identify matters such as applicable standards, data and reports, any available preliminary design drawings, service requirements, handback requirements, ROW, utility and access information, and other technical considerations.

3.4.2. Developing Projections (Traffic, Ridership and Revenue)

Traffic/ridership and revenue projections are at the center of P3 transportation projects that involve financing or payments tied to facility usage and revenue and will play an important role in all project phases. These may be of less importance in the case of non-revenue generating projects or availability payment concessions. The traffic/ridership and revenue study will assess corridor traffic demand, projected ridership, user willingness to pay, toll policy and system requirements, and future growth characteristics, among other factors. The agency's initial traffic/ridership and revenue projections should clearly articulate the methodology for data collection and modeling, major assumptions, and sensitivity testing. The results of such modeling should be provided to potential proposers for information only, and the proposers should be cautioned that they must perform their own studies. Reliance on any information provided by the agency will be at the proposer's own risk. Nonetheless, the strength of the agency's preliminary traffic/ridership and revenue study will likely affect the level of private sector interest in the P3 project.

Successful practice

It is essential that the agency consider policies related to tolling (such as rate ceilings, schedule of toll rate increases, and discounts or exceptions) early in the procurement process and communicate its decisions to the private parties. It can be very costly for the agency to adjust tolling policies after financial close is reached and the project is in operation.

In developing these projections, agencies should consider various issues that span the operating life-cycle of the facility. For example, for highway toll concessions, agencies should consider toll policy measures such as requirements and possible limitations on toll increases during the contract term and whether to provide special consideration for local or high-volume users.

It also is important to consider the approach to toll operations and maintenance, such as whether the agency will require the concessionaire to be responsible for the operations and maintenance of tolling or to use existing systems for tolling. In the former case, the proposers should assess alternatives available to reduce toll collection risk, and in the latter, they will be concerned about the level of risk associated with the existing systems.

3.4.3. Environmental and Other Approvals

If NEPA approval is not yet obtained, the FHWA Design-Build rule provides that the RFP must identify the current status and state that no commitment will be made to any alternative under evaluation, including the no-build alternative.⁶⁶ This practice is consistent with FTA policy. Due diligence efforts of State and local project sponsors will be needed to identify the environmental and other approvals necessary for design and construction of the project and to ensure the required information is included in the RFP, including identifying the approvals that will be obtained by the agency and the anticipated timelines for those approvals. The RFP documents also often include a list of approvals that will be the concessionaire's responsibility.

The potential for delays to P3 projects associated with environmental approvals is perceived as a major risk by the private sector and lenders. It is true that the NEPA process can encounter significant administrative

⁶⁶ 23 CFR § 636.109.



delays relating to procedural issues, and that litigation can result in injunctions causing further, extended delays. If litigation is still a possibility, this can be an area of significant concern to proposers, resulting in higher cost and possible withdrawal of proposers from the procurement, if the agency seeks to transfer environmental risk to the proposers. Even though the majority of cases result in a decision that does not disrupt the project schedule,⁶⁷ agencies must consider the risk as perceived by the private sector in deciding how to structure the procurement and allocate risk in the contract.

3.4.4. *Unanticipated Conditions*

The risk of unknown conditions at the site is a major issue for P3 projects as the potential cost and delays that may be caused by hidden conditions can be significant. Conditions to consider include:

- ▶ Geotechnical conditions and unanticipated underground manmade facilities.
- ▶ Underground utility facilities.
- ▶ Hazardous materials.
- ▶ Biological resources (threatened and endangered species and migratory birds).
- ▶ Cultural resources (paleontological and archaeological finds and historic sites).
- ▶ Condition of facilities that the concessionaire will be required to maintain.

By definition, unknown conditions are impossible to quantify in advance of final design and construction. Although it may be possible for the agency to transfer these risks to a concessionaire, particularly for revenue risk projects where the concessionaire may be considered the equivalent of the project owner, proposers are highly concerned about the potential for additional costs and delays associated with unforeseeable risks and argue that the public interest is not well-served by a risk allocation approach that requires the private sector to account for that uncertainty by including a significant contingency in the price proposals. Regardless of which party bears the risk of unknown conditions, any action that the agency can take during the pre-proposal period to control this risk will be beneficial to the project. This normally includes conducting geotechnical studies and other surveys in relevant areas. For certain projects, studies regarding the condition of existing facilities may also be advisable.

Issues associated with utility relocations are another major risk for P3 documents. As many utility facilities are underground, utility risk is significant. Obtaining subsurface utility engineering (SUE) data in a timely manner during the pre-procurement phase benefits both the agency and the private entity and the procurement. It also facilitates commencement of negotiations with the utility owners and third parties identified during this process. SUE is an engineering practice that combines civil engineering, surveying, and geophysics to obtain information about underground utilities, and is an integral part of the preliminary engineering process. SUE involves managing certain risks associated with utility mapping at appropriate quality levels, utility coordination, utility relocation design and coordination, utility condition assessment, communication of utility data to concerned parties, utility relocation cost estimates, implementation of utility accommodation policies, and utility design. Different “quality levels” of information are provided by combining these activities with traditional records research and site surveys and utilizing technologies such as geophysical methods and non-destructive vacuum excavation. Costs for SUE services are eligible for Federal participation.

⁶⁷ A decision adverse to the project can result in delays that take month or even years to resolve. Sometimes projects are dropped altogether. However, these are rare occurrences. In order to properly assess the risk for a particular project, it is necessary to examine the specific circumstances of the project/lawsuit.



The agency may significantly enhance the likelihood of a successful outcome of the P3 procurement by deciding to make an early investment in SUE. The benefits of early SUE for the P3 project are many, and the higher the “quality level,” the greater the benefit. Providing accurate utility information in the procurement documents will significantly reduce the cost that proposers assign to the risk of costs and delays attributable to utility relocations. By identifying the exact location of virtually all utilities ahead of time, relocations can be minimized, and costs and delays caused by cutting, damaging or discovering unidentified utility lines are reduced. These activities, combined with traditional records research and site surveys, and the use of new technologies such as surface geophysical methods and non-destructive vacuum excavation, provide “quality levels” of information.

The agency should determine the extent to which the proposers/concessionaire will be entitled to rely upon the SUE data and site conditions data included in the RFP documents as well as the level of risk associated with utility relocation and site conditions that it will transfer to the concessionaire. One successful practice is for the agency to seek proposers’ input early in the procurement process regarding the types of data they believe are most critical to efficiently price the project so that the agency can provide that data during the procurement. By conducting these investigations and providing key information relatively early in the procurement process, the agency can avoid the need to delay the procurement to obtain necessary data, ensuring that price proposals do not include unnecessary contingency for these risks.

For a discussion of issues relating to risks regarding site conditions and utility relocations relevant to P3 projects, see the 2015 NCHRP legal digest entitled “Liability of Design-Builders for Design, Construction, and Acquisition Claims.”⁶⁸

3.4.5. Consultation with Stakeholders, Utility Owners, and Other Third Parties

Almost every P3 transportation project involves multiple government agencies with a stake in the project. In addition, most such projects face a significant risk of project delays and unanticipated costs associated with utility relocations and interfaces with third parties who own facilities affected by the project. Although at least some of this risk can be transferred to the private sector, the agency should seek to reduce the risk to the maximum extent it can.

The first step in mitigating this risk is to identify the project stakeholders, affected utility owners, and other third parties, followed by an assessment regarding the level of risk to the project associated with approvals required from project stakeholders and third parties. In some cases, the agency may be able to transfer responsibility to the concessionaire to obtain permits and other approvals from stakeholders, but in many cases the agency prefers to retain responsibility for interfaces with stakeholders. Regardless of how risk and responsibility are allocated, the project will benefit from early steps taken by the agency to smooth the path for future approvals that need to be obtained from stakeholders.

With respect to utility owners and third parties, significant concerns revolve around the potential for delays to the project if the utility owners or third parties fail to take action required for project construction to proceed in a timely manner. In some cases, project operations are interrelated with third party operations, for example rail transit projects using the same corridor as freight rail operators. The risk of delays relating to project construction can be reduced by entering into agreements that set the rules to be followed to obtain approval of the elements of the concessionaire’s design affecting utility and other third-party facilities and to ensure that construction work for such facilities proceeds according to schedule. Similarly, risks relating to project operations can be reduced by third party agreements setting the rules that will apply after completion of construction. Ideally, the agency would start to negotiate these agreements during the pre-

⁶⁸ Refer to the NCHRP Research Digest on Liability of Design-builders identified in note 95 for additional information. The differing site conditions discussion starts on p. 26. Utility relocations are discussed at pp. 43-44. Available at: <https://www.nap.edu/download/22074>.



procurement phase and continue negotiations during subsequent phases, with the goal of finalizing the agreements well in advance of the proposal due date.

Refer to section 8.1.2 for additional information relating to negotiation of agreements with utility owners and other third parties.

3.4.6. Public Outreach

A public outreach plan can serve to both inform the public of the major project milestones as well as communicate the agency's commitment to transparency, thus building confidence in the agency's decision-making process. As mentioned earlier, political risk is a significant risk for many P3 projects, particularly for large projects in jurisdictions with little or no history of P3 procurements. A lack of information in the public domain or even a perception of lack of transparency can have a negative effect on public opinion and consequentially political support for the project.

The Colorado HPTE P3 manual proposes including the following in the agency's public outreach plan:

- ▶ Identification of key groups, individuals and geographic areas that will be the focus of public outreach.
- ▶ Plan for developing and updating briefing materials on the P3 project.
- ▶ Identification of media approaches to deliver public outreach, including website, media packages, public workshops, focus group sessions, key official meetings and board meetings.
- ▶ Identification of a schedule for delivery of the public outreach for the major stages, starting with the P3 project development stage through additional stages should the P3 project move forward beyond the development stage. The key milestones are identified as:
 - P3 project development
 - Procurement
 - Negotiation/financial close
 - Implementation
 - Operations
- ▶ Recordkeeping for the public outreach effort.
- ▶ Periodic evaluation and update will be accomplished based on feedback from public outreach sessions.

3.4.7. Determining Right-of-Way Strategy

Most P3 transportation projects face a significant risk of project delays and unanticipated costs associated with ROW acquisition if ROW needs and applicable requirements are not identified and coordinated early in the project planning phase. Even where most of the property required for a project is already under public ownership, it is likely that at least some of the parcels to be obtained will be on the critical path for the construction phase of the project. Although some of the responsibility for acquisitions can be transferred to the private sector, the power of eminent domain can only be exercised by the government. The first step in mitigating this risk is to involve the agency's ROW staff early in the project to help identify the required parcels, determine if the State has early acquisition authority that it can use for the project and set the stage for acquisitions to commence. Some of the early acquisition authorities, found in regulation at 23 CFR part 710, subpart E, allow ROW acquisition to begin before the NEPA process is complete. The State will need



to consider each project individually to make a determination about which if any of the early acquisition authorities can be used. If early acquisition authority is not used, ROW acquisition can commence once the NEPA process is complete. The proposers will expect the contract to include an access date for each parcel to be obtained by the agency and information regarding the concessionaire’s responsibilities for acquisitions, allowing them to schedule project development. In some cases, the agency might allocate responsibility for ROW acquisition to the concessionaire, particularly for projects where the final design will dictate how much ROW will actually be required. The contractual deadlines for acquisitions to be undertaken by the agency will require input from ROW staff and advisors as well as condemnation counsel, as they are dependent on staffing plans, legal requirements, and court schedules.⁶⁹ Furthermore, contract provisions should mitigate the risk that the P3 concessionaire, who may be unfamiliar with the Uniform Relocation Act’s restrictions on its ROW activities, inadvertently violates such requirements in its eagerness to accelerate the project schedule.

3.4.8. Federal Participation / Private Activity Bonds Allocation

Various types of funding may be available for the proposed P3 project, including several Federal options as discussed in section 2.4. During the pre-procurement period, the agency should assess available funding sources and take appropriate steps to ensure that the project will be eligible for grant funding, TIFIA and/or RRIF loans and credit assistance, and/or a PAB allocation, to offer the greatest flexibility to the private bidders in structuring their financing solution. As with all projects, the agency should meet with the Build America Bureau and relevant U.S. DOT operating administration representatives to ensure that the Federal partners understand project issues and to obtain advice regarding steps that should be taken to help ensure eligibility for future funding and finance opportunities.

An article discussing FDOT’s I-4 Ultimate project highlighted the importance of early and ongoing communications with U.S. DOT regarding TIFIA loans, stating:

“FDOT’s early and effective engagement with U.S. DOT from the beginning of the procurement process fostered a positive and productive relationship with U.S. DOT that helped facilitate a relatively smooth negotiation and closing process.

The I-4 Ultimate Project was the first project to implement the new, streamlined TIFIA procedure, for which proposer teams were provided a uniform baseline term sheet upon which to base their assumptions regarding TIFIA loan terms and conditions in their proposals.

FDOT engaged U.S. DOT early in the procurement process and maintained continuous and productive communications with U.S. DOT throughout the RFP development and closing phases . . . , developing a positive working relationship with the TIFIA Joint Program Office.

This relationship facilitated timely and co-operative resolution of the various issues that arose throughout the procurement. Although the best value proposer was responsible for negotiating and finalizing the terms of the TIFIA loan with U.S. DOT, FDOT remained engaged throughout, providing invaluable assistance to I-4 Mobility Partners in reaching final agreement with U.S. DOT.”⁷⁰

Planning for transit projects pursuing CIG funding includes added steps due to the statutory requirements that must be completed before the project is eligible for and can receive discretionary CIG funding. The

⁶⁹ M. Loulakis et al., *NCHRP Legal Research Digest 68* (TRB, 2015) also includes information regarding issues to consider in developing the acquisition strategy.

⁷⁰ Kojima and Harder, “I-4 – The ultimate project,” *2015 Project Finance International Yearbook*, accessed at <http://www.pfie.com/i-4-the-ultimate-project/21177339.fullarticle>.



transit project sponsor should discuss its proposed schedule with FTA representatives. If the project sponsor plans to award the P3 contract prior to award of the CIG construction grant, it should lay the groundwork for the possibility that a Letter of No Prejudice may be needed to allow work to proceed during the interim period.

The planning process should also consider potential opportunities based on FHWA's authority to conduct experimental programs involving "processes" under the Federal-aid Highway Program⁷¹ and a similar FTA program as discussed below.⁷² FHWA has established two experimental programs relevant to innovation that benefit P3 projects. The first is Special Experimental Project (SEP)-14, which allows for the testing of innovative contracting mechanisms and practices. A SEP-14 experiment in the 1990s tested the benefits of design-build contracting for highway projects. Prior to this test, design and construction contracts could not be combined because design contracts had to be acquired through a process requiring negotiation with the most highly qualified firm (essentially the same process required for Federal agency contracts under the Brooks Act).⁷³ Construction contracts had to be awarded to the lowest responsible and responsive bidder.⁷⁴ As a result of the SEP-14 test, Congress amended the law to expressly provide for design-build (and P3) contracting.⁷⁵ FHWA headquarters officials in the Office of Infrastructure continue to maintain approval and oversight of SEP-14 experiments.

SEP-15 was created in the early 2000s and is both broader in concept than SEP-14 and focused specifically on P3 project delivery. SEP-15 allows experimentation to test deviations from title 23 statutory, regulatory, or policy provisions, provided that the experimental features are consistent with the overall purpose and intent of the underlying statute, regulation, or policy being tested. Actions explicitly prohibited by statute cannot be the subject of a SEP-15 experiment. The experiment must be consistent with other Federal laws that apply to title 23 funded activities. All SEP-15 proposals are reviewed by a committee of senior headquarters officials and must be approved by the Deputy Administrator.⁷⁶ Thus, agencies wishing to propose a SEP-15 experiment must be prepared to have a fairly mature idea of what they wish to do, be able to describe the long-term benefits of their idea, and expect a thorough review process with no guarantee of approval. An example is its use in Florida's I-595, an availability payment project. During procurement, SEP-15 was used to increase the price comparability between proposals by allowing proposers to submit their project proposal to TIFIA during procurement, rather than once a preferred bidder had been selected. Consequently, proposers were able to submit their final proposals including the TIFIA component, making it easier for the FDOT to determine the best value proposer. This approach was subsequently adopted by the TIFIA program as the standard procedure for offering Federal credit assistance in a competitive P3 solicitation. Another example concerns Pennsylvania's Rapid Bridge Replacement, which aimed to replace over 500 structurally deficient bridges. During the procurement, SEP-15 was used to implement a process to speed up the preparation of NEPA documentation and create economies of scale. A list that includes these and other approved SEP-15 experiments may be found on FHWA's website.⁷⁷

On May 30, 2018, FTA issued a final rule⁷⁸ that would serve essentially the same purpose as SEP-15. Under the "Private Investment Project Procedures" (PIPP) recipients of Federal funding for public transportation projects would be able to request a modification or waiver of specific FTA requirements if the recipient

⁷¹ 23 U.S.C., §502(b)(2).

⁷² See "Private Investment Project Procedures," 82 Fed. Reg. 145 (July 31, 2017). *Federal Register: The Daily Journal of the United States*. Available at: <https://www.transit.dot.gov/regulations-guidance/rulemaking/2017-15985>.

⁷³ This provision continues to be part of Federal law, but design-build contracts are separately authorized. See 23 U.S.C. §112(b)(2).

⁷⁴ This, too, remains part of Federal law. See 23 U.S.C. §112(b)(1).

⁷⁵ See 23 U.S.C. §112(b)(3).

⁷⁶ The process is described the Federal Register Notice that announced the SEP-15 experimental opportunity. 69 FR 59983. Additional information is available at <https://www.fhwa.dot.gov/ipd/p3/toolkit/usdot/sep15/>.

⁷⁷ Ibid.

⁷⁸ 49 CFR part 650 (finalized at 83 FR 24672).



demonstrates that those requirements discourage the use of P3s or private investment. FTA would then have discretion to grant a modification or waiver of such requirement(s) if it determines that:

- ▶ The FTA requirement(s) discourage the use of P3s;
- ▶ The proposed modification or waiver of the FTA requirement(s) is likely to encourage a P3 or private investment;
- ▶ The amount of private sector participation is sufficient to warrant such modification or waiver of the FTA requirement(s); and
- ▶ The modification or waiver of the FTA requirement(s) can be accomplished while protecting the public interest and any public investment.

However, NEPA requirements and any other provisions of Federal statutes would not be subject to modification or waiver.

Finally, the agency should consider the opportunities for training offered by the Build America Bureau and FHWA's Office of Innovative Program Delivery (OIPD) and FTA's Private Sector Participation program.⁷⁹

3.5. Early Contractor Involvement / Pre-Development Agreement

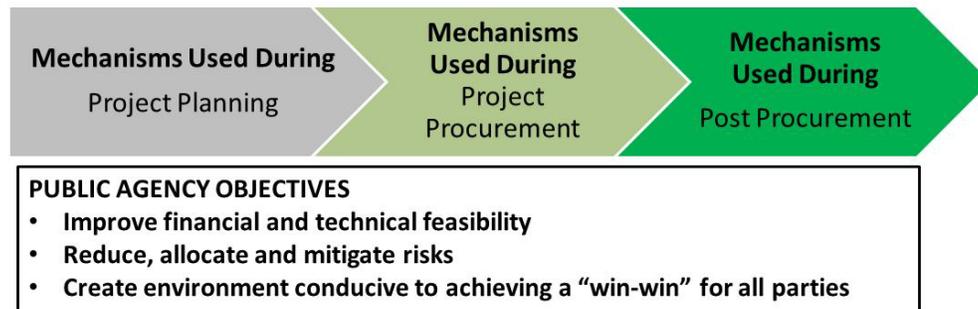
A number of P3 projects have used a PDA model, which involves selecting a concessionaire at the early stages of the project during project planning (see Figure 3). The use of pre-development or comprehensive development agreements are generally a function of State law and State policy. These agencies should consult with agency counsel for consistency with State and local procurement procedures. The concessionaire's scope may include participating in an initial project planning phase with an opportunity to negotiate a subsequent implementation agreement. As permitted by State law and policy, projects that successfully deploy PDAs typically have the following characteristics:

- ▶ The agency sees the value of securing innovation and sweat equity from the concessionaire during the project definition/feasibility/concept phase. The agency may be required to compensate the concessionaire, at a pre-agreed rate or cost, for work it performs under the PDA if the project does not proceed to the delivery phase or if another entity is ultimately selected to deliver the project.
- ▶ The benefit of early contractor involvement justifies reliance on a selection process that focuses primarily on qualifications with subsequent scope/price negotiations, in lieu of price competition involving unit prices, lump sum pricing or guaranteed maximum prices.

⁷⁹ See U.S. DOT Build America Bureau web page at <https://www.transportation.gov/buildamerica> and the FHWA Office of Innovative Program Delivery web page at: <https://www.fhwa.dot.gov/innovativeprograms/> and FTA's web page at <https://www.transit.dot.gov/PIPP>.<https://www.transit.dot.gov/PIPP>.



Figure 3. Private Sector Feedback and Involvement Mechanisms by Project Stage



Source: FHWA and Build America Bureau, “Early Contractor Involvement of Private Developers in the Consideration of Long Term Public Private Partnership Concession Options: A Discussion Paper”⁸⁰

Most industry observers consider the first P3 transactions in the United States to be PDAs, commencing with California’s AB 680 Program in 1990, the use of which spread thereafter to the Washington State Department of Transportation’s 1993 PPP Initiative, and to the State of Virginia under the Public-Private Transportation Act in 1995. The Texas Department of Transportation, the North Carolina Turnpike Authority, Houston METRO, and the Oregon Department of Transportation, among others, also have used PDAs. The PDA approach has become less common as the market has matured, but continues to be explored by agencies for specific projects.

There is no single way in which PDAs have been deployed, but evolving law and policy, transaction history and lessons learned suggest key attributes, suitability criteria and government sponsor safeguards to optimize value from this tool. The North Tarrant Express (NTE) project provides an example of the successful procurement of a PDA in combination with a toll concession for a portion of the same project that was ripe for development. PDAs may be procured through a qualifications-based selection process or may involve a best value evaluation based on pricing for the initial phase or based on an indicative price for the project. For the NTE project, the selection process included evaluation of the PDA pricing but that component of the proposal was given much lower weight than the technical and financial proposals for the initial scope.

Table 7 presents the project aspects that indicate good or poor suitability for PDAs for projects that are already deemed suitable for a P3 procurement.

⁸⁰ Federal Highway Administration, *Early Involvement of Private Developers in the Consideration of Long-Term Public-Private Partnership Concession Options: A Discussion Paper* (Washington, DC: 2017). Available at: https://www.fhwa.dot.gov/ipd/pdfs/p3/early_involvement_private_sector_p3s.pdf

Table 7. Pre-Development Agreement Indicative Factors

Pre-Development Agreement (PDA)	Indicative Factors
Factors indicating suitability for PDA	<ul style="list-style-type: none"> ▶ Procurement is timed to commence well before completion of environmental review and preliminary engineering. ▶ There are benefits associated with private sector support in determining project definition, environmental analysis, feasibility, risk management, and financing efforts. ▶ Agency desires other private sector support of the agency's project objectives. ▶ Limited public-sector resources and expertise affect its ability to appropriately develop the project
Factors indicating poor suitability for PDA for projects otherwise suitable for P3 delivery	<ul style="list-style-type: none"> ▶ More advanced project development process, with preliminary design complete or close to complete, and environmental reviews and approvals obtained or well in process. ▶ Project configuration, mode, and technology choices are clear. ▶ Funding and financing for project are generally understood. ▶ Project size is small or project lacks complexity. ▶ Opportunities for innovation are less in project definition and feasibility and more in means and method of delivery, technical problem solving and achieving optimal lifecycle cost efficiency. ▶ Agency's need for assistance in project planning can be met by private sector advisors without the need to permit them to also deliver the project.

For additional information regarding use of PDAs, see the discussion paper entitled “Early Involvement of Private Developers in the Consideration of Long-Term Public-Private Partnership Concession Options.” As concluded in the discussion paper, one of the key drawbacks of early involvement mechanisms with P3 projects is the inability to obtain competitive pricing. In addition, the fact that the concessionaire has a “lock” on the project may diminish the creative tension involved in designing the project under competitive conditions. Conversely, a PDA structure could involve conditions supporting positive synergies between the agency and proposer by reducing the private sector’s perception of risk, which could encourage its willingness to invest.⁸¹

⁸¹ Federal Highway Administration, *Early Involvement of Private Developers in the Consideration of Long-Term Public-Private Partnership Concession Options: A Discussion Paper* (Washington, DC: 2017). Available at: https://www.fhwa.dot.gov/ipd/pdfs/p3/early_involvement_private_sector_p3s.pdf



4. Starting the Procurement

P3 procurements typically proceed using a two-step, “best value” procurement process after the project has been identified. The first step of the procurement involves development of a “shortlist” of firms that will be asked to submit proposals, and the second step involves selection of the concessionaire based on technical and price proposals submitted by the shortlisted firms. This process can be summarized as follows:

STEP 1: Issuance of a RFQ, receipt of Statements of Qualifications (SOQs), and establishing a shortlist of qualified proposers based on review of the SOQs.

STEP 2: Issuance of a RFP to the shortlisted proposers, receipt of proposals, possibly entering into discussions and requesting proposal revisions, selection of a preferred proposer, possibly entering into limited negotiations with the preferred proposer, and award of a contract.

This chapter provides guidance on activities and considerations relevant to the development of procurement documents through the end of Step 1. Chapters 5 through 7 discuss issues, actions and strategies relevant to Step 2 of the procurement process.

Table 8 presents the key activities and goals for the procurement phase through the end of Step 1.

Table 8. Goals and Activities- Start of Procurement through Request for Qualifications

Goals through RFQ Issuance	Activities
Structure the procurement process	<ul style="list-style-type: none"> ▶ Conduct Procurement Strategy Workshop ▶ Develop evaluation structure and procedures ▶ Develop procedures to ensure full, fair and open procurement ▶ Develop organizational Conflict of Interest policies ▶ Develop policies to ensure full, fair and open procurement that minimizes conflicts of interest
Determine Request for Qualifications terms and basis for shortlisting	<ul style="list-style-type: none"> ▶ Determine RFQ terms and basis for shortlisting ▶ Develop and Issue RFQ ▶ Evaluate and shortlist proposers based on SOQ submitted
Seek necessary approvals	<ul style="list-style-type: none"> ▶ Update management and stakeholders and obtain necessary approvals to issue the RFQ

4.1. Establishing Procurement Strategy

4.1.1. Procurement Strategy Workshop

Once the agency has decided to use a P3 delivery strategy and has assessed the procurement options available under applicable law, it should develop a procurement strategy for the project. Since the P3 project finance model is designed to be highly leveraged, debt provides a majority of the financing required for the project. Sound structuring of the procurement process is hence key to the financial feasibility of the project.

Initial decisions regarding procurement strategy are often made in the context of an initial workshop focusing on project goals and objectives and how such goals and objectives can be met through different alternatives. In addition to setting an overall procurement strategy, the workshop should include a discussion regarding the selection methodology and evaluation criteria. Workshop attendees should include agency decision-makers as well as individuals on the agency’s team with detailed knowledge about the project and the available alternatives. As the workshop will involve sensitive procurement information, attendees should be advised to keep the discussions confidential. Agencies often require all individuals



participating in the workshops, including agency staff, to execute confidentiality agreements, to emphasize the need for confidentiality. The recommendations from the workshop are often subject to review by an executive steering committee that includes high-level agency officials and sometimes are subject to review by the agency's governing board.

Following this initial workshop, the agency should hold regular procurement team meetings involving the same individuals to discuss issues that arise during the pre-procurement period. These meetings will likely involve reconsideration of at least some of the strategic decisions made at the first meeting, as the agency further develops project concepts and obtains input from proposers and third parties.

During this stage of the procurement process it is critical for the agency to start developing its detailed procurement schedule that includes significant procurement milestones. From the proposers' perspective, how the agency manages the procurement and the schedule of procurement activities will provide a good indication of how the agency will manage the project.

4.1.2. *Alternative Selection Approaches*

Best Value

As noted above, use of a best value selection approach is one means of assuring project quality and has been proven to be a successful practice for P3 projects. Most transportation P3 projects in the United States and Canada have proceeded using a best value process.

Use of a best value process creates certain complexities for the procurement, requiring the agency to determine how to evaluate cost relative to technical criteria and to determine the relative importance of the technical evaluation factors and subfactors. The evaluation factors and major subfactors, and their relative importance, should be identified in the procurement package to ensure transparency in the selection process—providing assurance to proposers and the public that the competition will be fair and enabling the agency to justify its selection decision in the event of a protest.⁸² If point scoring is used, the total number of points in a category can be allocated among subfactors, if so desired by the agency. Another alternative is to list the subfactors in order and state that they are listed in equal or descending order of importance.

Agencies considering use of a best value approach have a number of alternatives from which to choose. The tradeoff approach is the method of choice for Federal agencies using a best value selection approach and has also been used by numerous State and local agencies for design-build and P3 procurements. FTA's Best Practices Procurement Manual (BPPM)⁸³ includes an extensive discussion regarding this approach. The underlying premise is that it is appropriate and in the best interests of the agency for the selection official to exercise his or her judgment to determine the relative advantages offered by the proposals following a review of the evaluation ratings and prices. The BPPM describes the rationale for using tradeoffs as follows:

“Some agencies have employed a quantitative approach of assigning scores to both technical and cost proposals, thereby compelling a source selection that is basically mathematically derived. Proponents of this method usually argue it is the most “objective,” and, therefore, the fairest approach to determine a winner. On closer examination, however, all approaches are, to one degree or another, subjective. The decision regarding what score to assign any given factor is subjective and any formulas

⁸² FHWA's Design-Build Rule (23 CFR Sec. 636.209(a)) specifically states that, for Federal-aid procurements, “[a]ll factors and significant subfactors that will affect contract award and their relative importance must be stated clearly in the solicitation.” See also *Conducting Procurement for Public-Private Partnerships (P3s)*, available at: https://www.fhwa.dot.gov/ipd/pdfs/fact_sheets/p3_toolkit_06_conductingprocurement.pdf.

⁸³ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, FTA Report No. 0105 (Washington, DC: 2016). Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>



employed after the initial scoring cannot make the process an “objective” one. Furthermore, recipients must have flexibility to make sound, factually-based decisions that are in their agency’s best interests. Any approach that assigns a predetermined numerical weight to price, and then seeks to “score” price proposals and factor that score into a final overall numerical grade to automatically determine contract award, can result in unintended and adverse consequences. Rather, agencies should evaluate the prices offered but not score the price proposals. Prices should be evaluated and brought alongside the technical proposal scores in order to make the necessary tradeoff decisions as to which proposal represents the best overall value to the agency. Agencies should carefully consider the technical merits of the competitors and the price differentials to ascertain if a higher price proposal warrants the award based on the benefits it offers to the agency as compared to a lower price proposal. This is a subjective decision-making, tradeoff process.

The difficulties in trying to assign a predetermined weight to price and then scoring price proposals is that no one can predict in advance how much more should be paid for certain incremental improvements in technical scores or rankings (depending on what scoring method is used). For example, no one can predict the nature of what will be offered in the technical proposals until those proposals are opened and evaluated. Only then can the nature of what is offered be ascertained and the value of the different approaches proposed be measured. It is against the actual technical offers made that the prices must be compared in a tradeoff process. Agencies cannot predict in advance whether a rating of “Excellent” for a technical proposal will be worth X dollars more than a rating of “Good,” or whether a score of 95 is worth considerably more or only marginally more than a score of 87. It is what is underneath the “Excellent” and the “Good” ratings, or what has caused a score of 95 versus a score of 87, that is critical. The goal is to determine if more dollars should be paid to buy the improvement, and, equally important, how many more dollars those improvements are perceived to be worth. It could well be that the improvements reflected in the higher ratings are worth little in terms of perceived benefits to the agency. In this case, the recipient does not want to get “locked into” a mathematically derived source selection decision. This may very well happen when price has been assigned a numerical score and the selection is based on a mathematical formula instead of a well-reasoned analysis of the relative benefits of the competing proposals.

Some agencies have recognized the pitfalls of using arithmetic schemes to make source selection decisions. They have opted not to use numerical scores to evaluate technical proposals and they have shifted to adjectival ratings instead, e.g., “Unacceptable,” “Marginal,” “Acceptable,” “Highly Acceptable,” “Outstanding.” They have also heavily emphasized the need for substantive narrative explanations of the reasons for the adjectival ratings and the source selection official then focuses on the narrative explanations in determining if it is in the agency’s best interest to pay a higher price for the technical improvements being offered. In this scenario price is evaluated and considered alongside technical merit in a tradeoff fashion using good business judgment to choose the proposal that represents the best value to the agency.”⁸⁴

⁸⁴ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, “4.3.3 Competitive Proposal Evaluation Mechanics,” FTA Report No. 0105 (Washington, DC: 2016), pp. 84-85. Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.



Notwithstanding the considerations discussed in the BPPM, many practitioners use point scoring rolled up into a formula, with best value determined based on total points. Most P3s in the United States and Canada have adopted a formulaic approach.⁸⁵ This appears to be due to a general agency preference for formulas combined with a strong industry preference for use of formulas. However, it should be noted that the Maryland Transit Administration, which received four highly competitive proposals for the Purple Line project, used the tradeoff approach in selecting the concessionaire.

The decision to use tradeoffs or a formula only affects the top level of the selection process. Regardless of which approach is used, the evaluators are responsible for reviewing the proposals and providing either recommended ratings or scores.

Another issue to be considered by the agency in establishing its evaluation process concerns use of point scoring, adjectives, or other means of rating the proposals. When a formula is used, the evaluators may nevertheless be asked to provide adjectival ratings, which are later converted to points. This approach is generally considered to facilitate the process of differentiating one proposer from another, since numerical ratings tend to remain within a relatively narrow range. The individuals providing the recommendations are usually not advised regarding the precise approach to conversions, which is typically determined by the selection committee. Regardless of which approach is used (qualitative ratings or scores), the evaluators should provide narrative justifications of the ratings.

Another method that may be considered to enable evaluators to differentiate one proposal from another is to establish a minimum level that must be achieved for a proposal to “pass,” with the evaluation rating based solely on aspects of the proposal that exceed the minimum. This can help mitigate the tendency to rate all proposals within a narrow band of passing marks, which might result in selection of a proposer whose technical approach, although acceptable, does not provide the best value to the agency.

Low Bid Approach

Some agencies have elected to award P3 contracts to the lowest bidder (or highest bidder, for revenue positive projects) providing a technically acceptable proposal. For these procurements, agencies generally determine the “bid amount” with reference to a net present value calculation that applies a discount factor to payments owing over time, resulting in a lump sum amount that can easily be evaluated. This approach has been used for P3s in Alberta and for highway P3s in British Columbia. Although many jurisdictions prefer the additional quality assurance provided by a best value approach, a low bid approach may be the only option available to some agencies under their enabling legislation and can be justified based on the premise that the structure of the P3 and a pass/fail technical evaluation sufficiently assures project quality. This approach also places additional emphasis on the RFQ process to ensure that all proposers invited to respond to the RFP are highly qualified to successfully deliver the project. This can become problematic if only a limited number of proposers respond to the RFQ and, in an effort to maintain the desired competitive tension, a proposer is shortlisted that is not adequately qualified to deliver the project.

4.1.3. Evaluation Criteria and Submittal Requirements

P3 evaluation criteria and their relative weightings should be determined at the agency’s executive level based on project-specific information, consistent with the agency’s goals and objectives. Staff and technical and financial advisors typically provide recommendations regarding weighted evaluation criteria based on an assessment of project needs and review of RFPs for comparable projects. In order to ensure that proposers understand what the agency is looking for, it is advisable to include language in the evaluation section of the

⁸⁵ As an example, all of TxDOT’s procurements have been based on points and a “blind price” grading approach where price and technical proposals are submitted separately and evaluated by different subcommittees without knowing which proposer submitted which price.



procurement document indicating how the criteria are tied to the agency's goals and objectives and making it clear that proposals will be evaluated based on how well they meet those goals and objectives.

RFQs and RFPs also include pass/fail criteria representing minimum requirements that proposers must meet to be considered for shortlisting or award (as applicable). These minimum requirements should incorporate standards used by the agency to determine contractor responsibility for its other procurements, as well as project-specific requirements. In determining the pass/fail criteria, it may be useful for the agency's procurement team to review requirements included in procurement packages for comparable projects.

Submittal requirements are normally developed by the agency's procurement team to match the evaluation criteria and must also be coordinated with the contractual requirements. Usually the legal team, working with the agency's contracting officer, develops the pass/fail and administrative requirements, which typically include matters such as non-collusion declarations and forms providing relevant information about the proposer's organization. The technical team develops submittal requirements for the technical proposal, and the financial team develops requirements for the financial proposal. To ensure that all requirements are appropriately identified and to avoid duplication, it is advisable for at least one member of each team to review the entire request.

Some pass/fail submittal requirements and evaluation criteria are relatively consistent across P3 projects. For example, because of the importance of ensuring that the contracting entity has an incentive to reach commercial close, many P3 RFPs, including those for the NTE and Purple Line projects, require the submittal of proposal security. (See additional discussion regarding proposal security in section 5.1.11.) Both projects also required the proposal to include information demonstrating the proposer's financial capability to complete, operate, and maintain the project over the long term, and to provide commitments from sureties that will issue payment and performance bonds covering design and construction of the project.

Some RFPs also include more project-specific pass/fail submittal requirements and evaluation criteria. As discussed in greater detail in Appendix B, for the NTE project, the Texas Department of Transportation (TxDOT) had a large project scope with limited available public funds. Because it was essential that proposals not exceed the available public fund amount, that requirement was included as one of the RFP pass/fail criteria.

As the procurement proceeds and additional information becomes available, the agency should periodically review the evaluation criteria and relative weightings to determine whether any changes should be made.

4.1.4. Other Issues

Relative Weighting of Financial and Technical Evaluation Factors

Decisions relating to assignment of relative weightings to financial and technical evaluation factors are the subject of extensive debate for many projects. The finance team generally prefers price to receive a higher weighting while the technical team may recommend an approach that either gives a higher weighting to the technical rating or gives both proposals equal weight.

As discussed in section 4.1.2, the tradeoff approach involves a balancing of the added value provided by a proposal against the additional cost associated with that proposal, and in that respect the financial and technical proposals can be viewed as having equal weight in the evaluation. The instructions to proposers (ITP) for the Purple Line stated that the financial proposal would be given "slightly greater weight."



Where a formula methodology is used, the likelihood increases that price will be given significantly greater weight than technical ratings. Recent examples of a formula methodology include the Virginia DOT's Transform 66 Outside the Beltway P3 procurement, which allocated 70 points to the financial proposal and 30 points to the technical proposal, and the Florida DOT's I-4 Ultimate Managed Lanes procurement, which allocated 60 points to the technical proposal and 40 points to the financial proposal, as follows:

For the Transform 66 Outside the Beltway project, financial proposals were evaluated based on a formula that normalized the prices by subtracting the best price from the proposer's price, dividing the result by 10, and subtracting the quotient from 70. The RFP included detailed information regarding scoring of the technical proposal, including a breakdown of various subcategories within the following high-level categories:

- ▶ Project Schedule: 10 percent.
- ▶ Design and Construction: 40 percent.
- ▶ Traffic Operations, Operations and Maintenance, and Long-Term Partnership: 50 percent.

For the I-4 Ultimate project, 35 of the 40 financial proposal points were allocated to financial price and 5 to financial feasibility. The 60 technical points were allocated to the following sub-categories:

- ▶ Technical Proposal Qualitative Assessment: 35 points (with further subcategories).
- ▶ Baseline Construction Period: 5 points.
- ▶ Inclusion of Direct Connection Proposal: 5 points.
- ▶ Project Technical Enhancements: 15 points.

For the NTE project, TxDOT gave much greater weight to the financial proposal than to technical. The RFP allocated 80 points to the financial proposal, 10 points to technical, and 10 points to the proposal for the PDA portion of the project. The financial score included 70 points for the base scope and 10 points for the ultimate scope.

Agencies using a normalized point scoring process may wish to consider normalizing the technical scores as well as price scores, since the highest price automatically receives the highest number of points available, while the best technical score will probably receive less than the maximum number of points available.

For procurements that allow the proposers to set the completion schedule, the agency may wish to adopt an "A+B" approach to allow schedule acceleration to be evaluated in conjunction with the financial proposal.⁸⁶

Transform 66 Financial Scoring Example

The formula used by VDOT to rank the proposals was based on the "Price" offered by the proposers, which was either the requested Public Funds Amount (with a positive value) or the offered Concession Fee (with a negative value). Each proposer's Financial Score was calculated based on the following formula:

$$\text{Financial Score} = 70 - [(Price_{\text{proposer}} - Price_{\text{best proposer}}) / 10]$$

(Price in millions of \$)

Under this formula, the proposer with the best Price (the lowest number) receives a Financial Score of 70, and other proposers will have lower scores. For example, assuming that the lowest Public Funds Amount is \$39 million, that proposal would receive a score of 70 and a proposal with a Public Funds Amount of \$100 million would receive 63.9 points: $70 - ((100m - 39m) / 10)$.

⁸⁶ For information regarding A+B bidding (also known as "cost plus time" bidding), refer to S. Scott et al., *NCHRP Report 561: Best-Value Procurement Methods for Highway Construction Projects* (Washington, DC: Transportation Research Board of the National Academies, 2006), pp. 37-38. Available at: <https://www.nap.edu/download/13982>.



Providing information to proposers regarding relative weight of subfactors.

Excerpt from Purple Line Instructions to Proposers (ITP)

The sub-criteria for each criterion, described in Tables 5.8.1 through 5.8.5, have been assigned relative importance by the Owner. Relative importance is defined as: (a) critical; (b) very important, and (c) important.... “Critical” means that the Owner considers elements of the Proposal relating to the sub-criteria item to be vital to the Proposer’s ability to achieve the P3 Objectives. “Very important” means that the Owner considers the elements of the Proposal relating to the sub-criteria item to be essential to the Proposer’s ability to achieve the P3 Objectives, but less important than a “critical” item. “Important” means that the Owner considers the elements of the Proposal relating to the sub-criteria to be a building block to achieving the P3 Objectives.

...

Table 5.8.1 Operations Sub-Criteria

Sub- Criteria	Description	Relative Importance
A. Approach to Safety	Evaluate the proposed safety and security features and processes including those at stations and other facilities and those that address User and employee safety, threat and vulnerability, as well as intrusion prevention and detection	Critical
B. Approach to Service Reliability	Evaluate the Proposer’s understanding of, and methods for, achieving service reliability and run times including required service level(s) as well as actions to mitigate the adverse effect of unplanned service reduction and special events and their resulting impacts on capacity	Critical
C. Understanding of Operations Planning	Evaluate how well the Proposer understands operations planning for the Project by establishing a preliminary Operating Plan for delivering all of the required operating services and demonstrating how the plan impacts reliability, energy consumption, transit connectivity, and encourages as well as accommodates User growth during the Term	Very Important
D. Approach to Mixed-Traffic and Sharing of Roadways	Evaluate how well the Proposer understands the impact of mixed traffic and sharing of roadways on service reliability, proposes innovative operating approaches to address the impacts, and considers community impacts, including noise and pedestrian and bicyclist safety	Very Important
E. Workforce Management Approach	Evaluate how well the Proposer understands how to attract and retain a qualified workforce capable of ensuring system reliability, system performance, and safety.	Very Important
F. Approach to Systems Assurance Monitoring	Evaluate the proposed Operating Plan to determine the extent to which the Proposer demonstrates an understanding of the requirements for proving the operational service and system assurance monitoring requirements	Important

Excerpt from North Tarrant Express ITP:

5.4.1 Concession Facility Development Plan Evaluation Factors

The evaluation factors for the Concession Facility Development Plan are as follows:

- (a) General Concession Facility Management; (b) Operations and Maintenance Management and Technical Solutions; and (c) Design-Build Management and Technical Solutions.

The Concession Facility Development Plan Evaluation Factors identified in clauses (a) through (c) above are listed in descending order of importance. Subfactors and their relative weightings are listed in Section 5.4.1.1 through 5.4.1.3. Consecutive factors or subfactors are set forth in descending order of importance, provided however, except as otherwise noted, consecutive factors or subfactors may be of equal value to each other.

...

5.4.1.1 General Concession Facility Management

The General Concession Facility Management evaluation subfactors include:

- (a) Management structure, personnel, and internal organizational systems; (b) Schedule, cost control, safety, and risk management; (c) Environmental management; (d) Public information and communications management; and (e) Mentoring and job training.

Subfactors (a) through (c) are each weighted more than each of subfactors (d) and (e).



Upset Limits

A number of the RFPs for transportation-related P3s in the United States include affordability (or upset) limits requiring the maximum price (or portion thereof) provided in the financial proposal to not exceed the specified limit. This approach requires proposers to focus on ways to match the agency's cash flow and makes it clear that financial proposals exceeding the stated parameters may be rejected.

As an example, TxDOT's RFP for the NTE project specified that a maximum amount of public funds (\$600 million) was available to fund the initial scope of the project, which included a specified mandatory scope as well as up to nine optional improvements that proposers could include in their proposals. Because the goal for TxDOT was to get as much project as possible for the specified maximum public funds amount, any proposals that sought funds in excess of the specified amount would be rejected. In contrast, for I-635, the scope of the project was specifically set forth in the RFP and, while the RFP for the project specified an affordability limit of \$700 million for the public funding component, proposers had the option of submitting a proposal that exceeded the available public funds amount. TxDOT reserved the right to request proposal revisions from any proposer that submitted a proposal that exceeded the maximum public fund amount.

Upset limits are a common feature in FDOT RFPs. Its RFP for the I-4 Ultimate project included annual upset limits ranging from \$99 million to \$121 million for the proposed maximum availability payment, but gave FDOT discretion to accept a proposal that exceeded the limit if all of the proposers submitted financial proposals that exceeded one or more of the upset limits.

Options

Whenever a procurement asks for separate pricing for a "base" project and elements that the agency has the option to include in the scope, the agency must consider how to factor the options into the selection process. Generally, option pricing is given less weight than the base project pricing.⁸⁷ FTA requires the agency to undertake a market value comparison before exercising any option and limits rolling stock options to 7 years following contract award.⁸⁸

Agencies also must consider the conditions associated with the options, including the last date for exercise of the option, technical submittal requirements relating to the options, and whether the concessionaire will finance the cost of the option or the agency will pay on an "as-you-go" basis.

The NTE procurement required pricing for a number of potential options for "ultimate scope" improvements that the proposer was unable to accommodate within its price for the base scope. As noted above, the evaluation formula included 10 points allocated to the ultimate scope pricing and 70 points to pricing for the base scope. In fact, the successful proposer included some of the options within its base scope, leaving three options for different capacity improvements to be included in the as-awarded contract.

⁸⁷ Federal Highway Administration requirements for change orders are set forth in its *Contract Administration Core Curriculum Manual*, FHWA-NHI-134077 (Washington, DC: 2014), pp. 151-158. The full document is available at: <https://www.fhwa.dot.gov/programadmin/contracts/cacc.pdf>. For FTA's requirements concerning change orders, see, *Best Practices Procurement & Lessons Learned Manual*, "5.1 Contract Changes," FTA Report No. 0105 (Washington, DC: 2016), pp. 114-118. Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.

⁸⁸ 49 U.S.C. 5325(e). FTA's requirements for evaluating options are set forth in FTA Circular 4220.1F, "Third Party Contracting Guidance," Chap. VI, Sect. 7.b. (Rev. 4, Mar. 18, 2013). The full document is available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/Third%20Party%20Contracting%20Guidance%20%28Circular%204220.1F%29.pdf>.



Options

Form J in the Purple Line instructions to proposers (ITP) identified the following assumptions for Option A:

Table 1: LRV Option A (Service Level 2)

Solely for the purposes of the NPV evaluation, the NPV of the LRV Option Price identified in ITP Form O-2, Section 1 for LRV Option A (Service Level 2) shall be calculated based on the following assumptions:

- (a) LRV Option A is exercised for the committed number of option LRVs required to go from Service Level 1 to Service Level 2 and the price per vehicle identified in ITP Form O-2, Section 1.b;
- (b) The Total LRV Option A Price in Base Date dollars is escalated at 2.5% per annum until the date LRV Option A is exercised;
- (c) The entire amount of the Owner's payments for LRV Option A occurs when LRV Option A is exercised on the Contract Month that is 60 months after Financial Close;
- (d) Prior to the NPV calculation, an adjustment factor of 0.50 is applied to the Total LRV Option A Price to account for the uncertainty of whether LRV Option A will be exercised; and
- (e) The NPV discount factor will then be applied to the Adjusted Total LRV Option A Price.

Month	Committed Number of Option LRVs	LRV Option A Price Per Vehicle	Total LRV Option A Price	Adjustment Factor	Adjusted Total LRV Option A Price	Discount Factor	Adjusted Total LRV Option A Price NPV
Month 60 after Financial Close		\$		0.50			\$

The Eagle P3 project, a light rail project in the Denver, Colorado metro area, included priced options for rolling stock, a storm sewer project, a grade separation project, and a bridge project. The option pricing received 2 points out of the 60 points allocated to the financial proposal. The concession agreement specified a five-year deadline for exercising the rolling stock option.

The Purple Line P3 agreement included priced options for rolling stock, subject to escalation, with a seven-year outside deadline for exercising the options. The price for the option vehicles was included in the net present value calculation used for evaluation purposes, with adjustments based on assumptions regarding the payment period and price escalation, and applying an uncertainty factor. The box above includes an excerpt from the proposal form for the Purple Line project identifying requirements relating to option pricing for vehicles.

4.2. Ensuring Full, Fair, and Open Competition

This section discusses steps that agencies should consider taking to ensure that the P3 competition meets requirements for full, fair, and open competition for both federally funded projects, as well as to comply with similar State law requirements.

FTA's BPPM summarizes the "full and open competition" requirement applicable to FTA-funded procurements as follows:

"Except as permitted by Federal law or regulations, recipients of Federal assistance must use third party procurement procedures that provide full and open competition. See FTA's enabling legislation at 49 U.S.C. § 5325(a), FTA Circular 4220.1F, Chapter VI, paragraph 1 – Competition Require, and CFR § 200.319, Competition.

Full and open competition is the guiding principle of Federal procurement requirements and practices. Lack of advance planning is not an acceptable justification for use of



noncompetitive procurement procedures. Recipients must constantly seek to permit and encourage meaningful interest and offers from all qualified entities and limit or rule out offerors only for business reasons that generally include cost, quality, and delivery. Because it is often easier to deal with fewer familiar contractors than potential new offerors/contractors, recipients must vigilantly cultivate ways to increase competition at reasonable expense.

The principle of full and open competition has one primary and two secondary purposes. The primary purpose is to obtain the best quality and service for the least cost. In other words, the objective is for recipients to obtain the best buy. The secondary purposes are to guard against favoritism and profiteering at the public's expense, and to provide equal opportunities for all qualified offerors to participate in public business opportunities.⁸⁹

FHWA's statutory and regulatory requirements for design-build in 23 U.S.C. 112 and 23 CFR part 636 provide for transparent and competitive procurement procedures.

4.2.1. *Preserving Competitive Interest*

Agencies interested in using P3s should be aware that, in most cases, the number of firms potentially interested in proposing for a P3 contract is significantly less than the number of firms likely to respond to a DBB procurement or even a DB procurement. The pool of potential proposers is diminished due to numerous factors, including:

- ▶ High level of complexity and long-term nature of P3 projects.
- ▶ Transfer of risk to the private sector.
- ▶ Requirements for equity investment and borrowing.
- ▶ Limitations on bonding capacity.
- ▶ Level of investment required to propose.
- ▶ Other opportunities available to the proposers, including other major procurements.

Limiting Competition to Most Qualified Teams

Practitioners generally recommend limiting the number of proposers participating in the process by shortlisting no more than four firms and selecting a single team for limited negotiations after review of initial proposals. The FHWA's Design-Build Rule⁹⁰ states that the maximum number of shortlisted teams may not exceed five unless the agency determines that a higher number is in the agency's interest. Limiting the number of shortlisted teams provides assurance that only the most highly qualified teams participate in the procurement, thus raising the quality of the proposals, and reduces the cost of the procurement for both the private and public sectors.

As the market has matured, the number of firms interested in pursuing P3 projects has increased, making shortlisting a meaningful exercise. For example, in 2014 the Maryland Transit Administration received six SOQs for the proposed Purple Line project, then estimated to have a total project cost of \$2.2 billion, with the private sector expected to invest between \$500 and \$900 million.⁹¹ Even though six may seem like a

⁸⁹ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, "2.4 Competition Requirements," FTA Report No. 0105 (Washington, DC: 2016), p. 21. Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.

⁹⁰ 23 CFR part 636.

⁹¹ See "Private-Sector Teams Shortlisted for Purple Line P3," Maryland Transit Administration (press release), Jan. 8, 2014. Available at: <https://mta.maryland.gov/private-sector-teams-shortlisted-purple-line-p3>.



relatively small number of competitors, for a project such as the Purple Line it would not have been advisable for Maryland Transit Administration to invite all of the teams to submit proposals, for a number of reasons. Due to the high cost of proposing for a P3 project, if proposers believe there are too many competitors, it is likely that one or more firms might drop out of the competition. In order to keep the most qualified firms interested in the procurement, it is therefore in the agency's interest to evaluate the teams' qualifications and short-list only the teams that are most qualified. This provides assurance that the agency will receive high quality proposals while preserving competitive tension in pricing the job. Reducing the number of proposers involved in the process also benefits the agency as it reduces the costs associated with time spent dealing with the proposers and evaluating proposals, and reduces the total value of stipends owing to unsuccessful proposers as discussed in more detail below. In some cases, legislative authority allowing use of P3s dictates use of a shortlisting process and limits the number of proposers that can be shortlisted.

The FHWA's Design-Build Rule recognizes that an "open" competition does not require the agency to allow all qualified firms to compete. By inviting firms to submit SOQs, the competition is both full and open. The rule indicates that it is preferable to have at least three teams in the competition, but no more than five, stating:

"Normally, three to five firms are short listed, however, the maximum number specified shall not exceed five unless you determine, for that particular solicitation, that a number greater than five is in your interest and is consistent with the purposes and objectives of two-phase design-build contracting."⁹²

Most agencies prefer to strike a happy medium, shortlisting either three or four teams. For the Purple Line project, the agency opted to shortlist four teams and received proposals from all four of them. As the procurement proceeds, the shortlisted firms will continue to assess their chances of success and one or more of the firms might decide to drop out of the competition. Factors outside of the procurement process may also affect the team's ability to compete, including changes in policy by senior management and organizational changes, among others. Some agencies, concerned about the possibility that they might end up with only one or two proposers down the line, elect to shortlist four or five teams instead of three.

Maintaining Confidentiality of Proposer Information

As noted in section 3.1.5, the ability to maintain confidentiality of proposer information is of crucial importance to P3 procurements. Non-disclosure is particularly critical with respect to ATCs and AFCs submitted by individual teams. Such submittals involve a significant investment by the proposers but are justified by the competitive advantage the team gains if the agency agrees to accept the concept. The agency's commitment to confidentiality should be expressed both in the RFQ and the RFP, and measures should be implemented within the agency to prevent information leakage.

It should be noted that, under some circumstances, the agency may be compelled to disclose information relating to ATCs. For example, for one design-build project, one of the proposers submitted an ATC to modify the scope of the project to avoid Section 4(f) impacts without affecting its functionality. Since Section 4(f) prohibits impacts that can be avoided, the agency was required to modify the project description for all proposers. The FHWA amended the Design-Build Rule in 2014 to reflect this requirement.⁹³

One-on-One Meetings

The one-on-one meetings held during the pre-proposal period, as described in section 5.4 and 5.5.1, serve to enhance competition, as they provide an opportunity for the proposers to gain a better understanding of

⁹² 23 CFR § 636.207.

⁹³ 23 CFR § 636.209 (b)(2).



the agency's goals and project needs, improving the quality of proposals received. Holding such meetings also helps to level the playing field for firms that have not previously had an opportunity to work with the agency. Benefits to the agency also include the ability to improve the quality of the procurement package based on comments from proposers, and to gain a greater understanding of how proposers view the project requirements and risks.

Stipends

Due to the nature of a P3 project, regardless of whether a best value or low bid selection process is used, proposals for P3 projects require a significant commitment of resources by the proposers to submit a cost and date certain proposal with committed financing. Recognizing the level of investment required to propose on P3 projects, the agency typically offers payment of a stipend to unsuccessful proposers submitting proposals that meet specified criteria, and in exchange receives the right to use technical and financial concepts and other intellectual property included in the proposal.

The amount of stipend depends on the size and complexity of the project and may be a specified amount or based on the value to the agency of the work product included in the proposal or the cost of proposal preparation. Stipends provided by the agency typically cover only part of the cost of an unsuccessful bid and range from 0.15 percent to 0.48 percent of the total contract cost with the average amount being around 0.25 percent.⁹⁴ Proposals also include certain fixed costs that do not correlate to project size, which may justify use of a slightly higher percentage in determining the stipend amount for projects on the lower end of the cost spectrum. The agency's agreement to pay a stipend recognizes that the cost of submitting a P3 proposal is very high relative to other delivery methods, and that potential proposers are more likely to participate in a P3 procurement if they recoup a portion of those costs. Proposers often use the stipend to pay for "out of pocket" costs paid to team members such as design-related costs associated with the proposal. These payments are needed to ensure that technical members of the team can afford to participate in P3 procurements, as the level of effort required for preparation of a P3 proposal is often much greater than the level of effort required to respond to a non-P3 procurement involving essentially the same compensation as the P3 project.

Proposers are highly concerned about the possibility that they will incur significant expense responding to a procurement that might be canceled prior to the proposal due date, or that the agency might cancel the procurement after selecting a proposer who has incurred even greater expense to be prepared to close the transaction. In some cases, agencies have agreed to pay a reduced stipend if the procurement is canceled prior to the proposal due date, and to pay the entire stipend to a proposer who is selected but fails to close the transaction due to no fault of its own.

In some cases, the agency may agree to pay a stipend to the successful proposer, presumably resulting in lower payments under the P3 agreement. Some procurements include an "early works agreement" allowing payment to the successful proposer for work performed during the period between selection of the concessionaire and award of the P3 agreement or between commercial and financial close.

The Texas, Maryland, and Colorado projects identified in Appendix B offered stipends to unsuccessful proposers. For the Purple Line project, the initially proposed \$2 million stipend was increased to an amount not to exceed \$2.5 million when there was an unforeseen procurement delay of several months due to political reasons. The stipend was payable only to proposers that signed a stipend agreement and provided a complete and compliant proposal, and the amount payable was tied to the value of the work product, requiring proposers to provide evidence of costs incurred if requested. By agreeing to pay the stipend, the

⁹⁴ National Council for Public-Private Partnerships, *The Procurement Process & P3 Contract Administration*. Available at: <https://www.ncppp.org/wp-content/uploads/2017/02/The-Procurement-Process-and-Contract-Administration-FINAL.pdf>
Available at: <https://www.ncppp.org/wp-content/uploads/2017/02/The-Procurement-Process-and-Contract-Administration-FINAL.pdf>



agency obtained the right to use any of the concepts included in unsuccessful proposals. In fact, the agency elected to use one of the concepts submitted by an unsuccessful proposer, involving a shift in the light rail alignment to achieve a resulting reduction in project cost of approximately \$32 million.

Other Measures

The agency should monitor the level of proposer interest over the course of the procurement and consider implementing additional measures to maintain competition if it becomes apparent that one or more of the shortlisted teams is unlikely to propose. This situation could arise due to changes in the marketplace, issues that are specific to members of particular teams (such as a merger between firms on different teams), a proposer's belief that it is not likely to succeed, or a proposer's determination that the documents require the concessionaire to assume risks that it is unwilling to take on after the proposer has asked for revisions that the agency has failed to make. Steps that an agency may wish to consider include increasing the stipend amount or modifying the procurement requirements, commercial terms, or technical requirements. However, the agency should be careful not to change the scope of work or other basic requirements so as to fundamentally alter the nature of the procurement, and thereby avoid the potential for protest by firms that chose not to provide qualifications under the previous terms, but might now have interest in the project under its current terms. The agency should keep in mind that changes made to the RFP for the purpose of keeping a single firm in the competition will apply to all firms. Depending on the circumstances, the agency may be better off not making the change and ending up with a shorter, but still competitive, list of proposers.

4.2.2. Ensuring Fairness and Transparency

Concerned about the high cost of proposing on P3 projects as well as the potential for bias in the selection process, proposers are interested in obtaining as much detail about the project and the selection process as possible. As discussed in section 4.3, agencies can (and should) adopt measures to avoid bias in the evaluation process by ensuring that individuals involved in drafting the solicitation documents or participating in the evaluation process are vetted to ensure that they are not subject to potential organizational conflicts of interest that might influence the solicitation. Agencies should also provide information about the project and selection methodology to enable proposers to understand what the agency is looking for and to provide their best offers in response to the RFP. However, agencies should recognize that if too much information is provided to proposers about subfactor weightings, the proposers are likely to focus on the criteria that have a significant effect on scoring, ignoring lower weighted criteria.⁹⁵

FHWA's rule regarding construction manager/general contractor procurements requires the following information to be included in solicitation documents to ensure fairness and transparency:

- (1) A clearly defined scope of services.
- (2) A list of evaluation factors and significant subfactors, including their relative weight of importance that will be used in evaluating proposals.
- (3) A list of required deliverables.
- (4) An indication of whether interviews will be conducted before establishing the final rank.

⁹⁵ S. Scott et al., NCHRP Report 561: Best-Value Procurement Methods for Highway Construction Projects (Washington, DC: Transportation Research Board of the National Academies, 2006), pp. 37-38. Available at: <https://www.nap.edu/download/13982>.



(5) A sample contract form(s).⁹⁶

It appears appropriate to apply these same guidelines to P3 procurements, subject only to the caveat that the scope of services for certain P3 projects—especially PDAs—may not be well-defined.

4.2.3. *Public Access to Information or Open Records*

For many P3 procurements in the United States, agencies elect to disclose the RFQ and RFP documents to the public, even though information provided by the private sector remains confidential until after award. As examples, the TxDOT and VDOT websites include copies of procurement packages as well as the signed contracts. Some agencies do not make documents available on their websites, although they will provide copies in response to a public records request.

During the period prior to issuance of the RFP, agencies typically limit distribution of the industry review documents to the shortlisted proposers, only posting the procurement package after it is formally approved.

4.3. *Organizational Conflicts of Interest*

As discussed in section 3.1.5, FTA and FHWA requirements include taking appropriate steps to avoid organizational conflicts of interest (OCI), including perceived conflicts of interest, with respect to the procurement. State OCI requirements may also apply.

OCI typically involve issues relating to bias, where a proposer has competing interests that may impair, or be perceived to impair, the proposer's performance or judgment, and unfair competitive advantage, where a proposer has access to relevant information not available to other proposers. The solicitation documents should include requirements for proposers to disclose any such potential conflicts and identify measures to mitigate them. Failure to comply may lead to disqualification. Some agencies provide the proposers with a list of firms that are not permitted to join proposer teams, but each proposer must ascertain whether a potential conflict exists and propose measures to mitigate any such conflict.

If potential OCI issues arise that affect a procurement, it may be useful to review the OCI regulations applicable to Federal agency procurements and case law interpreting such regulations.⁹⁷

4.3.1. *Developing an Organizational Conflicts of Interest Policy*

Developing an OCI policy is highly important to the success of a P3 project procurement, serving to assure the agency that procurement advice provided by its advisors is reliable, to improve confidence of the proposers that the procurement will be fair, and to promote public confidence in the integrity of government procurements.

4.3.2. *Policy Decisions*

One important policy decision to be made by the agency in setting its OCI policy for P3 projects concerns the extent to which existing agency consultants may be allowed to participate on proposer teams. This presents issues for consultants (who may be reluctant to work on small projects for the agency if such work will preclude them from a more significant role during project development), for proposers (who may be unable to find highly qualified consultants for their teams), and for agencies (who want to engage highly qualified firms to assist in project planning and design and also want to encourage formation of highly qualified teams). FHWA's Design-Build Rule addresses this issue by prohibiting firms that assist in

⁹⁶ 23 C.F.R § 635.504.

⁹⁷ The OCI requirements applicable to Federal agency contracts, and cases relating to OCI rules, are discussed in K. Szeliga (2006), "Identifying and Mitigating Organizational Conflicts of Interest," *Public Contract Law Journal* 35, No. 4.



preparation of an RFP document from participating on proposer teams unless the agency determines participation does not create a conflict because the following requirements are met:

- (i) The role of the consultant or sub-consultant was limited to provision of preliminary design, reports, or similar “low-level” documents that will be incorporated into the RFP, and did not include assistance in development of instructions to offerors or evaluation criteria, or
- (ii) Where all documents and reports delivered to the agency by the consultant or sub-consultant are made available to all offerors.⁹⁸

If the agency plans to conduct multiple procurements, it should consider whether any of the consultants who have access to confidential program information through their work on an existing project should be precluded from joining proposer teams for other projects. If the agency does not want to prohibit the consulting firm from working on other projects, the agency may wish to consider whether conflict of interest concerns may be adequately resolved by requiring the firm to establish an ethical wall between the personnel who have access to the confidential program information and the personnel who join proposer teams for other projects.

Special requirements apply to consultants working on NEPA documents to ensure that decisions made under NEPA are not influenced by a consultant’s interest in future work on the project. FHWA’s Design-Build Rule includes the following requirements:

- (c) If the NEPA process has been completed prior to issuing the RFP, the contracting agency may allow a consultant or subconsultant who prepared the NEPA document to submit a proposal in response to the RFP.
- (d) If the NEPA process has not been completed prior to issuing the RFP, the contracting agency may allow a subconsultant to the preparer of the NEPA document to participate as an offeror or join a team submitting a proposal in response to the RFP only if the contracting agency releases such subconsultant from further responsibilities with respect to the preparation of the NEPA document.⁹⁹

The agency’s conflict of interest (COI) policy should also address disclosure requirements for proposers and provide a process for the agency to make determinations regarding conflicts and mitigation measures.

4.3.3. Additional Considerations

Issues Relating to Proposer Organization

Proposers should be aware of the potential consequences of failing to take appropriate steps to identify OCI. For one recent design-build procurement, all four of the bidders were rejected due to their failure to comply with OCI requirements in the RFP.

In addition to being aware of issues associated with firms on their teams, proposers should also be vigilant in asking individual team members to identify prior assignments relating to the project as well as business and personal relationships with individuals who are part of the agency’s team for the project. That information should be disclosed to the agency so it may determine whether an OCI or personal conflict of interest exists. The adverse consequences of a failure to disclose potential conflicts can be seen in a recent situation involving an OCI resulting in a decision by the selected firm to withdraw from a \$220 million contract

⁹⁸ 23 CFR § 636.116(a)(1).

⁹⁹ 23 CFR § 636.116(c) and (d).



because “a design-firm manager involved in the bid had formerly been assigned to [the procuring agency].”¹⁰⁰

Issues Relating to Agency Team Members

Organizational conflicts of interest or personal conflict of interest can arise as the result of agency team member relationships with members of the proposer teams. Problems can be avoided by requiring each agency team member to review a list of firms identified as proposer team members and to disclose any business or personal relationships. Examples of potential problems include:

- ▶ Agency team member who is married or otherwise related to an individual employed by one of the proposer team members.
- ▶ Agency team member formerly employed by a proposer team member whose retirement plan owns stock in the company.
- ▶ Agency team member married to a consultant who works for one of the proposer team members.

If this information is timely and properly disclosed, the agency will have the ability to remove the agency team member from the solicitation process, thus avoiding the conflict, or to implement other measures to mitigate the apparent conflict.

Engineering News Record excerpt on project where all four bidders were rejected due to Organizational Conflict of Interest.

In a letter to [industry] associations citing plans to seek a new round of bids in early January, the [regional transportation agency for the Twin Cities area] listed 36 subcontractors that had done preliminary design or planning work. The letter repeated the bid solicitation’s language stating that if any prime contractor “includes a subcontractor from the list below in its bid, the Prime Construction Bidder will be found to be nonresponsive, will be rejected from the bidding process, and will be given no further consideration.”¹⁰¹

4.4. Developing Evaluation Structure and Procedures

This section addresses steps that should be taken early in the procurement to set the stage for SOQ and proposal evaluations. Section 6.3 provides additional details regarding the proposal evaluation process. Although there are numerous ways agencies can structure and procure a P3 contract, perhaps the most important rule is to define and document the process to be used and then follow it. If changes to the process need to be made over the course of the procurement, both the changes and the reasons for the changes should be clearly documented.

4.4.1. Evaluation Teams

Agencies evaluating SOQs and proposals for P3 projects typically set up separate evaluation teams that may be considered as subcommittees of the selection committee. The evaluation teams:

- a. Perform pass/fail evaluation of SOQ/proposal compliance with administrative requirements.
- b. Review technical elements of SOQs/proposals including a pass/fail review as well as a qualitative evaluation.

¹⁰⁰ P. Reina, “How a Conflict Issue Forced CH2M to Cede Big Rail Job to Bechtel,” *Engineering News Record*, May 5, 2017. Available at: <https://www.enr.com/articles/41953-how-a-conflict-issue-forced-ch2m-to-cede-big-rail-job-to-bechtel?v=preview>.

¹⁰¹ Scott Van Voorhis, “‘Overlooked’ Conflict-of-Interest Rule Created Confusion on Big Light-Rail Bid,” *Engineering News Record*, February 8, 2018. Available at: <https://www.enr.com/articles/43939-overlooked-conflict-of-interest-rule-creates-confusion-on-big-light-rail-bid?v=preview>



- c. Review financial elements of SOQs/proposals including a pass/fail review as well as a qualitative evaluation.

The nature of the project and the details of the procurement process have a significant influence on the makeup of the proposal evaluation teams, which typically include advisors as well as public employees.

The evaluation teams are all subject to appropriate oversight by the leadership. Many agencies have found it helpful to have a team of facilitators onsite who can answer questions about the evaluation process, coordinate any matters involving communication with evaluators on different teams, and advise evaluation team members regarding technical, financial, and legal aspects of the RFP.

All individuals involved in the evaluations are required to sign confidentiality commitments and disclose any financial or other interests and relationships that could present conflicts of interest. Ideally, the evaluation subcommittees will be chaired by public employees. However, due to limited availability of agency staff as well as the need for specialized expertise, the evaluation subcommittees often include advisors. Some agencies limit the role of advisors to providing advice to the voting team members.

The proposal compliance team reviews the proposal for compliance with administrative and legal requirements on a “pass/fail” basis. This team typically includes at least one attorney to ensure an understanding of legal compliance issues. The technical and financial evaluation team members are selected to provide specialized expertise needed for review of proposals.

4.4.2. Selection Committee and Selection Official

Proposal evaluations for P3 projects using a best value selection process typically include use of a selection committee, sometimes called a management committee. This committee is responsible for overall proposal evaluation, including both the technical and financial proposals. The selection committee receives reports and detailed evaluation information from the evaluation subcommittee chairs and decides whether to accept the ratings recommended by each subcommittee.

In some cases, the selection committee may include one or more of the subcommittee chairs. Given the selection committee’s role, it is advisable for the committee to include members with knowledge of both technical and financial aspects of project development and operations. Selection committees are almost always exclusively staffed by agency employees. If for some reason the agency wishes to include a consultant on the selection committee, the agency should be especially careful to check for organizational conflicts of interest to avoid protests, the possibility of voiding the procurement, and the possibility of unauthorized disclosure of confidential information.

For the Purple Line project, the selection recommendation was made by a management committee comprising public employees who had an understanding of both technical and financial aspects of project development and operations. The selection decision was made by an executive committee comprised of a total of five individuals, with three individuals representing MDOT executive leadership, one individual representing Montgomery County, and one individual representing Prince George’s County.

4.4.3. Evaluation Manuals

The review process for the evaluation should be described in an evaluation manual developed well in advance of receipt of SOQs/proposals. Ideally the evaluation manual would be developed prior to issuance of the RFQ or RFP, but it may be advisable to defer development, particularly for an agency’s first P3 project, to avoid the need to modify the manual when addenda are issued. In addition to explaining the process to be followed in evaluating proposals, identifying the evaluators, specifying a protocol for communications among evaluation team members, and including other pertinent information about the procurement, the manual should include checklists of submittal requirements and forms to be used by evaluators during the review of the SOQs/proposals. However, each evaluator should be aware that the



forms might sometimes need to be modified to address issues that only become apparent as the evaluator is reviewing the RFQ/proposal and related SOQ/RFP requirements. The manual should contemplate the possible need to deviate from the stated procedures and include a process for approving changes and documenting such modifications.

The manual should be labeled as a confidential document and treated as such throughout the evaluation process. Copies of the manuals should be kept in a secure location and accounted for once the evaluations are complete, so as to ensure that the contents remain confidential.

In many cases, the evaluation manual is developed by a procurement management team that is also responsible for training evaluators and ensures that confidentiality and disclosure forms are received. The procurement management team members can also act as facilitators during the evaluation process, making themselves available to answer questions about the evaluation process, coordinate any matters involving communication with evaluators on different teams, and advise evaluation team members regarding technical, financial, and legal aspects of the RFP.

4.4.4. Evaluation Training

Evaluation training is critical to a successful evaluation and procurement process. The schedule for evaluating SOQs and proposals should include a training session that occurs before the start of the evaluation process. Due to the number of people involved in the evaluation process, and constraints on access to information, it is important to ensure that everyone associated with the evaluation understands the rules of the game. Even if an individual has previously participated in a similar evaluation process, he or she should be encouraged to attend the training session.

Recognizing that the evaluators' time is valuable, typically the training session is scheduled to occur in the space set aside for evaluations, shortly before or after receipt of the SOQs or proposals. Upon completion of the presentation or receipt of the SOQs/proposals, whichever occurs later, evaluators are permitted to start the review process. Sometimes, due to timing constraints and the inability to get all of those involved in the evaluation process to attend a single training session, agencies may provide for at least one alternative/make-up training session.

The training should provide an overview of the procurement, identify the purpose of the evaluation process, walk through the evaluation manual, discuss the process to be followed in rating the submittals, and emphasize the importance of maintaining confidentiality.

4.4.5. Communications with Proposers

The solicitation document (RFQ or RFP) will typically identify an agency representative responsible for acting as the point of contact for communications with proposers. That same individual remains responsible for communications with proposers relating to evaluation of SOQs and proposals.

If in the process of reviewing an SOQ or proposal the evaluator determines that it is necessary to ask the proposer to clarify its submittal or provide additional information, the request should be issued by the agency's designated representative. Usually the evaluator who discovers the need for additional information discusses the issue with the evaluation team chair, and if the chair agrees it is appropriate to submit a request, the evaluator drafts the question and submits it to a facilitator, who puts it in proper form, obtains approval from the designated representative, and sends the request out. It may be necessary to consult with counsel to verify that the request is permissible under the terms of the solicitation and applicable law. The request should specify a deadline for submittal of a response, allowing a reasonable amount of time for the proposer to submit its response while ensuring that the evaluation team will be able to review the response without delaying the evaluation timeline.



4.4.6. Document Control

Due to the confidential nature of SOQs and proposals, it is essential for the agency to maintain a stringent document control system throughout the evaluation process. The documents should be kept in a secure facility and reviewed by evaluators within that facility. In some cases, the evaluation takes place within an existing agency facility, but it may be necessary for the agency to rent space for the purpose.

Although most agencies still require proposers to submit multiple hard copies of their proposals, certain proposal elements (including the financial model, price proposals, and other financial information) are commonly provided in electronic form, allowing the evaluators to search for and verify information more easily, and avoiding the need to manage numerous volumes of hard copy proposals. Some agencies ask for an electronic copy of the entire proposal, but usually also ask for at least one hard copy original, which serves as the control or master file in the event of discrepancies. If the evaluation process includes review of electronic copies, the agency should consider requiring evaluators to use computers supplied by the agency, to ensure that proposal information does not leave the facility. If electronic documents are accepted or required, they should be provided on a USB/flash drive/CD, which will be subject to the same strict document control procedures as hard copy documents.

The documents should be kept in a locked room when not under review. If the evaluation schedule is tight, the agency may need to arrange for access to materials outside of business hours. In some cases, the agency may permit documents to be reviewed outside of the secure facility, but should ensure that the evaluators understand the importance of maintaining control of the materials, locking them up when they are not being reviewed, and returning them to the appropriate location when the evaluation is complete. However, absent unusual circumstances, all evaluators should expect to spend the evaluation period at the designated evaluation facility, reviewing the documents in that space.

The agency should decide how many copies of the SOQ and proposal to retain. Since evaluators may want access to SOQs during proposal evaluations, it is generally advisable to retain all of the SOQ copies until after proposal evaluations are complete. Once the contract is awarded, the agency may elect to destroy extra copies of the documents, but should retain an archived set for record purposes. If a protest is filed, the agency should consult with counsel before taking any action to destroy documents.

4.5. Developing the Request for Qualifications

Ideally the RFQ will only be issued after the agency has developed its overall procurement strategy for the project. In some cases, agencies may issue an RFQ earlier, with the goal of accelerating the procurement process. In that situation, once the procurement strategy is set, the agency should consider whether it might benefit from re-starting the process, based on a review of the RFQ process and updated information about the project.

The main objective of the RFQ step is to identify proposers who are interested in participating in the process and who have assembled highly qualified teams to perform the services and obtain financing. The RFQ also serves to communicate key project information and information about the procurement process to the market and to obtain initial feedback from industry through outreach meetings and written comments. The agency may also hold industry meetings to solicit early private sector input prior to issuance of the RFQ (see section 3.2.9).

The RFQ identifies the evaluation criteria for determining which teams are most highly qualified and will be permitted to submit proposals. As discussed in section 4.1, such criteria are typically set by senior management during the planning stages of the procurement process, but may be revisited over the course of the procurement.



4.5.1. Key Considerations

In drafting the RFQ, it is necessary to understand the agency's reasons for shortlisting as well as the motivations of private sector participants.

From the agency's perspective, in addition to serving to enhance competition (as discussed in section 4.1), the agency views the RFQ as a means of assuring quality in the performance of services and obtaining a team that understands the agency's goals and objectives, which typically include reducing agency costs, assuring quality and accelerating project delivery:

- ▶ *Quality.* The traditional means of assuring quality (that is, by controlling the design, inspecting construction, and retaining responsibility for operations and maintenance) is not an option for P3s. Instead, the agency must focus on the quality of the proposer teams and their proposals, and rely on the P3 structure itself and the contract terms and conditions to give the P3 contractor incentives to provide a high-quality project and perform operations in a way that meets public needs.
- ▶ *Cost and Accelerated Delivery.* Public sector goals for P3 projects generally include a desire to minimize the expenditure of public funds and to accelerate the delivery schedule. These goals compete with each other and are interrelated with the goal of achieving high quality. For P3 projects where the concessionaire supplies financing, the concessionaire has significant incentives to determine the most cost-effective way to develop the project. Where the financing is based on revenue that is contingent on project completion, the concessionaire has significant incentives to complete the project as early as possible. Use of a best value selection approach enables the agency to consider cost and schedule, as well as quality, in determining the successful proposer.
- ▶ *Track Record.* Most RFQs require proposer teams to provide information about their prior experience and safety record, with higher ratings given to teams with a track record of successfully delivering projects of comparable complexity, scope, and size and with a history of successfully working together. One consideration that is somewhat unique to P3 projects is that firms with relevant P3 experience may have only minimal experience on other projects within the State. In such cases, agencies may want to include evaluation criteria in the RFQ encouraging teaming with local firms that have worked on projects in the area, understand the agency's policies and practices, and have knowledge of the local market, particularly as it relates to labor, suppliers, and other subcontractors critical to executing a project. The agency may also be willing to accept comparable project experience in nearby States or other similar jurisdictions.

At the RFQ phase, the private sector's primary motivation relates to profitability. Proposers will only become involved in the procurement if they perceive a good chance of being awarded a profitable contract. As discussed in section 4.2.1, use of a shortlisting and industry review process increases proposer interest in the competition as it increases the odds of winning the contract and offers the opportunity to engage in a dialog with the agency during the pre-proposal period.

Development of the Request for Qualifications

The content of the RFQ should be developed using established methods that will determine the key qualifications of the proposers and their potential ability to provide the best value in the delivery of the project. The RFQ content should include clear and complete description of:

- ▶ The goals and objectives of the project and the procurement.
- ▶ Relevant information about the background, development and funding status.
- ▶ The procurement process, including the schedule for major procurement milestones.
- ▶ Procurement rules, including communications, conflicts of interest and confidentiality.
- ▶ Submittal requirements.



- Technical qualifications.
- Financial qualifications.
- ▶ Evaluation criteria.
- ▶ Protest procedures and debriefings.
- ▶ Required forms.

Evaluation Criteria for Statements of Qualification

The SOQ evaluation criteria should be disclosed in the RFQ. The evaluation criteria for RFQs typically include:

- ▶ Administrative criteria, including “must-meet” conditions.
- ▶ Technical criteria, including organizational capacity and past performance of team members and key personnel.
- ▶ Financial criteria, including financial capacity of the proposer and past financial performance.

As described below with the CDOT and VDOT examples, the evaluation can be staged to progressively screen proposers first based on administrative criteria before advancing to a review along technical and financial aspects. However, in order to expedite the review process, it may be advisable to conduct concurrent reviews for administrative compliance and qualitative evaluation. Table 9 provides a summary of technical and financial criteria that can be used for evaluating SOQs.

Table 9. Technical and Financial Criteria for SOQ Evaluation

Criteria Category		Evaluation Parameters
Technical Criteria	Organizational Capacity	<ul style="list-style-type: none"> ▶ Project team organization. ▶ Key team members and their qualifications. ▶ Key subcontractors and their qualifications. ▶ Staff/resource capacity and availability. ▶ Specialized capabilities (design/ construction/ operations/ maintenance) relevant to the project. ▶ Quality assurance and quality control organization and approach. ▶ Approach and understanding of project. ▶ Understanding of local context.
	Past Technical Performance	<ul style="list-style-type: none"> ▶ Experience with P3 projects. ▶ Experience with similar types of projects. ▶ Specialized expertise in risk mitigation and management on other P3 projects or projects of comparable complexity. ▶ Quality performance. ▶ Safety record. ▶ Experience working with the procuring agency and/or local subcontractors. ▶ References.
	Project-specific	<ul style="list-style-type: none"> ▶ Technical approach. ▶ Understanding of project and local context.
Financial Criteria	Financial Capacity	<ul style="list-style-type: none"> ▶ Financial capacity of the proposers (ability to incur debt and raise equity). ▶ Bonding record or proof of bonding capability. ▶ Legal and financial disclosures.
	Past Financial Performance	<ul style="list-style-type: none"> ▶ Past performance on awarded contracts (completion, liquidated damages, quality, claims, fines, schedule). ▶ History of performance (unsubstantiated claims, fines, suits, quality, accuracy, schedule).
	Project-specific	<ul style="list-style-type: none"> ▶ Financial approach.

The RFQ Requirements for U.S. 36 Phase 2, Colorado

The technical and financial qualification for the U.S. 36 Phase 2 comprised of two stages. The first stage included seven pass/fail criteria, all of which had to be passed to make it to the second stage. The criteria were as follows:

1. Original executed transmittal letter is included.
2. Lead contractor has demonstrated it can obtain payment and performance bonds or a letter of credit in the amount of \$110 million. This is close to five times the equity contribution or near half the total cost of the project.
3. No team member is disqualified to work for the Federal Government or any State government.
4. The team includes persons licensed to practice architecture, engineering and/or surveying.
5. The lead contractor is pre-qualified by CDOT.
6. Each team member has the financial capability to carry out the project responsibilities allocated to them (for this, evidence needs to be presented regarding: profitability; capital structure; ability to service existing debt; ability to invest equity; other commitments and contingencies; and past performance in meeting similar commitments under similar types of contracts).
7. Certification concerning no previous disqualifications, relevant criminal activity, etc. which could lead to disqualification.

The second stage for U.S. 36 phase 2 is composed of five weighted criteria. These criteria included:

- A. Candidate structure and management approach, including a structure capable of functioning as an effective, well integrated finance-design-build-operate-maintain team and previous experience of team work among team members (max. 15 points).
- B. Candidate technical experience, including depth and relevance of the experience of the different team members related to the project responsibilities allocated to them (max. 25 points).
- C. Candidate financial experience, including depth and relevance securing and successfully implementing financing for similar projects (max. 25 points).
- D. Statement of technical approach, including an understanding of the risks and mitigating measures needed during all phases of the project and the demonstration of an effective approach to ensuring that adequate materials, equipment and personnel are available (max. 15 points).
- E. Statement of approach to financing, including an in-depth understanding of the tools, requirements, and critical considerations involved in developing and executing a financing plan (max. 20 points).



The RFQ Requirements for Transform 66 Outside the Beltway, Virginia

The RFQ process for Transform 66 Outside the Beltway was also composed of two similar stages. First, it included six pass/fail criteria, all of which had to be passed for proposers to advance to the second stage. The criteria were:

1. To include an original executed transmittal letter.
2. At least one of the team members has demonstrated it can obtain payment and performance bonds or a letter of credit in the amount of \$500 million. This is close to 0.3 times the equity contribution or 13 percent of the total cost of the project; the surety/insurance company or bank providing such letter must be rated in one of the two top categories by two nationally recognized rating agencies or at least A- (A minus) or better.
3. Neither team member is disqualified to work for the Federal Government or any State government.
4. Each equity member can demonstrate the ability to raise at least \$350 million in equity.
5. Certification concerning no previous disqualifications, relevant criminal activity etc. Disclosures will be reviewed and could lead to disqualification.
6. To make a written commitment to identify personnel available with the qualifications for the project.

The second stage for Transform 66 Outside the Beltway RFQ process was composed of four weighted criteria. They were:

- A. Technical qualifications and capability, including relevance of the experience of the lead contractor with projects over \$250 million; examples of completed or substantially completed work on two DB or DBFOM projects (max 40 percent).
- B. Statement of technical approach, including an understanding of the scope and complexity of the project, including risks and potential solutions (max. 10 percent).
- C. Project finance qualifications and capabilities, including demonstrated success in reaching financial close for tolled DBFOM projects (max. 40 percent).
- D. Conceptual project financing discussion, including understanding of financing tools and current market developments (max. 10 percent).

4.5.2. *Communicating Requirements to Proposers*

There is no single preferred form for the RFQ. However, in order to facilitate SOQ evaluations, it is advisable to include requirements in the RFQ ensuring that all SOQs will provide required information in the same order, subject to reasonable page limits. This also makes it easier for proposers to confirm that their submittals are complete.

The document should include background information relevant to proposers interested in responding, such as information about the agency, the procurement process, requirements related to organizational conflicts, the scope and status of the project, the plan of finance, and anticipated contract requirements (including applicable Federal requirements), as well as information regarding SOQ contents and submittal requirements and the evaluation and shortlisting process. The private sector will be particularly interested in understanding enough about the project requirements to ensure they have assembled a team that can deliver the entire project scope. It is preferable to identify a broader scope of requirements and allow teams to then pare themselves down as the procurement evolves and the public and private sector responsibilities become better defined. Late changes to a team's composition could result in the agency having to reevaluate the team in the context of shortlisting decisions to maintain the integrity of the procurement process.

As discussed above, technical and financial submittal requirements should be developed by the agency's technical and financial teams to match the evaluation criteria. The RFQ typically requires information to be provided about the proposer team's management and organizational structure, key personnel, key subcontractors and suppliers, and relevant experience. Reference information is usually required for key personnel and for projects identified in the experience section of the SOQ. The RFQ may require the SOQ to include a discussion regarding project understanding and/or anticipated approach to the project. On the financial side, the RFQ will likely require information regarding the proposer's plan of equity investment, performance security, financing experience, plan of finance, and copies of financial letters of support and equity member financial statements.



The RFQ will include standard forms relevant to a proposer responsibility determination and enabling evaluators to ascertain whether the proposer team meets minimum legal and administrative requirements. The RFQ forms also typically include a letter to be signed by the proposer including representations and acknowledgments regarding the SOQ. It should be noted that P3 concessionaires are often organized as special purpose entities (SPEs) and may plan to defer formation of the actual contracting entity until after the shortlist is announced. If the agency is willing to accommodate this approach, the RFQ will need to require signatures by equity members of the future SPE. In that case the “proposer” will likely be a consortium instead of the actual contracting entity. In order for the evaluation team to verify that the planned structure is consistent with the project concept, the RFQ should ask for copies of organizational and teaming documents. For additional information regarding issues relating to SPEs, refer to section 5.1.10.

RFQs also typically include protest procedures, as the agency’s standard procedures normally do not cover a shortlisting process. They also usually include a list of rights reserved to the agency with respect to the procurement.

4.5.3. Rules of Engagement

The RFQ must advise proposers regarding basic rules to be followed throughout the procurement so as to avoid organizational conflict situations and improper contacts that could lead to protests or render the procurement invalid.

Teaming

As proposers are highly concerned about unauthorized disclosure of information, the conditions for joining a team usually include an exclusivity agreement. However, situations may arise where related firms are on different teams, particularly where a corporate merger or acquisition occurs after teams have formed. When this occurs, the agency and the teams will need to consider what action to take. In some cases, the agency may determine that the affiliated entities are sufficiently separate so that both teams will be allowed to proceed, or it may require one of the teams to withdraw or re-form with a different entity. If the relationship creates an organizational conflict, the OCI rules will be relevant in determining the solution. For the Purple Line procurement, a corporate acquisition resulted in a potential organizational conflict when a subconsultant on one of the teams became affiliated with the agency’s procurement consultant, resulting in reconfiguration of the proposer’s team.

One question that often arises for P3 projects, particularly where there is only a limited number of potential subcontractors or suppliers in specialty areas, is whether a particular subcontractor or supplier may be a member of multiple teams. Allowing different teams to share the same members gives rise to the concerns about information leakage and collusion. This represents a greater concern at the proposal stage than at the SOQ stage. The SOQ for the Purple Line project included the following provision establishing rules to be followed to avoid problems:

“After submittal of SOQs, no Proposer or any of its team members may communicate with another Proposer or its team members with regard to the RFP or either team’s Proposal; *provided, however*, that subcontractors that are shared between two or more Proposer Teams may communicate with their respective team members so long as those Proposers establish reasonable protocols to ensure that the subcontractor will not act as a conduit of information between the teams (contact among Proposer organizations is allowed during informational meetings organized by the Contracting Officer).”

A related concern is associated with the possibility that one of the proposers may require a critical subcontractor or supplier to have an exclusive relationship with that proposer’s team, thereby limiting the number of teams able to meet minimum qualifications requirements. This may be addressed by excluding specialty suppliers from the qualifications requirements in the SOQ, or by including a prohibition in the



SOQ on exclusive arrangements. As an example, the RFQ for the Los Angeles World Airports Automated People Mover (APM) project advised proposers not to identify operating system suppliers in their SOQs. Instead, the agency planned to hold a separate “Eligibility Determination Process” and provide a list of eligible suppliers to the shortlisted proposers.

Rules of Contact

The RFQ should identify the agency’s point of contact and require each proposer to identify a point of contact to receive addenda and other information. In order to avoid giving any proposer access to information that might give rise to an unfair competitive advantage, potential proposers should be prohibited from contacting any agency representatives regarding the RFQ, other than the designated point of contact. In order to avoid opportunities for collusion, the rules of contact for the RFQ should also prohibit proposers from contacting each other to discuss the project. Failure to adhere to these rules could lead to proposer disqualification.

The RFQ may also include a prohibition on contacting stakeholders such as Federal, State, and local agencies; utilities; and railroad operators. In addition to helping to keep the playing field level for all proposers, the prohibition on stakeholder contact also helps to avoid multiple calls to stakeholders from different proposers asking questions about the project. If the agency believes that it is in the project’s interest for proposers to receive information from particular stakeholders, the agency may wish to set up a joint meeting that includes stakeholder as well as proposer and agency representatives.

In order to avoid questions from the proposers about permitted contacts, it may be advisable to include a provision in the RFQ stating that proposers are not restricted from engaging in communications for matters unrelated to the project, and that they are allowed to participate in public meetings and formal meetings set up by the agency.



5. Developing the Draft Request for Proposal

The term “RFP” refers to the entire set of documents issued to proposers for purposes of soliciting proposals. The RFP documents typically include instructions to proposers (ITP), contract terms and conditions, multiple volumes of technical provisions and other documents that are also considered part of the contract, and reference information documents that are outside of the contract.

The main objective of the RFP step is to obtain competitive proposals that meet the agency’s requirements, allowing the agency to make an intelligent decision regarding proposer selection. The RFP also serves to communicate updated project information and information about the procurement process to the shortlisted teams and to establish rules for communications with the proposers.

Table 10 presents the key goals and activities for the procurement phase through issuance of the final RFP.

Table 10. Goals and Activities—Procurement through Request for Proposal Issuance

Goals for the Request for Proposal Process	Activities
Develop Request for Proposal (RFP)	<ul style="list-style-type: none"> ▶ Develop draft RFP procurement terms ▶ Develop draft RFP contract terms
Develop Final RFP	<ul style="list-style-type: none"> ▶ Industry review process ▶ Develop final RFP procurement terms ▶ Develop Final RFP contract terms ▶ Continued project due diligence
Seek necessary approvals	<ul style="list-style-type: none"> ▶ Update management and stakeholders and obtain required approvals required to issue the RFP

5.1. Developing Draft Request for Proposals – Key Considerations

5.1.1. Schedule

The RFP should update the agency’s schedule for major steps in the procurement, with appropriate caveats making it clear that the dates remain subject to change. As an example, the ITP for the Florida DOT’s I-4 Ultimate P3 project identified three rounds of pre-RFP industry review activities and provided estimated dates for the proposal request and response process (shown in the box). Various activities during the procurement process may result in changes to the procurement schedule as the procurement proceeds. These include activities that are typically started during the pre-procurement phase once the project delivery strategy is finalized or in parallel with the decision. Table 11 presents the key

Activities Included with Dates in Instructions to Proposers (ITP) for the Florida DOT’s I-4 Ultimate P3 Project
Issue Final RFP
Exchanges regarding rate tables
ATC and AFC meetings (multiple)
One-on-One Meetings (two rounds)
Identification of underwriters and underwriter counsel
Provision of market pricing updates
FDOT responses to ATCs and AFCs
One-on-One Meetings (Fourth Round)
Last day for Proposers to submit questions under ITP Section 2.3
Request for approval of changes in organization
FDOT provision of wage rate tables
Administrative and Technical Proposal Due Date
Submittal of Model Auditor details
Exchange regarding Bond Financing Base Interest Rates, TIFIA Rates, and Bank Debt Financing Benchmark Rate(s)
Financial Proposal Due Date
Selection/Award
Best Value Proposer submittal of information and documents
Execution of Agreement and Financial Close

schedule drivers during the P3 procurement phase and their potential for delaying the schedule. While developing the procurement schedule, it is important to be mindful of dependencies— particularly dependence on external factors outside of the control of the procurement team and the agency—and activities that pose a high schedule risk. It is important also to recognize the schedule impacts of the technical details of the procurement. For instance, if the RFP is developed with a “non-commercial position” (i.e., transfer of risk to the private entity that the entity has no ability to control), significant time may be required to negotiate with the proposers. Furthermore, external factors such as political support and public opinion can also impact the procurement schedule. The Maryland Purple Line project was impacted by the State gubernatorial election that occurred while the procurement was underway, and the subsequent request by the Governor to re-evaluate the project’s merit added an approximately 12-month delay in the schedule for award of the contract and financial close.

Table 11. Key Schedule Drivers at the Request for Proposal Stage

Key Schedule Drivers (Procurement Phase)	Potential for Schedule Risk	Notes / Dependencies
Approval of elected officials	High	This can potentially be a high risk at any stage of the procurement. Seeking legislative approvals to the extent possible prior to procurement and keeping legislators informed and on-board throughout the procurement process can help mitigate this risk.
Federal agency approvals	Medium to High	Early involvement of Federal Regional or Division Office Staff is recommended.
Federal funding/financing (e.g. grants/TIFIA/RRIF/PABs) application (if relevant)	High	Engage staff/ advisors experienced with application process and procedures for the appropriate financing instruments.
Interactive one-on-one sessions with shortlisted proposers and ATC and AFC meetings.	Medium	The evaluation approach and procedures should be identified well in advance but also kept simple to accommodate the insights from these sessions.
Negotiations on final P3 agreement.	Medium to High	This can be a high schedule risk if the agency starts with a “non-commercial” position, leading to extensive negotiations. Pre-award negotiations with the selected or preferred proposer can proceed much more expeditiously than competitive negotiations with multiple proposers.
Commercial close	Medium	Appropriate risk allocation and starting the procurement process from a “commercial” position is key to achieving timely commercial close.
Financial close	Medium to High	Level of risk depends on number and type of financial instruments used, as well as market conditions.

5.1.2. Submittal Requirements

RFP submittal requirements are much more complex than those required by the RFQ, but the underlying concept is similar. Submittals must be tied to the evaluation criteria and enable the agency to determine which proposer best meets the agency’s goals and objectives for the project. The submittal requirements vary significantly depending on the agency and its goals and objectives, the type of project, and the type of payment structure used.

To enable proposers to easily identify specific requirements for each element of the proposal, the agency may wish to include separate exhibits in the ITP identifying submittal requirements for the administrative submittal, technical proposal and financial proposal. This also helps to reduce the likelihood that the agency will have to ask proposers to correct errors in their submittals. For the I-4 Ultimate project, the exhibits



included eight pages of instructions for the administrative proposal, plus forms; 14 pages of instructions for the technical proposal, plus forms; and 18 pages of instructions for the financial proposal, plus forms.

5.1.3. *Cost and Pricing Data*

Some agencies require cost and pricing data to be provided with financial proposals for P3 projects, while other agencies do not require any such data—other than the financial model—to be submitted. Cost and pricing data is not part of the proposal and therefore is not evaluated, but may be relevant to the agency for matters such as understanding the proposal, reaching financial close, negotiation or determination of payment adjustments, extensions of time, compensation, excuse from compliance, request for change proposals, agency changes, modification requests, refinancing gain calculations, calculation of termination compensation, and resolution or settlement of claims and disputes. Such data may be relevant even for revenue risk projects to the extent that the agency has agreed to make payments to the concessionaire for specified relief events. The data is held in safekeeping by the agency to ensure that the agency has access to contemporaneous information about pricing in the event of a future dispute.

In order to strengthen the concessionaire’s position that such data constitutes proprietary information, the contract may provide for the information to be held in escrow or for the data to be held by the agency in a locked cabinet with the key held by the concessionaire. The information may also be provided electronically, with the concessionaire holding the password required to obtain access to the data. If electronic data is provided, the concessionaire should be obligated to maintain a hard copy set for future reference.

If the documents require cost and pricing data, the agency should conduct an initial review of the data to verify that it is complete, and index it to facilitate future reviews. The data should be supplemented when change orders are issued.

5.1.4. *Disadvantaged Business Enterprise (DBE) Requirements*

U.S. DOT DBE program requirements apply to P3 projects as they do to other highway and transit projects that receive Federal funding. The regulations applicable to the U.S. DOT’s DBE program are found at 49 CFR Part 26. The DBE Program is designed to remedy ongoing discrimination and the continuing effects of past discrimination in federally assisted highway, transit, airport, and highway safety financial assistance in transportation contracting markets nationwide.¹⁰²

Under the Federal DBE program, recipients are required to set an overall DBE goal for their federally assisted programs. For FHWA recipients, the goal is reflected as a percentage of the State’s apportioned highway funds and represents the relative availability of DBEs as compared to all contractors that perform the types of work relevant to the State’s Federal-aid Highway Program.¹⁰³ The goal methodology must be submitted to FHWA for approval.

States are required to meet the maximum feasible portion of their overall goals through race-neutral means.¹⁰⁴ States must set DBE contract goals to meet any portion of their overall goal that cannot be met using race-neutral means. Contract goals vary depending upon the amount of subcontracting opportunities available under the particular contract and the number of DBE firms that provide those services. Thus,

¹⁰² Race-conscious Federal programs such as the DBE program must meet a standard of “strict scrutiny” to pass constitutional muster. Strict scrutiny means that the DBE statute and regulations serve a “compelling governmental interest” (i.e., curing the effects of past or present discrimination in the surface transportation construction market) and are “narrowly tailored” to further this compelling governmental interest.

¹⁰³ 49 CFR § 26.45

¹⁰⁴ 49 CFR § 26.51.



contract goals could be higher than the statewide goal, lower than this goal, or even zero percent, depending on the type of work required under the particular contract at issue.

The Federal DBE regulations also allow States to establish a “project goal” for complex projects. This goal is separate from the overall goal but still uses the same goal-setting approach as described in the paragraph above concerning a State’s overall goal.¹⁰⁵ The funds for the project to which the project goal pertains are separated from the base from which a State calculates its regular overall goal, and progress toward meeting a project goal should be reported separately from the State’s overall goal attainment report.

On P3 projects, depending on the circumstances, a State agency may choose to set a DBE contract goal or it may set a separate project goal, which could include both a race-neutral projection and a race-conscious projection. Where race conscious contracting efforts are contemplated on a P3 project, a State agency may need to adopt DBE procedures different from those implemented for design-bid-build projects that States typically undertake. In a design-bid-build project, the design and scope of the project are known at the time of bid, allowing bidders to identify up front DBEs that can be used on the project to meet the contract goal. U.S. DOT’s regulations direct States to require bidders to submit their DBE participation information either at the time of bid or no later than five days after bid opening.¹⁰⁶ In a P3 project, the project design and the scope of construction are yet to be determined as of contract award. Thus, at the time of award, it may be difficult for a proposer to identify the specific DBE firms that will be used to meet the contract or project goal. Often only design/consultant DBEs can be identified prior to award. Thus, best practices typically require the developer to submit, usually with its response to the RFP, or otherwise at a time prior to award, a DBE Participation Plan that includes those specific, typically design-related DBEs, and work items for which DBEs will be solicited to perform.

A DBE Performance Plan should include a schedule by which the developer will identify specific DBE firms. The recipient must monitor compliance with the schedule, which becomes a roadmap for the developer to show ongoing good faith efforts to meet the goal. The DBE Performance Plan typically details the developer’s oversight strategy to monitor requirements such as commercially useful function, procedures for termination of DBEs, and prompt payment of subcontractors.

For more details on best practices for integrating DBE considerations into P3 projects, developers should consult FHWA’s “Disadvantaged Business Enterprise Program Administration and Oversight on Projects with Alternative Contracting and Procurement Methods: A Handbook for FHWA Civil Rights and Other Oversight Practitioners.”¹⁰⁷

Small Business Enterprises (SBEs)

Small business programs do not trigger constitutional guarantees under the 14th Amendment or otherwise, and therefore are not subject to strict scrutiny standards. In addition, Congress has specifically authorized States to establish small business set-asides and other programs favoring small business,¹⁰⁸ which means that such programs are not prohibited by the competition requirements of 23 U.S.C. §112. Thus, States have wide latitude to establish small business requirements within the context of a P3 project. These may include training programs as well as goals and race-neutral set asides for small businesses. Many States have such programs, some of which are even more aggressive than the Federal programs.

¹⁰⁵ See 49 CFR §26.45(e)(3)

¹⁰⁶ 49 CFR §26.53.

¹⁰⁷ Available at:

https://www.fhwa.dot.gov/civilrights/documents/DBEandACM_Handbook_20180820.pdf

¹⁰⁸ See 23 U.S.C. §304.



5.1.5. *Technical, Financial, and Administrative Proposals*

As can be seen from the schedule for the I-4 Ultimate project in Section 5.1.1, some procurements ask proposers to segregate “administrative” submittals from the technical and financial proposals. This facilitates the pass/fail review of the proposal as the administrative and legal information does not need to be pulled out of the technical proposal.

The RFP may also provide for separate due dates for technical proposals and financial proposals. For the I-4 project, the financial proposal due date was approximately 1 month after the date for technical proposals and administrative submittals. This gives the agency the opportunity to review the technical proposals and administrative submittals for compliance and request clarifications and/or revisions before receipt of the financial proposal. This approach is particularly desirable for transit and other projects involving complex systems, since the complexity of the systems requirements increases the likelihood of technical errors. It also gives the proposers additional time to estimate costs after finalizing the technical proposal and has the added benefit of extending the bid validity period, which starts upon receipt of financial proposals. This approach has also been used for a number of other projects, including Maryland’s Purple Line project (with a 3-week lag time between proposals) and the Los Angeles World Airports APM project (with over 2 months between proposals).

5.1.6. *Financial Model*

The FHWA P3 Toolkit website includes a primer on financial structuring and assessment for P3s that describes the function of a financial model as follows:

“Bidders, lenders and the public agency use financial models to determine a project’s financial feasibility from their perspectives. Financial models of the project produce indicators that help private bidders determine the potential value of the project, help lenders check the project’s capacity to repay debt, and help public agencies to determine the value of the concession or the amount of public subsidy that might be needed. Each party generally uses a financial model to test different scenarios of interest to it and their impacts on the indicators of interest.

The financial model is used by bidders to structure the proposed financing and review the impacts of different financial options. The financial structure of a project has to be consistent with its risk profile. Financial structures are tested based on scenarios in which various risks occur. Varying input assumptions and different financial structures are tested to assess the impacts on the bidder’s projected cash flow throughout the project’s life-cycle.”¹⁰⁹

The financial model provides information critical to evaluation of the financial proposal and is typically required to be provided as an electronic document that can be manipulated by the evaluators. Refer to the FHWA financial structuring and assessment primer identified above for additional information regarding development of financial models, model inputs and outputs, and the importance of conducting a sensitivity analysis.

The financial model also serves a function over the course of the project’s lifecycle and is used to price compensation payments required by the contract due to variations from base assumptions, and to make calculations such as for refinancing gains that are to be shared between the public agency and the concessionaire. In some cases, it may be necessary to rebuild the model included in the proposal so that it is suitable for periodic updates over the course of the project. Some agencies provide for the financial model to be placed into escrow upon award to preserve the concessionaire’s position that the model constitutes proprietary information exempt from disclosure under open records laws.

¹⁰⁹ Federal Highway Administration, *Financial Structuring and Assessment for Public-Private Partnerships: A Primer*, “Chapter 6. Financial Modeling,” pp. 23-25. Available at: https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/primers/financial_structuring_and_assessment/ch_6.aspx



5.1.7. *Evaluation and Selection Process*

The RFP must identify the evaluation criteria and major subfactors that will be used as the basis for selection and their relative weighting. As discussed in section 4.1, such criteria are typically set by senior management during the planning stages of the procurement process, but both the criteria and their relative weightings may be revisited over the course of the procurement.

The RFP also should include a general description of the process that will be followed in evaluating and selecting the preferred proposer (or “apparent best value proposer” or other descriptive term). Some agencies provide more detail than others regarding the process. In the interests of transparency, more detail is preferable, but the agency should recognize that its flexibility to address unanticipated issues arising during the evaluation and selection process will be circumscribed by the commitments included in the RFP.

If the agency intends to use a competitive negotiation process—which involves requests for revised proposals after discussions either with all proposers or proposers within a competitive range—the ITP should so advise the proposers. Most P3 RFPs reserve the right to request revised proposals but do not include detailed information about the process. If the agency is subject to legal constraints that preclude pre-award negotiations with the selected proposer, but has the ability to use competitive negotiations, it may wish to include a more detailed description.

Refer to section 4.4 for additional information regarding the evaluation and selection process.

5.1.8. *Pre-award Process*

The RFP should also describe the process to be followed during the period following selection and prior to award. If the agency would like the flexibility to negotiate with the selected firm, the RFP should make it clear that the agency reserves the right to enter into discussions in the agency’s interest. The agency should preserve the ability to move to the next highest ranked proposer if negotiations fail with the highest ranked firm.

Where a DBE goal is contemplated, the RFP should include the DBE goal and DBE performance plan requirement. The expectations regarding the content of the performance plan should be clearly explained, e.g., specific DBE firms that will be used (typically design firms), specific work categories for which DBEs will be solicited, schedule for identifying specific firms, and how oversight will be performed and requirements will be monitored. Often, the RFP requires the responder to identify a full-time employee with the experience necessary to ensure DBE requirements are met.

The process for commercial close should also be described in the RFP. This involves finalizing the form of the contract documents, obtaining legal opinions, evidence of insurance, performance security, copies of key contracts, evidence of authority, and other information required as a condition to execution and delivery of the contract. For some projects, financial close occurs concurrently with commercial close, making the process even more complicated. Refer to section 7.5 for a description of financial close requirements.

5.1.9. *Flexibility for Innovation*

The RFP should be drafted so as to communicate the agency’s willingness to allow the private sector to introduce alternative technical concepts (ATCs) or innovative designs and production processes that serve the agency’s goals for the project, for example:

- ▶ Cost reduction (TxDOT’s LBJ TEXpress Lanes).
- ▶ Access to technology needed to fulfill environmental requirements (FDOT’s Port of Miami Tunnel).
- ▶ Reducing right-of-way acquisition and environmental impacts (VDOT’s I-495 Express Lanes).



To achieve such results, it is important for proposers to understand that the agency is willing to consider changes to its existing project plans. For the LBJ TEXpress Lanes, one of the teams responding to the RFP presented a design that differed from the one promoted by TxDOT. Instead of a tunnel approach, the team proposed a trench-cantilever design that would diminish cost by \$900 million. TxDOT was willing to accept the new design, which required an environmental re-examination of the alternatives. Moreover, TxDOT showed flexibility in dealing with the effects of the Great Recession on the procurement process, extending the deadline to respond to the RFP, thus allowing the procurement to continue until market conditions became more favorable, and also extending the financial close deadline both during the procurement and after conditional award.

Virginia's I-495 Express Lanes provides another example of an agency's willingness to allow flexibility. For this project, an unsolicited proposal modified a project description that VDOT had evaluated as a publicly funded project and had determined to be unfeasible due to its high costs and ROW requirements. The unsolicited proposal included a reduced number of lanes and consequently a decrease in the ROW requirements and the number of homes that had to be demolished. But, to improve mobility, it introduced a series of measures to decrease congestion along the corridor, including high occupancy tolling (HOT) lanes with open road toll (ORT) collection and dynamic toll pricing. This not only meant that VDOT had to be willing to consider the changes to the project included in the unsolicited proposal but also that it was prepared to take the necessary steps to obtain approvals from the Federal Government and others to implement the changes.

5.1.10. Special Purpose Entity – Changes in Teams and Key Staff

Since P3 projects normally involve long-term operations and maintenance, the concessionaire is typically set up as a Special Purpose Entity (SPE), often a limited liability company (LLC). Since LLCs are generally not well capitalized, the agency may require guaranties from the LLC members or their parent companies. The concessionaire will typically enter into major subcontracts for performance of design-build services, acquisition of vehicles, and operation and maintenance services. The concessionaire's team will include financial advisors, and it will also need to identify proposed lenders. The RFQ requests information regarding the concessionaire, the concessionaire's equity members, the financial strength of the equity members and any proposed guarantors, and the experience and qualifications of the team members.

Because of the costs associated with formation of a special purpose entity for a P3, the equity members often submit a proposal along with a promise to form the SPE if selected. This requires some attention to detail in drafting the ITP and in reviewing the information provided when the proposals are received. The documents to be provided as a condition to commercial close will include the organizational documents for the concessionaire as well as evidence that the parties are authorized to execute and deliver the closing documents. Legal opinions are advisable due to the complexities of the transaction and should not present an undue burden on the proposers, since the lenders will require opinions in connection with the financing.

Typically, the proposer may change its team members following submission of the statement of qualifications and/or proposals only with the approval of the agency, and the proposer must provide support for any such proposed change with detailed information regarding the reason for the change and proposed replacement member(s). Agencies also usually reserve the right to impose terms and conditions on any such consent. In addition, proposers are also often required to notify the agency of any material change in circumstances to its members that adversely affect the proposer's ability to perform its obligations under the P3 agreement or to obtain financing.

5.1.11. Proposal Security

For large P3 projects in the United States, proposal security is typically required to be submitted with the proposal, either in the form of a bid bond or letter of credit in a specified amount and form. The amount of the proposal security varies depending on legal requirements and the purpose of the security. The agency



has the right to draw on the security if the proposer fails to comply with its obligations under the RFP, including its obligation to execute and deliver the contract and ancillary documents. Proposal security is typically released after award of the contract to the successful proposer.

It should be noted that, for projects involving post-selection negotiations, the primary purpose of the proposal security is to ensure that the proposer negotiates in good faith, although it would also cover situations involving withdrawal of the proposal or failure to close the deal following successful negotiations. For such projects, the agency might wish to consider whether the benefit of having proposal security justifies the cost.

The amount of the security is typically set based on applicable legal requirements and the financial advisor's assessment regarding the amount and may be the subject of discussions with proposers in one-on-one meetings. For the NTE project, the proposer was required to submit a proposal bond in the amount of \$35 million if the proposal included approved financing commitments or \$50 million if the financing commitments were not approved. For FDOT's I-4 Ultimate project, the proposal security was in the amount of \$20 million, and for the Purple Line project, the amount was \$10 million.

For certain projects, including FDOT's I-4 Ultimate project and the NTE project, the RFP provides that the proposal security will remain in effect after commercial close for the purpose of securing the proposer's obligations under the P3 agreement through financial close.¹¹⁰ In some cases the value of the proposal security must be increased as a condition to contract award (for the NTE project the value was increased by \$25 million). For other projects, the proposal security is replaced with separate financial close security upon award. The Purple Line project required financial close security in the amount of \$20 million.

In other countries, it is common to see letters of credit as bid security, but U.S. contractors generally provide proposal bonds even though the RFP may permit other forms of proposal security.

5.1.12. Proposal Validity Period

As is the case for all major construction projects, the agency should set the bid validity period for a P3 based on the agency's needs, taking into consideration the effect of a longer validity period on price as well as industry's ability to commit to pricing over a longer period. For design-build projects, the maximum limit appears to be 180 days from the bid date, as contractors are apprehensive about the effect of market changes on their costs and sureties are unwilling to issue proposal bonds for longer periods. If the agency is concerned that it may not be able to award the contract within the stated validity period, it can include a provision in the RFP stating that the agency may ask proposers to extend the validity period, in which case the extension is subject to approval by both the proposer and its surety. The effect of delay on proposer costs can be dealt with by including an escalation clause in the form of contract. As an example, for the Orange County Transportation Authority's I-405 project, the contract provides for the price to be escalated if the full notice to proceed is delayed beyond 300 days after the proposal due date, with escalation calculated based on the 3-year rolling average of the monthly Engineering News Record (ENR) Los Angeles Construction Cost Index (CCI).

For P3 projects the issue becomes even more complicated due to considerations associated with the finance component of the deal as well as the possibility that negotiations may extend beyond the bid validity period. Even after the contract is signed, it is possible that the selected firm may not be able to reach financial close, in which case the agency may want to be able to return to negotiate with the second ranked firm. The Purple Line RFP, which included a 180-day initial bid validity period, addressed this scenario by specifying that the procurement remained in effect until financial close and making it clear that the proposers had the right to extend their bid validity periods accordingly. Before agreeing to an extension, the proposer would

¹¹⁰ FDOT's I-4 Ultimate RFP required proposal security through financial close. Commercial and financial close occurred on the same day.



need to assess current market conditions and the ability to hold its contractors to their prices. In fact, for the Purple Line, commercial close occurred 121 days after the proposal due date and the TIFIA loan closed 68 days later (189 days after the proposal due date).

5.1.13. *Soliciting Teams for Multiple Project Delivery Structures*

For most projects, the agency decides which delivery method to pursue before issuing the RFP, basing its decision on a thorough analysis of each delivery method and engaging in market soundings with industry and discussions with stakeholders. However, for some projects, the agency may wish to explore more than one type of project delivery structure.

The projects discussed below provide examples of procurements involving an assessment of the advantages and disadvantages of a revenue-risk P3 compared with a delivery model involving collection of toll revenues by the agency, with the agency bearing the risk that revenues will be less than anticipated.

Virginia's procurement process for Transform 66 Outside the Beltway, a project to expand 22 miles connecting the I-495 Capital Beltway to US-29 in Gainesville, was designed to increase competition and thus the benefits resulting from the project. The new procurement process used by VDOT responded to the political climate surrounding P3s in the state. The Transform 66 Outside the Beltway procurement promoted competition in three ways: 1) it included measures to address public skepticism that the P3 delivery method would deliver the best value for citizens; 2) it retained a State-funded public option as an alternative until financial close; and 3) the private sector had the opportunity to submit across different delivery methods: DB with public financing, DBOM with public financing, and toll concession (DBFOM). At the end of the procurement process, the DBFOM alternative submitted by Express Mobility Partners—a consortium of Cintra, Meridiam, Ferrovial Agroman US, and Allan Myers VA, Inc.—was the preferred proposer. This delivery option did not require up-front public funding whereas the public option required \$400 to \$600 million. One significant benefit was that the agency received an initial payment of more than \$500 million that could be used for additional transportation improvements along the I-66 corridor.

Other agencies have also considered public alternatives in connection with P3 procurements. TxDOT's 2007 procurement for a concession for the SH-121 Toll Project was ultimately terminated after the North Texas Tollway Authority (NTTA), in exchange for the right to develop and operate the project, offered to pay the State an amount that exceeded the private sector's offer for the project (\$3.196 billion vs. \$2.8 billion).

In 2014, TxDOT issued an RFQ for the Grand Parkway that contemplated alternative delivery structures. However, after shortlisting teams for both a P3 and a design-build-maintain (DBM) approach, TxDOT opted to issue an RFP only for the DBM model. According to a TxDOT spokesman, the decision was attributable to the difficult financial climate and weak traffic and revenue forecasts for the Grand Parkway. In the end, the agency believed these factors made it unlikely that TxDOT would receive strong toll concession proposals, so it was not worth pursuing the P3 option.¹¹¹

Agencies interested in preserving the ability to use multiple procurement structures will need to consider the effect of the alternatives on the competition and should consult with their advisors and representatives of Federal funding agencies regarding measures that should be adopted to ensure that the procurement process remains fair, open, and competitive.

Some practitioners believe that use of multiple procurement structures may reduce the number of respondents interested in the procurement, as some firms may decide to respond only to their preferred

¹¹¹ "TxDOT drops P3 concession on Grand Parkway TX99 for design-build," *TOLLROADSnews*, Feb. 14, 2012. Available at: <http://www.abcr.org.br/Conteudo/Noticia/1853/tollroadsnews+++txdot+drops+p3+concession+on+grand+parkway+tx99+for+design+build.aspx>.



structure due to proposal cost considerations, while others may decide not to respond altogether because they view the chances of success as significantly diminished. Proposers may perceive that they are competing not only against other firms but also against the other delivery methods being considered.

5.1.14. *Reserved Rights*

The ITP will typically include a list of reserved rights, for example the right to reject all proposals, waive deficiencies, and seek clarifications from proposers.

5.2. Developing the Draft Request for Proposal – Contract Terms

The discussion that follows is primarily directed at agencies that are using a P3 model for the first time or are embarking on a new P3 that differs in material respects from the agency's prior projects. If the agency has previously used the P3 methodology for a comparable project, it will probably be advisable to use the terms and conditions for the prior transaction as a starting point for the new project, with appropriate modifications to address lessons learned on the first project.

5.2.1. *Agency Decisions – Commercial Terms*

P3 projects differ significantly from other types of delivery methods due to the types of responsibilities assumed by the private sector. In particular, inclusion of financing in the contract and the long-term responsibilities undertaken by the private sector will require the agency to make numerous decisions regarding commercial terms, including terms that are not addressed in the agency's standard contracts as well as standard provisions that are not suitable for P3s. FHWA's *Model Public Private Partnership Core Toll Concessions Contract Guide* (2014) provides detailed guidance on developing concession agreements for highway transportation P3s.¹¹²

A model P3 template for transit projects is on FTA's web site,¹¹³ along with many other resources.

Issues to be addressed include:

- ▶ The scope and term of the concession (see section 3.2.3).
- ▶ Payments by the agency (including progress or milestone payments, mechanism for availability payments, deductions, escalation, payments for risks allocated to the agency).
- ▶ Requirements relating to financial close.
- ▶ Financing issues, including interest rate changes, changes to the baseline TIFIA term sheet (where TIFIA is used), issues associated with refinancing, and lender's rights.
- ▶ Requirements for design, construction, equipment supply, and operations and maintenance.
- ▶ Requirements relating to property acquisition, hazardous materials, site conditions, utility relocations, and third parties.
- ▶ Agency changes, including the possibility of changes in required service.
- ▶ Requirements to be met on handback.
- ▶ Labor-related requirements.
- ▶ DBE and subcontracting requirements (see sections 5.1.4 and 5.2.6).

¹¹² Federal Highway Administration, Model Public Private Partnership Core Toll Concessions Contract Guide. Available at: https://www.fhwa.dot.gov/ipd/pdfs/p3/model_p3_core_toll_concessions.pdf
https://www.fhwa.dot.gov/ipd/pdfs/p3/model_p3_core_toll_concessions.pdf

¹¹³ <https://www.transit.dot.gov/funding/funding-finance-resources/private-sector-participation/private-sector-participation-2>



- ▶ Ethical requirements.
- ▶ Indemnification.
- ▶ Default provisions.
- ▶ Compensation upon termination.
- ▶ Dispute resolution.
- ▶ Changes in ownership.
- ▶ Insurance and performance security requirements (bonds, letters of credit, parent company guaranties).
- ▶ Limitations on liability (consequential damages and caps on liability).
- ▶ For revenue risk projects, provisions assuring the concessionaire that its future revenues will not be adversely impacted by future projects that affect ridership as well as policies, requirements and limitations on how charges/rates for revenues may be adjusted over the term of the concession.
- ▶ Relief events and remedies.

Many of these issues will require legal analysis as well as analysis of the advantages and disadvantages associated with different alternatives. The agency's financial, legal and technical advisors can provide information regarding approaches used by other agencies, and can provide recommendations for the current project, but ultimately the business decisions will need to be made by the agency.

5.2.2. Agency Decisions – Risk Allocation

Much of the contract drafting will revolve around the agency's decisions relating to allocation of risk—that is, determining which of the parties to the contract (or third parties) will bear specific risks—as well as measures that can be incorporated in the contract to address risk. The process for risk management is discussed thoroughly in NCHRP Research Report 850.¹¹⁴

One practice that has been successful in assisting agencies in making informed decisions regarding risk allocation is to hold a risk workshop early in the procurement process. At the workshop, decision-makers will obtain information regarding underlying risks affecting the project and their potential impacts, and input regarding which party is best able to manage risk, how to align risk allocation with project goals and objectives, and how to provide both parties with incentives to take appropriate steps to manage risk. Obtaining risk allocation decisions early in the procurement process will avoid the need for extensive redrafting once decisions are made.

The concessionaire's finance-related obligations are a major factor in risk allocation decisions due to the high cost to the concessionaire of delays that affect project completion, thus also delaying the start of the concessionaire's revenue stream. While relatively short delays in completion result in additional interest expense, extended delays may result in the need to modify the loan terms and an increased cost of financing. Sometimes the risk allocation involves "splitting" the risk between the parties. As one example, risk of utility delays may be shared, possibly with a utility delay "relief event" resulting in the concessionaire receiving a 1-day time extension for every 2 days of delay, and with the agency agreeing to pay interest owing to the lenders for each day of the extension period and the concessionaire bearing the interest risk for the other days of delay. Another commonly used approach is to establish "bands" for allocation of risk, typically with the concessionaire responsible for additional costs incurred up to a specified amount (the first band), the parties sharing the cost risk within an intermediate band, and the agency responsible for costs

¹¹⁴ R. Stewart, G. Brink, M. Watson, A. Hiller, and M. Brink, *NCHRP Report 850: Applying Risk Analysis, Value Engineering, and Other Innovative Solutions for Project Delivery* (Washington, DC: Transportation Research Board of the National Academies, 2017). Also see K. Molenaar, S. Anderson, and C. Schexnayder, *NCHRP Report 658, Guidebook on Risk Analysis Tools and Management Practices to Control Transportation Project Costs* (Washington, DC: Transportation Research Board of the National Academies, 2010).



incurred in excess of the maximum limit in the intermediate band. There are many other ways to allocate risk, and the agency should be prepared to dedicate a significant amount of time to the workshop discussion.

Workshop attendees should include agency decision-makers, individuals on the agency's team with detailed knowledge about project risks, individuals who have experience with other P3 projects and can advise about approaches to risk allocation used for other projects, and individuals who can advise about statutory and case law issues affecting risk allocation. At the conclusion of the workshop, a summary of the decisions made should be circulated for further review. Contract drafting can start based on this summary.

The agency should establish a framework for initial risk allocation decisions to be revisited by the procurement team as additional information becomes available, including a process for responding to input received from proposers and a process for vetting recommended changes with the agency's senior management. The workshop decisions are often tracked in a risk/responsibility matrix that can be updated as the procurement proceeds and risk decisions are revisited.

5.2.3. Determine Precedent Documents

In determining the starting point for developing concession agreement terms for a P3 project, it is advisable for the drafter to consider whether forms used for other projects would be suitable for the current project, reducing the amount of time required to produce the documents. Factors that should be considered in making this decision include:

- ▶ Similarities between the proposed risk allocation and business terms of the proposed P3 transaction and the risk allocation and terms of the precedent documents.
- ▶ The level of effort required to modify the precedent documents to be suitable for use by the agency.

Ideally, initial decisions regarding risk allocation and business terms will be made before deciding what forms to use as the basis for the project documents. However, in some cases, agencies defer the risk allocation workshop until relatively late in the procurement planning process. When that happens, the procurement team will likely need to decide on the precedent and start drafting the contract documents even though the forms used may not be consistent with the decisions that are ultimately made. This approach may require extensive rewriting that could have been avoided had the drafters started with more appropriate precedent.

In some cases, precedent may be available for comparable projects undertaken by another agency in the same State. In that situation, conforming the document for use by the agency would require less effort than starting with a document from another State, as the precedent would already comply with applicable law—although a compliance check would still be required due to differences in the laws applicable to different agencies within the same State, and statutory changes and new case law will need to be addressed. The documents will also need to be revised to incorporate any requirements that are specific to the agency as well as differences in project scope, risk allocation, and business terms.

In other cases, the best precedent may be from another State. In that situation, a higher level of effort is required to conform the document, as it will need to be modified to ensure compliance with applicable State and local law as well as to incorporate any requirements that are specific to the agency and to address differences in the project scope, risk allocation, and business terms.

In still other cases the agency might decide to start with its own precedent (for example a design-build contract form) and add terms and conditions addressing the addition of financing, operations, and maintenance to the scope and modifying the risk allocation as appropriate. This approach can be very time-consuming and costly to both the agency and proposers due to the significant differences between P3 projects and other delivery methods.



One of the benefits of using a recently negotiated and executed P3 contract as precedent is that it allows the agency to focus on terms and conditions that are specific to its proposed project. With an increasing number of U.S. P3 projects that have reached financial close, it is possible to determine certain terms and conditions that represent standard concepts and, due to their use in multiple transactions, are known to be acceptable to P3 investors and lenders across a wide range of project types. Adoption of these standard concepts helps to reduce the cost to both the public and private sectors in drafting, reviewing, and negotiating the documents. It also enables the parties to focus their energy on aspects of the contract that are cost drivers or that present significant policy considerations for the agency.

On the other hand, both the agency and the private sector need to recognize that legal requirements and policies applicable to the agency and its projects may be incompatible with the standard concepts in the precedent documents, and that the agency and its counsel may have a strong preference for certain terms and conditions used in its other contracts. If the form of contract will be drafted based on documents developed by another agency, the drafters should conduct a review of the agency's standard terms and conditions for projects involving the same scope as the P3 (that is, design, construction, financing, operations and maintenance). These forms should be analyzed not only to identify standard contract provisions that should be carried over to the P3 agreement, but also to ascertain the agency's standard approach to risk allocation and consider what changes should be made. This review will also facilitate the process of determining applicable legal requirements that must be included in the contract through searches for statutory references and provisions dealing with legal concepts such as indemnities.

If the agency is planning to use P3s for multiple projects, it should consider developing programmatic documents setting forth the standard terms and conditions for future contracts. This approach, however, requires a significant level of effort, and it would be difficult for an agency to make the programmatic decisions necessary to develop standard terms unless it has a history of prior projects to draw upon.

5.2.4. Developing Project Performance Requirements

One of the key advantages of a P3 procurement structure is that it enables the agency to focus on desired performance outcomes of a facility to maximize public benefit while letting the private entity determine the most efficient means to achieve those outcomes. Contractually, this is made possible through performance requirements. Performance requirements detail the expectations for facility performance and define what is needed to accomplish the objectives of the project. By establishing requirements based on the performance of the facility or the project, the agency transfers risks to the concessionaire while providing measurable metrics to gauge performance. When developing performance metrics, the agency should determine whether the requirements can be clearly defined in the project agreement and whether and to what extent such requirements can be reasonably measured and enforced during the contract term. Sometimes a desired outcome or performance might make sense from a public policy perspective, but in practice may be cost prohibitive or simply not practical for the agency to measure and enforce.

Agencies that are new to the P3 procurement model but have procured projects using the design-build delivery approach may be able to use that expertise to develop performance requirements for the development phase of a P3 project. However, most P3 procurements require performance requirements for operations and maintenance as well. It is critical that agencies start the process of developing performance requirements early in the procurement process to allow sufficient time to analyze and finalize performance requirements for all project elements.

According to FHWA and the Build America Bureau, the process of developing performance requirements includes:

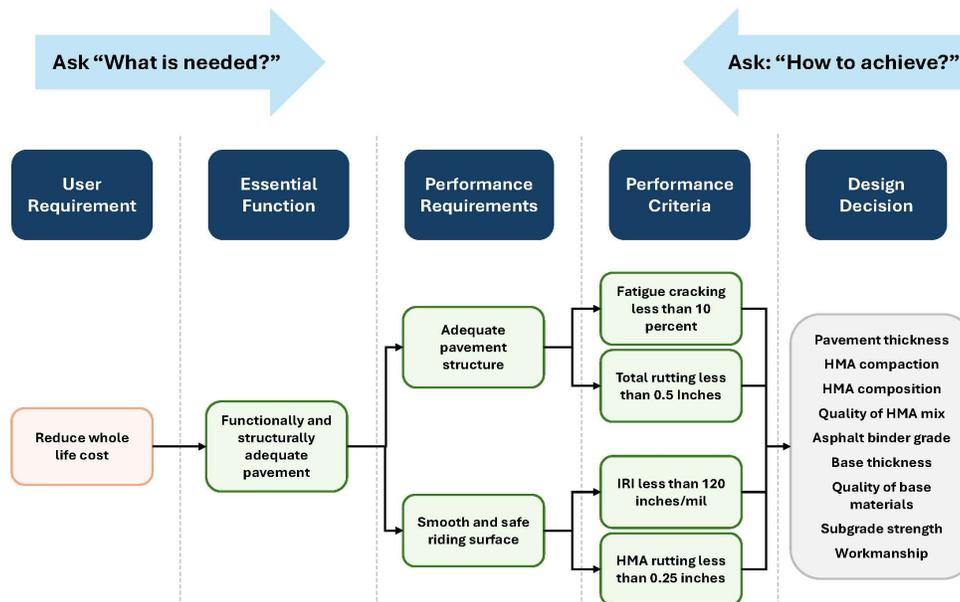
- ▶ *Identifying stakeholder expectation*, which could be in the form of an operational goal; for example: reducing life-cycle cost, improving mobility, or increasing ridership.
- ▶ *Defining the essential function* required to achieve that goal.



- ▶ Developing *performance requirements* to meet the essential function.
- ▶ Developing *performance criteria* or measures or metrics to evaluate performance.

Figure 4 provides an example of the steps needed to determine performance criteria that would dictate design decisions.

Figure 4. Example of Identifying Performance Requirements/ Criteria for “Reduce Cost”



Source: FHWA and Build America Bureau, “Webinar on Use of Performance Requirements in Design and Construction for Public-Private Partnerships.” (see: https://www.fhwa.dot.gov/ipd/pdfs/p3/toolkit/performance_requirements_webinar_020917.pdf)

Inexperienced P3 owners may be inclined to focus their procurements on performance criteria for the design and construction of the facility as opposed to criteria for how the facility will be operated and maintained. It is advisable to have a multidisciplinary team create performance requirements for the facility. Unlike method specification, a performance requirement promotes contractor innovation while focusing the agency resources on monitoring the performance outcomes in accordance with the pre-determined performance criteria. This approach, combined with financial penalties for failure to meet the performance targets, transfers performance risk to the private sector, giving the concessionaire “skin in the game” with respect to construction or operational performance outcomes. Furthermore, because the agency only specifies *outcomes* not *methods*, the private entity has flexibility to select materials and techniques that provide the most efficient solution to meeting the performance criteria. The agency should, however, recognize that this approach necessitates a high level of responsibility for the agency to identify all parameters critical for performance and to establish thresholds for both construction and operation performance requirements in the RFP documents.

For further information on performance requirements refer to the Strategic Highway Research Program (SHRP2) S2 R07.¹¹⁵

¹¹⁵ S. Scott, L. Konrath, and T. Ferragut, *Framework for Performance Specifications: Guide for Specification Writers*, S2-R07-RR-3 (Transportation Research Board of the National Academies, Second Strategic Highway Research Program: Washington, DC, 2014). Available at: <http://www.trb.org/Publications/Blurbs/169109.aspx>



5.2.5. Addressing Safety Considerations

Safety considerations may be a key aspect of the P3 project considering the risks involved. The RFP should ask for the proposer's approach to safety of all employees and the public as part of their preliminary Project Management Plan. For facilities involving complex structures, such as tunnels, a fire safety plan and strategy may be required as part of the concept design. The proposers should also provide a comprehensive description of safety measures they will take during construction and operation of the facility including life safety response issues as part of their preliminary Operations and Maintenance Plans.

Safety should also form a part of the performance requirements. The agency should be entitled to issue compliance orders for safety concerns or risks involving the project that the concessionaire may be asked to respond to for additional compensation during facility operation. In case of an emergency situation, the requirement of consultation with the concessionaire may be waived.

Presidio Parkway, California

Presidio Parkway is an availability payment project, a 1.6 mile six-lane segment on Route 101, from the Golden Gate Bridge Toll Plaza to Broderick Street. It includes two tunnels, one viaduct, and the demolition of previous structures, all of which are risky endeavors for both construction workers and for drivers and passengers on the completed facility, who could be subject to wild fires or dangers resulting from seismic activity in the earthquake-prone region. For the RFP, Caltrans and the San Francisco County Transportation Authority (SFCTA) requested the teams to present:

- “A description of the proposer's approach to safety, for both employees of the developer and the public as part of their preliminary project management plan. The proposer was also requested to provide a fire and safety strategy as part of their concept design for the tunnel systems plans, as well as a strategy for a fire suppression system.
- A description of the approach to safety during construction and O&M after construction, including life safety response issues as part of their preliminary operations and maintenance plan.”

The Technical Requirements section of the Comprehensive Agreement included the following salient safety requirements of the Developer:

- Project Management Plan should include:
 - Hazardous waste operations, safety, and health plan section, prepared by a certified industrial hygienist licensed by the American Board of Industrial Hygiene.
 - Health and safety plan (HASP) including training for Caltrans staff who visit the project.
- The project is located within a military base with unexploded ordnance, a risk to consider during the project construction, as such ordnance had been found near the project site. Training on the topic is mandatory, work should continue in areas considered safe by the Presidio Trust, the current owner of the military base site.
- The developer shall develop detailed Traffic Control Plans for public safety.
- The project is a “Recovery Route” in a seismic-prone area. The agreement describes two types of seismic events: 1) functionality evaluation earthquake (FEE), a seismic event that has a 50% probability of exceedance in 75 years; and 2) safety evaluation earthquake (SEE), a seismic event that has a 7.5 percent probability of exceedance in 75 years. The project needs to fulfill performance parameters depending on the type of seismic event. For FEE, two performance parameters exist: i) serviceable performance, with full traffic access after a maximum of 72 hours; and ii) repairable performance, with limited immediate access for emergency vehicles and full traffic access after 7 days. For the SEE, the performance parameter is: iii) no collapse performance, and 3 days after the seismic event, structure stability for public safety.
- The tunnel fire and life safety systems requirements are not limited to fire detection equipment but include communication (two-way radio, CCTV), traffic control signals, emergency ventilation, the drainage system, and tunnel emergency exits.



5.2.6. Addressing Disadvantaged Business Enterprise/Small Business Enterprise Requirements

As discussed in section 5.1.4, federally funded P3 projects are subject to U.S. DOT requirements (49 CFR Part 26) relating to DBE. State goals are not allowed on federally assisted contracts. 49 CFR Section 26.53(e) describes how DBE goals are typically established for P3 procurements, stating:

In a “design-build” or “turnkey” contracting situation, in which the recipient lets a master contract to a contractor, who in turn lets subsequent subcontracts for the work of the project, a recipient may establish a goal for the project. The master contractor then establishes contract goals, as appropriate, for the subcontracts it lets. Recipients must maintain oversight of the master contractor's activities to ensure that they are conducted consistent with the requirements of the DOT DBE regulations.¹¹⁶

Consistent with this rule, availability payment P3 projects in the United States, such as the Purple Line and I-4 Ultimate projects, imposed DBE requirements on the concessionaire for the design and construction phase. The Presidio Parkway and I-595 projects also included DBE requirements for the operation and maintenance phase.

For the Transform 66 Outside the Beltway project, the P3 agreement included DBE and small, women-owned and minority business enterprise (SWaM) goals for the design-build period, requiring an updated DBE/SWaM plan to be provided annually. Despite its name, the SWaM program is a race-neutral small business program.¹¹⁷ The agreement requires reports and documentation to be provided periodically to enable VDOT to verify compliance, and includes various remedies for non-compliance. The agreement identifies an annual and long-term SWaM goal for the operations and maintenance period. The contract includes a requirement, similar to that in the Purple Line agreement, requiring the concessionaire to provide an improvement plan if it fails to meet the DBE goals for two consecutive quarters.

It should be noted that 49 CFR Section 26.39, which became effective in 2012, requires an SBE element to be included in each agency's DBE program. Section 26.39(b)(2) states that the DBE program may require bidders on multi-year design-build contracts or other large contracts to specify elements of the contract or specific subcontracts that are of a size that small businesses, including DBEs, can reasonably perform.

5.3. Developing the Draft Request for Proposal – Reference Documents

The RFP also includes reference documents, which are provided to proposers for information only. Reference documents serve to present potentially useful information to proposers and also serve to avoid claims that information available to the agency was withheld from the proposers. Proposers typically argue that they should have the right to rely on reference documents, and agencies generally resist such arguments, since reference documents are typically out-of-date or otherwise not suitable for use as contract documents. The Agency may wish to consider use of a disclaimer that the reference documents are provided for information only. It can be helpful to get feedback from interested firms prior to advertising the RFQ (as part of the informal market sounding process or as part of a more formal RFI process) with regard to reference documents or data that will be particularly useful or necessary for proposers to begin to evaluate project risks. Often the proposers will choose their own level of reliance on the data provided. In some cases, they may choose to bear the risk of relying on it completely, but in most cases they will decide either to validate the data by collecting their own on a sample size or to update the data by performing their own study in totality. This decision typically depends on a few factors, including the specific project characteristics, the time available or access provided by the public agency to collect the data, the age of the

¹¹⁶ For best practices in goal setting, see FHWA Handbook: *The Disadvantaged Business Enterprise Program: Administration and Oversight on Projects with Alternative Contracting and Procurement Methods.* Available at: https://www.fhwa.dot.gov/civilrights/documents/DBEandACM_Handbook_20180820.pdf

¹¹⁷ The Department does not recommend including small business goals with DBE goals in the same contract as it may dilute the effect of the DBE program.



data, and the cost to collect or verify the data versus the amount of risk the proposer is comfortable taking if relying solely on the data provided.

A decision to include historical data in the reference documents in lieu of conducting current investigations and providing reliable data to the proposers may save the agency money up front, but can result in increased proposal prices due to the addition of contingency to cover perceived risk.

For a discussion regarding various issues relating to reference documents, see the 2015 NCHRP legal digest entitled “Liability of Design-Builders for Design, Construction, and Acquisition Claims.”¹¹⁸

5.4. Industry Review with Shortlisted Proposers; Developing the Final Request for Proposal

For most of the large transportation/transit P3 projects, agencies issued a draft RFP to shortlisted proposers for industry feedback prior to issuing the final RFP.

The industry review process affords agencies an opportunity to ensure that the RFP documents reflect an approach to risk allocation and technical requirements that will attract robust, high quality competition. Potential disadvantages of industry review include the possibility that the RFP documents will be modified based on multiple proposers’ needs, some of whom may not submit proposals, or that it could unbalance the competition by favoring one firm’s favored approach or product over another’s, or that the RFP documents will be modified based on proposer comments without knowing the relative importance of the modifications to the requesting proposers. Hence, the agency may make concessions that are not necessary.

Industry review has proved to be a highly useful tool, particularly for first-time or early P3 procurements, where an established process or form of documents have not yet been developed and where industry feedback is vital to determining the marketability of the proposed approach.

The industry review process involves significant cost both to the agency and the shortlisted firms, as it typically entails multiple rounds of one-on-one meetings as well as written questions that the agency considers in finalizing the RFP package. Nevertheless, both sides believe the process is worth the investment. One of the most important benefits of this process is that it affords proposers an opportunity to better understand and ask questions regarding legal requirements and policies and practices relevant to the procurement and the project agreement that might be unique or that may differ from those encountered in other jurisdictions. Investors and their lenders will need to determine that these requirements are acceptable to obtain management approval of the equity investment and project financing. For the I-4 Ultimate project, the industry review process occurred over a four-month period and included multiple one-on-one meetings to discuss draft documents delivered to the proposers and potential ATCs and AFCs. For the Purple Line, the process included three industry review packages and a series of one-on-one meetings over a 6-month period, with numerous written questions submitted.

The first industry review draft likely will not represent a complete set of documents. In some cases, the contract terms may be provided in the form of a term sheet. Although proposers might prefer to see a complete set of detailed documents, use of a term sheet allows the agency to focus on major issues and cost drivers, allowing the detailed documents to be drafted based on decisions made by the agency after receipt of initial input from the proposers.

Due to the number of written questions that are typically submitted during the industry review process, as well as the fact that the RFP has not yet been issued in final form, agencies often elect to respond in writing only to selected questions (or not to provide any written responses); proposers determine if their other questions were addressed by tracking changes made to the RFP itself in future updates to the document.

¹¹⁸ M. Loulakis et al., *NCHRP Legal Research Digest 68: Liability of Design-Builders for Design, Construction, and Acquisition Claims* (Washington, DC: Transportation Research Board of the National Academies, 2015), p. 13. Available at: <http://www.trb.org/Main/Blurbs/173607.aspx> Available at: <http://www.trb.org/Main/Blurbs/173607.aspx>



That means questions that the agency received during the industry review period may be asked again after the RFP is issued, if the proposers believe a particular issue was not addressed satisfactorily.

It is possible that the industry review process may become less important as agencies develop standard forms and determine that the benefits of the process no longer outweigh the costs. While industry review was used on earlier Canadian P3 projects, over time mature P3 jurisdictions in Canada have developed standardized procurement processes and no longer conduct industry reviews. This is, arguably, due in large part to the flexibility shown by agencies in incorporating industry feedback and lessons learned from past projects into the RFP process and documents, effectively rendering the industry review step unnecessary and allowing the procurement timeline to be shortened. It is also possible that U.S. agencies will continue to use the process even though they have developed standardized forms, recognizing the benefits that are gained by obtaining industry input into project-specific aspects of the RFP.

Agencies that have not previously engaged in confidential meetings with proposers sometimes question whether the process raises legal concerns. These agencies should consult with agency counsel for consistency with State and local procurement procedures. Confidential meetings should be analyzed with reference to the laws applicable to the specific agency, but the fact that the process is in common use for P3 and DB procurements may be relevant. The rules applicable to Federal agencies may also be of interest to agency counsel tasked with determining whether such meetings are permissible, or may be adopted as a best practice. Federal agencies procuring contracts under the Federal Acquisition Regulation (FAR) routinely hold one-on-one meetings with proposers during the pre-proposal period. FAR § 15.201(a) specifically encourages agencies to engage in such meetings to exchange information with potential offerors with the stated goal of improving the understanding of all participants regarding both the agency's requirements and industry capabilities. According to FAR § 15.201(b), this process allows potential offerors to judge whether or how they can better satisfy the agency's requirements and enhances the agency's ability to obtain quality supplies and services at reasonable prices. It also increases efficiency in proposal preparation, proposal evaluation, negotiation, and contract award. FAR §15.201(c) notes that "[a]n early exchange of information among industry and the program manager, contracting officer, and other participants in the acquisition process can identify and resolve concerns regarding the acquisition strategy, including proposed contract type, terms and conditions, and acquisition planning schedules; the feasibility of the requirements, including performance requirements, statements of work, and data requirements; the suitability of the proposal instructions and evaluation criteria, including the approach for assessing past performance information; the availability of reference documents; and any other industry concerns or questions."

5.5. Continued Project Activities

During the period prior to issuance of the RFP, the agency should continue various project activities that benefit the project while preserving the proposers' flexibility to develop innovative project solutions.

5.5.1. *Project Definition, Risk Mitigation, and Other Activities*

Section 3.4 discusses activities the agency should undertake during the project planning period to complete environmental reviews and other approvals for the project, and to reduce or mitigate project risks. Those activities should continue during the pre-procurement period and may include:

- ▶ Refining the project scope.
- ▶ Refining projections (traffic, revenue, ridership).
- ▶ Continuing the process to complete environmental reviews and other approvals.
- ▶ Continuing site investigations.
- ▶ Final survey and mapping
- ▶ Final hydrology



- ▶ Hazardous materials assessment
- ▶ Continuing to negotiate third party agreements.
- ▶ Refining right-of-way strategy.

The topics of discussion at one-on-one meetings with proposers during this period should include providing information about the agency's progress in these activities and asking proposers to identify additional activities that would be desirable, such as an additional boring program, covering areas of special concern to the proposers. Due to funding limitations, the agency likely will not be able to undertake all desired activities, but some of the actions requested by the proposers may be a worthwhile investment. One consideration is whether it would be more time and cost efficient for the agency to perform the work than it would be to have three or four proposers perform the work and build the cost of that labor into their proposals. Another consideration is whether, by providing the requested information, the contingency included in a proposer's price is likely to be reduced. Early agency action and investment is often the best way to address potential increased costs associated with conditions that would otherwise be unknown, unforeseen, or poorly defined.

5.5.2. *Federal Participation*

Section 3.4.8 discusses activities the agency should undertake during the project planning period to ensure that the project remains eligible for Federal funding, loans, and credit assistance. Those activities should continue during the procurement period and include:

- ▶ Continuing discussions with the Build America Bureau and funding agencies, including advancing the draft TIFIA/RRIF loan and intercreditor agreement terms.
- ▶ Ensuring that the project meets Federal requirements.
- ▶ Continuing to assess the possibility of seeking Federal approvals allowing implementation of innovative approaches.
- ▶ Reviewing any changes in applicable law, regulations, and guidance.
- ▶ Conducting a compliance review to ensure that all applicable Federal requirements are addressed in the ITP and contract documents.

5.5.3. *Private Activity Bonds*

In addition to seeking a provisional PABs allocation through the Build America Bureau, the agency should take appropriate steps to identify a conduit issuer prior to issuance of the RFP and to negotiate a memorandum of understanding with the issuer that will form the basis for the eventual arrangements between the selected concessionaire and the issuer. For the Purple Line project, the Instructions to Proposers included the following information relating to PABs:

“The Owner has received a provisional \$1.3 billion U.S. DOT PABs allocation for the Project. The Owner expects the allocation to remain available throughout the solicitation process and until Financial Close. The use of PABs, if available, in a Proposer's plan of finance is optional and entirely the decision of the Proposer.

If the Initial Project Debt includes PABs, then the Maryland Economic Development Corporation will serve as the issuer of the PABs. Further, the Owner has entered into a Memorandum of Understanding with MEDCO regarding the issuance of the PABs. Proposers shall be solely responsible for obtaining ratings, bond counsel opinions, credit enhancement (as applicable) and an underwriting commitment or placement of the PABs, as well as satisfying any conditions placed on the use of the allocation by U.S. DOT or complying with any other requirements of State and Federal tax Laws.



The foregoing approach has been developed by the Owner as an accommodation to the Proposers and in order to attempt to facilitate the use of PABs by Proposers. The Owner makes no representation as to, nor guarantees the amount, if any, of PABs that can or will be issued for the Project or the use of proceeds to finance the Project as a matter of federal tax Law. Proposers should seek the advice of their own tax consultants. Should a Proposer elect to include PABs in its Financial Proposal, it does so at its own risk and cost, and the Owner shall have no liability with respect thereto.”¹¹⁹

¹¹⁹ Instructions to Proposers for the Purple Line issued by the Maryland Department of Transportation and Maryland Transit Administration on July 28, 2014, as amended through Addendum 5, §1.9.3. Capitalized terms used in this quote have the meanings set forth in the Instructions to Proposers.



6. Period from Issuance of Request for Proposal to Selection

This chapter provides guidance on activities and considerations from RFP issuance through selection of proposer. Table 12 presents the key goals and activities for this phase of the procurement.

Table 12. Goals and Activities—From Issuance of Request for Proposal through Selection

Goals for the Selection Process	Activities
Revise RFP as needed	<ul style="list-style-type: none"> ▶ Conduct meetings with proposers ▶ Reconsider prior decisions as appropriate ▶ Issue addenda to address issues raised by proposers, refine project details and provide other key information and requirements
Evaluate Alternative Technical Concepts and Alternative Financial Concepts	<ul style="list-style-type: none"> ▶ Evaluate ATCs and AFCs ▶ Consider impact of proposed ATCs on the NEPA process
Evaluate Proposals	<ul style="list-style-type: none"> ▶ Evaluate proposals based on pre-determined evaluation process and guidelines ▶ Obtain clarifications from proposers as needed ▶ Select preferred proposal ▶ Award (with or without negotiations)
Proposal Revisions (if applicable)	<ul style="list-style-type: none"> ▶ Conduct competitive negotiations ▶ Best and Final Offer

6.1. Continuing Dialog with Proposers – Revisions to Request for Proposal

It is important for agencies to continue to seek input from proposers throughout the procurement process to ensure, among other things, that the RFP documents are clear and understandable and that the project is technically and financially feasible considering the constraints, requirements, and other terms of the P3 agreement. Proposer input during the procurement process will also enable the agency to address changes in market conditions that occur during the procurement process and other issues that may be beyond the control of proposers.

6.1.1. Confidential Meetings with Proposers

It has become a common practice to continue the one-on-one meetings with proposers after issuance of the RFP. The focus of these meetings changes from input relating to draft documents to discussion of the as-issued technical requirements and commercial terms. Agencies may also make presentations regarding aspects of the project, if deemed advisable. Meetings are sometimes limited in scope to specific issues, such as insurance requirements or technical requirements or financing issues to ensure both parties have their subject matter experts available for the discussions. The one-on-one meetings also provide an opportunity for proposers to discuss potential ATCs and AFCs and to address requests for clarification regarding any previously submitted ATCs and AFCs.

The one-on-one meetings are confidential, and it is common for the agency to require participants to sign confidentiality agreements. The ITP will normally specify that proposers may not rely on anything discussed during the meetings and that changes to the terms of the P3 agreement (if any) must be reflected in the final or amended RFP documents. If any information that is necessary to develop a proposal is disclosed to one proposer during the pre-selection period, FHWA's Design-Build Rule requires the agency to make such



information available to all proposers.¹²⁰ At the same time, the agency is prohibited from disclosing information provided by one proposer to others if such disclosure would reveal proprietary information.¹²¹ In order to walk the line between these competing mandates and comply with the requirements of the Design-Build Rule, the agency should have the contracting officer present at all one-on-one meetings¹²² and ensure a designated staff person takes careful notes regarding information provided to each proposer.

The number and frequency of one-on-one meetings during a procurement will vary based on the project but will typically include one or more meetings after issuance of the RFP, after each significant addendum, and prior to the submittal of final ATCs. To ensure a fair process, each proposer is allotted an equal amount of time, and agendas are determined in advance to ensure that appropriate representatives from both the proposer team and the agency are in attendance.

One important function served by one-on-one meetings is to reduce the need for post-selection negotiations, as the agency has the ability to obtain multiple rounds of proposer feedback as to the form of P3 agreement and incorporate them as it deems appropriate through issuance of RFP addenda. As an agency's P3 program matures, the need for a forum to address commercial terms is reduced, and the agency is more likely to resist making changes to its "template" form once issued.

6.1.2. Question and Answer Process

Most agencies use essentially the same process for responding to questions submitted after the RFP is issued, generally considering these communications non-confidential and providing both the questions and responses to all proposers. The RFP may also allow confidential questions if certain criteria are met, but permit the agency to determine that all proposers may need to see the response, regardless of the proposer's characterization. The question and answer (Q&A) process serves a valuable function since it allows proposers to raise issues that they do not have time to discuss in one-on-one meetings, enabling the agency to obtain proposer feedback to improve the contract and RFP documents, maintain competitive interest, and improve the quality of the proposals. The process also allows the agency to identify issues that are important to multiple proposers and that may be critical for project feasibility and to maintain competition, as compared with questions that are only important to one of the proposers or do not warrant changes to the RFP.

The Q&A process also enables the proposers to provide input from their lenders, sureties, insurers and other interested parties to ensure that such parties identify any requirements that they believe are problematic. This process is particularly important for procurements that do not permit post-selection negotiations, or where negotiations are limited to specific issues.

The rules for the Q&A process will be set forth in the ITP, which will describe the format for the questions, the timeline for submission and, in some cases, a limit on the number of questions that each proposer may ask. Often, agencies will not limit the number of questions each proposer may ask regarding the draft RFP because the agencies want to encourage proposers to thoroughly review the RFP documents and identify any issues that should be corrected before the proposal due date. However, some agencies have found that limiting the number of questions that may be asked results in better questions—although in some cases such

¹²⁰ 23 CFR 636.507.

¹²¹ 23 CFR §636.115(e) provides: "When specific information about a proposed acquisition that would be necessary for the preparation of proposals is disclosed to one or more potential offerors, that information shall be made available to all potential offerors as soon as practicable, but no later than the next general release of information, in order to avoid creating an unfair competitive advantage. Information provided to a particular offeror in response to that offeror's request must not be disclosed if doing so would reveal the potential offeror's confidential business strategy. When a presolicitation or preproposal conference is conducted, materials distributed at the conference should be made available to all potential offerors, upon request."

¹²² See 23 CFR §636.115(c)(4).



limitations result in submittal of multi-part questions that are difficult to parse and respond to. As the procurement continues and addenda are issued, agencies are more likely to limit the number of questions that can be asked to encourage proposers to focus discussions on priority issues and concerns that affect commercial and financial feasibility.

One successful practice relating to the Q&A process is including a requirement in the RFP for categorizing the level of importance of the proposer's questions as "go/no-go" issues, minor clarifications, and other categories in-between.

Another practice that has proven successful is to combine each proposer's questions and agency responses into a single matrix that is issued to all proposers. The matrix does not identify any proposers, so while proposers will be able to see the issues raised by other proposers, they will not be able to know with certainty which proposer asked the question, so long as the shortlist includes at least three proposers. The agency typically reserves the right to reword questions as it deems appropriate, and it does not promise to answer all questions submitted.

Due to the number of questions that are asked during the RFP period, and the number of changes that may be made to the documents over the course of the procurement, it is likely that early answers to questions will be superseded by later responses or by changes to the contract documents. It is generally advisable to invest time to clean up the Q&A prior to the proposal due date, and to issue a final consolidated set of Q&As that includes all of the proposer questions and corresponding agency responses. It is essential that the final set of Q&A responses reflect the agency's final position on issues, even if the agency's position has changed over the course of the procurement.

The Q&A process allows the agency to refine and clarify the RFP and ensure a robust and competitive procurement, while also helping to identify and resolve any ambiguities in the P3 agreement documents that might otherwise present issues after the contract is awarded. The P3 agreement may expressly provide that the final responses to questions posed during the procurement will not be deemed a part of the P3 agreement and generally will not be relevant in interpreting the agreement, however they may be used to clarify provisions in the P3 agreement that are otherwise considered ambiguous.

6.1.3. *Reconsider Prior Decisions as Appropriate*

Agencies may need to reevaluate positions taken and decisions made prior to the initiation of the procurement as a result of proposer input and other factors. This can affect the procurement requirements and P3 agreement requirements, such as the scope of services, risk allocation, and other contractual issues. For example, an agency may issue an RFP with an expected timeline for the procurement, contract execution and financial close, but as issues arise during the course of the procurement, the timeline may and often does change.

For the second phase of the North Tarrant Express (NTE) project (see Appendix B), the initial RFP anticipated that financial close would occur concurrently with commercial close, which was scheduled to take place 61 days from the announcement of the best value proposer (conditional award). However, due to input from proposers regarding their concerns about difficulties of achieving financial close on a TIFIA loan and a PAB issuance in such a short time frame, combined with the fact that the NEPA process would not be complete on the scheduled commercial close date, TxDOT revised the RFP to allow an additional 180 days to reach financial close, subject to the successful proposer's delivery of financial close security. This necessitated revisions to the P3 agreement and the ITP to include additional excuses for failure to achieve financial close within the specified timeframe, such as:

- ▶ The failure to complete the NEPA process.
- ▶ A drop in the State's credit rating below a stated threshold.



- ▶ Any delay in identifying the PAB Issuer or any delay by or refusal of the PAB Issuer to issue bonds in the amount that the concessionaire’s underwriters are prepared to underwrite.
- ▶ The failure of the PAB Issuer or TxDOT to comply with the terms of the PAB Agreement or the withdrawal, rescission, or revocation of the PAB allocation by the U.S. Secretary of Transportation in the amount previously approved.
- ▶ The failure of the TIFIA Joint Program Office [predecessor to the Build America Bureau] to close financing or provide financing on or prior to the deadline for financial close despite commercially reasonable efforts by concessionaire to do so.

An agency may also have to revise the scope of work for a project based on industry input. The as-issued NTE RFP identified Segment 1 as the base scope project and did not specify the amount of public funds available for its design and construction. After issuance of an addendum identifying the public funding limitation (\$600 million), TxDOT used the Q&A process and one-on-one meetings to work with proposers to identify a smaller base scope that could be delivered for the maximum available amount and listed nine options for additional scope that proposers could include in the proposal without an increase in the maximum available public funds amount.

6.1.4. Issue Addenda

Once the need to change published documents is identified, an addendum will be prepared and issued. An addendum is a written supplement to an RFP issued by the agency after the publication of the final RFP, which includes changes or additions to (i) the terms and conditions of the RFP, (ii) the conceptual design or the plans and specifications of a project, (iii) the terms or conditions of the related P3 agreement, or (iv) any other document related to the RFP. For projects subject to Federal requirements, FHWA review and approval is required for any material addenda prior to issuance to proposers.¹²³

6.2. Alternative Technical Concepts and Alternative Financial Concept Process

6.2.1. Alternative Technical Concepts

The FHWA defines an alternative technical concept as:

“A request by a proposer to modify a contract requirement, specifically for that proposer’s use in gaining competitive benefit during the bidding or proposal process... [and] must provide a solution that is equal to or better than the owner’s base design requirements in the invitation for bid (IFB for DBB) or request for proposal (RFP for DB) document.”¹²⁴

The ATCs involve modifications offered by proposers to technical requirements specified in the RFP that may be pre-approved by the agency for incorporation into such proposer’s proposal. A pre-proposal ATC process allows proposers to confidentially propose innovations and technical enhancements that would not otherwise comply with the RFP requirements and allows the agency to obtain a better project without increasing its cost (or at a relatively low cost) or to gain the benefit of a cost reduction without an adverse impact on project quality.

If the agency approves a proposer’s ATC, the proposer has the right to submit a proposal that incorporates the approved deviation from the technical requirements without concern that its proposal will be rejected as non-conforming. However, the ATC process should not be used to allow a reduction in the functionality of the project. For Federal-aid highway projects, ATCs are allowed only if they provide a solution that is equal

¹²³ See 23 CFR §635.112(i)(4).

¹²⁴ Federal Highway Administration, “Alternative Contracting Methods: Alternative Technical Concepts,” (Washington, D.C: n.d.). Available at: https://www.fhwa.dot.gov/innovation/everydaycounts/edc-2/pdfs/edc_atc.pdf



to or better than the agency's base design requirements.¹²⁵ The use of ATCs has become a standard practice for design-build and P3 transportation projects, and various resources discussing use of ATCs are available to project owners.¹²⁶

The ATC process has been incorporated into the procurement process for major U.S. P3 projects seeking competitive pricing, including the TxDOT and FDOT P3 programs, the Maryland Purple Line, and the Colorado U.S. 36 project.

Reasons for including ATCs in the procurement include:

1. Encouraging Innovation. The primary reason agencies are interested in allowing ATCs is to encourage innovation. ATCs are particularly useful where the agency, either for purposes of its environmental analysis or for other reasons, has developed the design of the project to a level that reduces opportunities for innovation or where the agency is relying on standard specifications that similarly limit innovation.
2. Obtaining Competitive Pricing for Innovations. If proposers were required to bid to the "base" requirements of the project's procurement scope of work, without modification, the agency might be able to obtain some post-award benefit from the successful proposer's innovations through negotiations or the change order process, but the agency would not have the benefit of competitive pricing with respect to the implementation of the concepts. Furthermore, agencies may provide for the incorporation of the ATCs from unsuccessful proposers into the final P3 agreement during a post-selection negotiation process. If an agency did not allow submission of pre-selection ATCs, it would never find out about the alternative concepts that the unsuccessful proposers might have submitted.
3. Reducing the Agency's Risk for Defective Design. One additional benefit relating to ATCs concerns liability for defects in the design. Even for P3 projects, case law indicates that an agency may be held liable under the *Spearin* doctrine¹²⁷ for problems arising during construction resulting from faulty prescriptive specifications in the contract documents. If, however, the design is based on an ATC submitted by the selected contractor, the contractor will no longer have any basis for arguing that the agency somehow bears liability for a defective design. In addition, the fact that proposers were offered a reasonable opportunity to review the agency's design and propose alternatives may be helpful in defending against claims that the agency's specifications were the cause of a design problem.

¹²⁵ See 23 CFR § 636.209. See also Federal Highway Administration, *Use of Performance Requirements for Design and Construction in Public-Private Partnership Concessions*, "3.4 Alternative Technical Concepts" (Washington, DC: December 2016). Available at: https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/discussion_papers/performance_requirements/ch_3.aspx.

¹²⁶ See, for example, D. Gransberg et al., *NCHRP Synthesis 455, Alternative Technical Concepts for Contract Delivery Methods* (Washington, DC: Transportation Research Board of the National Academies, 2014).

¹²⁷ *United States v. Spearin*, 248 U.S. 132 (1918). This decision, since called the "*Spearin* doctrine," held that a contractor will not be liable to an owner for loss or damage that results solely from defects in the plan, design, or specifications provided to the contractor. Effectively, *Spearin* created a doctrine whereby the owner impliedly warrants that the plans and specifications are sufficient to construct the project and will, if followed, result in a functioning system. *Spearin* holds that if a contractor is required to build according to plans and specifications prepared by the owner (or the owner's representative), then the contractor will not be responsible for the consequences of defects in the plan.



6.2.2. *Relationship between Alternative Technical Concepts and the National Environmental Policy Act*

DB, P3, and other alternative delivery procurements may allow a contractor to implement ATCs that might improve the quality or lower the cost of the proposed project. The scenarios described below indicate how a decision to accept an ATC might interplay with NEPA requirements:

1. If the ATC is accepted before the completion of the NEPA process, as may be the case for a design-build contract, the impact would probably be minimal. If a Notice of Intent has been issued, but no further NEPA work has been done, the Notice of Intent need only be reissued if it no longer fairly describes the project being proposed. It is highly unlikely that an ATC would result in such a radical change.
2. If a Draft EIS has been issued, but not a Final EIS, a supplemental Draft EIS would be required if the ATC results in a change so significant that a new alternative or impact is introduced that could not be deduced from the information provided in the current Draft EIS.¹²⁸ Commenters on the Draft EIS must have a fair presentation of the action being proposed, the alternatives being considered, and the potential environmental impact of the proposed project and its alternatives. For projects being considered in an EA, the same rules apply.
3. If the ATC were to be accepted after the issuance of the Final EIS or the ROD, the existing Final EIS will have to be re-evaluated to determine if the changes occasioned by the ATC resulted in significant environmental impacts that were not evaluated in the EIS or resulted in new information or circumstances that have significant environmental impacts not evaluated in the EIS. Thus, it is not enough that the ATC makes changes in the project evaluated in the original EIS. There have to be new significant environmental impacts that were not previously addressed to require a supplemental EIS.

Various strategies may be employed to avoid the need to supplement an EIS should an ATC arise. First, the normal rule is that an EIS must be prepared early in the project development process, prior to final design and certainly before the letting of any construction contracts. Thus, the EIS often covers a broader scope than that contemplated by the final design. A legitimate question to consider is whether the ATC entails changes so significant as to require a supplemental EIS. Another approach might be to try to anticipate the effects of possible ATCs and account for them in the EIS. It is not necessary to actually predict what ATCs might be proposed. Only the scope of possible environmental impacts of design variants should be woven into the EIS.

Should a supplemental EIS or EA be required, only activities directly affected by the supplement must be suspended. Work that remains unchanged by the ATC would not have to be stopped.¹²⁹ Agencies and proposers are sometimes reluctant to consider ATCs because they might require substantial additional environmental review and thus result in extended project delays. However, relatively few ATCs have such a broad impact on a proposed project.

6.2.3. *Alternative Financial Concepts*

Structured in much the same way as ATCs, Alternative Financial Concepts are a mechanism to allow private sector proposers to submit for pre-approval, on a confidential basis, financial concepts that deviate from the RFP requirements. The process is intended to allow shortlisted proposers to incorporate financial innovation and creativity into their proposals. If an agency decides to use AFCs, the RFP will identify requirements associated with AFCs. The RFPs for the NTE, VDOT Transform 66 Outside the Beltway and

¹²⁸ The supplementation of highway and transit environmental impact statements is covered 23 CFR §771.130. Also relevant is the regulation regarding re-evaluations. A re-evaluation is often used to determine if a supplemental EIS is necessary. See 23 CFR §771.129.

¹²⁹ 23 CFR §771.130(f).



FDOT I-4 Ultimate projects provided proposers with the ability to submit AFCs and included guidelines for the submission of AFCs.

Similar to the process for ATCs, an agency will accept an AFC only if it determines that the terms and conditions of the P3 agreement, as modified by the AFC, allow the agency substantially the same or better value for money, rights, and remedies as the unmodified terms and conditions. The agency retains the discretion to allow or reject any AFC submitted, and the ITP usually identifies the types of AFCs that the agency will not consider or accept. The ITP for the NTE project excluded AFCs from consideration if they would require or result in:

- ▶ An increase in the public funds amount.
- ▶ A change affecting certifications regarding service commencement and project completion.
- ▶ A change regarding allocation of responsibility for certain significant activities (design, permitting, ROW acquisition, etc.) between the agency and the concessionaire.
- ▶ A change affecting compensation events and relief events, or otherwise allocating additional risk to the agency or reducing risk allocated to the concessionaire.
- ▶ A change to the provisions regarding default, notice, cure periods, remedies and dispute resolution, except to the extent the change creates more favorable terms for the agency.
- ▶ A change to the provisions relating to noncompliance points and related remedies, except to the extent the change creates more favorable terms for the agency.
- ▶ A change to the termination provisions, except to the extent the change has a neutral effect or creates favorable terms for the agency.
- ▶ A change to provisions of the contract documents regarding lenders, subject to certain exceptions.
- ▶ A change modifying requirements for insurance, performance security, financial close security, or indemnities that would be less favorable to the agency.

AFCs usually are required to be submitted in writing prior to the proposal due date with, among other things:

- ▶ A detailed description of the AFC.
- ▶ An explanation of the value of the AFC to the agency, including an estimate of any savings accruing to the agency associated with the AFC.
- ▶ An explanation and detailed description of changes to contract language.
- ▶ An analysis justifying use of the AFC, which may include an explanation of how the proposed changes to the P3 agreement will provide the agency substantially the same (or better) rights and remedies as the unmodified terms and conditions.

Like ATCs, approved AFCs may be incorporated into a proposal, subject to any conditions that may have been specified in the agency's approval.

6.2.4. *Evaluating Alternative Technical Concepts and Alternative Financial Concepts*

Agencies that allow the use of ATCs or AFCs often establish an ATC or AFC review team that may consist of both agency personnel and outside advisors. Confidentiality requirements apply to review of ATCs and AFCs because they include innovative ideas that proposers do not want to be disclosed to other proposers. Depending on State law, however, the RFP may allow the agency to disclose an unsuccessful proposer's ATCs or AFCs to the successful proposer. FHWA's Design-Build Rule only permits such disclosure following acceptance of a stipend.¹³⁰

¹³⁰ See 23 CFR §636.113.



There is some debate revolving around proposer reluctance to expend significant resources on developing and proposing innovative ideas due to lack of confidence in an agency's evaluation and review process. In addition, firms may be concerned that different proposers with similar ATCs may be treated differently. These concerns are best addressed through use of a controlled evaluation process as well as provisions in the procurement documents establishing clear parameters for the alternatives that the agency is and is not willing to consider.

One strategy that many agencies have adopted to make the ATC process more efficient is to ask proposers to submit conceptual or high-level ATCs to obtain early feedback from the agency before developing a detailed submittal. PennDOT used such a process for its Rapid Bridge Replacement project so that it would not be overwhelmed by the number of ATCs submitted by proposers. The primary concern was that the time it might take to appropriately review the submissions could delay the procurement process or cause the agency to simply reject what otherwise might be innovative and valuable approaches to consider. To help streamline the review process and mitigate the amount of resources expended by proposers and PennDOT during the ATC process, conceptual or high-level ATC submissions were encouraged to gauge the interest of the agency in further considering them and in the level of potential for approval. If PennDOT was interested in a concept based on high-level engineering or policy analysis, proposers were then encouraged to submit detailed submissions with the necessary design data to support the ATC. If the concept was something PennDOT knew it likely would not accept, no formal submission would be necessary. Thus, both the proposers and the agency were spared unnecessary time and resources developing and reviewing several detailed ATCs.

As noted above, proposers are highly concerned about the possibility that their ideas may be disclosed to others. The example above demonstrates one circumstance in which the agency may elect to disclose an ATC to avoid an organizational conflict. A more common circumstance involves the possibility that the agency may already be considering a concept when it receives a similar ATC or AFC from one or more proposers. In that case, if the RFP is later modified to include the agency's concept, the proposer may think that the agency is disclosing a proprietary idea. The agency may be able to avoid this perception by engaging in preliminary meetings with proposers to discuss potential concepts and notifying each proposer regarding overlaps between the agency's and the proposer's concepts.

6.2.5. *Experience with Alternative Financial Concepts*

In the NTE, FDOT I-4 Ultimate and VDOT Transform 66 Outside the Beltway projects, shortlisted proposers were afforded the opportunity to submit AFCs. For the VDOT Transform 66 Outside the Beltway project, VDOT received several "Innovative Financial Concepts" (the functional equivalent of AFCs) from shortlisted proposers, and the successful proposer's financial proposal included at least one of its Innovative Financial Concepts. VDOT representatives found the process valuable because it provided them with insight into the various financial sources, structures, options, and approaches that were being explored by the shortlisted proposers. Proposers will only need to obtain agency consent to use an innovative financing solution where the proposed solution is inconsistent with RFP requirements. Thus, proposers may be able to proceed with innovative solutions based on financial market dynamics without the need to request agency approval.

6.3. Evaluation of Proposals

One of the essential elements of the RFP is a description of the process for proposal evaluations. In order to ensure that the evaluators understand the proposal requirements, evaluation requirements, and procedures to be followed during evaluations, the entire evaluation team should be brought together for training before starting the evaluation process.

The agency and its evaluation team must pay particular attention to requirements in the RFP. Although the agency may elect to modify the process in the evaluation manual, if appropriate circumstances exist (and so



long as the modification is made in accordance with the protocol for changes set forth in the manual), deviations from the evaluation requirements included in the RFP could create grounds for protest.

6.3.1. Proposal Evaluation

The make-up of evaluation teams and the considerations for staffing them are described in section 4.4.1.

A typical evaluation process includes an initial review of the proposal by a proposal compliance team to confirm, on a “pass/fail” basis, conformity with administrative and legal requirements. The compliance review may be conducted before the technical and financial committees commence their reviews, but in order to reduce the overall time required for evaluation, in many cases reviews are undertaken concurrently.

For most projects, the financial proposals are not available to the technical evaluators, and the financial evaluators are segregated from the technical proposal evaluators until after the initial evaluations are complete and the results are presented to the selection committee. This was the process followed for the NTE and Purple Line projects, serving to ensure that the technical proposers do not know the pricing submitted by each proposer. In some cases, the financial proposals are not opened until technical evaluations are complete—although this approach lengthens the evaluation process. This is the approach recommended by the CDOT and the HPTE Manual.

During the evaluation, in accordance with the procedures set forth in the ITP, the agency may ask written questions of the proposers, seek clarifications, and possibly conduct oral interviews—although the agency will need to be careful about the dividing line between asking for a clarification and asking for proposal revisions or otherwise engaging in discussions or negotiations, and should consult with its counsel regarding the types of communications that are permissible exchanges without entering into discussions.¹³¹ Counsel also should be consulted regarding the agency’s ability to accept proposals that fail to meet all applicable requirements in the ITP, and how those proposals should be evaluated.

If the ITP includes separate due dates for technical and financial proposals, it should also include provisions allowing the agency to engage in discussions with proposers regarding weaknesses in their technical proposals during the interim period and permitting proposers to submit revised technical proposals on or before the due date for the financial proposals. The ITP may also allow use of a competitive negotiation process that includes both technical and financial proposals, as discussed in section 6.4. Discussions may be written or oral.

Purple Line Example: The agency’s evaluation team included separate technical and financial committees. Additionally, a proposal compliance committee was charged with ensuring that the proposals were complete and compliant from an administrative and legal perspective. The technical and financial committees were fire-walled; i.e. the technical committee had no knowledge of the financial concepts proposed and vice versa. An agency staff member led each of the evaluation committees with the technical and financial committees comprised of a majority of advisors.

6.3.2. Proposer Selection

As noted in section 4.4.2, proposal evaluations for P3 projects using a best value selection process typically include use of a selection committee, sometimes called a management committee.

¹³¹ The dividing line between clarifications and requests for proposal revisions presents legal issues and must be determined with reference to State law as well as guidance provided by the Federal funding agency (see FHWA’s Design-Build Rule and FTA’s BPPM). Although not directly applicable to State and local agency procurements, case law applicable to Federal agency procurements under FAR Part 15 may be useful by analogy.



In some cases, the selection committee may ask the subcommittee to reconsider its recommended rating, and in others the selection committee may decide to adjust the rating without asking for additional subcommittee review. The selection committee has access to all aspects of the proposals, including both financial and technical proposals. Once the ratings are set, the committee is responsible for conducting the tradeoff analysis or inputting scores into a pre-set formula and making a final selection recommendation.

The selection committee's final decision is eventually presented to administrative leadership for final approval. For some projects, the agency's executive director (or equivalent function) may act as the selection official. For more complex projects, the function of the selection official may be undertaken by yet another committee.

For the NTE project, the selection recommendation was made by an "Evaluation and Selection Recommendation Committee" (ESRC), with the assistance of advisors from four separate advisory subcommittees that conducted a pass/fail and responsiveness review and evaluated the development plan, the financial proposal, and the pre-development agreement (PDA) proposal for Segments 2 through 4. The ESRC's recommendations were then presented to a Steering Committee that made a selection recommendation to the Executive Director of TxDOT, who then made a selection recommendation to the Texas Transportation Commission, which ultimately made the final selection decision.

6.3.3. Results of Evaluation

Once the evaluation process is complete, an agency has a number of different ways to proceed, which may include award with or without negotiations, discussions and requests for revised proposals from multiple proposers, or terminating the procurement. If the agency selects a proposer for negotiations, the negotiations will be subject to limitations as described in the RFP. Most RFPs permit the agency to award without negotiations, specifying that the proposer is obligated to enter into the form of the agreement included in the RFP, without negotiation or variation, except to make certain contemplated changes such as filling in blanks and other information that the form of the agreement requires from the proposal.

The RFP also will identify the circumstances under which a proposer will be deemed to have violated its obligation to negotiate in good faith with the agency, in which case the proposer will forfeit its proposal security. Such circumstances may include:

- ▶ The proposer's failure to attend and actively participate in reasonably scheduled negotiation meetings with the agency.
- ▶ The proposer's insistence upon terms or conditions for any documents to be negotiated or provided by the selected proposer that are inconsistent with the RFP, including the form of the P3 agreement included in the RFP package.

If an agreement satisfactory to the agency cannot be negotiated with the apparent best value proposer, the agency may reserve the right in the RFP to formally end negotiations with that proposer and take action consistent with the provisions set forth in the RFP. Such action may include, among other things, (a) requiring the selected proposer to enter into the agreement in the form included in the RFP, without variation except to fill in blanks and include information that the form of the agreement indicates is required from the proposal; (b) rejecting all proposals; (c) issuing a request for proposal revisions to the proposers (see discussion in section 6.4); or (d) proceeding to the next most highly ranked proposal to finalize or attempt to negotiate the P3 agreement.

6.4. Proposal Revisions (If Applicable)

6.4.1. Competitive Negotiations

Best value procurements often allow the agency to establish a competitive range following review of initial proposals, engage in discussions with the proposers in the competitive range, and ask for revised proposals.



This process, commonly known as competitive negotiations,¹³² is commonly used by Federal agencies under FAR Part 15 and has also been used by a number of State and local agencies for transportation design-build projects. This process provides benefits to the public by maintaining competitive tension throughout the procurement, but lengthens the procurement schedule and is not favored by industry due to the increased costs of proposing.

As discussed elsewhere in this report, although P3 procurements often reserve the right to engage in discussions and request revised proposals, that right is not commonly exercised. Usually the RFP includes language stating that the agency does not intend to do so or identifying limited circumstances under which the agency will request revised proposals. An agency will most likely exercise this right if a change in scope occurs after receipt of proposals, if an error in the RFP documents becomes apparent after reviewing proposals, or if all proposals are unaffordable or are otherwise unacceptable. The ITP for the Purple Line included the following statement: “Although the Owner does not intend to request best and final offers (‘BAFOs’), the Owner reserves the right to request BAFOs when it is in the best interest of the State.” The ITP included reserved rights to establish a competitive range and conduct discussions with proposers in the competitive range.

6.4.2. *Establish Competitive Range*

The purpose of establishing a competitive range is to reduce the agency’s level of effort in engaging in discussions and requesting proposal revisions and also to reduce costs incurred by proposers who are unlikely to be selected. In its BPPM, the FTA describes the reasons for establishing a competitive range as follows:

1. Certain proposals, upon evaluation, may be so much more inferior than others for price or other reasons that the possibility of accepting a subsequent offer is so remote as to make negotiations unnecessary.
2. The recipient may have enough proposals such that it can be assured of negotiating the best buy in dealing only with a limited number of offerors; negotiating with more would be wasteful of both recipient resources and those of the marginal proposers.¹³³

For these reasons, a commonly used technique is to conduct negotiations only with offerors determined to be within the competitive range. In assessing the competitive range, competition remains an important objective and the effort in determining the competitive range is to preserve those proposals that stand a reasonable chance of being found acceptable; not to unduly limit competition by eliminating viable proposers.¹³⁴ Thus, if the procurement permits the agency to use competitive negotiations, the agency may have the ability to consider proposals that are not fully responsive but that could become acceptable through the proposal revision process.

¹³² FHWA uses the term “competitive negotiations” to refer to the Brooks Act-type process applicable to procurement of professional services contracts, involving review of proposals to determine the most highly qualified firm, and proceeding to negotiate with that firm, reserving the right to proceed to negotiations with the next ranked firm if negotiations fail with the first. See 23 C.F.R § 172.3.

¹³³ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, FTA Report No. 0105 (Washington, DC: 2016), p. 87. Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.

¹³⁴ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, “4.3.4 Competitive Proposal Evaluation Criteria,” FTA Report No. 0105 (Washington, DC: 2016), pp. 85-86. Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.



FHWA’s Design-Build Rule also contemplates establishment of a competitive range, discussions and proposal revisions.¹³⁵

6.4.3. Discussions

The BPPM describes the discussion process as follows:

“Competitive negotiations offer an important advantage over sealed bids—they afford the recipient and the offerors an opportunity to discuss/negotiate important aspects of the project, including the impact that the offeror’s perceived performance and schedule risks have on the price being offered. These discussions may very well result in negotiated adjustments to the specifications, delivery schedule, etc. and thus a more cost-effective approach to accomplishing the project objectives. In contrast to competitive negotiations, the sealed bid method affords no opportunity to discuss or negotiate the price, specifications, delivery requirements, or other important aspects of the contract, such as a contractor’s key personnel, insurance, warranties, etc.”¹³⁶

Discussions can be oral or written, depending on the extent of the revisions the agency is seeking. If a price reduction is desired, oral discussions will likely be needed.

6.4.4. Request for Proposal Revisions/Best and Final Offers

The BPPM also includes a description of the process for requesting proposal revisions and BAFOs.¹³⁷ The purpose of the request is to allow proposers to address deficiencies in their proposals and make other changes based on the discussions.

FHWA’s Design-Build Rule limits agency requests for proposal revisions, as follows:

“Sec. 636.511 Can there be more than one round of discussions?

Yes, but only at the conclusion of discussions will the offerors be requested to submit a final proposal revision, also called best and final offer (BAFO). Thus, regardless of the length or number of discussions, there will be only one request for a revised proposal (i.e., only one BAFO).”¹³⁸

As a result of this restriction, an agency relying on FHWA funding should consult with FHWA if for some reason it believes multiple requests for revised proposals are advisable.

A request for proposal revisions is normally issued in the form of an addendum to the RFP, and is addressed only to the proposers in the competitive range. Upon receipt of the revised proposals, the agency repeats the evaluation process in accordance with the RFP and makes its selection decision.

¹³⁵ See 23 CFR Part 636, Subpart E – Discussions, Proposal Revisions and Source Selection.

¹³⁶ Federal Transit Administration, *Best Practices Procurement & Lessons Learned Manual*, “3.4.7 Competitive Proposals (Request for Proposal),” FTA Report No. 0105 (Washington, DC: 2016), pp. 57-58. See “4.3.6 Two-Step Procurement,” p. 57, for guidance regarding the process to be followed. Available at: <https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/funding/procurement/8286/fta-best-practices-procurement-and-lessons-learned-manual-2016.pdf>.

¹³⁷ *Ibid.* See also “4.3.8. Competitive procurements may be used when the following circumstances are present,” p. 58.

¹³⁸ 23 CFR § 636.511.



7. Selection to Commercial and Financial Close

This chapter provides guidance on activities and considerations after selection through commercial and financial close. Table 13 presents the key goals and activities for this phase of the procurement.

Table 13. Goals and Activities—From Selection through Commercial and Financial Close

Goals after Selection	Activities
Commercial and Financial Close	<ul style="list-style-type: none"> ▶ Negotiate the P3 agreement ▶ Fulfill requirements of award and contract execution ▶ Update management and stakeholders and obtain any required approvals to Commercial Close ▶ Commercial close ▶ Financial close

7.1. Negotiation of the P3 Agreement

The ability to engage in negotiations following selection of a proposer and prior to award, although not an essential requirement for P3s, has served as a highly useful tool for State and local agencies using P3s. Pre-award negotiations with the selected firm can proceed much more expeditiously than competitive negotiations with multiple firms. Like competitive negotiations, pre-award negotiations enable the agency to obtain modifications to the proposal in key areas (although for highway P3s, FHWA regulations limit the ability to obtain modifications through pre-award negotiations). In competitive procurements, pre-award negotiations are typically limited to:

- ▶ Identifying and incorporating proposal commitments (over and above contract requirements).
- ▶ Incorporating design and other concepts (e.g., ATCs) from selected proposer’s proposal and those from unsuccessful proposers, including pricing impacts.
- ▶ Adjustments in favor of the agency for any errors or gaps in the base case financial model.
- ▶ Pricing adjustments due to intervening causes; e.g., movement in benchmark interest rates.
- ▶ Other matters at the agency’s election.¹³⁹

Prior to execution of a P3 agreement, the agency will review the selected proposer’s proposal to identify those elements of the proposal that are deemed by the agency to exceed the requirements of the agreement (and which may have been viewed as such during the evaluation process). The agency will then send the selected proposer the list of perceived commitments and the parties will work together to develop a consolidated list of commitments that can be incorporated into the P3 agreement, usually in an exhibit. Once incorporated into the P3 agreement, the proposal commitments will be contractually binding on the concessionaire. This ensures that the agency will receive the benefits of the proposed added-value commitments that were included in the proposal and that may have been taken into consideration in the evaluation process.

Incorporating ATCs. Another major benefit offered by pre-award negotiations relates to the agency’s ability to use competitive leverage to ask the selected firm to incorporate innovative concepts submitted by the unsuccessful proposers. This option is not available during competitive negotiations since that process

¹³⁹ See additional discussion regarding post-selection negotiations in *Establishing A Public-Private Partnership Program: A Primer*, dated November 2012, which can be accessed at https://www.fhwa.dot.gov/ipd/pdfs/p3/p3_establishing_a_p3_program_112312.pdf



involves requests for multiple firms to submit revised proposals, so that disclosure of one proposer's ideas to another would constitute an unfair practice that is prohibited under the Federal requirements for full, open and fair competition.

The RFP will describe the process for incorporation of any ATCs approved by the agency into the P3 agreement. The proposer's pre-approved ATCs may be incorporated into an exhibit, along with any conditions that may have been included in the agency's approvals. In addition, the agency may wish to incorporate ATCs from unsuccessful proposers into the P3 agreement. In such case, the agency will advise the selected proposer of the proposed ATC and the parties will negotiate any resulting change in price. The RFP also usually allows the agency to incorporate ATCs submitted by unsuccessful proposers into the P3 agreement through a Change Order after execution of the agreement. This option is not available during competitive negotiations, since that process involves requests for multiple firms to submit revised proposals, so that disclosure of one proposer's ideas to another would constitute an unfair practice that is prohibited under the Federal requirements for full, open, and fair competition.

Some P3 RFPs include a provision that provides the agency with the ability to draw on the selected proposer's proposal security if such proposer fails to engage in "good faith negotiations" with the agency. In such case, the RFP may describe the circumstances under which the selected proposer would be "deemed to have failed to engage in good faith negotiations." For the NTE project in Texas, for example, the selected proposer would forfeit its proposal security if (a) the proposer failed to attend and actively participate in reasonably scheduled negotiation meetings with TxDOT or (b) the proposer insisted upon terms or conditions for any documents to be negotiated or provided by the concessionaire that were inconsistent with the P3 agreement documents.

Even for the highly streamlined P3 procurements in Canada, the procurement process incorporates a limited negotiation period following selection of the preferred proponent, and often a reservation by the agency of the right to conduct broader negotiations. The right of the selected proposer to negotiate the terms of the project agreement following selection is limited to minor, mechanical amendments. However, RFPs for projects in Ontario may include a reservation of the right to identify the preferred proponent following negotiations with the first and second-ranked proposers either sequentially (if negotiations fail with the first-ranked proposer), or contemporaneously.

Ontario's Highway 407 RFP provided that the agency may use the negotiations process to negotiate any aspect of the first- or second-ranked proposals or the project agreement, including any amendments to the project agreement required to revise the scope of the project if all proposal prices exceed the agency's project budget. Furthermore, if the final credit spreads are not consistent with the indicative credit spread benchmarks of the preferred proponent, or if the preferred proponent's lenders fail to provide satisfactory lenders' commitment letters and the situation is not rectified to the agencies' satisfaction, the agencies may, in their sole discretion, choose from a number of courses of action, including commencing negotiations with the second-ranked proposer, engaging in competitive negotiations with the two highest ranked proposers, and re-determining the rankings and proceeding with the preferred proponent. The NTE and Purple Line projects both included a pre-award negotiation step.

North Tarrant Expressway, Texas Negotiations

For the NTE Segments 1 & 2W project, TxDOT and the selected proposer had to negotiate and finalize an independent engineer agreement (IE Agreement) that was required to be in place prior to commercial close. Both the selected proposer and TxDOT had to agree to a negotiation schedule for the IE Agreement and to attend and actively participate in reasonably scheduled negotiation meetings. If the selected proposer failed to negotiate in good faith, as noted above, the proposer ran the risk of forfeiting its proposal security. However, if TxDOT or the independent engineer failed to negotiate in good faith, the proposer was thereby excused from reaching commercial close by the stated deadline and did not forfeit its proposal security. The Facility Agreement for NTE Segments 3A and 3B was a fully negotiated deal.



7.2. Requirements for Award and Execution of Contract

Requirements for award and execution of the contract (also known as commercial close) vary depending on agency practice, and may require approval by the agency's governing body or another agency. The requirements to be fulfilled by the proposer as a condition to award should be specified in the ITP. These typically include but are not limited to execution and delivery of the project agreement by the proposer, delivery of performance security, any parent guarantees, evidence of insurance, evidence of authorization,¹⁴⁰ legal opinions and other ancillary documents. For revenue-positive projects, the proposer may also be required to deposit an upfront payment. For projects where financial close occurs subsequent to commercial close, the proposer may be required to deliver a schedule identifying the timetable and steps for achieving financial close, as well as financial close security to ensure timely financing for the project. For some projects, financial close may be scheduled to occur concurrently with commercial close.

In both the U.S. and Canada, proposers are typically required to include commitment letters with proposals, confirming lenders' willingness to provide debt financing backed with credit committee approval. The commitment letters may contain conditions such as completion of due diligence and, in the case of the Denver Eagle P3 project, "all normal and customary contingencies or conditions precedent to funding."

For the NTE project, the conditions to commercial close included the provision of, among other things:

- ▶ Evidence of corporate approval of the P3 agreement and certain other agreements, and of due authorization, execution, delivery and performance of each agreement.
- ▶ A legal opinion from the concessionaire's counsel meeting RFP requirements.
- ▶ Evidence of insurance required by the P3 agreement.
- ▶ Evidence of licensing.
- ▶ Various other agreements contemplated by the transaction (lease, lease escrow, intellectual property escrow, facility trust agreement, tolling services agreement, independent engineer agreement, and related documents).
- ▶ An approved DBE Performance Plan.
- ▶ Commitments to provide payment and performance security upon start of construction, in the form of either:
 - i. A commitment letter from a licensed Surety regarding payment and performance bonds; or
 - ii. A commitment letter from a financial institution committing to provide a payment and performance letter of credit.
- ▶ If applicable, guarantees from guarantor(s) in a form approved by TxDOT.
- ▶ Security for the pre-development agreement (PDA) in a form approved by TxDOT.
- ▶ If applicable, an executed lender's direct agreement (in the form attached to the RFP) and copies of executed initial funding agreements and initial security documents.
- ▶ If applicable, a valid and binding form of financial close security.
- ▶ The executed PDA.

The RFP for VDOT's Transform 66 Outside the Beltway project included similar conditions to commercial close.

¹⁴⁰ That is, evidence that all requisite action has been taken by the governing body of the entity to authorize the transaction.



7.3. Other Issues that May Affect Commercial Close

The RFP for a P3 project will identify the conditions for execution of the P3, which typically include execution of the P3 agreement and related documents as described in section 7.2. Where financial close is to occur concurrently with commercial close, the P3 agreement may specify that failure to obtain financing will result in forfeiture of the concessionaire's proposal security.

The execution of agreements for some projects may require approvals or reviews from either State or Federal agencies. For the NTE and LBJ Express projects, for example, State law required submittal of the P3 agreements to the State attorney general for a determination that such agreements are "legally sufficient." State law also required submittal of the P3 agreement and other documentation to the legislative budget board and the State auditor as well as publication of certain of the selected proposer's financial information.

As described in Appendix B, the enabling legislation for the Purple Line P3 procurement required a report to be submitted to the Maryland General Assembly with a 30-day review and comment period before submittal of the agreement to the Maryland Board of Public Works (BPW) for approval. These requirements serve to ensure transparency by providing the public with access to information regarding the solicitation process and the contract terms.

Agencies should review applicable State and local laws to determine the requirements that may apply with respect to P3 agreements in their jurisdiction.

7.4. Contract Start-up

Following commercial close, the activities to be undertaken are dictated by the terms of the P3 agreement. Although the primary focus at this point is on activities relating to the financial close, the agreement usually identifies other tasks to be performed during the period prior to financial close. For some projects, the agreement may provide for a limited notice to proceed with early work (or the right to proceed without a formal notice once specified conditions are met). In some cases, early work is undertaken at the concessionaire's risk, and in other cases the agency may agree to reimburse certain of the costs incurred by the concessionaire. The concessionaire is usually required to provide specified deliverables to the agency; for example, a detailed project schedule and updates to other information included in the proposal. The concessionaire will normally proceed with design activities and undertake other preliminary efforts to accelerate the post-financing project delivery schedule.

If the concessionaire's key contracts for the design-build phase (for example with its DB contractor and equipment suppliers) were not finalized prior to commercial close, they should be finalized prior to financial close and reviewed for compliance by the agency. An agreement with the O&M contractor should also be finalized prior to financial close, although certain terms may be subject to further review as the project proceeds.

This interim period also offers the agency an opportunity to prepare its team for administration of the P3 agreement. The procurement team may be asked to provide training sessions to ensure that the individuals responsible for contract administration are familiar with the contract terms and conditions, including commitments made by the concessionaire.

7.5. Financial Close

Financial close may occur concurrently with commercial close or sometime thereafter. If financial close is not concurrent with commercial close, as noted in section 7.2, the conditions to commercial close set forth in the RFP may include various requirements to ensure that financial close occurs as scheduled. One such condition is for the concessionaire to provide financial close security, and if financial close does not occur within the timeline set forth in the P3 agreement, the concessionaire's financial close security may be subject to forfeiture.



The requirements for financial close will vary from project to project, but P3 agreements typically include the following conditions:

- ▶ Satisfaction of all of the conditions to commercial close, including execution of the P3 agreement.
- ▶ Executed initial funding documents and initial security documents.
- ▶ Executed lenders' direct agreement.
- ▶ Legal opinions if not provided at commercial close.
- ▶ An update of the audit and opinion obtained from the independent model auditor regarding the suitability of the base case financial model that incorporates any agreed upon proposed amendments to the base case financial model.

While the majority of the responsibility for achieving financial close belongs to the concessionaire, agencies also have some responsibilities in the financial close process.

7.5.1. Review of Loan Documents

A number of funding/financing agreements and loan documents are required in connection with the concessionaire's financing obligations under the P3 agreement (or under the RFP if financial close will occur concurrently with commercial close). The agency's primary concerns relate to requirements ensuring that the funds and project debt are used for the purposes authorized by the agreement and that the agency's interests are protected. For example, a P3 agreement may include provisions that:

- ▶ Restrict lenders from obtaining a security interest in the agency's interest in the project, the project right-of-way (ROW) or the agency's rights under the P3 agreement.
- ▶ Require the debt instruments to include a provision stating that the principal and interest owed under such instruments are valid claims against only the concessionaire and are not the obligation of the agency.
- ▶ Obligate the lenders to acknowledge that they do not have the right to seek damages from the agency except with respect to the agency's breach of any obligations that it owes to lenders directly or obligations owed to the lender under the P3 agreement where the lender has succeeded to the concessionaire's interests.

7.5.2. Legal Opinions

Due to the size and complexity of P3 transactions, as well as the fact that the transactions include a finance component, each party involved in the transaction will likely have to provide legal opinions relating to the documents they sign. The documents required for commercial close (or, if not provided at commercial close, for financial close) typically include legal opinions from the agency's counsel as well as counsel to the concessionaire and key contractors, and financial close likely will require additional legal opinions from the agency, concessionaire, and others. The opinion from the agency's counsel should cover matters such as due authorization, execution, delivery, enforceability of the documents signed by the agency, confirmation that all required approvals have been obtained from third parties, and disclosure of litigation or other contracts relevant to the transaction. Opinions from other counsel will cover comparable issues with respect to their clients and the documents signed by their clients.

Opinions regarding authorization, execution and delivery serve as a form of due diligence and should be reviewed by competent counsel. Similarly, opinions disclosing relevant litigation and contracts should be provided by counsel with relevant knowledge. An enforceability opinion requires the opinion giver to review the project documents with reference to applicable law and identify aspects of the documents that the courts may not be willing to enforce. As an example, enforceability opinions typically include qualifications and exceptions for situations involving bankruptcy; if one of the parties becomes insolvent, bankruptcy law will apply and the party may be entitled to certain rights that are inconsistent with enforcement of the



contract. Opinion letters also typically include a number of assumptions made by legal counsel relevant to the opinions given. P3 transactions are generally governed by the law of the State where the project is located, and enforceability opinions must be issued by attorneys licensed in that State.

Legal opinions are not normally required for DBB or DB contracts, so agency procurement personnel may not be familiar with the underlying issues associated with opinions. It is also possible that agency counsel involved in the transaction will not have been called upon to issue opinions for prior deals, in which case they may want to obtain copies of opinions issued with respect to other agency transactions such as bond deals. It is advisable for the procurement team to address issues associated with legal opinions early in the procurement process, so as to avoid unnecessary delays in the closing process. This both ensures that agency counsel will be in a position to issue necessary opinions when the deal closes, and that issues important to agency counsel are incorporated into the opinions to be provided by other counsel.

The parties should be aware that the legal opinion forms included in the procurement package are templates that will be modified by the issuing attorneys to conform to their standard practices and to address specific issues noted in legal review of the final documents. The closing schedule should require draft opinions to be provided for review and comment by the opinion recipients, and should include sufficient time to negotiate the terms of the final opinions. The American Bar Association, and various State and local bar associations, have published reports regarding legal opinions that should be consulted in drafting and negotiating legal opinions for P3 transactions. A list of reports can be found at https://www.americanbar.org/groups/business_law/migrated/tribar.html.

7.5.3. Issues Relating to Financial Close

It is common practice among P3 projects in both the United States and Canada for the agency to assume interest rate risk between the benchmark rates and base rate at financial close for a specified period (the interest rate protection period), although there are many variations in approach. This practice provides the concessionaire an incentive to achieve financial close before the date the interest rate risk transfers to the concessionaire. If interest rates increase during the interest rate protection period, the agency will be responsible for any increased costs to the developer resulting from the increase. The agencies involved in both the NTE Segments 1 and 2W project and the Denver Eagle P3 project, for example, bore the risk of changes in interest rates (either positive or negative) for the period specified in the P3 agreements. For the NTE project, TxDOT bore the interest rate risk from seven days prior to the proposal due date to the earlier of (i) the date of financial close or (ii) the date specified in the P3 agreement as the interest rate protection end date, which was more than 1 year after the proposal due date. The developer reached financial close nine days before the interest rate protection period end date and, since interest rates went up during the period, the agency was responsible for paying an additional amount with public funds. For the Denver Eagle P3 project, the agency bore the interest rate risk for the period between the date the proposal was submitted and the earlier of (i) 6 months after the effective date of the proposal or (ii) the date of financial close. In Ontario, the agency also reserves the right to terminate the project agreement in the event of a severe market disruption.

For P3 projects in the United States, financial close often occurs months after commercial close. This may change as the market matures. In Canada's more mature market, financial close typically occurs within a day of commercial close, as the parties would not proceed to commercial close until the completion of all requirements for financial close other than rate-setting and insertion/amendment of related figures and provisions (and subject to formal delivery of documents).

The P3 agreement (or ITP if financial and commercial close occur concurrently) will identify circumstances that excuse the concessionaire for failure to reach financial close by the specified deadline. Justifiable reasons should relate to circumstances that are beyond the concessionaire's control, which may include the following, depending on the project.



- a. The agency's failure to complete the NEPA process prior to the deadline for financial close, or litigation challenging the NEPA review that is filed before lapse of the applicable statute of limitations that remains pending on the deadline for financial close.
- b. The agency's failure to deliver an opinion from its counsel in favor of lenders (if not previously provided).
- c. If the concessionaire's original financing includes PABs:
 - The agency's refusal or unreasonable delay in conduit issuance.
 - The agency's counsel's refusal to allow closing, where bond counsel gives an unqualified opinion sufficient to close (unless the opinion is unreasonable).
 - The agency's counsel's delay in authorizing the closing (beyond allowed turnaround times).
 - The failure of the PABs issuer or the agency to comply with the terms of the PABs agreement or the PABs allocation is rescinded or modified by the U.S. DOT.
 - The PABs allocation is terminated or expired such that the allocation is not available for financing.
- d. If the concessionaire's original financing includes TIFIA/RRIF:
 - The inability of U.S. DOT to close financing or provide financing on or prior to the deadline for financial close.
 - U.S. DOT's determination, through no fault of the concessionaire, to provide less than the full amount of funding assumed in the term sheet.
 - U.S. DOT's insistence, through no fault of the concessionaire, on materially inconsistent terms than those that were in the term sheet.
- e. A temporary restraining order or other form of injunction by a court that prohibits prosecution of any portion of the work that remains pending on the deadline for financial close.

7.5.4. Transportation Infrastructure Finance and Innovation Act

The TIFIA closing may occur simultaneously with the rest of the project financing, or may occur separately. Most commonly, the PABs or other project debt will price, and bond purchase agreements will be executed, prior to the TIFIA loan closing, but be issued shortly after. For the Purple Line project, the TIFIA loan closed on the same day the PABs were priced but several days before the PABs were issued. A TIFIA closing occurs when the U.S. DOT enters into a credit agreement and a term sheet with the borrower, which could be the P3 project sponsor or the P3 project's private sector partner. The credit agreement will articulate the type of TIFIA credit assistance, as well as the amount and terms of the TIFIA credit assistance, and the disbursement and repayment conditions.

7.5.5. Private Activity Bonds

As noted in section 2.4.4, PABs are issued by a public entity authorized under applicable State law to issue these types of bonds, with the P3 project's private sector partner liable for repayment of the obligation. A PABs closing involves the issuance of the bonds by the authorized public entity and the loan and transfer of the proceeds of the bond issuance to the P3 project's private sector partner. The concessionaire must use the bond proceeds to perform its responsibilities on the P3 project and for other uses related to the bond



issuance, and must repay the issuer for the loaned bond proceeds with revenues or payments received in the course of performing the work on the P3 project.

7.5.6. Other Lender Requirements and Agreements

The P3 agreement typically includes provisions providing assurance to lenders that they have the right to step into the concessionaire's position in the event of a default. Typically, the agency and lender enter into a "Direct Agreement" describing each party's rights and remedies, and identifying the process to be followed if a concessionaire default occurs. FHWA's Model Public-Private Partnerships Toll Concessions Contract Guide includes a discussion regarding lender's issues.¹⁴¹

¹⁴¹ Federal Highway Administration, *Model Public-Private Partnerships Toll Concessions Contract Guide – Draft Addendum (Part 2)*, "Chapter 11. Lender Rights and Direct Agreement." Available at: https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/model_contract_guides/core_toll_concession_part2/.



8. Additional Issues to Consider

This chapter provides guidance on issues and considerations not covered in previous chapters, including a discussion of unique issues relevant to P3 procurements in different industry sectors.

8.1. Risks Associated with Utility Relocations and Third Parties

As previously noted, utility and third-party risks present major concerns for concessionaires undertaking the responsibility for developing transportation facilities. It is therefore in the agency's interest to assess the potential risk associated with utility line relocation early in the project planning process and formulate a strategy to mitigate and manage this risk.

Sections 3.4.4 and 3.4.5 discuss issues relating to unknown utilities and steps that an agency may take to minimize the risks associated with them, such as early SUE and title work. The agency will want to provide proposers with baseline information that it assembles as part of the procurement package, identifying known utilities, and where possible, arrangements that have or will be made to address such utilities, and the dates by which such arrangements will be consummated.

In addition, where a project extends through multiple jurisdictions, it will be helpful for the agency to understand the extent to which it may exercise or benefit from the local jurisdiction's prior rights to require a utility owner to relocate or protect-in-place its own facilities.

8.1.1. *Failure to Cooperate*

The risk of costs and delays to the project due to failure of utility owners and other third parties to cooperate with the concessionaire presents different issues from the risk of unidentified facilities. P3 agreements often include provisions obligating the concessionaire to take the lead in seeking approvals required from third parties and working with third parties to ensure that their facilities are relocated in a timely manner, but also recognize that, in some cases, a third party may fail to cooperate with the concessionaire despite its best efforts to address the third party's concerns. Such a situation can quickly create significant additional project costs, and a concessionaire prejudiced by such lack of cooperation may be entitled to compensation from the agency for the delay. The P3 agreement may also require the agency to assist the concessionaire in dealing with the third party if reasonably requested to do so by the concessionaire.

8.1.2. *Agreements with Utility Owners and Other Third Parties*

One means of managing the risk of a third party's failure to cooperate is to establish a framework for the relationship between the future concessionaire and third party through a negotiated agreement with that party. In the case of utility owners, these agreements are often called "master agreements." In order to obtain the maximum benefit from these agreements, it is important for the agency to devote resources to ensure that the agreements are concluded prior to contract award. Ideally, such agreements will specify timelines for approvals and other third-party activities and will identify which costs will be borne by the agency or the third party. As these agreements are typically entered into prior to award of the concession agreement, the concessionaire is not normally a party to the agreement, but the agreement should make it clear that the agency plans to assign responsibility for performance of certain aspects of the agreements to the concessionaire.

The terms and conditions of these agreements may require extensive negotiation, as they involve impacts to the third party's operations, the need to devote resources to meet schedule commitments, and costs of performance, as well as potential exposure to liability for the cost of any delay to the concessionaire if the third party fails to perform. Agreements are generally easier to negotiate if the agency will pay the third party's costs, but the agency should not assume it can take on the obligation to pay such costs (or require its



concessionaire to pay them), as the question of cost liability for relocations must be determined with reference to applicable State law.

The importance of concluding these agreements prior to award of the P3 agreement cannot be overemphasized. It may be necessary for the agency to hire outside advisors and counsel to assist with these agreements, since agency staff may not have sufficient time available. In some cases, the agency may already have master utility relocation agreements in place providing standard terms for any utility relocations required for its projects, in which case those agreements should be reviewed with reference to the terms of the P3 agreement and revisions negotiated as appropriate.

Even though, in the ideal world, all agreements would be finalized before issuance of the RFP, in practice, agencies that are using a P3 for the first time will likely continue to negotiate during the proposal period and should aim to finalize all agreements before the proposal due date. In some cases, it may not be possible to finalize the agreements by the proposal due date, in which event the contract documents will need to address the risk of post-proposal changes in the agreements.

8.1.3. P3 Agreement Provisions

The P3 agreement should identify all existing third-party rights and agreements affected by the project and any contractual rights or obligations under such agreements that will be assigned to the concessionaire or that the concessionaire will be required to assume. It should also identify requirements that the concessionaire must meet before it has the right to call on the agency for assistance or obtain relief. For example, in the PennDOT Rapid Bridge Replacement Project, which required significant interaction with third parties, provisions in the contract treated excessive delay caused by negligence or deliberate inaction on the part of utilities as compensation events, but only if the concessionaire demonstrated it had done everything in its power to obtain cooperation, including giving PennDOT an opportunity to intervene.

8.2. Protests

Procurement protests serve an important function for agency procurements. The ability to file a protest ensures integrity in the public procurement process and provides transparency, thereby encouraging participation and competition in government procurements. The opportunity to submit bid protests also protects the public interest in procurement integrity, as protestors have an incentive to serve a “watchdog” function.

State laws governing procurement protests vary from jurisdiction to jurisdiction. Some agencies have adopted detailed procedures, while others have less detailed requirements. In many cases, protest requirements adopted by State and local agencies are similar to the rules applicable to bid protests for Federal contracts. Federal rules allow only “interested parties” to file protests. An “interested party” is an actual or prospective bidder or offeror whose direct economic interest would be affected by the award of a contract or by the failure to award a contract. Typically, this would include disappointed proposers who were not shortlisted or selected for award, parties who were excluded from bidding, or parties that were disadvantaged during the procurement.

8.2.1. Typical Grounds for Protest

Protests may arise for a variety of reasons at various times during the procurement, including prior to selection, post-selection, or post-award. In the case of a P3 procurement, a protest may arise when a firm is not shortlisted or when a firm is not selected for award. In most jurisdictions, courts will not second guess an agency’s administrative determination and will provide the agency with a fair amount of deference regarding shortlisting and selection determinations, only granting a protest on such grounds when the agency’s decision is shown to be arbitrary or capricious. One exception to this deference occurs when the agency fails to follow its own procedures and the terms of the solicitation.



P3 procurement documents may require a protest to be filed prior to the proposal due date (or date for receipt of SOQs) if a proposer believes that the terms of the solicitation are not clear, are unlawful, or favor one proposer over another. This ensures that post-selection protests will be limited to the agency's failure to follow its own rules as set forth in the RFQ and RFP documents. Such a provision should include specific deadlines for the protest and provide that the right to make a protest on such grounds will expire if the protest is not timely filed. Such restrictions are essential to preventing a protest based on the language of the procurement from interfering with the award after proposals are submitted.

8.2.2. Protest Procedures

It is important for the agency to adopt procedures for each type of protest enabling a quick resolution, so as to not delay the project through a protracted or delayed protest. In some cases, the agency's existing procedures are sufficient, but the agency should consider whether inclusion of specific provisions in the RFQ or RFP would be beneficial. Clear protest procedures that allow for the timely and efficient resolution of protests also benefit proposers, who rely upon the orderly progression and integrity of the procurement process. Some agencies require that protests be filed with and determined by the agency as a pre-requisite to seeking relief in court.

Protests may be filed even though the agency has acted in accordance with its procedures. Therefore, the procuring agency is well advised to have a strategy in place to deal with protests before they arise, ensuring that protests will be responded to timely, efficiently and effectively. If a protest is filed, the agency's first line of defense will likely be that it followed appropriate practices, such as those discussed earlier in this Guidebook, like providing each proposer with the same information and not disclosing any proposer's confidential business strategy, and adhering to the terms of the solicitation and evaluation process identified in the procurement documents.

If a protest is filed, or if an unsuccessful proposer indicates it is considering a protest, the agency may want to consider disclosing certain additional information about the evaluation process or conducting a debriefing with the proposer as a way to resolve the proposer's concerns. This strategy has proven helpful for at least one project where the proposer was satisfied by the information provided and decided not to file a formal protest. With no access to relevant information, the proposer may have no choice but to seek the same information through a more protracted formal protest process, which could potentially delay the project. In all cases, the agency's decisions regarding the approach to be taken to address protests and potential protests should be made in consultation with the procurement officer and legal counsel.

8.3. Public Transparency

Public records laws usually include an exception permitting information to be kept confidential where the public interest in disclosure is outweighed by the public interest in maintaining confidentiality. In most cases, the public interest in confidentiality permits information to be kept confidential during the procurement process, to preserve competitive tension, and to ensure that proposers are willing to engage in open discussions with the agency throughout the process. Individuals involved in discussions with proposers, as well as those participating in proposal evaluation, including outside advisors and observers, are typically required to sign confidentiality and nondisclosure agreements. Once award is made, the balance changes and the public interest in disclosure outweighs the interest in confidentiality, subject to exceptions for proprietary information and other categories of information that the statute exempts from disclosure.

In some cases, agencies may allow the concessionaire to take the position that aspects of its financial proposal constitute proprietary information that is exempt from public disclosure. For example, the proposers' financial models are sometimes delivered into an escrow, enabling the concessionaire to argue that its model is not a matter of public record. It is not clear, however, whether such an arrangement in fact avoids application of the public records laws.

Some agencies, including the Maryland Transit Administration, routinely require cost and pricing data to be provided for their contracts, which may result in such information becoming a matter of public record. For the Purple Line project, the P3 agreement includes provisions recognizing that the cost and pricing data and the financial model are the concessionaire's property and permitting the concessionaire to take the position that the data and model constitute proprietary information that is exempt from disclosure under the Maryland Public Information Act.

Some agencies have adopted policies (or are subject to statutory requirements) mandating a greater degree of public disclosure than others. Recent TxDOT procurements require proposers to provide executive summaries suitable for immediate disclosure. Following TxDOT's selection of a proposer for negotiations (called "conditional award"), its financial summary form and any information contained therein is subject to disclosure. After final award, all portions of the proposals (including those of the unsuccessful proposers), except certain non-public financial statements, are also subject to disclosure.

Under Florida's Public Records Laws, sealed bids, proposals or replies received by an agency pursuant to a competitive solicitation are exempt from disclosure until such time as the agency provides notice of an intended decision or until 30 days after opening the bids, proposals, or replies, whichever is earlier. As a result, FDOT RFPs strive to include specific safeguards to ensure that price proposals remain confidential until the statutory time period has run for affected parties to file a notice of intent to file bid protest, following the notice of posting of the award. For FDOT's Port of Miami Tunnel (POMT) project, a Sunshine Law request was made shortly after proposals were received, resulting in the public disclosure of technical proposals early in the evaluation process. This requirement makes requests for revised proposals problematic, as each proposer could obtain copies of the competing proposals, and FDOT's procurement documents do not contemplate such requests.

The Build America Bureau is subject to a legislative mandate to ensure the transparency of P3 projects receiving credit assistance through its program. 49 U.S.C. § 116(e)(3)(A) provides as follows:

“(3) Transparency.-The Bureau shall-

(A) ensure the transparency of a project receiving credit assistance under a program referred to in subsection (d)(1) and procured as a public-private partnership by-

- (i) requiring the sponsor of the project to undergo a value for money analysis or a comparable analysis prior to deciding to advance the project as a public-private partnership;
- (ii) requiring the analysis required under subparagraph (A), and other key terms of the relevant public-private partnership agreement, to be made publicly available by the project sponsor at an appropriate time;
- (iii) not later than 3 years after the date of completion of the project, requiring the sponsor of the project to conduct a review regarding whether the private partner is meeting the terms of the relevant public-private partnership agreement; and
- (iv) providing a publicly available summary of the total level of Federal assistance in such project.”

Accordingly, agencies using TIFIA, RRIF, INFRA, or PABs for P3s must adopt appropriate measures to ensure that the public interest is served by use of a P3 delivery method and enable the public to learn about the details of P3 procurements and projects—including conducting a VfM (or comparable) analysis, publicly disclosing the terms of the P3 agreement and amount of Federal participation and conducting a performance



review. As discussed in section 3.1.5, in some cases State law or policy may require an even greater degree of public disclosure.

8.4. Document Control

Due to the complexities involved in a P3 solicitation, the number of different players involved in document development, and the importance of maintaining confidentiality with respect to certain types of communications, proper methods of document control are of critical importance for P3s.

Colorado's P3 Management Manual assigns the responsibility to identify document control systems and records management for the proposed P3 project to the P3 Project Manager. The Manual allows for the use of Colorado DOT's Electronic Document Management System (EDMS) (ProjectWise) or HPTE's (Aconex).¹⁴² The system is required to: a) store and share large documents among authorized users; b) provide search and retrieve capabilities across documents; c) have a document control manager assigned for each P3 project; and d) track contract performance.

For the private sector, Colorado's P3 Management Manual assigns the following responsibilities: a) the use of data systems, standards, and procedures compatible with those employed by HPTE/CDOT, and the adoption of new processes in response to changes introduced by HPTE/CDOT; b) providing a secure location to use the EDMS; c) training their personnel to use the EDMS; d) having a mechanism to upload data into the EDMS; e) backing up all project-related documents on a nightly basis and storing all project-related documents in a secure off-site area on a weekly basis. HPTE/CDOT will assess how file storage and organization is conducted and the protocols involved with project information.

Virginia's 2017 PPTA Implementation Manual and Guidelines assigns to the VDOT P3 Office/VDOT District the responsibility to implement the document control database, to take place from project procurement to project completion.

Some States do not discuss document control responsibilities in their P3 guidelines, and instead address document control based on their standard policies or on a project-specific basis. For example, Indiana (which uses Oracle Fusion Middleware as its EDMS) does not discuss document control in its 2013 Public-Private Partnership Program Implementation Guidelines. As another example, Arizona's 2011 ADOT P3 Program Guidelines contemplates that document control requirements will be specified in the P3 comprehensive agreements. For the South Mountain Freeway DBM project, the P3 agreement requires the developer to establish and maintain an EDMS for the project and to allow ADOT access to the data. The responsibilities required by the ADOT contract are more specific than those described by CDOT, e.g., prepare a plan describing the methodologies used to log, track, retrieve, and approve documents.

8.5. Unsolicited Proposals

A number of public sector entities accept unsolicited P3 proposals, and several have adopted guidelines for such submittals. An unsolicited proposal has been defined as "a written proposal for a new or innovative idea that is submitted to an agency on the initiative of the offering company for the purpose of obtaining a contract with the government, and that is not in response to an RFP, broad agency announcement, or any other government-initiated solicitation or program."¹⁴³

¹⁴² Different EDMSs are used by state transportation agencies as described here: Caltrans, Division of Research, Innovation and System Information, "Project Delivery Document Management Systems," (Sacramento, CA: October 20, 2016). Available at: http://www.dot.ca.gov/newtech/researchreports/preliminary_investigations/docs/project_delivery_document_management_systems_preliminary_investigation.pdf

¹⁴³ 48 CFR § 2.101. Although this definition is found in the Federal Acquisition Rule (FAR), which does not apply to procurements by State and local agencies, the FAR is generally recognized as establishing sound procurement practices and is therefore cited in this Guidebook.



8.5.1. Advantages of and Process for Unsolicited Proposals

The unsolicited proposal process can, potentially, support private sector innovation and efficiencies in project delivery to a greater extent than a traditional solicited procurement. Enabling legislation in a given State may or may not explicitly address the authority of public sector entities to receive and act upon unsolicited proposals. In some States, enabling legislation may prohibit the acceptance of unsolicited proposals, prohibit the solicitation of proposals not tied to any specific project or projects or impose a fee to accompany such proposals.

In States where enabling legislation includes a process for unsolicited proposals, once a proposal is received, the agency is typically required to evaluate such proposals in accordance with statutory requirements or implementing guidelines. The legislation or guidelines may also provide the criteria for evaluating such proposals (such as public or agency benefit) and/or stipulate requirements for soliciting competing offers.

The unsolicited proposal process can include a mechanism serving to maximize the benefits of private sector innovation and efficiencies in project delivery. A proposal request originating within an agency typically includes a defined scope and engineering standards. An unsolicited proposal process gives the proposers wide latitude to innovate and express the benefits of their proposed innovations. Furthermore, unlike in a competitive bidding process, where the private proposers are restricted from seeking public support for their proposal, a firm submitting an unsolicited proposal can reach out to stakeholders to build a coalition in favor of its (proposed) solution.

8.5.2. Virginia I-495 Example

The unsolicited proposal for the Virginia I-495 HOT lanes provides an example of the opportunity for innovation that can occur when the private sector has the ability to submit a proposal on projects that it chooses, instead of being limited to projects identified by the public sector. At the time the Virginia DOT received the proposal in 2002, it was not considering priced managed lanes on the right-of-way, and HOT lane implementation in the United States was still in its nascent stage. The innovative proposal provided a solution to the congestion problem as well as a mechanism to finance the roadway expansion while minimizing externalities such as land acquisition. The private entity that submitted the proposal (Fluor) succeeded in gaining public support for the proposed solution through its outreach efforts.

8.5.3. Disadvantages of Unsolicited Proposals

Unsolicited proposals also involve some negative aspects. They create a burden on the agency if it is subject to mandatory requirements to review and evaluate proposals upon receipt without the ability to schedule and appropriately manage the review process. Significant staff and/or specialized consultant resources, such as financial advisors, may need to be dedicated to reviewing and processing unsolicited proposals, leaving staff spread thin on regular tasks. To overcome this, agencies may specify a pre-set time period for delivery of unsolicited proposals.

Another aspect of unsolicited proposals is the possibility and/or the perception that the proposed project might displace or defer projects that the agency would otherwise undertake or significantly impact the priority order of projects within the agency. Requests to accelerate projects may be viewed as an attempt to bypass standard environmental review, permitting, stakeholder involvement, and public outreach processes. Procedures for unsolicited proposals typically require appropriate levels of community and stakeholder coordination to avoid these concerns.

Another issue raised by the use of unsolicited proposals relates to intellectual property concerns associated with innovative solutions proposed by the private sector. To encourage competition and to ensure transparency in the procurement process, most States require public agencies to give public notice of an unsolicited proposal and to solicit competing offers. Federal and State law may dictate the latitude that individual State or local governments have in developing guidelines for protecting proposers' intellectual



property rights while ensuring a transparent procurement process. For example, the FAR requirements applicable to unsolicited proposals submitted to Federal agencies expressly state that: “Government personnel shall not disclose restrictively marked information included in an unsolicited proposal.”¹⁴⁴ State and local agencies typically place the burden on the proposing entity to identify information that it believes is exempt from disclosure under the State’s open records laws, but reserve the right to determine that the information is subject to disclosure under applicable law. Some States also require proposers to provide a substantial fee along with their unsolicited proposal. The cost of producing an unsolicited proposal, the requirement to pay a fee, and concerns regarding confidentiality can act as deterrents to active and effective private sector participation in the unsolicited proposal process.

8.5.4. Key Considerations and Successful Practices for Unsolicited Proposals

Some considerations for setting up an unsolicited proposal program include:

- ▶ Policies and enabling legislation: Consider whether enabling legislation specifies requirements for unsolicited proposals.
- ▶ Evaluation considerations: Evaluate the agency’s capacity, including staff resource, expertise and evaluation procedures required to evaluate and respond to unsolicited proposals. In considering procedures, the agency may want to specifically evaluate policies protecting unsolicited proposers’ confidentiality and intellectual property rights.
- ▶ Competitive procurement considerations: Evaluate requirements to ensure a fair and transparent competitive procurement process.

Some successful practices that agencies wishing to seek unsolicited proposals may consider include:

- ▶ Limiting the times when an unsolicited proposal can be submitted. For example, PennDOT has established two opportunities per year, once every six months, for potential private partners to submit unsolicited proposals. This allows the Department to prepare for receipt and dedicate appropriate resources for efficient review of each submission.
- ▶ Charging an Unsolicited Proposal Fee. Several agencies charge a fee that must be paid prior to review of any unsolicited proposal. This fee serves to ensure that the agency only receives proposals from individuals and firms that are committed to the project and have the resources to see the process through and deliver the project. In some cases, the fee is returned if the agency decides, based on a very high-level review, not to pursue the proposal. If the agency decides to proceed with a detailed evaluation, the fee is used to help offset at least a portion of the cost of that review and assessment by the agency.
- ▶ Cost protection for private sector proposer. Providing some cost and/or intellectual property protection for proposers can encourage innovation from the private sector. The agency may wish to establish a framework allowing compensation to the proposer for original ideas or work products included in the unsolicited proposal that the agency elects to use even though the proposed project does not proceed to the design and construction phase. This would help to encourage innovation by assuring proposers they will be compensated for usable concepts included in their proposals, and would allow the agency the right to use the proposed concepts.

8.6. Issues Specific to Different Industry Sectors

Certain issues relevant to P3s are specific to the type of project and industry sector. The following discussion concerns issues specific to highway, transit, port, and airport projects.

¹⁴⁴ 48 CFR § 15.608.

8.6.1. Highway

Toll Setting

The viability and success of a revenue-based toll project is highly dependent on how the toll rates are set over the term of the concession. If the agency has the right to set rates, it means that the concessionaire's revenue is subject to the political considerations of the agency without regard to the actual costs and profitability of the facility—which may be an unacceptable outcome for potential concessionaires. On the other hand, allowing the concessionaire unfettered discretion to adjust toll rates invites a potential backlash from the public. Accordingly, the P3 agreement should include provisions that set clear parameters as to what toll rates may be charged and under what conditions. By providing bands in which the toll rates may be set, the agency provides the concessionaire with clear limits but the flexibility to adjust toll rates as the concessionaire sees fit. Matters that can be considered include inflation, traffic levels, types of users, exemptions for HOV users, the duration of the term, competing facilities, average traffic speed, and time and season of the year, among other things. And with the advent of dynamic pricing, the agency may provide for these factors to be considered on a minute to minute basis.

Business Rules

The agency needs to set out the “business rules” for any tolled facility. These business rules are the framework for the concessionaire to develop its tolling system. Through the business rules the agency can direct the concessionaire as to the practical, logical, and political factors to be taken into account, while at the same time allowing the concessionaire flexibility to develop its own solutions. Business rules may include matters such as requirements for recordkeeping, vehicle classifications, defining exempt transactions, identifying discounts, communications with customers, website services, and transactions involving customers of other toll operators, handling violations and complaints, video tolling, and handling fees.

Competing Facilities

Concessionaires must take a long-term view of any project they are considering, as key to the success of the project for them is long-term profitability. Thus, a 35- to 50-year term must take into account a number of potential variables during that time frame that could affect the traffic and revenue for the project. One significant factor to consider is that future development of other facilities (e.g., “competing facilities”) in proximity to the project may reduce toll traffic due to the availability of a “free” alternative.

While this issue could be addressed by a covenant on the part of the agency not to develop competing facilities, FHWA does not consider this approach a good practice.¹⁴⁵ Instead, most toll concessions include

¹⁴⁵ A non-compete covenant included in the franchise agreement for the SR-91 project in California proved to be highly controversial when the State DOT determined that certain improvements prohibited by the franchise agreement were needed for safety purposes. Subsequent laws adopted in California permitting use of P3s for highway projects have specifically prohibited such covenants, while permitting agreements to allow the concessionaire to be compensated for impacts to its operations. See Assem. Bill 1467, 2006-2007, ch. 32, 2006 Cal. Stat. Available at: https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=200520060AB1467. The relevant provision reads as follows:

(3) No agreement entered into pursuant to this section shall infringe on the authority of the department or a regional transportation agency to develop, maintain, repair, rehabilitate, operate, or lease any transportation project. Lease agreements may provide for reasonable compensation to the leaseholder for the adverse effects on toll revenue or user fee revenue due to the development, operation, or lease of supplemental transportation projects with the exception of any of the following:

(A) Projects identified in regional transportation plans prepared pursuant to Section 65080 of the Government Code and submitted to the commission as of the date the commission selected the project to be developed through a lease agreement, as provided in this section, unless provided by the lease agreement approved by the department or regional transportation agency and the commission.



provisions that treat development of a competing facility as a “relief event,” and include a formula to determine the impacts of the new facility on the concession, accounting for factors such as then current toll rates, traffic changes, remainder of time in the term, and proximity of the new facility, among other things.

These competing facility provisions are likely to be carefully scrutinized by sources both inside and outside of the agency. While such a provision may give a concessionaire a sufficient level of comfort to pursue the project, agencies must consider the political implications of an agreement with a private concessionaire that may affect the agency’s ability to provide for effective and efficient transportation to meet the needs of the traveling public.

It is common for a P3 agreement to exclude from the definition of a “competing facility” any transportation projects in then-current long-range plans of the agency, such as a State DOT’s STIP or LRTP. Another means of limiting the impact is to clearly delineate what types of facilities would be “competing facilities” (e.g. highways or frontage roads but not local access or transit). And any such provision should include geographical limitations (within a certain number of miles or a predetermined zone) to ensure the concessionaire does not receive a windfall due to a distant facility.

It should be noted that not all competing facility clauses are explicitly for the benefit of the concessionaire. Outside groups opposed to growth or the expansion of roadways in an area may pressure the agency for a competing facilities clause to limit future development and traffic. In such a case, the agency may want to take steps through public relations to publicize this point whenever the issue is raised during development. This may counteract opposition to the project if the public understands this is the result of third party input, and not a “giveaway” to concessionaires.

Snow and Ice Removal

One of the most basic and outwardly simple operations of a highway is snow and ice removal during winter months. But with a P3, this can raise some unique issues with risk allocation. Questions to be asked include:

- ▶ Who will be responsible for snow and ice removal?
- ▶ What geographical limits apply, and what standards apply?
- ▶ What are the agency’s obligations regarding snow and ice removal with respect to the local government that has jurisdiction over the roads they connect to?
- ▶ With respect to bridges over the facility (which are often included in the concessionaire’s maintenance obligation to avoid interference with facility operations and to take advantage of efficiencies): how far past the end of the bridge must one perform the snow and ice removal, particularly if the local government typically performs the work as part of the maintenance of its own roads?

These issues present significant concerns for P3s because the capital investment associated with snow and ice removal equipment can be very large, particularly in comparison to the amount of use the equipment will get each season. For this reason, the P3 agreement may allow for the concessionaire to lease equipment and storage facilities from the agency and to purchase supplies, such as rock salt, from the agency. This arrangement can be limited, though, depending on how much equipment and supplies the agency needs at a given time to perform its own work on the remainder of the system.

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- (B) Safety projects.
 - (C) Improvement projects that will result in incidental capacity increases.
 - (D) Additional high-occupancy vehicle lanes or the conversion of existing lanes to high-occupancy vehicle lanes.
 - (E) Projects located outside the boundaries of a public-private partnership project, to be defined by the lease agreement.

However, compensation to a leaseholder shall only be made after a demonstrable reduction in use of the facility resulting in reduced toll or user fee revenues, and may not exceed the reduction in those revenues.



In cases where the agency retains the responsibility for snow and ice removal, or requires the concessionaire to retain the agency to do the work, the P3 agreement should address responsibility for damage and additional wear and tear to the facility resulting from the agency's work. The concessionaire may be concerned that the techniques and skills used to perform snow and ice removal may prematurely shorten the life of the structure or increase short term maintenance costs. This can be addressed, in part, by using specific standards for the work to be undertaken by the agency and by performing routine inspections before, during, and after the season.

8.6.2. Transit

Although transit P3s are less common in the United States than highway P3s, a number of different agencies have used P3s for transit projects. One of the first such projects was the New Jersey Transit Corporation's turnkey contract for the Hudson-Bergen light rail line in the mid-1990s. Given recent transit P3 examples, such as the Eagle project in Denver, the Purple Line in Maryland, and the LAX automated people mover in Los Angeles, and the fact that several transit properties have announced an interest in using P3s, it seems likely that P3s will continue to be used as a tool for delivering transit projects in the future.

Vehicle Supply

Questions to be addressed in the context of a transit P3 include whether the transit vehicles will be provided by the concessionaire or the agency, as well as performance requirements for the vehicles. A requirement for the concessionaire to use vehicles supplied by the agency will engender discussions regarding delivery schedule, compliance with performance requirements, and integration with the concessionaire's other work.

In some cases, the project requirements for transit vehicles may affect the number of proposers able to meet RFQ or RFP requirements. For instance, if only four different vehicle suppliers are capable of providing vehicles meeting the project criteria, a decision to include vehicles in the scope of the P3 procurement could potentially limit the field of respondents to the same number. This is because of a general preference for exclusive arrangements in teaming. If a proposer is unable to secure a commitment from one of the four qualified suppliers because they are already committed to another team, that proposer will be unable to satisfy the minimum project qualifications requirements. In some cases, agencies have included language preventing vehicle technology providers from being exclusive to one team. While this approach might appear sufficient to address the problem, it is not clear whether it is effective, and it is very difficult for the agency to police the nature of any commitments, formal or informal, that might be made between private firms. Another alternative is to run separate qualifications processes for the vehicles and the proposer teams, requiring each short-listed proposer to identify its vehicle supplier by a stated deadline.

Fare Collection and Farebox Risk

Allocation of risks and responsibilities for transit projects are intertwined with the undeniable fact that, for such projects, farebox revenue likely will not be sufficient to cover costs of performing necessary work during the operations and maintenance phase. As a result, transit projects are more likely to rely on an availability payment approach. While farebox risk can be transferred to the private sector even in an availability payment arrangement, the advantages associated with transfer of that risk are not readily apparent. Both the Denver Eagle and Maryland Purple Line compensated the private sector partner through annual service payments, retaining responsibility for farebox risk. In addition, the P3 agreements for both projects make it clear that fare policy and structure will be determined by the public entity. This model serves to minimize the revenue risk of the private entity (as the agency assumes that risk) while ensuring that fares and other matters of significant interest to the public will remain within public control.

Even though the agency retains farebox risk, it may require the concessionaire to maintain and manage fare collection equipment and to undertake other functions relating to fare collection. For the Purple Line project, the concessionaire is responsible for supplying and installing the fare collection equipment, as well



as collecting cash, stocking ticket vending machines with paper ticket and receipt media, counting and accounting for cash fare transactions, making deposits with designated financial institutions, and providing certified statements of revenue collected.

Power Supply

Various issues relating to power supply will need to be considered in drafting the P3 agreement for a transit project, including which entity will contract with the utility company, how to address the risk of increases in rates, and how to deal with differences between planned and actual usage of power. If fuel-powered vehicles are used, the focus changes to cost of fuel and efficiencies in usage. For the Purple Line project, the agency is responsible for directly paying for electrical power required for system operations, and for working with the electric power provider to establish electrical power rates and fees prior to the start of trial running. The payment mechanism includes “painshare/gainshare” provisions to provide incentives to the concessionaire to develop a system that operates efficiently.

Coordination with Railroad Operators

A major consideration for the Denver Eagle project was the potential effects of railroad requirements on work rules for Project personnel as well as the need to coordinate operations with other railroads, due to interfaces between the Eagle project and operations by the National Railroad Passenger Corporation (Amtrak), Burlington Northern Santa Fe Corporation (and its Affiliates) and Union Pacific Corporation.

Labor Issues

Labor issues are a significant consideration for all P3s, as discussed in the FHWA’s P3 Toolkit.¹⁴⁶ The toolkit identifies issues relating to prevailing wages, employee benefits, worker displacement, workforce development, apprenticeship, workplace health and safety, equal employment opportunity, and project labor agreements, among others.

For transit projects, the agency will need to determine whether “Section 13(c)” statutory labor protection requirements apply and, if so, determine how to address them.¹⁴⁷ Agencies are highly concerned about labor harmony during operations, to avoid stoppage of service if labor disputes arise. Issues differ significantly for different agencies and also depend on the nature of the project. For example, the Regional Transportation District in Denver has a long history of contracting out operations, and was able to rely on that history in developing labor-related requirements for the Eagle P3.

In addition to standard State and Federal requirements relating to labor issues, the P3 agreement for the Purple Line included provisions addressing Section 13(c) issues and obligating the concessionaire and its contractors to enter into a labor peace agreement under 29 U.S.C. § 158.

Performance Requirements

Performance requirements for transit projects involve significantly different considerations than is the case for other projects. For example, they may encompass areas such as:

- ▶ Service availability and on-time performance.

¹⁴⁶ Federal Highway Administration, “Public-Private Partnerships: Labor Best Practices – Draft,” (Washington, DC: September 2015). Available at: https://www.fhwa.dot.gov/ipd/p3/toolkit/publications/model_contract_guides/labor_best_practices/.

¹⁴⁷ Requirements of Section 13(c) of the Urban Mass Transportation Act of 1964, since recodified as Section 5333(b) of the Federal Transit Act, but nevertheless still referred to as “Section 13(c)” by practitioners, are discussed in detail in *Transit Cooperative Research Program (TCRP), Selected Studies in Transportation Law, vol. 5, § 9D*. (Washington, DC: Transportation Research Board of the National Academies, 2014 Supp.).



- ▶ Vehicle and station cleanliness.
- ▶ Station maintenance (e.g., lighting, elevators/escalators, snow).
- ▶ Safety & security compliance (e.g., fire/life safety).
- ▶ Accessibility (e.g., ADA).

Issues relating to graffiti removal and other types of vandalism responsibility may result in lengthy discussions during the industry review process. For the Purple Line project, the P3 agreement included a “band” approach to risk sharing for vandalism risk.¹⁴⁸

Requirements to meet performance standards relating to electromagnetic interference (EMI) and vibration impacts may also present concerns in the context of a P3—particularly if the transit line is adjacent to facilities where research is conducted that may be affected by EMI and vibration.

Capital Renewal

The concession period for a transit project can be longer than the expected life of many components, and obligations to replace such components should be addressed in the P3 agreement. This is a particular concern for large P3s involving rail systems with significant capital renewal costs programmed during the concession period.

For further information on small- and medium-sized transit P3 projects, refer to *Transit Cooperative Research Program (TCRP), Public Transportation Guidebook for Small- and Medium-Sized Public-Private Partnerships (P3s)*, 2017.

¹⁴⁸ See Section 5.2.2 for a description of this approach.



Appendix A. Glossary

Term	Description
Agency	A public agency including departments of transportation, toll road agencies, transit agencies, and other State and local agencies responsible for developing and operating transportation projects.
Alternative Financial Concepts (AFC)	Structured in much the same way as ATCs, Alternative Financial Concepts (AFCs) are a mechanism to allow private sector proposers to submit for pre-approval, on a confidential basis, financial concepts that deviate from the RFP requirements.
Alternative Technical Concepts (ATC)	Modifications offered by proposers to technical requirements specified in the RFP that may be pre-approved by the agency for incorporation into such proposer's proposal. This process allows contractors to submit innovative concepts and solutions in a confidential manner.
Availability Payment	A periodic payment made to a concessionaire, typically commencing on completion of a project, a portion of which constitutes compensation for capital costs. Availability payments are subject to adjustment based on a payment scheme set forth in the concession agreement, including downward adjustments if the concessionaire fails to meet performance requirements under the agreement. Using an availability payment structure protects the interests of the public by giving the concessionaire a financial incentive to maintain the facility in satisfactory condition and operating at a specified level of performance.
Best value	A procurement process where price and other key factors are considered in the evaluation and selection process to minimize impacts and enhance the long-term performance and value of construction.
Buy America requirements	Requirements applicable to projects receiving U.S. DOT assistance, requiring certain goods and materials used in the project to be produced in the United States. Requirements vary depending on which Federal agency is providing assistance. For information about Buy America requirements applicable to FHWA-funded projects, see https://www.fhwa.dot.gov/construction/cqit/buyam.cfm . For information about FTA requirements see https://www.transit.dot.gov/buyamerica .
Categorical exclusion	A category of actions that do not individually or cumulatively have a significant effect on the human environment, and for which neither an environmental assessment nor an environmental impact statement is required under NEPA.
Competitive range	A list of proposers whose proposals have a reasonable chance of being selected for award based on their relative technical strengths and weaknesses, and their relative prices as determined by the procuring agency. Refer to Section 4.3.3.5 of FTA's BPPM for a discussion regarding how to set the competitive range.
Concession	A contractual right granted by an agency to a developer to design, build, finance, operate and maintain a particular asset owned by the agency, as documented and governed by the terms of a concession agreement.



Term	Description
Concession agreement	A contractual agreement whereby a public agency engages a private entity to design, build, finance, operate and maintain a facility for a specified time period in exchange for the right to collect revenues generated by the facility or receive availability payments. This document is also sometimes known in the market as a “comprehensive agreement,” a “concession and lease agreement,” a “franchise agreement, a “public-private partnership agreement,” or a P3 agreement.”
Concession Period	The duration of a concession, either commencing upon execution of the agreement or completion of the project, and ending upon handback of the facility to the public agency.
Concessionaire	The private sector party to a P3 agreement. Also called a developer or the “private partner” (although it should be noted that a P3 does not create a legal partnership between the public and private sector parties).
Condemnation counsel	The attorney(s) representing the project with respect to eminent domain/condemnation actions required to obtain project rights-of-way.
Credit enhancement	Financing tools (e.g., letters of credit, lines of credit, bond insurance, debt service reserves, and debt service guarantees) that improve the credit quality of underlying financial commitments. Credit enhancements have the effect of lowering interest costs and improving the marketability or liquidity of bond issues.
Davis-Bacon requirements	Prevailing wage and other requirements imposed by the 1931 Davis Bacon Act, 40 U.S.C. 3141, et seq., as amended.
Design-build (DB):	A procurement or project delivery method or arrangement in which a single entity (a contractor with subconsultants or a team of contractors and engineers, often with subconsultants) is entrusted with both design and construction of a project. This contrasts with traditional procurement where one contract is awarded for the design phase based on qualifications and then a second contract is bid for the construction phase of the project.
Design-build-finance (DBF)	A project delivery method that includes a component of financing provided by the design-build contractor in addition to DB services. The contractor provides the necessary up-front capital to address the project’s cash flow needs and is generally repaid by the public agency in a series of installments funded by taxes, fees, or tolls.
Design-build-finance-operate-maintain (DBFOM)	A project delivery method that combines design, construction, financing, and either long-term or short-term operations and maintenance services.
Direct agreement	An agreement between the developer, public agency and lender under which, among other things, the agency permits the developer to grant a security interest in its rights under the concession agreement to a lender and grants the lender step-in rights and cure rights in the event of a developer default under the concession agreement.
Disadvantaged Business Enterprise (DBE)	DBEs are for-profit small business concerns where socially and economically disadvantaged individuals own at least a 51% interest and also control management and daily business operations African Americans, Hispanics, Native Americans, Asian-Pacific and Subcontinent Asian Americans, and women are presumed to be socially and economically disadvantaged. Other individuals can also qualify as socially and economically disadvantaged on a case-by-case basis.



Term	Description
Environmental Assessment (EA)	A concise public document, for which a Federal agency is responsible, that provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or finding of no significant impact for a proposed transportation improvement pursuant to NEPA. An environmental assessment includes brief discussions of the need for the proposed improvement, the alternatives, and the anticipated environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted.
Environmental Impact Statement (EIS)	An EIS is a detailed written statement required by NEPA for major Federal actions that significantly affect the quality of the human environment. An EIS details the process through which a transportation project was developed, includes consideration of a range of reasonable alternatives, analyzes the potential impacts resulting from the alternatives, and demonstrates compliance with other applicable environmental laws and Executive Orders.
Equity investors	The entities that directly or indirectly own the developer and invest equity into the Project, also known as “sponsors” or “shareholders.”
Financial close date	The date on which the financing to fund the project closes. Conditions precedent to financial close typically include execution of the concession agreement documents, delivery of the base case financial model, delivery of requisite legal opinions, and confirmation that the requisite equity investment or shareholder loans have been made.
Finding of No Significant Impact (FONSI)	A finding of no significant impact under NEPA is a document prepared by a Federal agency that briefly presents the reasons why a proposed project not otherwise categorically excluded will not have a significant effect on the human environment and for which an EIS will not be prepared. It is issued subsequent to and includes the environmental assessment.
Formulaic approach	An approach to evaluation of SOQs or proposals that uses a formula or algorithm (if applicable) to combine price and non-price criteria.
Form FHWA-1273	The provisions of the FHWA-1273 generally apply to all Federal-aid highway construction projects and therefore, must be physically incorporated into the construction contract (including design-build contracts) and, if required, appropriate subcontracts and purchase orders. The form may be found online at: https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf .
Full funding grant agreement (FFGA)	The agreement used to provide Federal financial assistance under FTA’s Capital Investment Grants Program (49 U.S.C. §5309) for a New Starts project.
Greenfield Project	In a P3 context, a greenfield project is a project that requires the construction of a new asset. The concession agreement obligates the concessionaire to design and construct the new asset, and also to perform operations and maintenance.
High-Occupancy Toll (HOT) lanes	Managed highway lanes open to buses and high-occupancy vehicles at no cost, as well as non-HOV vehicles that pay a variably priced toll. Tolls are adjusted using fixed or dynamic rates to maintain free-flow traffic conditions.



Term	Description
Interfaces	In the context of P3 risk, project interfaces with other transportation infrastructure and utilities during the term of the concession, which may include freight rail, highway facilities, transit facilities and local agency facilities.
Letter of No Prejudice (LONP)	The LONP authority allows an applicant at its own risk to incur costs for a Project using its own funding sources with the understanding that the costs incurred subsequent to the issuance of the LONP may be eligible for Federal reimbursement or as credit toward the Grantee's local match should FTA award an FFGA for the Project at a later date.
Long-range Statewide Transportation Plan	The official, statewide, multimodal, transportation plan covering a period of no less than 20 years developed through the statewide transportation planning process.
Metropolitan planning organization (MPO)	The policy board of an organization created and designed to carry out the metropolitan transportation planning process. The MPO is responsible for planning and programming Federal highway and transit investments in its metropolitan planning area. Federal transportation statutes require that urbanized areas of 50,000 people or more must designate an MPO as a condition for spending Federal highway or transit funds. MPOs are responsible for developing a metropolitan transportation plan and a transportation improvement program. MPOs in nonattainment and maintenance areas also conduct a conformity analysis.
Metropolitan Transportation Plan (MTP)	The official multimodal transportation plan addressing no less than a 20-year planning horizon that the metropolitan planning organization develops, adopts, and updates through the metropolitan transportation planning process.
National Environmental Policy Act (NEPA)	United States environmental law, codified at 42 U.S.C. § 4321 et seq., requiring Federal agencies to study the environmental effects of their proposals, document the analysis, and make the information available to the public for comment. For transportation projects, NEPA requires examination and avoidance of potential impacts to the social and natural environment when considering approval of proposed projects. It provides an interdisciplinary framework for Federal agencies to prevent environmental damage and contains "action-forcing" procedures to ensure that Federal agency decision-makers take environmental factors into account. For additional information, access http://www.environment.fhwa.dot.gov/projdev/index.asp . (Source: Transportation for Communities - Advancing Projects through Partnerships (TCAPP))
Option	An offer made by one party to a contract to the other, on terms permitting the other party to accept the offer in accordance with the terms and conditions specified in the contract. P3 agreements may include the right for an agency to exercise an option requiring the concessionaire to proceed with certain work, with the price for that work set by the concessionaire's original proposal
Organizational conflicts of interest (OCI)	An organizational conflict of interest occurs where a contractor is unable, or potentially unable, to render impartial assistance or advice to the recipient (i) due to activities, relationships, contracts, or circumstances that may impair the contractor's objectivity or that may be perceived to impair the contractor's objectivity; or (ii) a contractor has an unfair competitive advantage.



Term	Description
Pre-development Agreement (PDA)	An agreement that allows a developer to participate in project planning at either a reduced or a deferred cost, in exchange for the right of first negotiation to develop the project on a design-build-operate-maintain or design-build-finance-operate-maintain basis.
Private Activity Bonds (PAB)	A form of tax-exempt bond financing that can be issued by or on behalf of State or local governments for privately developed and operated projects. This allows concessionaires to obtain tax-exempt interest rates for the project financing. Under current law, the total amount of such bonds is limited to \$15 billion.
Project concept	A transportation improvement idea that, when advanced through the stages of planning, environment, design, and construction, would satisfy an identified need, and that was considered in the context of the local area socioeconomics and topography, future travel demand, and infrastructure improvements in the area.
Project sponsor	An agency that advances and procures a transportation improvement project.
Proposal	A written document submitted by a private entity to a public agency for a P3 project that may be solicited (in response to a request for proposal issued by the agency) or unsolicited (not in response to any request for proposal issued by the agency).
Proposal security	Bid bond or other security for a proposer's obligations under the proposal.
Public involvement	The act of communicating and engaging with the public to inform them about an agency's activities (e.g., the development of highway improvements) to gain feedback.
Race conscious/ race neutral	DBE participation is reported as race conscious when the contract has a DBE goal. DBE participation is reported as race neutral when the contract does not have a DBE goal or when the prime contractor is a DBE.
Railroad Rehabilitation and Improvement Financing (RRIF)	Under this program the Federal Railroad Administration (FRA) Administrator is authorized to provide direct loans and loan guarantees up to \$35.0 billion to finance development of railroad infrastructure. Not less than \$7.0 billion is reserved for projects benefiting freight railroads other than Class I carriers.
Record of decision (ROD)	A concise public record issued by a Federal agency subsequent to an EIS that explains the basis for the project decision, identifies all alternatives considered, and summarizes mitigation measures incorporated into the project.
Request for Proposals (RFP)	The entire set of documents issued to proposers for purposes of soliciting proposals. The RFP documents typically include instructions to proposers (ITP), contract terms and conditions, multiple volumes of technical provisions and other documents that are also considered part of the contract, and reference information documents that are outside of the contract.
Request for Qualifications (RFQ)	The set of documents issued for the purpose of soliciting qualifications and establishing a list of qualified proposers. The RFQ documents typically include the goals and objectives of the project and the procurement, procurement rules, including communications, conflicts of interest and confidentiality, submittal requirements, and the evaluation criteria for determining which teams are most highly qualified and will be permitted to submit proposals

Term	Description
Resource agencies	Federal agencies with regulatory or permitting authority related to protection of natural or cultural resources. Examples include (but are not limited to) the U.S. Environmental Protection Agency (EPA) and U.S. Army Corps of Engineers. (Source: TCAPP)
Revenue risk	The risk that revenues for a project during the concession term do not match projections. “Revenue risk concessions” refer to P3s for which the developer bears the risk that it will fail to achieve its expected rate of return due to failure of project revenues to meet projections.
Statute of limitations	A statute that sets the maximum time after an event within which legal proceedings may be initiated.
Statute of repose	A statute that cuts off certain legal rights if they are not acted on by a specified deadline.



Appendix B. Project Descriptions

NORTH TARRANT EXPRESS PROJECT, FORT WORTH, TEXAS

Project Overview

The North Tarrant Express (NTE) project involves the reconstruction, widening, and addition of tolled managed lanes along approximately 31 miles of roadway north and east of Fort Worth, Texas. The NTE is being delivered in two phases.

The approximately \$1.64 billion NTE 35W Project is the second phase of the North Tarrant Express. The 18-mile project includes the reconstruction, widening, and addition of tolled managed lanes along I-35W in three segments: the 6.5-mile Segment 3A from I-30 in

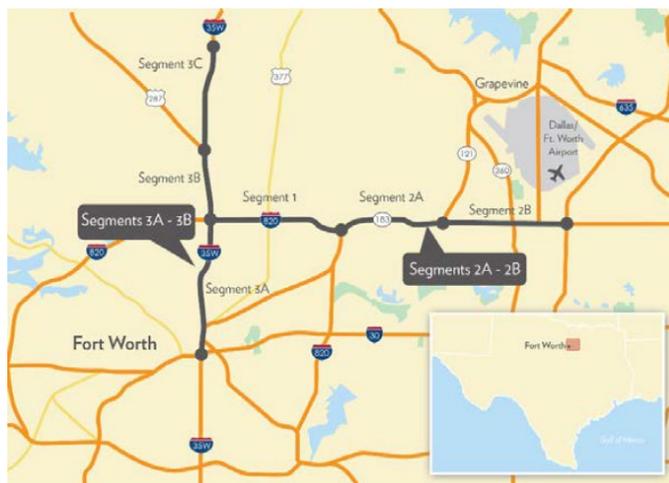
downtown Fort Worth north to I-820, the 3.6-mile Segment 3B from I-820 north to U.S. 287, and the 8-mile Segment 3C from U.S. 287 north to Eagle Parkway near Fort Worth Alliance Airport. Two tolled managed lanes will be constructed in each direction on Segments 3A and 3B, while one tolled managed lane in each direction will be added to Segment 3C. In addition, one to two general purpose lanes and new frontage roads will be added to Segment 3A by 2030. On Segments 3B and 3C, additional general purpose lanes, auxiliary lanes, or frontage roads are also contemplated by 2030.

Known as TEXpress Lanes, the new managed lanes will allow drivers without passengers in their vehicles to pay a toll when they want to avoid travel delays on the (free) general-purpose lanes. Prices on the managed lanes will be set in real time every five minutes to control the number of vehicles entering the lanes and keep traffic moving at speeds of at least 50 miles per hour.

Construction on Segment 3A began in May 2014 and was scheduled to be completed in September 2018. Construction on Segment 3B started in April 2013 and the segment was opened to traffic in July 2017. The \$2.12 billion Phase I of the NTE opened in October 2014. Phase I of the project rebuilt the existing four to six main lanes and added four TEXpress Lanes, plus frontage roads and auxiliary lanes, which approximately doubled the previous capacity along 13.3 miles of I-820 (Segment 1) and SH 121/SH 183 (Segment 2A) extending east from I-35W toward Dallas-Fort Worth International Airport. Two additional non-tolled main lanes also will be added to Phase I no later than 2030 at no additional cost to TxDOT, unless TxDOT requires the developer to construct the main lanes earlier than the traffic trigger set forth in the CDA or 2030.

Project History

Planning for roadway improvements along the I-35W corridor between downtown Fort Worth at I-30 north to I-820 (what has become Segment 3A) began with a Texas Department of Transportation (TxDOT) study in 1992. TxDOT continued to advance a schematic design periodically throughout the 1990s to refine interchange configurations and to include the addition of a reversible high occupancy vehicle (HOV) lane in the median, which would be available to multiple-occupant passenger vehicles only.



A separate TxDOT study conducted in the late 1980s to early 1990s examined improvements to I-35W north of I-820 to SH 114—a corridor that now includes Segments 3B and 3C—and resulted in a series of small improvements to frontage roads and the addition of new interchanges near Fort Worth Alliance Airport.

While TxDOT endorsed expanding I-35W, little was done in the early 2000s as pay-as-you-go funding from gas-tax collections was insufficient to complete a major widening in a timely manner. In addition, regional priorities were focused on the I-820 corridor—a corridor that would become part of the first phase of the NTE. To overcome the funding constraints delaying the project, TxDOT sought to capitalize on a 2001 change in Texas transportation law that permitted the State to issue bonds against the collection of toll revenues. It began to examine tolled managed lanes rather than HOV lanes as a means to provide an ongoing revenue source against which to issue bonds.

The Decision to Pursue as a P3 Project

Another significant change to Texas transportation law was enacted in 2003, permitting TxDOT to engage the private sector to finance, design, construct, operate, and maintain a toll road project on a public-private partnership (P3) basis. This approach allows final design, right-of-way acquisition, and construction to take place concurrently, with access to private sector financing helping to accelerate the delivery of the project.

Following the State legislature's authorization for of P3 projects in Texas, private investors began to assess project development possibilities in the State. In March 2004, TxDOT received an unsolicited proposal from a concessionaire to reconstruct and expand the entire I-820 and SH 121/SH 183 corridor, from I-35W in Fort Worth to I-35E in Dallas County, adding tolled managed lanes. This prompted TxDOT to begin a formal process to solicit competing offers, but the department ultimately canceled the process in early 2006. Nonetheless, the seed was planted that this corridor, and potentially others in the Fort Worth region, including I-35W, could be developed on a P3 basis.

Project Procurement

In 2006, the Texas Transportation Commission—TxDOT's governing board—approved a revised approach to procure two P3 agreements, a concession agreement for the development of at least the I-820 corridor as contemplated in the canceled procurement, and a second for a predevelopment agreement (PDA) to create a Master Development Plan for improvements to additional highway segments in the region. This multi-segment system of planned improvements, which included I-35W, was named the North Tarrant Express.

The Master Development Plan would assess the financial feasibility of the additional segments and prioritize their implementation. The winning proposer would also have the right of first negotiation with respect to any of these sections identified for development through P3 concession agreements, or otherwise identified by TxDOT as suitable for self-performance by the developer. By including the additional segments in the procurement, TxDOT hoped to generate greater interest from the private sector since a network of tolled managed lanes would be financially more attractive than a standalone facility. While it was not clear that all segments necessarily would be feasible to build using a P3 agreement, the private sector's expertise in conducting such a feasibility analysis would be helpful in identifying those projects that could potentially be feasible.

A procurement for the dual P3 agreements began in December 2006. From a field of two finalists, TxDOT awarded both P3 opportunities to North Tarrant Express Mobility Partners (NTEMP) in January 2009. NTEMP is a private consortium composed of Cintra U.S., Meridiam Infrastructure Finance, and the Dallas Police and Fire Pension System. Cintra, a Spanish company, is a highly-experienced toll road developer and operator. Meridiam is a French firm and is one of the largest investors in and developers of public infrastructure facilities in the world. The Dallas Police and Fire Pension System is no longer a member of NTEMP.

In June 2009, TxDOT and NTEMP executed the P3 agreements and formally concluded the competitive procurement process, a milestone referred to as reaching “commercial close.” NTEMP’s proposal provided the best value to the State for the construction of the NTE Phase I along the I-820 corridor. NTEMP’s P3 concession will extend over a 52-year period. It began construction on Phase I in late 2010. Phase I was completed and opened to traffic in October 2014, 8 months ahead of schedule.

While negotiation of the I-820 corridor P3 agreement was taking place, TxDOT revised its schematic designs for Segments 3A and 3B along I-35W to include tolled managed lanes and began an environmental review process.

As construction on Phase I began in 2010, NTEMP also undertook its master planning work for the I-35W corridor. NTEMP refined TxDOT’s initial designs for Segments 3A and 3B and prepared a plan of finance. NTEMP expected that these segments would be constructed on a P3 basis in the same manner as Phase I. In May 2010, the company informed TxDOT that it was ready to begin negotiations on a P3 agreement to build these sections of the NTE.

In July 2011, TxDOT and NTEMP agreed to a plan where NTEMP would design, build, finance, operate, and maintain Segment 3A and also operate and maintain Segment 3B, which would be financed and constructed by TxDOT. TxDOT felt that it could achieve superior value for money by delivering Segment 3B on a traditional design-bid-build basis, rather than asking NTEMP to deliver it on a design-build basis with its own financing. The plan was formalized under a new 52-year P3 agreement (Facility Agreement) executed in March 2013. The Facility Agreement did not include Segment 3C, which TxDOT initially planned to finance and construct itself at a later date. In early 2016, NTEMP submitted a request to TxDOT to develop Segment 3C (which was part of the original procurement and Master Development Plan) through a negotiated change order to the Facility Agreement for Segments 3A and 3B. The two parties expect to reach agreement on the change order by mid to late 2018. TxDOT gained environmental approvals for all three segments in 2012.

As with Phase I, the concessionaire will set the toll rates for the managed lanes and collect toll revenues from both Segments 3A and 3B (and ultimately 3C) over the life of the concession. Toll rates must be set in accordance with a Regional Managed Lanes Policy established in 2006 by the North Central Texas Council of Governments (NCTCOG) and its governing board. The policy provides a basic framework to help guide the development of new projects. The P3 agreement sets out a mechanism with TxDOT requiring the concessionaire to pay TxDOT a share of toll revenues once they exceed a defined thresholds.

Project Financing and Implementation

Financing for the \$1.397 billion NTE Segment 3A was finalized in September 2013. NCTCOG is contributing \$145 million in public funds and NTEMP is providing the remaining \$1.252 billion. NTEMP’s Segment 3A financing includes toll equipment for both Segments 3A and 3B.

Financing for the \$244 million Segment 3B is primarily being provided by TxDOT in the form of traditional State and Federal funds. A small portion of NTEMP’s financing will also cover Segment 3B. Financing for the proposed \$700 million Segment 3C is expected in 2018 pending agreement between TxDOT and NTEMP.

NTEMP’s financing package for Segment 3A includes a combination of private equity and debt. NTEMP’s private equity contributions from its three partners total \$442 million, and it also expects to generate \$46 million in interest income. The private partners will be repaid for their initial investment and receive a return over the life of the concession from toll revenue collections.

NTEMP also capitalized on two Federal credit programs administered by the U.S. Department of Transportation that reduce financing costs for concessionaires. The company secured a \$531 million loan from the TIFIA program, of which \$524.4 million was allocated to Segment 3A and \$6 million to Segment



3B. TIFIA provides low cost, flexible credit assistance to transportation projects of national and regional significance. The flexibility provided in TIFIA's debt service schedule was critical to the successful financing of the project.

In addition, NTEMP's financing includes \$274 million in tax-exempt PABs that TxDOT issued on behalf of the concession company. These PABs, allowed NTEMP to gain access to the tax-free municipal bond market, lowering its interest rates substantially. The TIFIA loan, as well as the PABs, will be repaid from project revenues.

The concession agreement shifts certain risks from TxDOT (and the taxpayer) to the concessionaire. For example, NTEMP has assumed the risk that toll revenues may be lower than expected. NTEMP's profit will come from the toll revenues with any amounts in excess of a certain threshold being shared with TxDOT for use on future transportation projects in the region. The State of Texas retains ownership of the land and improvements. NTEMP must hand back the facility in a prescribed state of good repair when the concession term expires on June 22, 2061 (or on another date, as agreed upon between TxDOT and NTEMP).

Construction of Segment 3B was completed in 2017. Construction on Segment 3A is anticipated to be complete in 2018. Segment 3C is expected to take approximately four years to construct, the commencement of which depends on the timing of the agreement between the P3 partner and TxDOT.

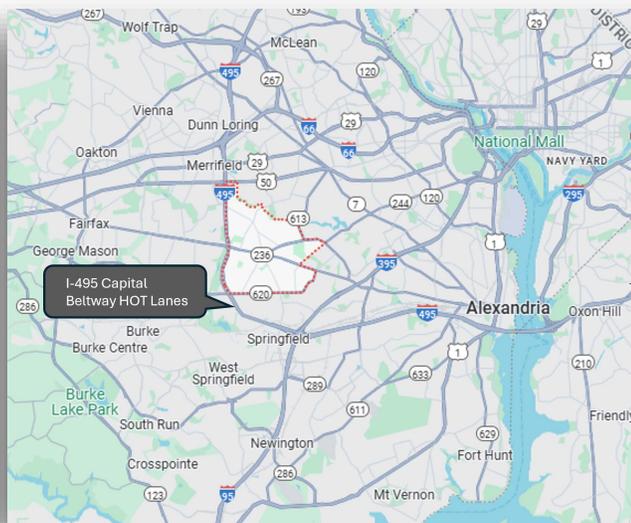


I-495 Capital Beltway High-Occupancy Toll Lanes, Virginia

This project description was published in U.S. DOT's *The Report on Highway-Public Private Partnership Concessions in the United States*.¹⁴⁹

Project Overview

The \$2 billion I-495 Capital Beltway High-Occupancy Toll (HOT) Lanes project expanded and improved a 14-mile section of the Capital Beltway (I-495) in Fairfax County, Virginia. In addition to adding four new managed HOT lanes (two in each direction) and reconstructing the existing general-purpose lanes, the project included the replacement of over 50 bridges and overpasses, the reconfiguration of six interchanges and the construction of three new interchanges providing direct access to the HOT lanes.



Advanced traffic management technology is being used to ensure that both the HOT lanes and the adjacent general-purpose lanes operate at maximum efficiency. Prices charged to use the HOT lanes change in real time to regulate demand and ensure that a dependable, high level of service is maintained at all times. Travelers may choose to pay for a dependable travel time on the HOT lanes, or they may elect to travel in the free general-purpose lanes, where they may experience a less predictable trip. Buses, emergency vehicles and vehicles with three or more occupants can all access the HOT lanes at no cost. Vehicles eligible for free use of the road must declare their HOV status using an E-ZPass Flex® transponder switched to the “HOV” setting. All motorists in the HOT lanes are required to have an E-ZPass electronic toll payment transponder. Tolls are collected at highway speeds and deducted from customers’ pre-paid E-ZPass toll accounts. The Virginia State Police enforce vehicle occupancy requirements on the lanes, ensuring that motorists that declare HOV status with their transponder have three or more people in the vehicle.

Project History

Beginning in the late 1980s, the Virginia Department of Transportation (VDOT) undertook a number of high-profile studies to explore options for addressing chronic congestion on the Capital Beltway. These efforts resulted in short-term solutions, including truck restrictions, deployment of Intelligent Transportation System (ITS) strategies, and geometric design improvements. In the 1990s, VDOT conducted a broad range of longer-term improvement studies, including a Major Investment Study in 1994.

In early 2000, VDOT assessed a range of options for improving the Capital Beltway, including HOV lane addition alternatives and concepts for improving interchanges. Estimated costs ranged between \$2.7 and \$3.3 billion, and impacts included displacing hundreds of residences. Local stakeholders expressed concerns over the potential solutions.

¹⁴⁹ Available at: https://www.fhwa.dot.gov/ipd/pdfs/p3/p3-toolkit_report_on_highway_p3s_122916.pdf Available at: https://www.fhwa.dot.gov/ipd/pdfs/p3/p3-toolkit_report_on_highway_p3s_122916.pdf



A Draft Environmental Impact Statement (DEIS) was completed in March 2002, assessing different HOV lane addition concepts. During the ensuing public comment period, VDOT received several comments suggesting that HOT lane options be explored instead of HOV lanes.

In June 2002, Fluor Daniel (now Fluor Enterprises), a private engineering, procurement, construction, maintenance, and project management company based in Irving, Texas, submitted an unsolicited proposal to VDOT to design, build, finance, operate and maintain HOT lanes on the Capital Beltway under a P3. Fluor would finance the project by borrowing against future toll revenues generated by the managed lanes. The company also proposed a streamlined design that would eliminate the need to purchase private properties and construct the improvements within the existing publicly owned highway right-of-way. This development reduced the project cost significantly and eased public opposition to the project originally proposed by VDOT.

Project Procurement

Under guidelines established in a 2001 amendment to the PPTA, VDOT formed an Internal Review Committee composed of agency staff to review Fluor's proposal. After finding that it was consistent with legal and policy requirements, VDOT issued a request for competing proposals. VDOT did not receive any competing offers and ultimately made the decision to accept the company's conceptual proposal for the Capital Beltway Project.

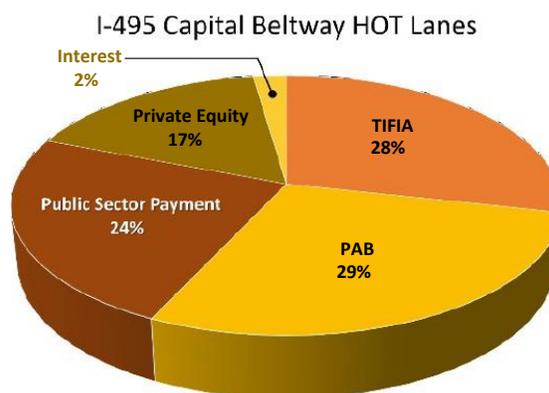
At the time that VDOT accepted Fluor's conceptual proposal, the company developed a relationship with Transurban, a private-sector Australian toll road operator. Transurban was interested in entering the American market and establishing new business. Meanwhile, Fluor was looking to act on a suggestion from VDOT to improve its position relative to toll road operation and its ability to finance the project.

The remaining steps in the procurement process were prescribed by the PPTA Act. Fluor and Transurban submitted a Detailed Proposal to VDOT in October 2003. VDOT then incorporated Fluor's design concept into the formal environmental review process. VDOT approved Fluor's detailed proposal in June 2004 and entered into negotiations in August. In October 2004, Transurban was acknowledged as a formal participant in negotiations.

In January 2005, the Commonwealth Transportation Board selected the HOT lanes plan for the Capital Beltway as its preferred alternative. An Interim Comprehensive Agreement was executed in April 2005 between VDOT, Fluor and Transurban to develop, design, finance, construct, maintain and operate the Capital Beltway HOT Lanes. The agreement acknowledged that the project would be privately funded and the State would not be responsible for any major project costs. However, through ongoing negotiations, the scope of the project continued to expand to include several major changes, including: altering the project's northern and southern termini, changing the I-66 interchange configuration, substituting direct access to Route 123 in Tyson's Corner with three new direct access interchanges and making other alignment changes to the HOT lanes.

In addition, VDOT required Fluor to support the robust public outreach efforts it had established for the Capital Beltway project. There were also federally-mandated design requirements that needed to be met, including additional sound walls and signage mounted on standalone structures.

These changes resulted in cost escalations. By May 2007, VDOT and Fluor-Transurban agreed to "freeze" the project and defer any



decisions on possible scope changes so that Fluor-Transurban could establish its fixed-price cost for the design-build contract and arrange its financing.

Ultimately, the State agreed to contribute \$409 million in public funds to the project to cover the changes to the project design. In addition, the VDOT agreed to compensate Fluor-Transurban if HOV traffic levels exceeded an established benchmark. This was important because HOVs would be allowed to use the HOT lanes at no cost. It also validated VDOT's policy goal of encouraging HOV traffic on the Beltway.

In December 2007, VDOT formally awarded the DBFOM Capital Beltway concession to Capital Beltway Express, LLC—the special purpose entity established by Fluor and Transurban to implement the project. The contract period included five (non-operational) years for construction and 75 years for operations and maintenance of the facility. In addition to being a partner in Capital Beltway Express, Fluor served as the prime design-build contractor that would build the project for a fixed price. Similarly, Transurban is serving as the toll operator of the managed lanes.

Project Financing and Implementation

The financing package for the Capital Beltway HOT Lanes included \$348.7 million in at-risk shareholder equity provided by Capital Beltway Express. In addition, the company secured a \$588.9 million loan from the U.S. Department of Transportation's (U.S. DOT) Transportation Infrastructure Finance and Innovation Act (TIFIA) credit program. This program lends money to projects of national significance at low interest levels available only to the U.S. government. In addition, the company received approval from U.S. DOT to raise \$589.0 million by selling tax-exempt Private Activity Bonds (PABs). The Commonwealth of Virginia issued the PABs on behalf of Capital Beltway Express. The TIFIA loan and PABs reduced the concession company's financing costs and will be repaid with project revenues during the 75-year concession period. VDOT also contributed \$495 million in public funding. This was an increase above the \$409 million it agreed to contribute in 2007, due to scope additions. VDOT's contribution is a subsidy and will not be repaid.

The project marked a number of precedent-setting "firsts" in transportation project delivery in the U.S. It was the first to use dynamically priced tolls to leverage a project financing package. It was also the first transportation project to use PABs in the United States.

The concession agreement shifts certain risks from VDOT (and the taxpayer) to the concessionaire. For example, Capital Beltway Express has unrestricted rights to set tolls, but at the same time has assumed the risk of lower-than-projected toll revenues. Revenues generated from the tolls are intended to cover all project costs, including debt service, operations, maintenance and administrative costs, as well as provide a reasonable return on investment.

Many contractual provisions exist to protect the public interest. For example, if the HOT lanes exceed financial expectations, excess toll revenues will be shared with VDOT. Additionally, the concession contract includes condition, performance and safety standards. Capital Beltway Express must hand the facility back to VDOT in a state of good repair at the end of the concession period. VDOT retains ownership of the land and improvements, as well as oversight of the HOT lanes.

Construction began in spring 2008, and the facility opened to traffic ahead of schedule in November 2012.

Due to a lower than expected toll revenues during the first two years of operations, Capital Beltway Express and its lenders restructured the project's debt. They used an additional \$280 million in private equity from Capital Beltway Express and \$150 million in existing project reserves to reduce the PAB debt—which must be repaid before the TIFIA loan—by 60 percent. This change improves Capital Beltway Express' credit structure and strengthens the creditworthiness of the TIFIA loan by reducing the project's overall debt load. The agreement was finalized in May 2014.





U.S. 36 Express Lanes, Colorado

Project Overview

U.S. 36 was a four-lane divided highway that connects the City of Boulder to Denver, Colorado at its intersection with I-25. The U.S. 36 Express Lanes project reconstructed the general-purpose lanes and added one high-occupancy toll (HOT) lane in each direction along a 15-mile segment. The project also included the replacement of eight bridges; accommodations for BRT service and associated transit station improvements; a bikeway; and installation of electronic equipment.

The project was delivered in two phases. Phase 1, delivered under a design-build contract, covers the first 10 miles of the project from north of Denver to Superior/Louisville. Phase 2, continuing northwest about five miles to Table Mesa/Foothills Parkway in Boulder, has been delivered under a design, build, finance, operate, and maintain (DBFOM) P3 with the Plenary Roads Denver consortium. The P3 transfers most project responsibilities to the private partner for a 50-year period.

Project History

Colorado's 18-mile, four-lane Boulder-Denver Turnpike connects northwestern Denver to Boulder, running from Interstate 25 (I-25) in Adams County to Foothills Parkway/Table Mesa Drive in Boulder. Opened as a toll road in 1952, the roadway experienced higher than expected demand as Boulder's population grew, allowing the State to repay its construction bonds in 1967 (13 years sooner than expected) and remove the tolls a year later. Over time, the Turnpike was integrated into the longer U.S. Route 36 crossing Colorado East to West.

As the local population continued to grow over the following decades, the Colorado Department of Transportation (CDOT) increased the number of interchanges from 1 to 10, roadway demand increased, and congestion worsened. Despite showing one of the highest transit ridership rates in the Denver-Boulder Regional Transportation District (RTD), the corridor regularly faced 3-to-4-hour daily congestion delays over the last decade, carrying 80,000 to 100,000 daily vehicle trips and operating at nearly 90 percent of its capacity. Projections estimated that daily vehicle trips would grow to 165,000 by 2035, pushing the corridor past 100 percent of its operational capacity. New facilities, by contrast, are typically designed to accommodate 85 percent of their total projected demand.

Because regional population projections predicted increased travel demand, public agencies began studying infrastructure solutions as far back as the 1960s. A 1983 study, for example, evaluated rapid transit feasibility along the U.S. 36 corridor. Similarly, the RTD's 2003 U.S. 36 Major Investment Study evaluated Bus Rapid Transit and HOV lane plans. Such plans aimed to improve mobility along the U.S. 36 corridor by increasing road capacity and expanding travel alternatives. Ultimately, five improvements were deemed necessary to meet corridor capacity, congestion management, and safety requirements: 1) increased trip capacity accommodating 12,200 projected person-trips per day by 2035; 2) expanded interchange capacity; 3) congestion reduction; 4) multi-modal transit and bikeway developments; and 5) highway facility updates. Following a comment period, CDOT organized a Preferred Alternative Committee (PAC), composed of agency representatives, elected officials, and technical staff from local jurisdictions, to review project alternatives for the corridor. After seven months, the PAC recommended a Combined Alternative Package in July 2008 including the following:

- ▶ One buffer-separated managed lane in each direction, separated from the general-purpose lanes, allowing bus and HOV traffic without tolls. Single-occupant vehicles would access any remaining capacity through dynamically priced tolls.
- ▶ Auxiliary lanes between most interchanges, beginning at highway on-ramps and terminating at the following interchange off-ramps as exit-only lanes.

- ▶ Bikeways, including bike lanes, bike routes, and/or multi-use paths ranging from street sections reserved exclusively for bicycle use to physically separated pathways designated for multiple non-motorized users (including pedestrians).
- ▶ Enhanced bus service and facilities, including Bus Rapid Transit (BRT) stations and associated platforms located in the highway median or in highway on- and off-ramps.
- ▶ Alternative transportation strategies requiring limited capital investments, including minor intersection or interchange improvements, bus route structuring, and Intelligent Transportation System (ITS) improvements.

The project advanced into the final environmental review stage and gained approval from FHWA and FTA in December 2009.

Decision to Pursue as a P3 Project

CDOT continues to face severe funding constraints when it comes to maintaining and expanding Colorado's transportation system. First, fuel tax revenues had stagnated. Second, strong public opposition hampered lawmakers' ability to raise any taxes, reinforced by the 1992 Taxpayer Bill of Rights (TABOR) amendment to Colorado's constitution, limiting State and local revenue and expenditure growth. As a result, CDOT estimates that transportation expansion and maintenance costs would exceed its roughly \$1 billion budget by \$600 million annually.

Given these funding constraints, CDOT could not procure its U.S. 36 improvement project using a DBB or DB contract. Even when CDOT and the Denver RTD pooled their resources to support a multimodal approach, they lacked sufficient resources to proceed.

Phase I involved a DB contract covering a 10-mile stretch running from Pecos Street in Denver to 88th Street in Louisville, Colorado. This phase included: 1) five bridge replacements, 2) a bikeway, 3) Bus Rapid Transit (BRT) improvements, 4) general-purpose lane reconstruction and pavement replacement, and 5) the construction of one HOT lane in each direction. Multiple government agencies provided public funding for the project, including CDOT, RTD, the Denver Regional Council of Governments (DRCOG), the city and county of Broomfield, and the city of Westminster. The project also accessed a Transportation Investment Generating Economic Recovery (TIGER) grant from the U.S. Department of Transportation to complete studies and cover costs associated with obtaining a TIFIA loan backed by the HOT lanes' toll revenues. The TIFIA process also raised the possibility for Phase II financing using a P3 structure with a private borrower. Phase I construction began in July 2012, and the facilities opened in June 2015.

For Phase II, CDOT employed VfM analyses to evaluate procurement options, namely design-build, design-build-finance-operate-maintain with availability payments, and DBFOM with revenue risk. The projected delivery schedule using a traditional procurement approach was twenty years. This was too long a time period to be an attractive option for CDOT. Similarly, CDOT rejected the availability payment model since it implied debt increases, a substantial hurdle under TABOR restrictions. This left the revenue risk DBFOM approach as the most practical option.

Fortunately, the Colorado Senate had considered alternative infrastructure financing and delivery methods, approving the Funding Advancements for Surface Transportation and Economic Recovery Act (FASTER) in March 2009. This legislation increased dedicated government revenues for transportation infrastructure and launched the High-Performance Transportation Enterprise (HPTE). This State-owned enterprise, possessed authority to engage in public-private partnerships and other alternative delivery methods. Most importantly, unlike CDOT, it was exempt from TABOR's debt financing restrictions. As part of its initial planning efforts, HPTE reviewed P3 programs in other States and assembled a list of strategic projects in Colorado that could benefit from innovative financing and procurement strategies. Phase 2 of the U.S. 36 Express Lanes was one of the projects that stood out on that list.



Project Procurement

CDOT/HPTE began the Phase 2 procurement process in February 2012, issuing a request for qualifications (RFQ) for a DBFOM concession, to which four teams responded. Phase 2 included the design, construction and financing of the remaining five miles of U.S. 36 to Boulder, as well as the operation and maintenance of the of the managed lanes in both Phase 1 and 2, and the existing managed lanes on I-25 connecting to downtown Denver. Three P3 teams were short-listed to receive the eventual request for proposals (RFP).

CDOT issued an RFP in October 2012. The selection process weighed financial aspects heavily (65 percent), considering subsidy requirements especially. The remaining selection criteria evaluated the proposals' technical aspects (35 percent). Based on this process, HPTE selected Plenary Roads Denver as the "best value" preferred bidder in April 2013. This Special Purpose Entity (SPE) was a company created to isolate the P3 project and its parent companies from one another's risks – included The Plenary Group, Ames Construction, Inc., Granite Construction, HDR, Transfield Services, and Goldman Sachs. The project's VfM analysis favored its selection based on the following criteria:

- ▶ Delivering the project with the lowest upfront subsidy.
- ▶ Transferring risks to the concessionaire.
- ▶ Relieving CDOT of Phase I operation and maintenance obligations.
- ▶ Constructing Phase II Managed Lanes and reconstructing the general-purpose lanes in an effective and economical way.
- ▶ Facilitating RTD's Bus Rapid Transit programs.
- ▶ Optimizing long-term asset conditions.
- ▶ Minimizing public inconvenience and maximizing worker and traveler safety.

Project Financing and Implementation

Plenary Roads Denver and the public partners signed the final Phase II DBFOM agreement in June 2013, giving the private partner responsibility for project design, construction, financing, operation, and maintenance over 50 years. For a 5.1-mile segment of the corridor, the private partners would expand the highway from 4 to 6 lanes by adding one high-occupancy toll (HOT) lane in each direction, improve Bus Rapid Transit (BRT), and add a bikeway. In addition, the private partner would take over operation and maintenance, including snow and ice removal, across the two HOT lanes and the four general-purpose lanes and take responsibility for Phase I debt. In the process, the P3 agreement transferred several project risks to the private concessionaire, including:

- ▶ Project design and construction risks, both financial (costs) and scheduling (time).
- ▶ Roadway operation and maintenance risks (under a 50-year warranty).
- ▶ Snow and ice removal risks.
- ▶ Traffic and toll-dependent revenue risks.
- ▶ Repayment risk for both TIFIA loans, removing CDOT's debt responsibility for both phase I and phase II.

Phase II construction began in the fall of 2014, with the facility opening in March 2016.

Phase II funding totaled \$258.6 million, including 8.0 percent private equity, 8.0 percent Private Activity Bonds (tax-exempt bonds issued by the private concessionaire), 23.2 percent TIFIA loans, 19.2 percent HPTE funds, 11.8 percent RTD sales tax revenue, 5.8 percent Federal funds, 7.3 percent State funds, 4.2 percent local funds., and 12.6 percent other financing. Managed lane tolls from Phase I, Phase II, and a segment of I-25 provide revenue for debt service. Toll rates vary by time of day based on a pre-set



schedule. The toll rates remain subject to the HPTE Board approval, and the private concessionaire shares revenues with HPTE when its return on investment exceeds 13.68 percent.



Purple Line Project, Maryland

Project Overview

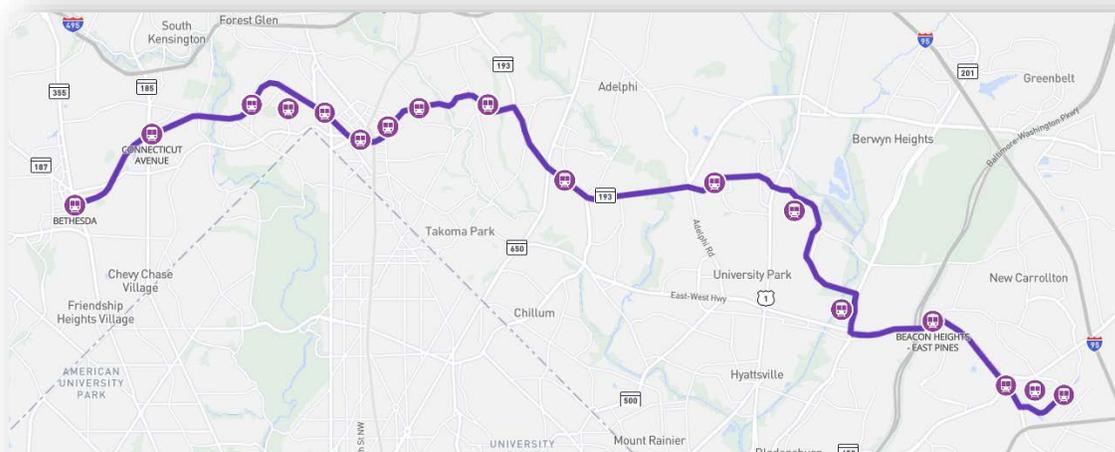
The Purple Line in Maryland is a new light rail transit system that will run 16.2 miles between Bethesda in Montgomery County and New Carrollton in Prince George's County. It will connect major activity centers located inside the heavily congested Capital Beltway, and provide direct connections to four branches of the Washington Metropolitan Area Transit Authority (WMATA) rail system (Metrorail), all three MARC commuter rail lines (linking Washington, Baltimore, and Frederick, Maryland), Amtrak's Northeast Corridor, and many local bus services. The five major activity centers in the Purple Line corridor are Bethesda, Silver Spring, Takoma/Langley Park, College Park, and New Carrollton. Each of these centers has a substantial employment base and surrounding residential communities, and all have an existing Metrorail station except Takoma/Langley Park.

The Purple Line will operate in an exclusive or dedicated right-of-way for 14 miles of its 16.2-mile length. Light rail vehicles (LRVs) will be given signal priority or pre-emption at most traffic intersections, and the vehicles will be electrically powered through the use of overhead catenary lines. The initial headway is 7.5 minutes during peak periods and 10 to 15 minutes during early and late periods of operation.

Institutional development in the Purple Line corridor includes the University of Maryland at College Park, which is a large employer in Prince George's County. Several Federal agencies are located in the corridor, including medical and research facilities such as the Forest Glen Annex of Fort Detrick (formerly the Walter Reed Medical Center Annex), the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, the Internal Revenue Service, and the Food and Drug Administration.

The Purple Line Project (the "Project") also includes certain improvements that are not part of the Purple Line light rail system, including:

- ▶ Bethesda Metrorail Red Line Station South Entrance.
- ▶ Silver Spring (Metrorail) Red Line Mezzanine Connection.
- ▶ Capital Crescent Trail.
- ▶ Silver Spring Green Trail.
- ▶ University of Maryland Bicycle Path.



Project History

Since 1992, public agencies in Maryland have been studying methods for improving transportation within Montgomery and Prince George's Counties. Planning and consideration for a transit facility along the Georgetown Branch right-of-way in Bethesda and Chevy Chase (formerly a B&O Railroad freight line and currently a pedestrian trail) date back to the early 1970s and an east-west transportation link has been on the Montgomery County Master Plans for more than 20 years. The transitway along the Georgetown Branch and a line between Silver Spring and New Carrollton were combined as the Bi-County Transitway in 2003, which, with further changes and additions, became the Purple Line.

In October 2008, the Maryland Transit Administration, a modal unit of the Maryland Department of Transportation (MDOT), in coordination with the Federal Transit Administration (FTA), issued an Alternatives Analysis/Draft Environmental Impact Statement for public comment, and the Governor selected the preferred alignment in August 2009. FTA approved the Final Environmental Impact Statement in August 2013. A Record of Decision and Final Section 4(f) Evaluation were completed in March 2014.

Statutory authorization for MDOT to use public-private partnerships (P3) for development and operation of certain projects was provided by the 2013 Transportation Infrastructure Investment Act, enacted in April 2013 by the Maryland General Assembly.

The Decision to Pursue as a P3 Project

MDOT/MTA chose to pursue P3 delivery for the Project through a performance-based design-build-finance-operate maintain (DBFOM) agreement after careful consideration and extensive analysis.

MDOT/MTA's due diligence effort considered a wide range of policy, operational, and financial factors in assessing whether to use a P3 delivery method for the Purple Line instead of a traditional project delivery method. MDOT/MTA's analyses identified the following factors supporting use of a P3 delivery method for the Purple Line:

1. **Operational factors:** The Purple Line is a natural stand-alone operation. Although it connects with other transit and rail services in the Washington area, other operators such as WMATA were unable to expand operations into a light rail system. Stand-alone administrative, supervisory, and maintenance operation would thus need to be created for Maryland Transit Administration to operate the Purple Line, given the more than 30-mile distance of the Project from Maryland Transit Administration's Baltimore operations headquarters.

Maryland Transit Administration's analysis concluded that, since the incentives to the private sector inherent in a P3 agreement are strongly linked to asset performance, a DBFOM approach would increase the likelihood of enhanced service delivery and performance of the Purple Line. Through the use of single contract accountability and strict payment deductions for non-performance, the following benefits could be consistently achieved:

- Strong, reliable on-time performance of the service.
- Safe and clean stations and vehicles.
- Enhanced customer service.

2. **Risk transfer efficiencies:** A DBFOM approach integrates various project elements into a single P3 agreement that permits optimal allocation of project risk between the public agency and the concessionaire. For instance, under a traditional project delivery approach, MDOT/MTA would retain the full responsibilities and related risks of insufficient coordination and integration among the multiple project delivery contracts. The P3 approach consolidates many project responsibilities and allocates them to the concessionaire, effectively transferring more coordination and integration risk to the concessionaire. Delay risk associated with responsibilities allocated to the concessionaire reduces the overall risk of schedule delays and, as



a result, reduces the risk to MDOT/MTA of cost overruns. For instance, if there is a construction delay because systems integration challenges cause a delay in testing of the light rail vehicles, the concessionaire bears the cost impact of the schedule delay. MDOT/MTA anticipated similar risk transfer efficiencies for operations and maintenance of the asset.

3. Whole life-cycle planning and cost optimization: In a DBFOM project structure, the concessionaire is responsible for design and construction of the project as well as operations and maintenance over a long-term period. Furthermore, the concessionaire is obligated to hand the project back to the public owner at the end of the term, at a pre-defined level of service and quality. Consequently, the concessionaire has greater financial incentive to make investment decisions that are optimized over the life of the project rather than the incentives contractors have with traditional delivery methods.
4. Schedule discipline: A P3 structure focused on asset availability provides clear incentives for the concessionaire to maintain schedule discipline during construction. The structure of the payments and the schedule on which they are released creates incentives for the concessionaire to enforce strict construction schedule adherence.
5. Enhanced opportunities for innovation: In a P3 arrangement, in contrast with traditional project delivery methods, the concessionaire is required to provide project assets and services according to performance requirements. In general, P3 agreements include technical provisions describing “what” is to be built as opposed to specifying the means and methods on “how” to build it. As a result, the concessionaire is afforded flexibility in how it meets the “what” performance requirements. This approach provides private sector proposers with opportunities and incentives to seek approval to use alternative methods of design, construction, operations, and maintenance practices that will improve long-term asset performance. Flexibility is further encouraged by use of a process for soliciting P3 proposals, permitting the proposers to incorporate innovative concepts into their proposals (and paying stipends to unsuccessful proposers, as consideration for the ability to transfer their concepts to the successful proposer). In order to avoid adverse impacts to the Federal environmental review process, the opportunities for innovation are subject to requirements to adhere to mitigation commitments made by MDOT/MTA in the context of the Federal environmental review process.
6. Potential financial value: The MDOT/MTA analysis conducted prior to the procurement estimated that a P3 approach would result in significant life-cycle cost savings for the Purple Line. In fact, the entity selected as the Project concessionaire delivered a proposal that offered considerable cost savings over the term of the contract, largely reflected in operations and maintenance and capital renewal savings over the operating period. MDOT/MTA estimated the total savings (including benefits from low bond rates at the financial close) at approximately \$550 million.

Solicitation Process

MDOT/MTA issued a Request for Information (RFI) in April 2013, seeking private sector input on best practices and innovative approaches to delivering and financing the Purple Line and a separate light rail project called the Red Line. The RFI asked for information regarding both traditional project delivery methods and alternative methods that could result in savings of time and money and ensure high-quality service into the future.

MDOT/MTA received 44 responses to the RFI. It held an industry forum on the Purple Line on May 15, 2013, including presentations by MTA and MDOT, followed by one-on-one meetings requested by the private sector, from May 15-18, 2013.



In November 2013, MDOT/MTA formally began the Purple Line procurement process by issuing a Request for Qualifications (“RFQ”). After evaluating the Statements of Qualification submitted in response to the RFQ, MDOT/MTA short-listed four consortia. They were:

1. Maryland Purple Line Partners
 - Vinci Concessions, S.A.S.
 - Walsh Investors, L.L.C.
 - Infrared Capital Partners, Limited.
 - Alstom Transport SA.
 - Keolis SA.

2. Maryland Transit Connectors
 - John Laing Investments Limited.
 - Kiewit Development Company.
 - Edgemoor Infrastructure & Real Estate LLC.

3. Purple Line Transit Partners (PLTP)
 - Meridiam Infrastructure Purple Line, LLC.
 - Fluor Enterprises, Inc.
 - Star America Fund GP LLC.

4. Purple Plus Alliance LLC
 - Macquarie Capital Group, Limited.
 - Skanska Infrastructure Development Inc.

MDOT/MTA proceeded with an industry review process with the four short-listed entities, involving issuance of three sets of draft documents, requests for written comments, and one-on-one meetings to discuss the Project and industry comments. The purpose of this process was to receive feedback from the shortlisted proposers, improve the quality of the Request for Proposals (RFP) documents, and maintain competitive tension for the solicitation.

On July 28, 2014, MDOT/MTA released the final RFP for the Project, adopting a DBFOM P3 structure. The as-issued RFP contemplated a proposal due date early in 2015. After the gubernatorial election in November 2014, the new governor asked MDOT/MTA to assess potential measures to reduce Project costs, resulting in various modifications to the RFP, additional one-on-one meetings with proposers, and extension of the proposal due date to late 2015. MDOT/MTA received technical proposals from all four short-listed entities in November 2015, with financial proposals delivered in December 2015.

Following a best value “trade-off” evaluation of technical and financial proposals, the Maryland Secretary of Transportation authorized MDOT/MTA to proceed with negotiations with PLTP. In addition to PLTP’s equity partners (Meridiam Infrastructure Purple Line (70 percent), Fluor Enterprises, Inc. (15 percent), and Star America Fund GP LLC (15 percent), the PLTP team includes Atkins North America, Inc. (Lead Design), Purple Line Transit Constructors (Lead Construction) comprised of Fluor Enterprises, Inc., the Lane Construction Corporation, and Traylor Bros., Inc., and Purple Line Transit Operators (Operations and Maintenance) comprised of Fluor Enterprises, Inc., Alternate Concepts, Inc., and CAF USA.

As required by the Maryland P3 law, on March 4, 2016, MDOT/MTA delivered a report to the Maryland General Assembly regarding the proposed transaction. After the 30-day waiting period required by law,



MDOT/MTA sought approval from the Maryland Board of Public Works (“BPW”). On April 6, 2016, the BPW unanimously approved award of the contract. Financial close was achieved in June 2016, as noted below.

Payments to PLTP; Project Financing

During the design-build phase, when and to the extent PLTP demonstrates that it has made adequate progress, the P3 agreement for the Project provides for payments to PLTP as follows:

- (a) Monthly progress payments (totaling \$860 million during construction),
- (b) A \$100 million revenue service availability (RSA) payment, and
- (c) A \$30 million final completion payment (for total construction funding payments of \$990 million).

Progress payments are made in an amount no more than 85 percent of the earned value of the design and construction work at any point in time, with PLTP financing the remainder of its costs.

Funding for the payments owing by MDOT/MTA under the contract (as well as costs outside the P3 agreement) includes local, State and Federal funds. Local funds include commitments from Prince George’s County of \$120 million cash, and commitments from Montgomery County of \$40 million cash and nearly \$170 million in-kind contributions toward the construction program. The in-kind contributions include payments for certain elements of the Project, such as the Bethesda Metro Red Line Station South Entrance, the Capital Crescent Trail, and the Silver Spring Green Trail. The University of Maryland is also providing approximately \$0.5 million for the cost of a new bike path adjacent to the Purple Line that PLTP will construct.

As of March 2014, in addition to funds already spent, it was estimated that approximately \$160 million of Maryland State funds would be used to support construction efforts. Federal funding includes \$36 million in FTA formula funds and \$900 million in FTA New Starts funds.

PLTP is financing the cost of the design-build work through private equity commitments and debt, including tax-exempt PABs, which are non-recourse to the State of Maryland, and a TIFIA loan. While TIFIA had previous experience with a transit P3 when it provided a loan to Denver RTD on the Denver Eagle P3 project, the Purple Line was TIFIA’s first loan to a transit P3 concessionaire.

A portion of the PABs and the overall debt will be used to help finance some early operations and maintenance and lifecycle startup costs as well as other miscellaneous costs. While MDOT/MTA will not pay for these financing costs as they are incurred, these costs are ultimately reflected in the RSA payment paid at the end of construction and the availability payments that will be paid during the 30-year operating period.

PLTP’s financing plan included:

- ▶ An \$874.6 million TIFIA loan, which closed June 14, 2016.
- ▶ Approximately \$313 million in PABs, issued on June 17, 2016, through a conduit issuer, the Maryland Economic Development Corporation, and underwritten by JP Morgan and RBC Capital Markets.
- ▶ \$138 million in private equity from PLTP’s equity members.

Full Funding Grant Agreement

Due to litigation challenging the environmental review for the Project filed during the solicitation process for the P3 agreement, the P3 agreement provided for the possibility that the Full Funding Grant Agreement (FFGA) for the Project might be delayed, granting PLTP the right to terminate the concession if the FFGA



was not executed on or before May 17, 2018. FTA signed the FFGA in August 2017, and the litigation was finally resolved in December 2017.

Availability Payment Regime; Renewal Work/Handback

During the operating period, if PLTP meets the performance requirements of the P3 agreement, it will earn monthly availability payments. MDOT/MTA can deduct up to 100 percent of the unadjusted operating, maintenance, capital (financing) repayment portions of the monthly availability payments for poor performance, with the exception of insurance and lifecycle payments, which are not subject to general performance deductions. The availability payments were a key part of the bid and are intended to cover repayment of PLTP's initial financing costs (including debt service and a return on its equity investment), its operating and maintenance costs, insurance, and lifecycle costs (e.g., replacing track when it wears out or parts on the LRVs). If the Project opens early, then availability payments will commence at opening and continue for 30 years. If Project opening is delayed due to factors for which PLTP is responsible, availability payments will not start until the Project is opened, and will continue until 30 years after the contractual deadline for start of operations—resulting in a reduction in the total stream of availability payments received by PLTP.

The constituent parts of the availability payments during the operating period include a fixed price for the availability payments, paid monthly. The availability payments are subject to adjustment based on changes in federally-published inflation indices, changes in interest rates prior to financial close, impacts of “Relief Events” as defined in the P3 agreement, and deductions relating to failure to meet performance requirements. Payments for operations and maintenance, lifecycle, and insurance costs are pegged to a basket of inflation indices, while payments intended to cover other costs (e.g., financing costs) are fixed on a nominal (year of expenditure) basis and are not linked to inflation indices. Regarding future inflation, the financial figures assumed (at the time of bid) that future inflation indices increase at 2.5 percent per year, meaning that the availability payments would be less (or more) than anticipated if actual inflation increases at other than 2.5 percent per year. Certain portions of the payment reflect “painshare/gainshare” commercial arrangements relating to power use and insurance price fluctuations.

The agreement includes provisions for early termination of the concession and calculation of amounts owing to the concessionaire upon termination. If MDOT/MTA terminates for default, under certain conditions it has the option to require a market resolicitation (where the successful new bidder determines the amount paid to PLTP's lenders and provides funding for termination payments) or to use a desktop method to determine the amount owing, with payment capped at no more than 80 percent of debt service.

No later than five calendar years before the end of the scheduled term of the P3 agreement or within a reasonable period before any early termination date, PLTP and MDOT/MTA will jointly identify the renewal work required for the Purple Line to meet all of the handback requirements and determine the schedule (and PLTP's estimated budget) for the performance, MDOT/MTA inspection, and PLTP completion of all such renewal work. Subject to the handback inspection provisions, PLTP must complete all renewal work on or before the end of the concession term. If PLTP is not on track for a successful handback, MDOT/MTA may begin withholding availability payments starting at five years prior to the end of the term. To further mitigate handback risk, MDOT/MTA may begin withholding a portion of the availability payments at twenty years prior to handback if MDOT/MTA's assessment concludes PLTP is not on track for a successful handback at the end of the term.

