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Public-Private Partnership Availability Payment Concessions Model Contract Guide

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BUILD AMERICA
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OFFICE OF INNOVATIVE PROGRAM DELIVERY

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16. Abstract

P3s concessions are an integrated service delivery approach where a public transportation agency enters a contractual agreement with a private sector entity to deliver a service and/or facility for a specific period. Under the P3 approach, the private sector entity is singly responsible for the design, construction, finance, operations, maintenance, operation and renewal (if needed) of facilities for a specified concession period. This Guide presents key concepts for the structuring and development of legal contracts for highway transportation P3s in the United States that involve availability payments to the concessionaire. The Guide illustrates how P3 contracts are developed and structured and explains the major provisions in typical P3 contracts and is designed to provide industry-standard concepts, relevant common tools and mechanisms, and situational examples applicable to P3 transactions.

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Preface

On July 17, 2014, the Build America Investment Initiative was implemented as a government-wide effort to increase infrastructure investment and economic growth. As part of that effort, the U.S. Department of Transportation (USDOT) established the Build America Transportation Investment Center (BATIC). The BATIC helped public and private project sponsors better understand and utilize public-private partnerships (P3s) and provided assistance to sponsors seeking to navigate the regulatory and credit processes and programs within the Department. In December 2015, the Fixing America's Surface Transportation Act (FAST Act) was enacted, which directed USDOT to establish a National Surface Transportation Infrastructure Finance Bureau, which was renamed the Build America Bureau (the Bureau).

Building upon the work of the BATIC, the Bureau was established in July 2016 as USDOT's go-to organization to help project sponsors who are seeking to use Federal financing tools to develop, finance and deliver transportation infrastructure projects. The Bureau serves as the single point of contact to help navigate the often complex process of project development, identify and secure financing, and obtain technical assistance for project sponsors, including assistance in P3s. The Bureau replaces the BATIC and is now home to DOT's credit programs, including Transportation Infrastructure Finance and Innovation Act (TIFIA), the Railroad Rehabilitation and Improvement Financing (RRIF) and Private Activity Bonds (PAB). The Bureau also houses the newly-established FASTLANE grant program and offers technical expertise in areas such as P3s, transit oriented development and environmental review and permitting. The Bureau is also tasked with streamlining the credit and grant funding processes and providing enhanced technical assistance and encouraging innovative best practices in project planning, financing, P3s, project delivery, and monitoring.

Working through the Bureau, USDOT has made significant progress in its work to assist project sponsors in evaluating the feasibility of P3s, and helping simplify their implementation. In response to requirements under the Moving Ahead for Progress in the 21st Century Act (MAP-21) and the FAST Act to develop best practices and tools for P3s, the Bureau, jointly with FHWA, is publishing this report on U.S. highway P3 concessions.

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1 Introduction

On July 17, 2014, the Build America Investment Initiative was implemented as a government-wide effort to increase infrastructure investment and economic growth. As part of that effort, the U.S. Department of Transportation (USDOT) established the Build America Transportation Investment Center (BATIC). The BATIC helped public and private project sponsors better understand and utilize public-private partnerships (P3s) and provided assistance to sponsors seeking to navigate the regulatory and credit processes and programs within the Department. In December 2015, the Fixing America's Surface Transportation Act (FAST Act) was enacted, which directed USDOT to establish a national surface transportation infrastructure finance bureau, which is the Build America Bureau (the Bureau).

Building upon the work of the BATIC, the Bureau was established in July 2016 as DOT's go-to organization to help project sponsors develop, finance and deliver transportation infrastructure projects. The Bureau serves as the single point of contact to help navigate the often complex process of project development, identify and secure financing, and obtain technical assistance for project sponsors, including assistance in P3s. The Bureau replaces the BATIC and is now home to DOT's credit programs, including Transportation Infrastructure Finance Innovation Act (TIFIA), the Railroad Rehabilitation and Improvement Financing (RRIF) and Private Activity Bonds (PAB). The Bureau also houses the newly-established FASTLANE grant program and offers technical expertise in areas such as P3s, transit oriented development and environmental review and permitting. The Bureau is also tasked with streamlining the credit and grant funding processes and providing enhanced technical assistance and encouraging innovative best practices in project planning, financing, P3s, project delivery, and monitoring.

Since the beginning of the Build America series of initiatives in July 2014, the Department – and now the Bureau - has closed more than $13 billion in DOT financing for 24 projects with over $31 billion in total project costs (including the recent $2.45 billion Amtrak loan – the largest in DOT's history).

Working through the Bureau, USDOT has made significant progress in its work to assist project sponsors in evaluating the feasibility of P3s, and helping simplify their implementation, including a series of model contract provisions for popular P3 project types. Development of these tools fulfills a requirement under The Moving Ahead for Progress in the 21st Century Act (MAP-21) that directs DOT and FHWA to develop public-private partnership (P3) transaction model contracts for the most popular type of P3s for transportation projects. Additionally, the FAST Act requires the Build America Bureau to develop standard contracts for the most common types of public-private partnerships. Based on public input favoring an educational, rather than prescriptive, contract model, the Build America Bureau, in cooperation with the Federal Highway Administration (FHWA), is concurrently publishing two guides describing terms and conditions typically adopted in P3 concession agreements: the first for Toll Concessions and the second for Availability Payment Concessions.

This Guide, for Availability Payment Concessions, presents key concepts for the structuring and development of legal contracts for highway transportation Public-Private Partnerships (P3) in the United States involving availability payments to the concessionaire. It is part of the broader effort by the Build America Bureau and FHWA to promote understanding of P3 transactions. The Guide is designed to provide industry-standard concepts, relevant common tools and mechanisms, and situational examples applicable to P3 transactions.

A glossary of terms is included as Appendix A to assist in understanding the terminology used in this Guide.

1.1 Public-Private Partnerships

A P3 describes a contractual arrangement between a Department (public authority) and a Developer (private entity) in connection with the design, construction, financing, operation and maintenance of an asset that will be used by or is otherwise valuable to the public. Unlike conventional methods of contracting for new construction (e.g., design-build), in which discrete functions are divided and procured through separate solicitations, P3 transactions contemplate a single private entity (generally a consortium of private companies comprising the Developer) which is responsible and financially liable for performing all or a significant number of the Project functions, including design, construction, financing, operation and maintenance. In recent years, Departments, including transportation agencies, have turned to P3 transactions to procure new transportation facilities, including highway projects, in an attempt to obtain time savings, cost savings, and more innovative, higher quality Projects with reduced risks. In exchange, the Developer receives the opportunity to earn a financial return commensurate with the risks it has assumed either through the receipt of Toll Revenues (on which the Developer takes both demand risk and toll collection revenue risk) or Availability Payments (on which the Developer takes financial risk associated with performing the Work according to agreed performance metrics without assuming demand risk) on such terms as may be outlined under the Concession Agreement. This Guide focuses on the terms and issues relevant to transactions for which the Developer is compensated through periodic payments (Availability Payments) based on the performance of the Project against agreed performance metrics. P3 transactions based on a toll concession mechanism are the subject of a separate guide published by the FHWA.

Availability Payments are made (usually subject to appropriation) by the Department to the Developer in exchange for the continuous delivery of the Project in accordance with the performance requirements set forth in the Concession Agreement. The Concession Agreement will set a maximum payment that may be earned if the Project is available at all times and meets all requirements, and will also specify a regime of deductions that may be assessed if there are periods of Unavailability or failures to meet the performance requirements. The Availability Payment is typically paid monthly in arrears based on the Developer's performance, subject to any deductions for Unavailability or failure to perform.

1.2 Contractual Terms of P3s

The contractual agreement between the Department and the Developer, generally known as the Concession Agreement, lies at the heart of the P3 transaction structure. Traditionally, important contractual terms related to P3 transactions have included the following:

- The term of the concession, which for US highway projects have extended from 30 to 50 years (and, in the case of brownfield Toll Concessions, up to 99 years);
- Requisite design-build specifications;
- Requisite operations and maintenance standards;
- Requisite hiring and employment standards;
- Payment calculation mechanism;
- Supervening Events, to a large extent defining the risk allocation in the contract; and
- Defaults and Early Termination of the contract.

Because the Concession Agreement dictates the essential short and long-term dynamics of the P3 transaction, it is critical to the long-term success of the Project that the Department and the Developer can develop contracts that effectively implement the intentions and priorities of the public sector.

1.3 P3s and the Federal Highway Administration

P3 transactions are being undertaken with increasing frequency to deliver complex highway projects in the United States. They represent an option for State and local governments to procure the development, financing, construction, operation and maintenance of transportation facilities. The value to the Department in a P3 transaction is the transfer of costs and subsequent risk related to the design, build, financing, operations and/or maintenance of the Project to the Developer. In return the Developer is rewarded via an agreed-upon compensation mechanism (e.g., Toll Revenues or Availability Payments for services performed) for a prescribed term. Whether a P3 transaction provides value to the Department and ultimately the public is to be assessed on a case-by-case-basis. Through this Guide, the FHWA seeks to create a better understanding of P3 market terms and possible contract structures for use in the consideration and development of Availability Payment-based P3 transactions.

1.4 Background: the Moving Ahead for Progress in the 21st Century Act (MAP-21)

The development of this Guide stems from section 1534 of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The MAP-21 requires the development of standard model contracts for the most common types of P3 transactions, with a view to encouraging transportation agencies and other officials to use these model contracts as a base template for use in P3 transactions.

In meeting these requirements, FHWA has already taken several actions prior to the publication of this Guide. An initial "listening session" for the public and stakeholders was held in January, 2013. The FHWA received a total of 28 comments following this listening session, and these comments were taken into account when selecting the topics to be covered in this Guide. In addition, on September 10, 2014 the FHWA published in the Federal Register a final version of the first part (the "Core") of the Toll Concession Model P-3 Contract Guide and on January 16, 2015 a draft version of the second part (the "Addendum") of the Guide, requesting comments from interested parties.

The focus of this Guide is on P3 transactions that involve long-term concessions for designing, building, financing, operating, and maintaining highway projects. This document complements other primers, guides and tools the FHWA Office of Innovative Program Delivery (OIPD) has developed on the topic of P3s, including the primer, *Establishing a Public-Private Partnership Program*; documents on conducting evaluation of P3 proposals, including risk assessment, value for money analysis, and financial assessment; and the suite of educational tools known as P3-VALUE.

1.5 Objectives/Purpose

Based on public and stakeholder input from the listening session, the FHWA ascertained that a set of prescriptive, standardized contracts for use in P3 transactions would not be acceptable or desirable to all State DOTs and other public agencies in the United States that are interested in using P3 for highway projects. As such, it is the objective of the FHWA that this Guide will assist in educating public agencies and stakeholders on key issues in highway projects procured as P3 transactions, the trade-offs, and ways to provide protections to the traveling public and State and local governments while continuing to attract private investment. Using the knowledge base of highway projects previously undertaken as P3 transactions, this Guide attempts to educate agencies and stakeholders that may be only beginning to approach P3 transactions, while still providing relevant information to more sophisticated and experienced State and local transportation agencies. Overall objectives include the following:

- Increase State and local agency understanding of standard P3 market terms and contract structures, including the rationale behind such terms and structures;

- Enhance State and local agency understanding of market and investor perspectives, goals, and objectives;
- Present and analyze current legal and regulatory dynamics relative to highway projects procured as P3 transactions;
- Present and analyze current tools and mechanisms used in Concession Agreements for P3 transactions;
- Incorporate international best practices, where relevant; and
- Encourage discussions with State and local agencies and stakeholders (through discussions to be conducted following the publication of this Guide, via webinar or some other medium(s) to be subsequently determined).

1.6 Description of Chapter Topics

This Guide provides specific analysis for State and local transportation agency personnel on the following topics related to highway projects procured as P3 transactions using an Availability Payment concession:

- **Chapter 1: Introduction –** Topics include the background to the development of this Guide, an overview of its intended purpose and suggested approaches for utilizing its contents.
- **Chapter 1: Completion Testing and Performance Security –** Topics include the achievement of substantial completion as a project milestone, the effect of late completion on the Project, approaches to the determination of the occurrence of substantial completion, the Department's liability following substantial completion and topics related to Construction Performance Security.
- **Chapter 1: Availability Requirements –** Topics include the meaning of "Availability" and "Unavailability" in an Availability Payment P3, and a discussion of Availability and service requirements during the various stages of the Term.
- **Chapter 4: Maintenance and Handback Requirements –** Topics include Handback Requirements, Handback Inspections, and the establishment of reserve accounts, letters of credit, and payments related to Handback.
- **Chapter 1: Payment Mechanism and Financial Model Adjustments –** Topics include the payment mechanism typically used in Concession Agreements, including discussion of Milestone Payments, Unavailability Adjustments, penalties and deductions to Availability Payments, and Availability Payment funding. Other topics discussed include the definition and handling of the financial model, and changes made to the financial model to respond to certain events during the Term.
- **Chapter 6: Insurance –** Topics include the background and incorporation of insurance requirements applicable to the Developer in the Concession Agreement, as well as benchmarking of insurance premiums, uninsurable risks, and conditions under which insurance is regarded as unavailable under the Concession Agreement.
- **Chapter 1: Contract Term and Nature of The Proprietary Interest –** Topics include the various considerations relevant to setting the Term, as well as the nature of the Developer's proprietary interest in the Project and considerations relevant to determining the type of interest to grant.
- **Chapter 1: Supervening Events –** Topics include a definition of Supervening Events, the types of contractual relief generally granted in Supervening Events, and the role of insurance in mitigating supervening risks.
- **Chapter 1: Change in Law –** Topics include the concerns of parties, unforeseeable changes in law and relevant considerations, tax-related issues and compensation that may result from changes in law.

- **Chapter 1: Department and Developer Changes –** Topics include the right of the Department to require changes in the Work, the procedures for compensating the Developer, and the right of the Developer to propose changes.
- **Chapter 1: Assignment and Changes in Equity Interests –** Topics include the restrictions on the right of the Department and the Developer to assign their interests in the Concession Agreement, as well as the definition of a change in ownership, example contractual provisions related to a change in ownership, permitted and prohibited changes, and participant concerns.
- **Chapter 1: Defaults, Early Termination, and Termination Compensation –** Topics include events related to default by the Developer and the Department, cure periods, and termination rights of both parties in the event of a default, as well as all issues related to compensation for Early Termination.
- **Chapter 1: Indemnities –** Topics include indemnities that the Developer may be required to agree to in favor of the Department and a general discussion of the indemnification procedures that the Concession Agreement may include.
- **Chapter 1: Federal Requirements** – Topics include Federal law requirements imposed on the Developer when the Project receives Federal funding assistance.
- **Chapter 1: Amendments to Key Developer Documents –** Topics include the background behind and general approaches taken in response to the conflicting desires of the Developer to maintain flexibility to amend project documents and the Department to receive the Project it bargained for when it approved the Developer's project documents at the outset.
- **Chapter 1: Lender Rights and Direct Agreement –** Topics include the separate Direct Agreement between the Department and the Lenders, which principally contains administrative acknowledgement by the Department of the Lenders' interest in the Project, the Lenders' rights to take action in the event of a Developer Default, and the Department's agreement not to terminate the Concession Agreement until the Lenders are afforded an opportunity to cure such default.
- **Chapter 1: Department Step-In –** Topics include the events triggering the Department's right to step-in, the effect of a Department step-in on the Developer's obligations, and the effect of a Department step-in on the Department's other rights.
- **Chapter 1: Disputes –** Topics include a discussion of the Dispute Resolution Procedures often used in Concession Agreements.
- **Chapter 1: Intellectual Property –** Topics include the ownership and licensing of intellectual property necessary to carry out the obligations under the Concession Agreement, and the intellectual property rights upon the expiry or termination of the Concession Agreement that may be necessary for the Department to operate the Project.
- **Chapter 1: General Provisions –** Topics include the application of, and consideration to be given to, general provisions that are typically standard and not heavily negotiated.

1.7 Suggested Use of the Availability Payment Concessions Guide

The FHWA encourages States, transportation agencies, and other public entities to use this Guide as a resource when developing their own Concession Agreements.

1.7.1 Educational Reference

The suggested primary purpose of this Guide is as an educational tool for State and local agencies and is not intended to be used as legal advice. Each chapter contains high level introductions to key topics, example definitions and provisions as well as guidance on contract structuring in respect of those key topics.

This Guide is designed to be an informational tool for State and local governments to refer to when considering a P3. Every Project is unique and attention will need to be given to the specific factors relevant to each transaction. This Guide introduces and analyzes several areas that have generally required significant consideration in highway projects structured as P3 transactions in the United States to date. Each such P3 transaction may require consideration of more or fewer factors than those covered herein. This Guide is for informational purposes only. FHWA recommends that Departments utilize their own counsel and other qualified and appropriate external expert advisors (typically with legal, technical and/or financial expertise) in any P3 transaction.

1.7.2 Illustrative and Example-Based

Existing Projects and Concession Agreements have informed the structure of this Guide. Furthermore, market-standard provisions have been discerned and analyzed for the benefit of the reader. The goal of these inclusions is to provide real-life examples of the theoretical analysis presented in the Guide. They also provide State and local agencies with a broader perspective and understanding of the P3 market and several non-contractual dynamics that may play a significant role in P3 transactions. The example provisions, when taken together with the explanations and descriptions of key issues, provide insight into best practices and may be utilized to develop solutions that can protect the interests of State and local governments, taxpayers and the traveling public. The inclusion of specific example provisions that may be derived from particular Projects does not indicate a recommendation or promotion of one particular form of P3 transaction over another. Instead, the examples illustrate a technique, mechanism, or dynamic that the FHWA views as valuable for the purposes of educating State and local agencies. Every P3 transaction is different, and what is applicable for one transaction may not be applicable for another transaction.

1.7.3 Glossary of Terms and Example Provision Definitions

A glossary of terms is included as Appendix A to assist in understanding the terminology in this Guide. Capitalized terms used throughout this Guide are defined in Appendix A, in the same manner as if used in a contract. The terms are for informational purposes only and are not designed to be used in legal documentation, even though a number of the terms may also be used in example provisions found in this Guide. The example contractual provisions contained throughout this Guide include bracketed capitalized terms. These terms are commonly used in the industry but both the terminology and substantive meaning of these terms will differ from transaction to transaction. Therefore, use of these terms (and the technical legal definitions that will accompany them in the Concession Agreement) should be considered carefully for each P3 transaction. As noted above, the descriptions contained in the glossary of terms do not represent legal definitions of these bracketed capitalized terms, and readers of this Guide should consult with their legal advisors prior to implementing example contractual provisions provided in this Guide.

1.8 Conclusion

This Guide is intended to contribute to a better understanding of P3s and considerations for structuring a highway project procured as a P3 transaction. The FHWA has designed the Guide to be as effective as possible in supporting public agencies in their exploration and implementation of successful P3 transactions, with the aim of promoting better and more efficient highway projects.

2 Completion Testing and Performance Security

2.1 Substantial Completion

Substantial Completion is a critical Project milestone. Substantial Completion, which signals that the Project is functionally complete and available for use, typically occurs upon the satisfaction of specified conditions (see Section 2.3 below for a discussion on typical conditions and the process for verifying their satisfaction). Those specified conditions are designed to measure whether the Project is functionally complete and, other than some minor remaining Work (commonly referred to as "punch list" Work), ready to commence service to the traveling public.

Once Substantial Completion occurs, the Developer will be able to earn Availability Payments in accordance with the Concession Agreement. The Developer must thereafter make the Project available to the public during the times specified in the Concession Agreement and must operate and maintain the Project in accordance with the minimum performance requirements. Failure to do so will result in deductions to the Availability Payments (see Chapter 1 (*Payment Mechanism, Performance Monitoring and Financial Model Adjustments*)). Because the occurrence of Substantial Completion also typically commences operations and maintenance of the Project, the conditions to Substantial Completion will also typically include the satisfaction of operations and maintenance-related obligations (such as the procurement of insurance for the operations and maintenance period) in addition to traditional obligations relating to the completion of construction work.

In addition to Availability Payments, the Department may also provide a lump sum payment to the Developer upon the occurrence of Substantial Completion. The Department may make such a payment if the Department is prepared to contribute funding to the Project, though it is not required and not all Departments will be able or willing to do so. The Developer will often use such a payment to repay debt raised to finance construction costs, or to pay the construction contractor; the allocation will be determined by the Developer as part of its plan of finance for the Project and prospective Developers will seek to make the most efficient use of the funds in light of their individual approach to funding the Project. See Chapter 1 (*Payment Mechanism, Performance Monitoring and Financial Model Adjustments*) for a full discussion of such payments.

The occurrence of Substantial Completion will typically mark the end of the construction phase of the Project and the beginning of the operating phase, although in some brownfield or "hybrid" rehabilitation and expansion projects the Developer will have already been performing certain operations and maintenance activities in respect of the existing assets during the design and construction phase. A number of State rules and regulations applicable to traditional design and construction contracts will not apply to the operations and maintenance activities (although they remain in effect with respect to any further design and construction activities which may occur), including certain regulations applicable to disadvantaged business enterprises and local sourcing requirements. However, the requirements of each jurisdiction are unique and their applicability to individual Projects may vary, so Departments should consult with their legal advisors regarding the application of such requirements to their specific circumstances.

2.2 Consequences of Late Completion

The Concession Agreement will specify the date by which the Developer intends to achieve Substantial Completion of the Project, which will be taken from the schedule in the Developer's bid for the Project. This Guaranteed Substantial Completion Date will not be changed due to delays in construction unless a Supervening Event (see Chapter 1 (*Supervening Events*)) occurs for which the Developer is expressly entitled to an extension of time.

The Developer's debt service obligations will be structured based on the original schedule, often with some contingency built in to accommodate minor delays. As a result, the Developer's debt service obligations may come due at a time when the Developer is not earning Availability Payments.

In many traditional design and construction contracts, and in some toll concession contracts, the Department will assess daily liquidated damages against the Developer for failing to achieve Substantial Completion by the Guaranteed Substantial Completion Date. The amount of liquidated damages is specified in the contract and calculated as a reasonable estimate of the Department's losses resulting from late delivery of the Project. In an Availability Payment transaction, however, liquidated damages are typically not assessed. The Availability Payments measure the value to the Department of receiving a completed, open road that meets all performance specifications, and because the Availability Payments are not made until the Project is completed, the Department does not suffer a loss which may be compensated. In many States, assessing liquidated damages in the absence of a genuine loss constitutes an unenforceable penalty.

In addition, many Concession Agreements contain a Long Stop Date by which the Developer must achieve Substantial Completion or else be in default. The Long Stop Date is typically set by the Department as one year after the Developer's Guaranteed Substantial Completion Date, but could be longer or shorter depending on the complexity of the Project and the expected construction schedule. Although the Developer will be at risk for the financial consequences of late completion, Concession Agreements typically contain this Developer Default because the Department will not wait indefinitely in light of the public interest in receiving a completed Project. The Developer thus has a period in which to manage late completion and the resulting financial consequences, but once the Long Stop Date is reached, the Department has the right to take action, including terminating the Concession Agreement and replacing the Developer (see Chapter 1 (*Defaults, Early Termination, and Termination Compensation*).

Set forth below is an example of a typical definition of the Guaranteed Substantial Completion Date and the Long Stop Date:

> ***Guaranteed Substantial Completion Date*** *means January 1, 2015.*
>
> ***Long Stop Date*** *means the date which is 1 year after the [Substantial Completion Date].*
>
> ***Substantial Completion Date*** *means the date on which each of the conditions to [Substantial Completion] set forth in [Section [X]] of the [Concession Agreement] shall have been satisfied.*

While the Developer is typically focused on avoiding the consequences of late completion, Departments may wish to consider the potential consequences of early completion of a Project. If a Project achieves Substantial Completion earlier than expected, the Department will be required to begin making Availability Payments earlier than expected as well. The Department's budget and planning process may, however, constrain its funding and prevent it from making Availability Payments before a certain date. The Concession Agreement may therefore state that irrespective of whether Substantial Completion has occurred, the Developer will not be entitled to receive Availability Payments before a fixed date. See Chapter 7 (*Contract Term and Nature of the Proprietary Interest*) for a discussion of the impact of early completion on the Term.

2.3 Determining whether Substantial Completion has Occurred

The occurrence of Substantial Completion is a significant financial event in the life of a Project, and all parties involved will take an interest in the process for determining whether it has occurred. The Department will want to ensure there is a robust testing regime in place to verify that the Project has been completed satisfactorily before any payments are made, while the Developer and Lenders will want to ensure that the testing regime is administered objectively and is based on factors within the Developer's control.

Concession Agreements typically contain a fixed list of conditions to Substantial Completion, focusing on completion of the design and construction work, completion of all requirements for the conduct of operations and maintenance work, the placement of insurance for operations, performance testing of any equipment or software that will be used to operate the road, and others as may be appropriate depending on the unique conditions of the Project.[1]

The list of conditions will not typically include an open-ended obligation that the Developer "satisfy all other reasonable requirements of the Department", as this will be viewed by Lenders as a significant risk to the achievement of Substantial Completion and payment by the Department. The list should therefore include all matters that the Department believes are relevant to determining Substantial Completion. In addition, Lenders will typically require that the Department must issue a certification once the conditions are objectively met. This is a key issue because Lenders may be concerned that Departments with too much discretion will insist on additional or different standards than originally agreed in the Concession Agreement, thereby putting in jeopardy timely commencement of Availability Payments which are the source of funding for repayment of the Project Debt. Lenders therefore prefer an objective test, subject to dispute resolution in the event of a disagreement over whether the test has been met.

Also, the list of conditions will not typically include tasks performed by third parties outside of the Developer's control, unless the Concession Agreement separately includes parameters for managing delays resulting from non-performance by such third parties (i.e., if a Compensation Event is provided by the Department). In some cases, the Developer may agree to accept the risk of third party performance if the third party's willingness and ability to perform on schedule are sufficiently reliable. Each Project will be unique in this regard and should be evaluated on a case by case basis, though in general Lenders will demand contingencies when these risks are introduced.

Set forth below is an example of a typical list of conditions to Substantial Completion that does not include any Project-specific requirements:

The [Department] will promptly issue a written certificate that the [Developer] has achieved [Substantial Completion] upon satisfaction of all of the following conditions for the [Project]:

(a) *the [Developer] has completed the [Design Work] and [Construction Work] in accordance with the [Project Documents] (including, without limitation, installation and commissioning of all [Project] equipment and systems required to be installed and commissioned by [Developer]);*

(b) *all certifications for the [Final Design Documents], independent design check of the [Final Design Documents], all mechanical, electrical and electronics systems, and bridge inspection and load rating reports have been submitted;*

(c) *all lanes of traffic as set forth in the design documents are in their final configuration and the [Developer] has certified that such lanes have been constructed in accordance with the requirements of the [Project Documents] and are available for continuous use by traffic subject only to [Permitted Closures] or [Closures] necessary for [Planned Maintenance];*

(d) *certification that the [Developer] has received, and paid all associated fees due and owing for, all applicable [Governmental Approvals] required for the operation and maintenance of the [Project], and there exists no*

[1] For instance, under the TIFIA credit assistance program, substantial completion is statutorily defined as "the opening of a project to vehicular or passenger traffic or a comparable event." (23 U.S.C. 601(a)(19)(A)).

uncured violation of the terms and conditions of any such [Governmental Approval] (except to the extent contested in good faith);

(e) *the [Developer] has prepared, in consultation with the [Department], and submitted the [Punch List] in accordance with the procedures and schedules set forth in the [Project Management Plan] and there remains no [Construction Work] to be completed other than the [Construction Work] described in the definition of ["Punch List"];*

(f) *all plans, manuals and reports for the [O&M Work] to be performed during the [O&M Period] have been submitted and, if applicable, approved by the [Department] as required under the [Project Documents];*

(g) *all [Insurance Policies] required by the [Concession Agreement] for the [O&M Work] have been obtained and are in full force and effect, and the [Developer] has delivered to the [Department] verification of insurance coverage as required by the [Concession Agreement]; and*

(h) *the [Developer] has certified that it has completed necessary training of personnel that will be performing the [O&M Work] and has provided the [Department] with copies of training records and course completion certificates issued to each of the relevant personnel.*

To the extent the Department is concerned that the technical elements of a Project are too complex to rely on generic criteria or the Dispute Resolution Procedures, an alternative approach is to utilize the services of an expert Independent Engineer hired to review the completed Project against a set of technical standards and determine, objectively and independently, whether they have been met. The Independent Engineer may be hired by the Developer or jointly by the Developer and the Department (the precise approach may depend on procurement requirements applicable to the Department), but will in either case have a legal duty of care to both parties. This approach is used regularly in international markets, particularly for complex Projects that require significant performance testing and is typically acceptable to, and often preferred by, Lenders.

2.4 The Department's Liability Following Substantial Completion

One of the most important ways that a P3 transaction differs from a traditional design and construction contract is the impact of Substantial Completion on the Department's liability.

In traditional design and construction contracts, the occurrence of Substantial Completion typically shifts liability for performance of the completed Project from the contractor to the Department. Except for defects covered by the express terms of the contractor's warranty, the Department accepts the work and assumes performance risk thereafter, thereby placing significant importance on the Substantial Completion tests and the methods for satisfying such tests.

By contrast, in a P3 transaction the Developer remains liable for the performance of the Project after Substantial Completion. If the Project does not perform according to the requirements set forth in the Concession Agreement, the Developer cannot rely on the Department's certification of Substantial Completion to avoid deductions to the Availability Payments or seek compensation from the Department due to the occurrence of Substantial Completion. The Department therefore does not "accept" the work in the traditional sense (although the Department's right to seek certain remedies for poorly performed work, such as requiring the Developer to uncover completed portions, may be limited after Substantial Completion). Long term operations and maintenance, and all risks and costs associated with the completed construction work, rest with the Developer. The Developer will typically manage these risks by seeking customary warranties and indemnities from its Design & Construction Contractor (D&C Contractor).

Set forth below is an example of a typical provision providing that the Department accepts no liability for the completed Work notwithstanding any other provision of the Concession Agreement, including as a result of certifying as to Substantial Completion, other than as limited by Applicable Law:

> *Nothing contained in the [Project Documents] shall in any way limit the right of the [Department] to assert claims for damages resulting from [Defects] in the [Work] for the period of limitations prescribed by [Applicable Law], and the foregoing shall be in addition to any other rights or remedies the [Department] may have hereunder or under [Applicable Law].*

When establishing the Substantial Completion test, Departments should bear in mind the different position they are in vis-à-vis the completed work as compared to a traditional design and construction contract. In particular, the Substantial Completion test in a Concession Agreement may be less stringent in some respects than that in a design and construction contract because the Department can rely on performance deductions from the Availability Payments as a means of managing proper delivery of the required specification and will not have liability for correcting any poorly performed work. However, minimum standards are still typically set in case the Department terminates the Concession Agreement following a Developer Default and assumes responsibility for the long-term operation and maintenance of the Project. The Department should therefore strike a balance between requiring a minimum level of quality and giving the Developer sufficient flexibility to meet the performance requirements in innovative and cost efficient ways.

It is also important to note that, in certain circumstances, the Concession Agreement may require the Developer to deliver elements of the Project that will not be subject to the O&M Standards and the scope of the Concession Agreement after Substantial Completion. For example, the Concession Agreement may require the Developer only to design and build a local road ancillary to other elements of the Project. In such cases, the Department should seek a warranty of such Work by the Developer under the Concession Agreement.

2.5 Construction Performance Security

2.5.1 Introduction

This Chapter considers the extent to which it is appropriate for the Department to require the Developer or its Design-Build Contractor to provide defined levels and/or types of construction performance security in connection with the Project. Common forms of construction performance security include surety bonds, on-demand letters of credit, retention requirements and parent company guarantees. The FHWA recognizes that participants in the P3 market have differing views regarding the relative benefits offered by different forms of construction performance security and the role that each may play in providing support to a Project. The FHWA encourages a robust dialogue with respect to these and other issues, and as a result, this Chapter does not analyze the extent to which there is a role in P3 projects for any particular form of construction performance security, nor the relative strengths and weaknesses of different forms of such security as may be commercially available in the United States. Departments should consult with their legal, financial and technical advisers to determine the type and amount of construction performance security that may be required by law or otherwise advisable for any particular Project. In addition, FHWA's primary role is that of a provider of funding, not an administrator of highway construction programs. Accordingly, FHWA's regulatory requirements for performance bonding (e.g. 23 CFR 635.110) do not specify when or how performance bonding must be used or the amount of such bonding when used, and as a matter of policy FHWA generally defers to the policies and practices employed by recipients of Federal aid, who are responsible for all aspects of highway planning, design, construction, maintenance and operations.

In the United States P3 market to date, the approach taken on construction performance security has varied significantly from State to State and from project to project. Some of the reasons for this are discussed in this Chapter. Some Concession Agreements have not required construction performance security to be provided by the Design-Build Contractor, whereas others have required performance and/or payment bonding in amounts up to as much as 100% of the construction price for the Project.

By way of contrast, in P3 markets outside of the United States, it is unusual for a procuring authority to prescribe minimum levels of construction performance security for a Project in the Concession Agreement. Some of the reasons for the approach taken in other markets are also discussed in this Chapter and may be applicable to Projects in the U.S.

2.5.2 The Role of Performance Security in Traditional Contracting

In Design-Bid-Build and Design-Build projects, Departments typically require the contractor to provide performance bonding and, in some circumstances, payment bonding. The typical bonding levels vary from State to State and from project to project, but can range between 10% and 100% of the contract price.

Departments are typically required to demand some level of performance and/or payment bonding as a matter of law (e.g., "Little Miller Acts"). The relevant law in some States may even prescribe the minimum level of performance and/or payment bonding required for each construction project the Department procures. This Chapter does not provide a comparative analysis of the relevant laws of each State on this issue.

In those States where there is no legal requirement for such bonding, the Department would nevertheless, as a matter of best practice, consider the extent to which it should require performance and/or payment bonding from the contractor in respect of the work the Department will pay the contractor to perform. To the extent that the Department requires bonding to be provided, in the absence of a legally prescribed amount, the level of bonding required is typically a function of the complexity of the construction project and the "maximum probable loss" in the event of a contractor default. The basis upon which "maximum probable loss" analyses are typically undertaken is not discussed in this Chapter.

Some Departments also require that the payment and performance of the Design-Build Contractor's obligations to the Department be guaranteed by the parent company, or parent companies, of the Design-Build Contractor. The principal function of such a guarantee is to provide a robust balance sheet with sufficient assets to stand behind the obligations of the Design-Build Contractor in circumstances where the legal entity signing the Design-Build Contract is a subsidiary of a larger corporate organization and depends on financial support from its affiliated organizations. A contract with such an entity is only as strong as the financial commitment from such affiliated organizations, and entering into a guarantee arrangement with a creditworthy affiliate (typically the parent of a corporate group) will contractually oblige the affiliated organizations to provide the Design-Build Contractor with further support in the event the Design-Build Contractor is unable to pay or perform its obligations.

2.5.3 The Approach Taken in Mature P3 Markets Outside of the United States

By comparison, as the international P3 market has matured, Projects have increasingly adopted construction performance security packages tailored to their specific requirements. The approach taken to each Project is a function of the cost and commercial availability of the relevant performance security instruments and the financial strength of the Design-Build Contractor that the Developer proposes to use, as well as the payment mechanisms utilized in the Design-Build Contract.

With respect to payment bonding, the international P3 market, consistent with the international construction market as a whole, has adopted a number of approaches to secure payment of amounts due to subcontractors and suppliers. For example, in Australia subcontractors typically do not look to payment bonds, but rather

rely on either a fast-track dispute resolution process for payment disputes under the Building and Construction Industry Payments Act of 2004, or a right to seek payment directly from the Developer under the Subcontractor's Charges Act of 1974. By comparison, French law tightly regulates the use of subcontractors and requires that they either be paid directly by the Developer or that the Design-Build Contractor provide a bank guarantee covering all sums due. Accordingly, the use of payment bonds from surety providers is not a universally adopted approach to securing payments due to subcontractors and suppliers.

Under a traditional Design-Bid-Build or Design-Build contract, the Department suffers the "first loss" in the event of a contractor default (e.g. bankruptcy), and it is for this reason that construction performance security is typically required, as it provides confidence to the Department that notwithstanding the Design-Build Contractor's performance, non-performance or financial condition, the relevant asset will be constructed for the contracted price. Conversely, in a P3 project, the "first loss" is suffered by the equity providers to the Project, and the "second loss" (which only arises if the losses are greater than the level of the equity committed to the Project) is suffered by the senior lenders to the Project. To the extent that there is a "third loss" (which would only arise if the cost to complete the Project was greater than the aggregate of the equity and debt committed to the Project), that loss would be suffered by the Department following the termination of the Concession Agreement, but only to the extent that the level of termination compensation payable by the Department to the Developer results in a loss to the Department. In the event of a termination of the Concession Agreement, however, the level of compensation payable by the Department to the Developer will typically take into account the amount it would cost the Department to complete the construction of the Project, meaning that (all other things being equal) the Department should not suffer any loss as a result of the termination of the Concession Agreement.

In other P3 markets (e.g., Canada, Australia, France and the United Kingdom), the level of construction performance security required to be provided by the Design-Build Contractor for the Project is typically prescribed by the Developer (in consultation with its equity and senior debt providers) on the basis that responsibility for the management of the construction is outsourced to a private Developer and that Developer is responsible for funding the construction cost and securing performance by the Design-Build Contractor.

As a practical matter, Departments should bear in mind that performance bonds "travel" with the underlying Design-Build Contract entered into between the Developer and its Design-Build Contractor, meaning that in the event of a termination of the Concession Agreement, the Department would only be able to take advantage of the performance bond (and require the surety to complete the construction) if it agreed to take over the Developer's obligations under the Design-Build Contract (and in respect of which the performance bond had been issued). The Department should also bear in mind that it would continue to be bound by its payment obligations under the bonding arrangement. Although the Concession Agreement can mandate this quite easily, in practice the implementation of this requirement is a more complex undertaking, because the Design-Build Contract will typically be drafted to work in conjunction with the Concession Agreement rather than as a stand-alone document. In other words, the terms of the Design-Build Contract may need to undergo significant amendment to reflect the fact that the Concession Agreement had been terminated, potentially resulting in a negotiation with the relevant surety.

If the Concession Agreement prescribes the form and/or amount of performance security that the Design-Build Contractor must provide in support of the Project, this may cause an unfair advantage or disadvantage to one particular bidder team (e.g., a Design-Build Contractor with comparably high financial strength may be unfairly disadvantaged if it is required to provide the same level of performance security as a Design-Build Contractor with comparably low financial strength, that the high financial strength Design-Build Contractor would not otherwise have needed to procure), while also adding costs to the proposals of other bidder teams which would not, in the absence of the requirement in the Concession Agreement, have been incurred.

2.5.4 *The Approach Taken in the United States P3 Market to Date*

Although some recent Concession Agreements in the United States have not required the Design-Build Contractor to provide defined levels of construction performance security, most P3 projects that have closed to date in the United States have had this requirement. Among the reasons for this:

- the majority of P3 projects that have closed to date in the United States have been procured in States where, as a matter of law, the Design-Build Contractor for the Project is required to provide a minimum level of construction performance security for the Project;
- in some States where the Design-Build Contractor is not required as a matter of law to provide a minimum level of construction performance security for the Project, the Design-Build Contractor is nevertheless required to provide a minimum level of payment bonding in order to secure the payment of amounts due and owing to subcontractors and suppliers, and it is typically the case that when a surety provides a payment bond to a Design-Build Contractor, they will also offer to provide a performance bond in an equivalent amount at no additional cost; and
- with respect to some of the early P3 projects to close in the United States, material levels of design and construction work were undertaken by the Developer between commercial and financial close and, at the time of commercial close, the senior debt financing solution was still being explored by the Department and the Developer. Accordingly, the Department took significant comfort from the Design-Build Contractor's activities on the Project being supported by committed construction performance security.

In addition, where the Lenders to a P3 Project determine that a parent company guarantee of the Design-Build Contractor's obligations to the Developer is appropriate in light of the particular entity that a Developer is contracting with, the Concession Agreement will typically mandate that the Department be named as a beneficiary of the guarantee in addition to the Developer and the Lenders. Departments considering including parent company guarantee(s) should consider carefully both any legal or practical challenges that may be anticipated in enforcing a foreign parent company's guarantee in a foreign jurisdiction.

3 Availability Requirements

3.1 Availability and Unavailability

An Availability Payment concession is essentially a contract between the Developer and the Department to make available a highway ("the Service") in return for periodic payments. The focus is upon the Developer's provision of the long-term availability of the highway as a *service* instead of a physical asset, as would be delivered under the conventional approach. As such, the concept of "Availability" (and, conversely, "Unavailability") is at the heart of the Concession Agreement. Generally, Availability is measured against conditions the Developer must meet, and naturally, non-compliance with such conditions constitutes Unavailability. Concession Agreements in the United States typically define the meaning of Unavailability.

Central to the definitions of Availability and Unavailability are certain minimum requirements of the Service (the "Availability Requirements" or "Service Requirements") that are specified in the Concession Agreement. Availability Requirements are typically limited to those Elements that are most important to the Department and critical to provision of the Service. This section focuses on the concept and implications of Availability and Unavailability. Availability Requirements are discussed in the next section.

An Unavailability occurrence usually leads to a deduction or adjustment to the Availability Payment ("Unavailability Adjustments"), thereby reducing the Availability Payment the Department pays to the Developer. It is natural that the conditions that together make up the Availability Requirements vary in importance. As such, the financial implications of the Developer's failure to meet a specific requirement are commensurate with the importance of that requirement to the Department (or the Service). The Concession Agreement will therefore categorize requirements and allocate weight to each specific requirement.

Unavailability Adjustments depend on the relative weight of each such specific requirement. For instance, in a highway project, degradation of Service in certain segments may be weighted more heavily than in other segments. Possible reasons include the segment's general criticality to the highway asset's usefulness, the segment's importance during certain time of the day (or day of the week) or similar factors. The weight assigned to each requirement is provided in the form of a factor, and usually defined as "Unavailability Factor." Such Unavailability Factors are typically further classified on the basis of hourly factors (based on the extent of highway Unavailability in a given hour), segment factor (based on the segment of the highway that is subject to Unavailability), time factor (based on the time of the day when the Unavailability occurs) and the like.

The table below contains examples of segment and time factors.

Segment Factor		
Segment Name	**Segment Description**	**Segment Factor**
A	The part of the highway from [point X] to [point Y]	[0.15]
B	The part of highway from [point Y] to [point Z] including ramps and interchanges on [point A]	[0.25]
C	The part of the highway starting from [point A] until termination of the highway at [point B]	[0.60]
Time Factor		
Time Period	**Time Description**	**Time Factor**
A	[6 am to 10 am]	[0.25]
B	[10 am to 4 pm]	[0.15]
C	[4 pm to 7 pm]	[0.35]
D	[7 pm to 10 pm]	[0.20]
E	[10 pm to 6 am]	[0.05]

The financial implications of Unavailability and application of Unavailability Adjustments are specifically discussed in Chapter 1 (*Payment Mechanism, Performance Monitoring and Financial Model Adjustments*).

The Concession Agreement typically provides for a cure period within which the Unavailability can be rectified without the Developer incurring any Unavailability Adjustments. If the Developer fails to rectify the Unavailability within the said cure period, then Unavailability Adjustments are applied from the first moment when Unavailability commenced (including the cure period). The Concession Agreement will usually permit and provide for certain Unavailability of the Service agreed between the Developer and the Department. This typically relates to planned closure ("Permitted Closure") of the Project for certain scheduled maintenance, and Unavailability resulting from a Permitted Closure does not result in Unavailability Adjustments.

An example definition of Unavailability is provided below.

> ***Unavailability*** *means either (a) a [Closure] that is not a [Permitted Closure], and/or (b) an [Availability Fault] that should have been cured but was not so cured during the relevant cure period (if any).*
>
> *When there is a cure period associated with an [Availability Fault], and such [Availability Fault] is not cured within that cure period, then such [Availability Fault] shall be deemed to have commenced as an [Unavailability] from the moment it first occurred.*

Often, the Concession Agreement will contain performance standards or requirements that are not part of the definition of Availability but are expected of the Developer in the delivery of the Service. Performance standards relate to the quality of the Service. As such, non-compliance of the performance standards does not constitute Unavailability but will attract certain performance deductions. Performance standards and performance deductions are dealt with in this chapter and in Chapter 1 (*Payment Mechanism and Financial Model Adjustments*), respectively.

Availability of the Service is expected to commence upon the Substantial Completion Date of the Project. As noted in Section 2.2, there may be occasions when the Developer is able to achieve Substantial Completion earlier than expected. As further described in Chapter 7 (*Contract Term and Nature of the Proprietary Interest*), the resulting early Availability of the Service may lead to higher total Availability Payments unless the Term is measured from the Substantial Completion Date. Making higher total Availability Payments by accepting early Availability of the Service may not be ideal for two reasons: (1) in some instances, the Department may have budgetary constraints both in terms of timing and aggregate amounts of Availability Payments, and (2) it distorts the basis on which the Developer was selected by the Department and provides an opportunity for proposers to "game" the procurement process by proposing unnecessarily long construction periods to gain a windfall. However, there may be instances when it may make economic sense for the Department to accept early Availability of the Service. The Department may therefore provide a financial payment for early Availability that is different from the Availability Payment, and which is based on the economic value of early Availability to the Department. The Concession Agreement will usually address the rights of the Department and financial implications of the Service being available prior to the expected Substantial Completion Date.

It is in the interests of both the Developer and the Department to keep the definition of Availability (or Unavailability) simple, consisting of metrics that are objective and easy to measure. Since the Availability Payment depends on the definition being met, the Developer and its financiers favor a definition that is objective, measurable, and reasonable and seek to avoid criteria which are unachievable or immaterial in the context of the Service as a whole. Additionally, it is important that the Availability Requirements are predictable and certain. Given this, the Department in drawing up the Availability Requirements, should carefully consider its current as well as future requirements in order to minimize future changes.

Another key consideration in defining Availability (or Unavailability) is monitoring costs including the administration of the Payment Mechanism. Measuring Availability (or Unavailability) can often be complex and time-consuming, resulting in high monitoring costs. The Developer and the Department would ideally both prefer to avoid a complex definition but the definition may have to be specific. In any case, the eventual nature of the definition of Availability (or Unavailability) will have to be considered on a transaction-to-transaction basis.

3.2 Availability Requirements

In the instructions to proposers/request for proposals, the Department will indicate the technical requirements that potential proposers are expected to meet in their proposals. In case the Developer's technical proposal deviates from the Department's requirements, the deviations need to be approved by the Department. Once the Department and the Developer agree on the final requirements, they are incorporated into the Concession Agreement.

Alternatively, the Concession Agreement may also make reference to the instructions to proposers/request for proposals of the Department that contains all relevant Availability Requirements.

At its core, an Availability Payment Concession Agreement is a contract for delivery of the Service by the Developer to the Department, which in theory should motivate the Developer to maximize quality of the Service and minimize lifecycle costs. The Concession Agreement should leave the opportunity for innovative solutions to achieve those objectives in the hands of the Developer. This essentially requires output-based Availability Requirements and performance standards, in which the Developer is not told how and when the activities leading to the delivery of the Service should be performed.

The technical requirements in such an output-based approach focus on the key performance indicators, related to either Availability or quality of the Service through performance standards. Translating this essential philosophy into practice, however, is a challenge.[2]

Public agencies using P3s often use an input-based approach and prescribe detailed requirements relating to the works and activities that are necessary to deliver the Service. There are two primary reasons: (1) the complexity of implementing such an output-based approach by public agencies that have long been accustomed to procuring projects through conventional delivery approaches (such as design-build or design-bid-build) for decades, and (2) the presence of a large number of input-based requirements and specifications that are included in regulations, standards and policies.

Internationally, of late an increasing number of public agencies take the position that they are ultimately only interested in a limited list of Availability Requirements and performance standards and wish to avoid detailed input-based specifications to the extent possible.

Technical requirements are typically classified into two categories: (1) design and construction, and (2) operations and maintenance. For instance, the Department will typically require a certain technical life of the highway as an output requirement, and the design and construction phase is the right time for the Department to monitor and enforce this technical requirement.

[2] Examples of output-based specifications for highways are: minimum standards for the quality of the road surface and minimum standards for bridge quality.

3.2.1 Design and Construction

General Requirements and Application of Reasonable Care

As discussed above, the philosophy underpinning a P3 calls for an output-based contractual arrangement. Concession Agreements in many jurisdictions outside the United States typically contain output-based requirements relating to the Availability of the Service. However, Concession Agreements in the United States often have included specific requirements prescribing the design and construction of the highway. These input-based requirements are very similar to the requirements in conventional delivery approaches, including design-build and design-bid-build contracts. Even though such design and construction related requirements are not unique to P3 Concession Agreements, they are briefly discussed below.

The various design and construction topics include – (i) site conditions, (ii) right-of-way acquisition, (iii) environmental requirements and compliance, (iv) utility adjustments, (v) Project schedule and deadlines, and (vi) hazardous materials and/or undesirable materials management and safety, etc. While these topics are typical of most highway projects, specific design and construction related technical requirements in the Concession Agreement cover alignment, lane width, median, drainage, shoulders, sound barriers, intersections, ramps and interchanges, etc.

As in the case of a contract for conventional project delivery, the Concession Agreement typically contains general requirements with respect to design and construction. Specific technical information of the design and construction requirements are included as an annex/exhibit or incorporated by reference to the instructions to proposers/request for proposal.

The [Developer] shall perform the [D&C Work] including [Utility Adjustments] free from defects and in accordance with:

(i) *[Good Industry Practice];*

(ii) *the requirements, terms and conditions set forth in the [Contract Documents], as the same may change from time to time;*

(iii) *the requirements, terms and conditions set forth in all [Governmental Approvals];*

(iv) *all [Applicable Law];*

(v) *the approved [Project Management Plan] and all component parts, plans and documentation prepared or to be prepared thereunder, and all approved updates and amendments thereof;*

(vi) *the [Project Schedule]; and*

(vi) *[Safety Standards].*

The Concession Agreement usually casts a responsibility on the Developer to use reasonable care to identify, notify and rectify any errors in the design and construction (technical) requirements prescribed by the Department. An example of such a clause is provided below.

The [Developer] shall use reasonable care to identify any provisions in the [Technical Provisions] that are erroneous, create a potentially unsafe condition (including with respect to extreme event performance of the [Project]), or are or become inconsistent with the [Contract Documents], [Good Industry Practice] or [Applicable Law].

Whenever the [Developer] knows, discovers or, in the exercise of reasonable care, should have known or discovered that a provision of the [Technical Provisions] is erroneous, creates a potentially unsafe condition or is or becomes inconsistent with the [Contract Documents], [Good Industry Practice] or [Applicable Law], the [Developer] shall have the duty to notify the [Department] of such fact and of the changes to the provision that the [Developer] believes are the minimum necessary to render it correct, safe and consistent with the [Contract Documents], [Good Industry Practice] and [Applicable Law].

If it is reasonable or necessary to adopt changes to rectify the [Technical Provisions] after the [Effective Date], such changes shall not be grounds for a [Compensation Event], [Delay Event] or other [Claim], unless:

(a) the [Developer] neither knew, discovered nor, with the exercise of reasonable diligence and care, should have known or discovered of the need for the changes prior to commencing or continuing any [D&C Work] affected by the problematic provision, or

(b) the [Developer] knew of, or discovered, and reported to the [Department] the problematic provision prior to commencing or continuing any [D&C Work] affected by the problematic provision and the [Department] did not adopt reasonable and necessary changes.

If the [Developer] commences or continues any [D&C Work] affected by such a change after the need for the change was known, discovered, or should have been known or discovered through the exercise of reasonable care, the [Developer] shall bear any additional costs and time associated with redoing the [D&C Work] already performed.

Inconsistent or conflicting provisions of the [Contract Documents] shall not be treated as erroneous provisions under this section/article, but instead shall be reconciled under [Section [X]] of this [Concession Agreement].

Certification and Deviations

Typically, the Concession Agreement contains procedures for certification of the Developer's Work, including the design and construction quality, and the Developer is required to follow these procedures to secure necessary certifications, which is discussed in Chapter 1 (*Completion Testing and Performance Security*).

Additionally, it is possible that the Developer may deviate from agreed standards, and such deviations may or may not be acceptable to the Department. The Concession Agreement usually includes a process to implement deviations from prescribed technical requirements and governs their impact on the rights and duties of both the Developer and the Department. This topic is covered in further detail under Chapter 1 (*Department and Developer Changes*).

3.2.2 Operations and Maintenance

As in the case of design and construction requirements, the main part of the Concession Agreement typically contains the general requirements with respect to operations and maintenance (O&M) with specific technical details of the O&M requirements included as an annex/exhibit or incorporated by reference to the instruction to proposers/request for proposal.

It is worth noting that Availability Requirements and performance standards tend to differ between the construction and operations phases, specifically in brownfield highway P3 transactions, where a part of the highway may be operational while design and construction on another part of the highway is still underway.

(a)	*The [Developer], at its sole cost and expense unless expressly provided otherwise in this [Concession Agreement], shall comply with all [Technical Provisions], including [Safety Standards] throughout the [Term].*
(b)	*[Section [X]] of the [Technical Provisions] sets forth minimum requirements related to [O&M During Construction] and [O&M After Construction].*
(c)	*The [Developer's] failure to comply with such requirements shall entitle the [Department] to the rights and remedies set forth in this [Concession Agreement], including [Unavailability Adjustments] and/or [performance deductions] from payments otherwise owed to [Developer], and termination for uncured [Developer Default].*

A non-exhaustive list of O&M activities to be performed in a typical highway Project O&M include – (i) general operations and maintenance both during construction and after the Substantial Completion Date, (ii) compliance with safety standards, (iii) management of hazardous and undesirable materials, (iv) policing, security, and incident response, etc.

While it is expected that the Developer needs to perform these O&M activities, the focus in an Availability Payment-based Concession Agreement is not the various O&M activities in and of themselves, but the eventual Availability (or Unavailability) of the Service at the agreed Availability Requirements and meeting of performance standards. Typical O&M related Availability Requirements and performance standards include (i) incident response and removal of stalled or damaged vehicles, (ii) lighting and signs, (iii) pavement, medians, landscaping, and drainage, (iv) tolling facilities and services (if any), etc. This is only an illustrative list of requirements as Availability Requirements and performance standards are based on the specific nature and needs of each Project.

Failure to meet the required Availability Requirements typically leads to an "Availability Fault", "O&M Violation" or the accumulation of Non-Compliance Points based on the classification of the requirement in question. Specific Availability Faults and O&M Violations are listed in the Concession Agreement. A non-exhaustive list of Availability Faults and O&M Violations is provided in the below table.

Availability Faults			
Asset	**Minimum Requirement**	**Cure Period**	**Interval of Recurrence***
Pavement Potholes	Pavement within the construction limits shall not have a defect greater than [1/2 square foot] in area including any single measurement of [1-1/2 inches] or greater in depth	[X minutes/hours]	[X minutes/hours]
Flooding	No portion of a lane can have standing water	[X minutes/hours]	[X minutes/hours]
Roadway Surface Debris	Conduct the removal and disposal of debris from travel lanes, including at a minimum, large objects, dead animals and tires	[X minutes/hours]	[X minutes/hours]

* Please see Section 5.1.4 regarding the implications of the prescribed interval of recurrence.

O&M Violations				
Category	**Task**	**Minimum Requirement**	**Cure Period**	**Interval of Recurrence**
Litter Removal	Monitor and pick-up, remove, and properly dispose of litter	No more than three cubic feet per acre of litter	[X minutes/hours]	[X minutes/hours]
Fuel Spills/ Contamination	Contamination management plan	Provide Contamination Management Plan after a fuel spill/contamination event	[X minutes/hours]	[X minutes/hours]
Highway Lighting	Maintain highway lighting at acceptable level of safety for traveling public	Maintain the highway lighting system with a minimum of [X] percent (X%) of highway lighting (including overhead, underdeck and sign lighting) operational and no more than [X] luminaries out in a row	[X minutes/hours]	[X minutes/hours]
Graffiti	Continually monitor and maintain assets free of graffiti and promptly remove or cover graffiti	Graffiti shall be removed, covered or painted over to match the color and the painted application finish of adjacent area	[X minutes/hours]	[X minutes/hours]
Vegetation Control on Concrete Slopes and Concrete Surfaces	Continually monitor concrete walls, sound barrier walls, concrete slopes, retaining wall, sidewalks, etc.	Concrete surfaces shall be kept free of vegetation. Vegetation shall not be allowed to grow between concrete joints on slopes, bridges, walls, sidewalk or curb & gutter sections.	[X minutes/hours]	[X minutes/hours]

General Requirements

A general requirement in the Concession Agreement is that the Developer performs the O&M Work in a manner consistent with Good Industry Practice (as it evolves from time to time), Applicable Laws, and Governmental Approvals. The need to meet these standards is both understandable and reasonable from the perspective of the Developer, to the extent the changes in them over time do not lead to material additional costs to the Developer. If the Availability Requirements and performance standards are truly output-based, then the Concession Agreement should provide for sufficient flexibility for the Developer to incorporate such changes.

On the other hand, if the O&M requirements are input-based, changes in good industry practice makes the technical requirements obsolete for the Developer, and the transfer of such a risk to the Developer may not lead to value-for-money for the Department. Therefore, instead of prescribing specific asphalt mix requirements and maintenance periodicity requirements that are input-based, the Department could set pavement quality requirements in terms of longitudinal roughness, patch work, rutting and cracking, all of which take the form of output-based specifications. Additionally, in the context of highway lighting, the Department could set requirements in terms of lumens per square foot (lux) rather than prescribing the Developer to use lighting equipment of specific type and nature (lamp's size, wattage, center length, etc.).

General Requirements

(a) The [Developer] shall carry out the [O&M Work] in accordance with:

(i) [Good Industry Practice], as it evolves from time to time;

(ii) the requirements, terms and conditions set forth in the [Contract Documents], as the same may change from time to time;

(iii) [Applicable Law];

(iv) the requirements, terms and conditions set forth in all [Governmental Approvals];

(v) the approved [Project Management Plan] and all component parts, plans and documentation prepared or to be prepared thereunder, and all approved updates and amendments thereof;

(vi) the approved [Operations and Maintenance Plan], and all approved updates and amendments thereof;

(vii) the approved [Maintenance Plan], and all approved updates and amendments thereof;

(viii) [Best Management Practices];

(ix) [Safety Standards]; and

(x) all other applicable safety, environmental and other requirements, taking into account the [Project Right of Way] limits and other constraints affecting the [Project].

(b) If the [Developer] encounters a contradiction between clauses (i) through (x) above, the [Developer] shall advise the [Department] of the contradiction and the [Department] shall instruct the [Developer] as to which subsection shall control in that instance. No such instruction shall be construed as a [Department Change].

(c) The [Developer] is responsible for keeping itself informed of and applying current [Good Industry Practice].

Management of Hazardous Materials and/or Undesirable Materials

The [Developer] shall manage, treat, handle, store, remediate, remove, transport (where applicable) and dispose of all [Hazardous Materials] and/or [Undesirable Materials] encountered in performing the [O&M Work], including contaminated soil and groundwater, in accordance with [Applicable Law], [Governmental Approvals], the [Hazardous Materials Management Plan] and/or [Undesirable Materials Management Plan], [Best Management Practice], and all applicable provisions of the [Contract Documents], including the [Technical Provisions].

Environmental Compliance

(a) In the performance of [O&M Work], the [Developer] shall comply with all [Environmental Laws] and perform or cause to be performed all environmental mitigation measures required under the [Contract Documents] or

under the [Environmental Approvals], including the consents and approvals obtained thereunder, and shall comply with all other conditions and requirements thereof.

(b) The [Developer], at its sole cost and expense, shall also abide by and comply with the commitments contained in the environmental impact documentation related to the [NEPA/CEQA Approval] and any additional commitments contained in subsequent re-evaluations and [Environmental Approvals] required for the [Renewal Work].

Deviations and Changes in Requirements

As in the case of design and construction standards/requirements, the Concession Agreement typically provides for deviations in O&M standards/requirements by the Developer. Any such deviation needs to be approved by the Department in accordance with the procedure laid down in the Concession Agreement. Deviations initiated by the Developer are dealt with as a Developer Change, which is discussed in Chapter 1 (*Department and Developer Changes*).

The Department too can initiate a change to the O&M standards/requirements, and such a change ("Department Change") can be classified either as (1) Discriminatory O&M Changes, or (2) Non-Discriminatory O&M Changes. As the Concession Agreement is a long-term contract, the Department may fear locking itself to specific O&M requirements without the flexibility to change them over time. Consequently, the Concession Agreement allows for Department Changes under limited circumstances and conditions. Department Changes are further discussed in Chapter 1 (*Department and Developer Changes*).

4 Maintenance and Handback Requirements

4.1 Introduction

The Term of an Availability Payment concession generally ranges from 30 to 40 years, although the Term will ultimately depend on the nature of the Project, the authorizing legislation and the needs (and relative bargaining power) of the parties. On termination or expiration of the Term, the Department will assume responsibility for the Project. Because the Department will be responsible for operating and maintaining the Project after the end of the Term, it will have a strong interest in ensuring that all of the Project assets it receives are not run-down or in a condition that will require immediate and costly life-cycle maintenance. The Developer, by comparison, will naturally seek to minimize its costs and may be unlikely to voluntarily make long-term investments in the Project during the final years of the Term (as it will not receive much of the benefit of those investments). Although the ongoing performance specifications contained in the Concession Agreement would require the Developer to comply with such items as ride quality and cracking of the roadway (as such requirements continue to apply during the Handback Period), there is nevertheless a risk that the Developer could defer necessary renewals and instead choose to incur additional routine maintenance costs, together with the possibility of incurring noncompliance deductions from the Availability Payment for failure to meet performance requirements. This is a particularly sensitive issue in Availability Payment transactions, as the typical life of some Project Elements (such as bridges) may be only slightly longer than the Term, which reduces the natural incentive for the Developer to perform life cycle maintenance that might be present in a transaction with a longer Term. For this reason, special attention should be paid in the Concession Agreement to the means and methods of measuring the expected residual life of key Elements to ensure that the Developer does not hand back a Project to the Department requiring extensive major maintenance.

The Concession Agreement should therefore include provisions for dealing with what will happen to the Project (and particular assets) at the end of the Term, including the rights and obligations of the Department and the Developer with respect to the long-term condition of the Project on Handback, including any Residual Life Requirements of the Project assets. These provisions are important to avoid disputes at the end of the Term and also to incentivize the Developer to make life-cycle investments in the Project at the appropriate time. The extent of the obligations the Department places on the Developer with respect to the Handback condition of the Project may be reflected in the pricing of the Developer's bid for the Project and may have an impact on the design, construction, or maintenance strategies considered during the procurement process. It is important to note that during the Handback Period, O&M Standards will remain applicable to the assets subject to the Handback Requirements and the failure of such assets to comply with the relevant O&M Standards may separately give rise to a deduction from an Availability Payment.

4.2 Handback Requirements

4.2.1 Defining Handback Requirements

Generally, the Developer will be required to transfer the Project back to the Department in accordance with prescribed Handback Requirements. From the Department's perspective, Handback Requirements are particularly important in incentivizing the Developer to renew and replace Elements of the Project at the optimum time (from a life-cycle perspective), rather than perform the minimum maintenance required and, as described above, possibly accept some Availability Payment deductions for breach of its performance requirements. The Developer will seek to economize its long-term life-cycle costs in light of the performance specifications required under the Concession Agreement, so a well-defined set of Handback Requirements

will likely impact the Developer's approach to operations and maintenance at all stages of the Project life-cycle. In particular, the Department should give careful consideration to complex assets, such as bridges, tunnels and other major structures, because properly crafted Handback Requirements can encourage the Developer to invest in these assets early and avoid the need for the Department to undertake expensive replacement efforts after the end of the Project.

Handback Requirements are generally contained in a schedule to the Concession Agreement within the technical specifications for the Project and should include the Developer's obligations, including valuation methodologies and inspection requirements, in relation to maintenance and condition of each Element of the Project during what is known as the Handback Period, generally commencing five years prior to the end of the Term.

The Handback Requirements should draw a distinction between long-life Elements and those Elements that naturally wear out during the Term. Although not every Element of the Project needs to be in "as-new" condition at the time of Handback, the Developer will generally be required to demonstrate a specified Residual Life (the period remaining until the relevant Element of the Project requires reconstruction, rehabilitation, restoration, renewal, or replacement) for each major long-life Element, such as structural foundations, and if these Elements are not performing as expected, the Developer must repair them before the end of the Term. For Elements that generally wear out more quickly (and will likely have been replaced at least once during the Term) such as road signs, the Developer is generally not required to renew each such Element immediately before Handback (provided the Element remains serviceable) but instead may be asked to pay an amount to the Department that will depend upon the condition, Useful Life, and age of each such Element. For these short-life Elements, a formula-based approach to determining the amount payable to the Department will generally be adopted. In addition, the operation and maintenance requirements in the Concession Agreement may require that short-life and medium-life Elements have a minimum Useful Life at the time of replacement or renewal to prevent the Developer from taking a sub-par approach to renewals during the final years of the Term.

4.2.2 Residual Life

The primary component of the Handback Requirements will generally stipulate the condition each Element of the Project must be in at the end of the Term. The condition of the Project and each of its Elements is generally evaluated during the Handback Period before the end of the Term to determine the expected Residual Life of the asset at the end of the Term.

The Handback Requirements will generally prescribe the following matters:

- How to calculate the Residual Life of each Element of the Project at each year during the Handback Period and at the end of the Term. This calculation will generally include an agreement to put in place a Residual Life Methodology toward the end of the Term, generally commensurate with the length of the Handback Period, containing the criteria to be adopted for the calculation of the Residual Life of each Element. The Residual Life Methodology should be described in general terms and should not place undue reliance on current technologies for the testing of Elements. A specific Residual Life Methodology is not generally put in place at the beginning of the Term because the methods and techniques for establishing Residual Life are likely to have evolved by the time the Handback Inspections are performed;
- The Residual Life Requirements for each Element of the Project;
- How to calculate the cost of completing repairs and renewals on each Element to ensure that it will meet the Residual Life Requirements; and

- How to calculate the Handback amount payable to the Department at the end of the Term in respect of any relevant short-life Elements.

The following complexities may arise when setting the Residual Life Requirements of an Element and determining the corresponding Renewal Work required to achieve the Handback Requirements:

- Certain assets are difficult to handle at Handback if their Useful Life is approximately the same as the Term. This may apply, for example, to bridge decks constructed with conventional reinforcing steel and subject to a regular deicing program, for which a Useful Life of around 50 years (which may coincide with the length of the Term) appears to be in line with expectation. Specialist advice will often be needed on how best to treat these Elements. It is generally not good practice to specify in the Concession Agreement that Renewal Work such as major bridge deck renewals are to be performed just before Handback because (a) the renewal may not in fact be needed at that time and (b) the Developer's incentive to perform the Renewal Work to the appropriate level of quality at that time will be diminished; and
- Where a Concession Agreement includes significant parts of existing assets within the Developer's operation and maintenance obligations, such as a widening of an existing roadway where the expectation is that the existing road pavement foundation or existing bridges are to be retained, this adds complexity to the Handback Requirements. For example, it may not be practical or economical to specify a Residual Life Requirement that exceeds the Residual Life of the existing road pavement. Often in these situations, the Handback Requirements are based on a detailed assessment of the condition of the existing road pavement and the Handback Requirements may be less stringent than those applicable to a "new build" Project.

4.2.3 *Additional Handback Requirements*

In addition to specific provisions regarding the Residual Life of each Element and a Handback amount for short-life Elements, the Handback Requirements will generally require the Developer to prepare a Handback plan that will be used to determine the condition and performance of the Project and identify the testing, evaluation, and calculation methods that are to be used to demonstrate to the Department that all equipment and systems function as intended and meet all applicable code and standards of the technical specifications.

The Developer may also be required to prepare and deliver to the Department, as a condition to the achievement of Substantial Completion, a Life-Cycle Maintenance Plan that outlines the estimated life of the Project, major maintenance to be undertaken by the Developer, pavement deterioration assessments, and how the Developer will meet its performance and Handback Requirements during the Term. This plan will be updated annually to take into account developments in each of these areas and reflect updated technologies for, among other things, measuring Residual Life (including potentially the adoption of technologies that are not well-developed at the beginning of the Term). For example, where a Residual Life of 50 years may be specified for concrete and steel Elements, current technologies may not be able to predict the incipient onset of major deterioration and corrosion beyond 10 years. Such a case reinforces the need for the Department to require the Developer to produce a Life-Cycle Maintenance Plan for all Elements and to monitor and report their condition and performance in service throughout the Term.

During the Handback Period, the Developer generally will be required to prepare enhanced annual updates to the Life-Cycle Maintenance Plan that, in addition to the matters described above, will also include the Developer's calculation of Residual Life for each Element (using the Residual Life Methodology and taking into account the results of inspections during the Handback Period).

The Handback Requirements will also generally outline the Handback Inspections requirements (see Section 4.3 below).

An example Handback requirements provision is set forth below.

> *(a) Upon the end of the [Term], the [Developer] shall relinquish and surrender full control of the [Project] to the [Department], at no charge to the [Department], in at least the condition required by the [Handback Requirements].*
>
> *(b) The [Developer] will diligently perform and complete all [Renewal Work] required to be performed and completed prior to transfer of the [Project] to the [Department], based on the required adjustments and changes to the [Life-Cycle Maintenance Plan] resulting from the inspections and analysis under the [Handback Requirements].*

4.3 Handback Inspections

During the Handback Period, the Developer will be required to perform Handback Inspections to determine the condition and Residual Life of each Element. These inspections may be required to take place annually or in other increments during the Handback Period, and should also take place at the expiration of the Term. The results of such inspections should be used by the Developer and the Department to determine (a) the Residual Life of the long-life Elements, (b) the condition, Useful Life and age of the short-life Elements and (c) the dollar amount of funds to be maintained in the Handback Reserve Account covering the cost of completing maintenance, repairs, and remediation of long-life Elements, as well as any cash payments for the short-life Elements, to ensure that the Project is transferred back to the Department at the end of the Term with the specified Residual Life Requirements.

The requirements of conducting Handback Inspections are generally detailed in the Handback Requirements in the technical specifications schedule of the Concession Agreement. The level of detail is varied, with some projects incorporating a detailed outline of the inspection requirements of each Element and others including a more general requirement for inspections to be conducted with appropriate coverage such that the results are representative of the Project. Generally, the inspections will be conducted by an independent testing agency, and the Department will have the right to be present during the inspections.

An example Handback Inspections provision is set forth below.

> *Beginning five years prior to the projected expiration of the [Term] and every year thereafter, the [Developer] will conduct annual inspections of the [Project] and provide reports of such inspections to the [Department] pursuant to the [Handback Requirements].*

4.4 Handback Reserve Accounts and Letters of Credit

4.4.1 Handback Reserve Account

The Concession Agreement will generally include a provision requiring the Developer to establish and fund a Handback Reserve Account at the beginning of the Handback Period. This reserve account is generally required by the Department as security for the obligation of the Developer to transfer the Project back to the Department in the agreed condition, with each Element meeting the relevant Residual Life Requirement.

The Handback Reserve Account should remain funded with the Handback Reserve Amount, which generally equals the amount necessary to ensure the Project meets the Handback Requirements at the end of the Term, although it may also include a contingency buffer. The Concession Agreement will generally either allow the parties or an independent consultant to determine the estimated Handback Reserve Amount. In each case, this amount is based on the then-current Residual Life of the Project, the Residual Life Requirements of each Element of the Project, the Handback Inspections, and other technical parameters outlined in the Handback Requirements. The Handback Reserve Amount will generally be calculated yearly, and the funds in the Handback Reserve Account would be adjusted accordingly if necessary.

The Developer may have an incentive to underestimate the likely cost of Renewal Work when calculating amounts to be transferred to the Handback Reserve Account. By comparison, the Department may an incentive to increase the calculation of the Handback Reserve Amount. If Renewal Work is to be performed by the Department after Handback using the proceeds of the Handback Reserve Account, the Department's costs may be higher because of procurement costs and the risk that the Developer may not have adequately priced the Handback Reserve Account. To the extent possible, the pricing of the required Renewal Work should take into consideration what the Department's future commitments may be if required to perform the Renewal Work rather than simply what the Developer estimates.

The Handback Reserve Account will generally be in the name of and controlled by a third-party Escrow Agent or otherwise held by the Developer for the sole benefit of the Department, which allows the Department to control the withdrawals the Developer makes from the account. While the Concession Agreement will generally set out the conditions for the account, an account control (or similar) agreement may also be entered into by the parties shortly following establishment of the account.

The Developer will generally only be able to make withdrawals from the Handback Reserve Account to fund the cost of Renewal Work to ensure the Residual Life of the Project at the end of the Term is equal to the Residual Life Requirements, though in some cases the Department may permit withdrawals to fund work necessary to meet the Developer's safety compliance obligations. The Department can get comfortable with these types of withdrawals as generally the amount of the withdrawal to pay for repairs or renewal costs would equally reduce the amount the Department would need to cover the costs of such Renewal Work in the event the Developer transfers the Project to the Department in less than the agreed-upon condition. However, even for such withdrawals, the Developer would generally still have to give notice to the Department, along with information surrounding the amount of the withdrawal and associated works, and the Department would have to provide consent prior to the withdrawal being made.

If the Handback Inspection conducted by the Department prior to the end of the Term determines that any Element of the Project does not meet the Handback Requirements or that the Residual Life of one or more long-life Elements does not equal or exceed the Residual Life Requirements, then the Concession Agreement should permit the Department to use the funds in the Handback Reserve Account to pay for the necessary Renewal Work to the extent necessary to meet the Handback Requirements. In addition, the Department will generally retain from the Handback Reserve Account an amount based on a formula for short-life Elements, if applicable. Any residual amounts left in the account following the payment of such costs will generally be paid to the Developer. If the Developer meets all of the Handback Requirements at the end of the Term and no further repairs or Renewal Work are required in respect of the Project, the amounts in the Handback Reserve Account will be paid to the Developer.

Some Projects may include a specific provision in the Concession Agreement which requires the developer to establish a "Renewal Work Reserve Account" to cover the cost of non-handback activities. A Renewal Work Reserve Account will typically be redundant with the same requirement under the Financing Documents. However, in cases where Availability Payments will be substantially level over the Term and not "sculpted" to anticipate significant increases in expenditure by the Developer for heavy Renewal Work prior to the

Handback Period, the Department may wish to consider whether or not to require the establishment of a Renewal Work Reserve Account to ensure availability of funds for the performance of such Renewal Work by the Developer.

4.4.2 Letters of Credit

The Concession Agreement will generally allow the Developer to substitute some or all the Handback Reserve Amount with a letter of credit issued in favor of the Department. This substitution may be preferred by a Developer that wants to free up cash flow during the Handback Period, as the Handback Reserve Amount may be significant and would be locked up in the Handback Reserve Account for five or more years. It is important to note that, unless dis-applied by the P3 statute of the State applicable to the Project, State law may impose additional requirements concerning the use and content of letters of credit with which the Developer will be required to comply.

An example Handback Reserve Account provision, including provisions for substitution of letters of credit, is set forth below. The following example contemplates the use of an independent consultant to determine the appropriate amount, although as noted above the Department and the Developer may agree on the amount without a third party's input.

(a) *No later than the first day of the year that is seven years prior to the expiration of the [Term], and no later than the first day of each subsequent year, the [Department] and the [Developer] will cause an independent consultant to set forth an amount that it reasonably determines is equal to an amount sufficient to cover all costs necessary to cause the [Elements] to meet the [Handback Requirements] at the end of the [Term]. The amount determined in the preceding sentence is the* ***Handback Reserve Amount****.*

(b) *Five years prior to the expiration of the [Term], the [Developer] shall establish the [Handback Reserve Account] for the sole and exclusive benefit of the [Department] to be held and controlled by a third party (the* ***Escrow Agent****) to be agreed between the parties.*

(c) *Concurrently with the establishment of the [Handback Reserve Account], the [Developer] will deposit therein cash, a [Handback Performance Security] or a combination of the two in an aggregate amount equal to at least 100% of all costs necessary to cause the [Elements] to meet the [Handback Requirements] at the end of the [Term] as reasonably determined by the independent consultant pursuant to paragraph (a) above. Within [X] days of the date of each annual determination of the [Handback Reserve Amount], the [Developer] will cause the amount on deposit in the [Handback Reserve Account] to be equal to at least 100% of the [Handback Reserve Amount] so determined. If the sum of the amount available under the [Handback Performance Security] and the amount of cash on deposit in the [Handback Reserve Account] exceeds 100% of the new [Handback Reserve Amount], the [Developer] will be permitted (A) to cause the stated amount of the [Handback Performance Security] to be reduced by an amount equal to such excess, or (B) to direct that the excess cash then on deposit in the [Handback Reserve Account] be transferred to the [Developer].*

(d) *At its sole cost, the [Developer] will be permitted to deposit a [Performance Security] (the* ***Handback Performance Security****) to the credit of the [Handback Reserve Account], which will have a scheduled expiration date no earlier than the first anniversary of the scheduled end of the [Term] (or, if it expires earlier than such date, permits a drawing of the full amount of the [Handback Performance Security] if the [Handback Performance Security] is not renewed or extended at least [X] days prior to its stated expiration date). The [Handback Performance Security] will be considered a part of the [Handback Reserve Account] and the amount available thereunder will be included in any calculations of the amount required to be on deposit in the [Handback Reserve Account]. The [Handback Performance Security] will provide that, if its [Term] is*

scheduled to expire prior to the termination of the [Handback Reserve Account], then the [Department] may draw thereon in an amount equal to the full amount available to be drawn thereunder. The [Department] will deposit the proceeds of any drawing on the [Handback Performance Security] into the [Handback Reserve Account].

(e) The [Developer] shall be entitled to withdraw funds from the [Handback Reserve Account] in such amounts and at such times as needed only to pay for the improvement, repair, renewal or replacement of any [Element] to ensure each [Element] has the [Residual Life Requirements], and otherwise meets the [Handback Requirements], at the end of the [Term].

(f) Prior to drawing funds from the [Handback Reserve Account], the [Developer] shall give written notice to the [Department] of the amount to be drawn and the purpose for which funds will be used, together with such other supporting information as the [Department] may reasonably require. Within [X] days from the date of the receipt of such notice, the [Department] shall either approve or withhold its approval to [Developer]'s proposed withdrawal. The [Department] may only withhold its approval to any proposed withdrawal from the [Handback Reserve Account] to the extent that:

(i) the [Developer] is unable to demonstrate to the reasonable satisfaction of the [Department]that the proposed withdrawal amount will be used to meet costs incurred by [Developer] in undertaking improvement, repair, renewal or replacement of any [Element] to ensure each [Element] has the [Residual Life Requirements], and otherwise meets the [Handback Requirements], at the end of the [Term]; or

(ii) the balance standing to the credit of the [Handback Reserve Account] plus the aggregate amount of all withdrawals made from the [Handback Reserve Account] is less than the [Handback Reserve Amount],

provided, however, that if the [Department] fails to respond within such [X] day period, the [Department] will be deemed to have given its approval to such withdrawal request.

(g) On the last day of the [Term], the [Escrow Agent] shall pay any amounts standing to the credit of the [Handback Reserve Account] to the parties in the following order of priority:

(i) first, an amount equal to that required to improve, repair, renew or replace each [Element] to the extent required for the [Developer] to have performed all of its obligations under the [Handback Requirements] as at the end of the [Term], shall be paid by the [Escrow Agent] to the [Department]; and

(ii) second, the remaining balance standing to the credit of the [Handback Reserve Account] shall be paid by the [Escrow Agent] to the [Developer].

4.5 Payments in Lieu of Meeting Handback Requirements

Some Projects may include a specific provision in the Concession Agreement allowing the Developer, in lieu of meeting the Handback Requirements for some or all of the Elements of the Project, to make a payment to the Department in an amount equal to the cost of performing any necessary repairs or renewals. This payment may be in addition to general Handback amounts payable to the Department in respect of short-life Elements.

This provision may be particularly relevant if the Equity Members at the end of the Term have changed from those at the beginning of the Term and these new Equity Members are mere investors rather than experienced

contractors or operators of roads and highways (see also Chapter 1 (*Assignment and Changes in Equity Interests*)). In such cases, it would be preferable for the investor to arrange for a payment to be made to the Department rather than to perform the Renewal Work needed to restore the Project to the condition that the Handback Requirements dictate. A payment in lieu of performance may also be desirable if the Department anticipates that near or just after the end of the Term the Project will need to undergo major maintenance, such as a road widening project or similar capital expenditure. However, the Department's exercise of such a right would need to be accompanied by modified Handback Requirements in relation to the Work that will not be performed.

An example in-lieu payments provision is set forth below.

(a)	*The [Developer] shall have the option to pay an amount equal to the cost of the [Renewal Work] that will be necessary for the [Department] to perform after the end of the [Term] to ensure that the [Residual Life] at the end of the [Term] of the [Element] equals or exceeds the [Residual Life Requirements] for the [Element] in lieu of the [Developer] itself performing such [Renewal Work] necessary to meet the [Handback Requirements].*
(b)	*The [Developer] shall make the payment required under paragraph (a) by making a deposit into the [Handback Reserve Account] for transfer and release to the [Department] at the end of the [Term], free and clear of all liens, pledges, and encumbrances.*
(c)	*The [Developer] shall deliver written notice to the [Department] prior to the first day of the fifth full calendar year prior to the end of the [Term] setting forth its election to exercise its rights under paragraph (a) above for each applicable [Element] of the [Project]. Failure by the [Developer] to deliver such written notice to the Department by such deadline or failure of the [Developer] to include any [Element] in the written notice shall be deemed an election by the [Developer] to perform all [Renewal Work] necessary to ensure that the [Residual Life] at [Handback] of the [Element] meets or exceeds the [Residual Life Requirements].*

5 Payment Mechanism, Performance Monitoring and Financial Model Adjustments

5.1 Payment Mechanism

5.1.1 Introduction

The payment mechanism – together with the performance monitoring system and Availability Requirements – lies at the core of an Availability Payment P3 contract. Whereas the primary purpose of the payment mechanism is to compensate the Developer, it also allocates responsibilities and risks between the Department and the Developer. Moreover, it provides the incentives for the Developer to perform according to the service standards, thereby aligning public and private interests.

5.1.2 Availability Payment

The basis of the payment mechanism is the Availability Payment, a fee paid by the Department to the Developer for making the highway available to users at predefined standards. The Availability Payment is agreed upon between the Developer and the Department during the procurement and stated in the Concession Agreement.

An Availability Payment is a fee for providing a service, not a reimbursement of costs incurred by the Developer. The Service is the Availability of the highway to the users in accordance with the terms of the Concession Agreement. In its bid, the Developer structures the Availability Payment so as to recover the projected operational, maintenance, and debt service expenses and still achieve its targeted Equity internal rate of return ("IRR") that is appropriate given the risk profile of the Project.

Ensuring Availability of the Project in accordance with the predefined standards may require the Developer to perform a range of activities related to (re-)construction, major maintenance, maintenance and operations, which also involve costs. However, the concept of the Availability Payment focuses on a single performance-based service fee irrespective of the disparate activities that the Developer may need to perform. Hence, the Availability Payment is not made up of several, cost-related components but is only linked to the level of Service. This means that no payments are made to the Developer by the Department until the Service is Available and payments are only made to the extent the Service is Available, at the agreed standards. In other words, the Availability Payment represents the maximum payable for full delivery in accordance with the Concession Agreement and deductions are assessed for failure to perform. These performance deductions are calculated to measure the actual loss incurred, not as mere penalties, an important distinction because a deduction designed to be a penalty may be unenforceable in many States.

Availability Payments are typically paid on a monthly basis, but sometimes on a quarterly and even on an annual basis. If the deduction regime is complex, Departments may consider applying the adjustments quarterly, even with a monthly Availability Payment. Departments often decide not to use longer deduction periods, in order for the incentive mechanism to have the intended effect.

Many Departments intend to seek Federal-aid reimbursement for at least a portion of their Availability Payment to the Developer, and FHWA has established a methodology for calculating the Federal participation, based on the Developer's financial model estimates of eligible (e.g., capital) versus ineligible (e.g., O&M) costs. In addition, when a Federal TIFIA loan is part of the Developer's financial structure, the TIFIA debt service payments must be deducted as part of the calculation of the Federal participation rate. Departments and their financial advisors should engage with the FHWA to seek guidance when structuring transactions in

order to determine the extent to which these restrictions may impact their ability to pay the Availability Payments.

An example of a clause defining the timing and basis of the Availability Payment is as follows:

> *Upon [Substantial Completion] of the [Project] the [Department] will begin making [Availability Payments] to the [Developer] as provided in this [Article [X]].*
>
> *The [Availability Payments] are based on the segments being open and available for public travel as measured through [Developer's] conformance with the [Contract Documents], including the minimum operating and maintenance requirements.*

The Developer has an incentive to reach Substantial Completion as early as possible in order to start earning Availability Payments and begin repaying its loans, thereby minimizing financing costs. However, in a well-structured Concession Agreement the Developer's incentive to reach Substantial Completion early is mitigated for the benefit of the Department so that (1) no early Availability will be accepted prior to an agreed date or (2) a financial payment, but not an Availability Payment, will compensate the Developer for early Availability. Early achievement of Substantial Completion is discussed in further detail in Sections 3.1 (*Availability and Unavailability*) and 7.1 (*Contract Term*).

Given the importance of the Availability concept, the definition of Availability standards requires close attention. The definition of Availability typically incorporates the requirements that are crucial to ensure safe and comfortable use of the highway. Ideally, the definition of Availability is clearly linked to output requirements. The definition of Availability Requirements is covered in Chapter 1 (*Availability Requirements and Availability*).

5.1.3 Milestone Payments and Periodic Payments

The concept of an Availability Payment is that the Department compensates the Developer for delivering services according to the Availability Requirements, not for the completion of the work. This might be interpreted to require 100% financing by the Developer. However, one of the considerations for the Department in structuring payment mechanisms is whether 100% private financing creates value-for-money and achieves optimum affordability. Decreasing the private financing component by making Milestone Payments or periodic payments during or immediately after Substantial Completion can improve both value-for-money and long-term affordability.

From the perspective of the Department, the purpose of the private financing in an Availability Payment Concession Agreement is not only to have access to private capital to overcome budgetary constraints, but also to provide an incentive for the Developer to perform. A generally accepted principle is that 100% private financing is not required to provide that incentive. The main target is to ensure the Developer has sufficient money-at-stake under all circumstances, thereby providing an incentive to always perform.

Requiring 100% private financing may result in the Developer being more "financially exposed" than necessary to provide the desired incentives, with the Developer requiring a premium for such risk transfer. As a result, it could lead to overpricing of the risk transfer in the form of higher Availability Payments, which may decrease the value-for-money for the Department. If a Department has funds available, paying Milestone Payments or periodic payments at Substantial Completion or even during construction (once the value of such payment has been fully earned, as described below) can improve long-term affordability and value-for-money. Such capital contributions can reduce the exposure of the Developer and hence the costs of financing, without compromising the effectiveness of such risk transfer.

The legal and regulatory justifications of these Milestone Payments or periodic payments are easiest when linked to Substantial Completion, which already requires verification and validation by the Department. The potential savings from Milestone Payments or periodic payments will be more significant when applied during construction, but that comes at the cost of higher transaction costs because of additional verification and validation that is necessary to prevent the Department from having too much financial exposure—by paying more than the value of the works completed and by creating a situation in which the Department would be worse off in case of an early termination. For example, the Department will typically require as a condition to payment of such amounts that the Developer deliver reports from a qualified, independent technical expert in order to substantiate the progress of the work and the Developer's eligibility to receive the Milestone Payment. Such reports may, however, generate increased monitoring costs for the Developer if required on a frequent basis. Departments also will often wish to receive copies of the same reports that Lenders receive from their technical advisor, as the information contained in such reports will be relevant to the Department's interests when paying Milestone Payments. Because such reports are already being prepared, delivering them to the Department as well as the Lenders does not typically result in increased costs.

An example of a clause including justification and verification requirements follows:

The [Developer] shall be entitled to receive from the [Department] [Milestone Payments] in accordance with this [Section [X]].

In order to request a [Milestone Payment], the [Developer] shall submit to the [Department], on or after the applicable [Payment Date], the following:

- *an invoice, in a format acceptable to [Department], for the amount of [Milestone Payment] payable by the [Department] on or after such [Payment Date];*
- *certification by the [Independent Quality Firm]:*
  1. *of the percentage of [D&C Work] completed as of such date, as compared to the [Schedule of Values], and the corresponding dollar value of such work; and*
  2. *that all required [QA] and [QC] tests, inspections, measurements, permits and any other requirements of the [Contract Documents] for such completed [D&C Work] have been completed and all non-conformance reports relating to the respective work activity have been resolved;*
- *within 5 days of request by the [Department], verifiable evidence in electronic format from the [QA] and [QC] reviews that the relevant [QA] or [QC] reviewer relied on to make its determination the [D&C Work] is complete and conforms to the requirements of the [Contract Documents];*
- *copies of the [Lender's] technical advisor's reports submitted during the previous [Payment Period];*
- *copies of all reports submitted by the [Developer] to the [Department] during the previous [Payment Period]; and*
- *copies of all reports submitted by the [Department] to the trustee for the bondholders during the previous [Payment Period].*

Sizing of Milestone Payments or periodic payments can be based upon the availability of public funds (affordability), but also on efficient risk allocation (value-for-money). The Department and its financial advisors can determine the appropriate size on the basis of scenario analyses in the project financial model.

The Milestone Payment at Substantial Completion or Final Acceptance—also referred to as the Substantial Completion Payment or the Final Acceptance Payment—is typically reduced for Unavailability of existing highways impacted by construction or other violations of the contractual requirements prior to the Substantial Completion Date. The structure of these Unavailability Adjustments and O&M Violation Adjustments are further discussed in Chapter 1 (*Availability Requirements and Availability*).

Other than during construction, Departments typically do not allow the Developer to reshape the profile of Availability Payments—often referred to as "sculpting." One reason is that this would be contrary to the principle of paying for services rather than inputs. An additional one is that financial bids—based on the net present value of Availability Payments—become less comparable. In some jurisdictions, Milestone Payments have been used for major maintenance, which may have facilitated more efficient financing solutions and led to more attractive bids (although this approach is not common). The timing of these Milestone Payments matters in the assessment of the bids as the interests of the Developer and the Department with respect to timing are not automatically aligned. The Developer generally prefers earlier Milestone Payments or periodic payments, whereas the Department has the opposite interest. The Developer may prefer receiving the Milestone Payments or periodic payments even earlier than scheduled in its financial proposal; however, such a result, if reflected in the Developer's original financial proposal, could have changed the evaluation of the original bids. Therefore, this mechanism requires strict conditions and clarity on both the evaluation methodology and the contractual consequences, so as not to distort the competition between bidders and to prevent unintended bidding behavior.

5.1.4 *Unavailability Adjustments and O&M Violation Adjustments*

A payment mechanism is designed to incentivize the Developer to provide the services in accordance with the requirements and minimize the deficiencies in respect of those requirements. The mechanism typically distinguishes between Unavailability Adjustments and O&M Violation Adjustments, which are further distinguished from the Non-Compliance Points system described in Section 5.2 below.

Unavailability Adjustments

The essence of the payment mechanism is linked to the economic impact of the Unavailability of the road. Typically, this means that the maximum Availability Payment,[3] based on a full Availability of the road, is reduced by Unavailability Adjustments dependent upon the:

- timing of Unavailability;[4]
- duration of the Unavailability;

[3] As discussed before, Unavailability Adjustments before Substantial Completion may lead to reductions of Milestone Payments or Substantial Completion or Final Acceptance Payments.

[4] Outside the United States, another system is often used, in which, instead of the timing of the Unavailability the expected traffic volume at the time of the Unavailability is used to determine the Unavailability Adjustment. This alternative system requires more monitoring of traffic volumes, but automatically takes into account changes in travel patterns over days, weeks, seasons and years and therefore better reflects the actual economic damage caused by unavailability of the road.

- location of the Unavailability; and
- number of unavailable lanes.

An Unavailability Event can be defined as follows:

> ***Unavailability Event*** *means either (a) a [Closure] that is not a [Permitted Closure], and/or (b) an [Availability Fault] that should have been cured but was not cured during the relevant cure period (if any) and is neither (i) excused under [Section [X]] of the [Concession Agreement], nor (ii) pertains exclusively to a lane that is subject to a [Permitted Closure] to which such [Availability Fault] is directly related. When there is a cure period associated with an [Availability Fault], and such [Availability Fault] is not remedied within that cure period, then such [Availability Fault] shall be deemed to have commenced as an [Unavailability Event] from the moment it first occurred. For purposes of clarification, this means that when the [Unavailability Factors] are determined, there will be deemed to be no cure period if the [Availability Fault] is not remedied within the cure period provided (if any).*

The example introduces the concept of a Permitted Closure. Typically, planned maintenance, Compensation Events and emergencies are considered to be Permitted Closures, and therefore do not lead to Unavailability Adjustments. An example of a definition of Permitted Closure follows.

> ***Permitted Closure*** *means the occurrence of any one or more of the following events or conditions:*
>
> *(a)* *a [Closure] specified, caused or ordered by, and continuing only for so long as required by, [the Department] or any governmental entity, or a utility owner performing work under a permit issued by [the Department], except to the extent such [Closure] is the result of the negligence, willful misconduct, or breach of [Applicable Law] or contract, by [Developer] or any [Developer-Related Entity];*
>
> *(b)* *[Closures] for performance of properly scheduled and executed planned maintenance;*
>
> *(c)* *a [Closure] due to a [Compensation Event] or [Delay Event], provided the [Developer] is using commercially reasonable efforts to: (i) mitigate the impact of the [Compensation Event] or [Delay Event]; (ii) reopen the affected segment(s) as quickly as possible to traffic during [High Priority Hours] and [Mid Priority Hours]; and (iii) minimize the impact of [Developer's] activities to traffic flow during such [Hours];*
>
> *(d)* *a [Closure] due to an [Emergency] that is not the result of the negligence, willful misconduct, or breach of [Applicable Law] or contract by the Developer or any Developer-Related Entity nor considered a Compensation Event or Delay Event, provided Developer is using commercially reasonable efforts to: (i) respond to the Emergency in accordance with the requirements of the [Contract Documents]; (ii) mitigate the impact of the [Emergency]; (iii) reopen the affected segment(s) as quickly as possible to traffic during [High Priority Hours] and [Mid Priority Hours]; and (iv) minimize the impact of [Developer's] activities to traffic flow during such hours; or*
>
> *(e)* *a [Closure] necessary to construct a permanent repair of damage caused by an [Emergency] that is not the result of the negligence, willful misconduct or breach of [Applicable Law] or contract by the Developer or any Developer-Related Entity or considered a Compensation Event or Delay Event, provided [Developer] is using commercially reasonable efforts to: (i) reopen the affected segment(s) as quickly as possible to traffic during [High Priority Hours] and [Mid Priority Hours] with temporary repairs; (ii) minimize the impact of [Developer's] activities to traffic flow during such hours; and (iii) construct the permanent repair of damage during [Low Priority Hours].*

In other jurisdictions the concept of Permitted Closures does not exist, meaning that an Unavailability Event caused by these same circumstances lead to Unavailability Adjustments, which are then repaired in the Compensation Event or Delay Event. The idea in that approach is that the payment mechanism is never "switched off", thereby creating a continuous incentive to perform. The effective outcomes of both approaches are very similar.

O&M Violation Adjustments

In addition to keeping the Project available, the Developer will be required to operate, maintain and renew the Project in accordance with the Technical Requirements. O&M Violations are triggered by noncompliance of the contractual obligations set forth therein. Departments typically distinguish categories of O&M Violations, depending on the significance of the violation requirement. Each O&M Violation classification has an associated O&M Violation Adjustment. Some Availability Payment Concession Agreements have this system both before and after completion, though it usually applies only to violations that affect existing Facilities. Furthermore, some Availability Payment Concession Agreements require the Developer to provide backup, in Microsoft Excel or other agreed spreadsheet format, of quarterly O&M Violation Adjustments and Unavailability Adjustments to ensure invoice accuracy and timely auditing of invoices.

Most O&M Violation systems also specify a cure period and an interval of recurrence. An O&M Violation that is cured within the applicable cure period will not be assessed the corresponding O&M Violation Adjustment. After the cure period, any O&M Violation that is not cured within its respective interval of recurrence will be deemed to occur anew and assessed another O&M Violation Adjustment and such new occurrence shall have no cure period.

The calculation of Unavailability Adjustments and O&M Violation Adjustments (together, "Payment Adjustments") is often expressed in a formula. Below is an example:

Payment Adjustments *shall be calculated as follows:*

$$QPA_{q,y} = QUA_{q,y} + QVA_{q,y}$$

Where:

QPAq,y = [Quarterly Payment Adjustment] for [Quarter [Q]] in [Year [Y]];
QUAq,y = [Quarterly Unavailability Adjustment] for [Quarter [Q]] in [Year [Y]]; and
QVAq,y = [Quarterly O&M Violation Adjustment] for [Quarter [Q]] in [Year [Y]].

Quarterly Unavailability Adjustments

The [Quarterly Unavailability Adjustment] shall be calculated as follows:

$$QUA_{q,y} = \sum_{hour\ h=1}^{hq} HUA_h$$

Where:

$$HUA_h = \sum_{segment\ s=1}^{n} \left[HUF_{h,s} * SWF_{h,s} * TWF_{h,s}\right] * \frac{MAP_y}{365 * 24}$$

QUAq,y = [Quarterly Unavailability Adjustment] for the [Quarter [Q]] in [Year [Y]];
HUAh = [Hourly Unavailability Adjustment] for the [Hour [H]];
HUFh,s = [Hourly Unavailability Factor] for [Segment [S]], [Hour [H];

SWFh,s = [Segment Weighting Factor] for [Segment [S]], [Hour [H]]; and
TWFh,s = [Time Weighting Factor] for [Segment [S]], [Hour [H]].
MAPy is the [Maximum Availability Payment] for that [Fiscal Year] indexed for inflation.

Quarterly O&M Violation Adjustments

The [Quarterly O&M Violations Adjustment] shall be calculated as follows:

$$QVA_{q,y} = \sum_{i=1}^{n} VA_{hi,q}$$
$$OMV$$

Where:
QVAq,y = [Quarterly O&M Violations Adjustment] for the [Quarter [Q]] in [Fiscal Year [Y]]
and
VAi,q = [O&M Violations Adjustment] for each applicable [O&M Violation] [I] in [Quarter [Q]].

5.1.5 Sizing Financial Incentives

Determining the "right" level of deductions is one of the most difficult aspects of the preparation of the payment mechanism. The size of the deductions should be such that the Developer makes the right decisions; in other words, that the interests of the Department and the Developer are aligned. Key is to shape the penalty system in such a way that it incentivizes the Developer to cure the deficiency/default as soon as possible. The Department and its financial advisors can "calibrate" the ideal amounts of deductions on the basis of scenario analyses of the payment mechanisms in the Project financial model. Often deductions are calculated to measure the actual loss incurred, not merely penalties. In many States, deductions that are not a reasonable approximation of an actual loss (or are otherwise determined to be penalties) may be unenforceable as a matter of law.

Many payment mechanisms include "ratchet mechanisms", in which long delay in fixing a failure or repeated recurrence of a failure leads to higher deductions. These mechanisms help ensure that structural issues are properly dealt with and can also serve as a safety net in case the initial incentive proves ineffective.

In most payment mechanisms penalties and deductions are irreversible. Some mechanisms have the opportunity to reclaim the imposed penalties and deductions in case of good performance in later periods. This "reclaim" system is a little more complicated to manage, but is generally seen as reasonable and does typically reduce the overall negative financial incentives and therefore the risk profile from the perspective of the Developer.

In some jurisdictions, Departments apply grace periods for deductions, typically in the first year of operations (i.e., during the "bedding in" period). In that way, both the Department and the Developer can get used to the financial incentive system, without serious financial consequences.

Departments can choose to include a cap on the amount of deductions and penalties for poor performance, reducing the risk for the Developer and creating a more stable cash flow. This should therefore create more certainty with respect to the Developer meeting its debt service obligations, thereby improving the financeability of the Project.

5.1.6 Escalation

A critical element in structuring a Concession Agreement is the allocation of inflation risk. For long-term Concession Agreements, this can be a significant risk, and transferring it will have a price. Typically, Departments include some form of "inflation correction" in the Concession Agreement, creating a means of mitigating the risk of inflation and thereby reducing the risk premium that the Developer needs to include in the bid.

Typically, only a percentage of the Availability Payment needs to be corrected for inflation to mirror the underlying cost increases, because only part of the Developer's costs, such as for operations and maintenance, are variable. Two key variables determine the inflation risk allocation 1) the percentage of the Availability Payment that will be indexed and 2) the indicator that will be used for escalation. The most common options are:

- Escalation is based on a predetermined fixed value, for example 2.5%. The advantage to the Department of this approach is that the resulting cash flow is predictable. In addition, this simplifies comparison of bids, because bidders are not allowed to come up with their own escalation solutions. The disadvantage is that it is still transferring some or significant inflation risk to the Developer, because there is no link with actual cost increases.
- Escalation is based on an indexation formula – including percentages of the Availability Payment to be escalated and a set of published indicators – set by the Department. The advantage of this approach is that the Department remains in control and minimizes the risk of unexpected indexation formulas. The disadvantage is that it most likely leads to suboptimal inflation protection for the Developer, because it is possible that the Department's escalation formula is not closely linked with actual cost increases of the Developer's financial proposal. The Developer will therefore still have to price the cost increase risk in its bid. This risk may be decreased if the Department seeks each proposer's view as to the "basket" of indices that will most closely correlate to its variable costs.
- Escalation is based on an indexation formula set by the Developer. This approach may lead to the optimal protection against inflation risk for each Developer, thereby allowing the Developer to effectively transfer the long-term price increase risk to the Department. At the same time, accepting this risk means that the cash flow for the Department becomes even less certain than in option 2, as the Department will not know which index is relevant for purposes of projecting its costs until the winning Developer is selected. Moreover, unless this approach is accompanied by clear conditions and a description of a fair comparison methodology, there is a risk of unintended escalation formulae and incomparability of bids.

Generally speaking, option 1 is the best solution and option 2 is the second best if the Department is not interested in accepting any long term cost risk increase and option 3 is the best solution if the Department wishes to create the opportunity for the Developer to transfer this risk back to the Department. Escalation formulae could also be a combination of these options, depending on the nature of the Project and the needs of the Department.

An example of a simple escalation clause follows:

MAPy is the [Maximum Availability Payment] for that [Fiscal Year] indexed for inflation according to the following formula:

$$MAP_y = MAP_{base} * k * \frac{CPI_y}{CPI_{base}} + MAP_{base} * (1 - k)$$

Where:

MAPBase = *the Maximum Availability Payment] as of [Date X] which is US$ x.*

k = *Percentage indicating the portion of the [Maximum Availability Payment] indexed to the [Consumer Price Index];*

CPIBase = *the [Consumer Price Index] as of the [Date X] reference month which is y.*

CPIy = *the [Consumer Price Index] as of the reference month that is available in the year that is immediately prior to the commencement of [Fiscal Year] [Y] (CPIy shall apply to all calculations relating to [Fiscal Year] [Y]);*

y = *the [Fiscal Year] for which the inflation-adjusted [Maximum Availability Payment] is being calculated; and*

The [Availability Payments] in any [Fiscal Year] will never be less than zero or greater than the [Maximum Availability Payment] for that given [Fiscal Year].

5.1.7 Availability Payment Funding

The debt financing of the Developer is secured by the payments to be made by the Department under the Availability Payment Concession Agreement. Therefore, a critical element for the Developer and its financing parties will be the nature of that underlying Department obligation. In many jurisdictions, payment by the Department is subject to appropriation by the legislature. The Developer and its Lenders will assess the degree of appropriation risk with respect to such payment—i.e., what is the legal obligation of the Department to pay the required amounts and what remedies would the Developer and its Lenders have in the event such payments are not appropriated and paid?

Even though the Availability Payments can be backed by a high quality commitment, the payments are normally subordinate to the Department's existing debt obligations. Regardless of payment priorities, however, most Departments are mindful of over-committing future funds.

Furthermore, the private contractor and its Lenders will assess the source of such payments by the Department —i.e., whether they are paid from Project revenues or other sources, such as general revenue of the Department, grants from the Federal and State government or tax revenues, and what legal restrictions, if any, may apply to such funds. The higher the credit quality of the Department's payment obligations, the better the resulting pricing for the debt will be. Such pricing should flow through to better pricing for the department for the Availability Payments that are proposed.

5.2 Performance Monitoring

Concession Agreements primarily use a Non-Compliance Points system to enforce performance monitoring. As discussed in Chapter 1 (*Availability Requirements and Availability*), performance standards address the quality of the Service (for example, public outreach and environmental compliance). Concession Agreements typically require the Developer to meet certain minimum performance standards, and a failure to do so will typically result in the accumulation of Non-Compliance Points.

The Concession Agreement typically includes a representative, but not exhaustive, list of minimum performance standards and classifies them in different categories (varying in terms of significance). Most Concession Agreements prescribe processes for penalizing non-compliance, but rewards for superior performance are rarely used. The failure to meet a minimum performance standard will be reflected in the accumulation of Non-Compliance Points. The Concession Agreement defines the procedures to report and

record each failure, cure periods that may apply before such points are assessed, and the maximum number of Non-Compliance Points the Department may assess for each failure. Departments should carefully analyze the types of outcomes they wish to achieve with any given Project and the relative severity of failing to achieve them when compiling the performance points system applicable to a Project.

The accumulation of Non-Compliance Points by the Developer may trigger some or all of the following remedies:

- The Department may assess performance deductions to the Availability Payment;
- The Department may be permitted to increase the level of monitoring of the Project, for which the Developer will be required to compensate the Department;
- The Department may require the Developer to prepare and submit a remedial plan for the Department's approval, setting forth a schedule and specific actions the Developer will undertake to improve its performance, such as improvements to quality management practices, plans, and procedures; changes in its organizational and management structures; increased monitoring and inspections; changes in key personnel; and the replacement of Subcontractors; and
- In the event of systemic performance failure, termination of the Concession Agreement for Developer Default.

A specific failure that is often included in the payment mechanism is related to the proper functioning of the performance monitoring system. Typically, the Department largely relies upon the Developer for monitoring its own performance. If the Developer, however, fails to report Unavailability or non-compliance events, the monitoring system proves unreliable. This is often seen as a major failure, leading to non-compliance points—above a predefined threshold—resulting in significant financial penalties. Although the Department relies upon the Developer's self-monitoring, the Department may audit the Developer and assess Non-Compliance Points on its own initiative.

Departments often wish to retain a certain degree of flexibility with respect to the financial incentives and therefore often have the right to revise the noncompliance points table. This is particularly relevant because the functioning of the payments mechanism is not always predictable or because performance indicators evolve, which may create the need to revisit and revise the mechanism from time to time. The right to revise the mechanism is not meant to create new obligations, however, but rather to allow for new ways to measure existing obligations.

5.3 Base Case Financial Model Adjustments

The Concession Agreement will require the Developer to deliver and maintain a base case financial model containing all of the cash flow projections (including all costs and revenues) and calculations relating to the Project ("Base Case Financial Model"). This Base Case Financial Model is the successor to the financial model that the Developer submitted as part of its bid for the Project. On the Financial Closing Date, the Base Case Financial Model may be placed in an escrow in order to avoid unauthorized tampering or modification. After the Financial Closing Date, updates and adjustments to the Base Case Financial Model are allowed only under certain conditions and are generally subject to approval under the Concession Agreement by both the Developer and the Department. Additionally, Lenders may separately require similar approval rights under the relevant Financing Documents.

Updates to the Base Case Financial Model consist of changes performed to reflect the financial consequences of certain events, including the incorporation of historical information. Typically, updates are performed in order to account for the impact of Compensation Events, Delay Events, refinancing events, annual updates of

audited financial information, and other circumstances that are deemed appropriate by the Department and the Developer.

Adjustments to the Base Case Financial Model can also include changes to assumptions, logic, mathematical formulas/calculations and forecasted information resulting from material changes to the Project.

5.3.1 *Definition of the Base Case Financial Model*

Developed in a spreadsheet computer program, typically Microsoft Excel™, the Base Case Financial Model is a set of calculations that incorporate standard accounting principles as well as unique features reflecting the specific P3 transaction. Often developed as a workbook, the Base Case Financial Model may consist of tables or spreadsheets that describe revenues, operating and maintenance costs, capital costs, debt repayment, equity returns, Project cash flows, cash flow prioritization, tax treatments, coverage ratios and other financial statistics. They usually include sections on assumptions and may summarize results in numbers and/or charts.

The Base Case Financial Model helps Developers create an optimal financial proposal in a competitive procurement and demonstrate to the Department that the proposed financing package makes financial sense. Furthermore, it can be used to demonstrate to 1) debt providers—banks and capital markets intermediaries—that loans and bonds can be repaid under reasonable circumstances, and 2) equity investors that their returns throughout the life of the Concession Agreement will yield an adequate return on their investments.

In addition, the Base Case Financial Model is used to determine the financial consequences of certain events, including refinancing, relief and compensation events over the life of the P3 project. The advantage of using a financial model to determine those financial consequences is that they precisely reflect the financial consequences in great detail and therefore can lead to a "fair price". The downside of using a financial model is that its operation can become very complicated. Some international Departments are concerned that Developers may take advantage of their lack of expertise with financial models, and therefore decide not to make the Base Case Financial Model part of the Concession Agreement. Instead, they use simpler algorithms to calculate the financial consequences of refinancing and Compensation Events or Delay Events. However, the market standard in the U.S. and internationally now is to make the Base Case Financial Model part of the Concession Agreement and agree upon clear and fair procedures to manage the model. The sections below detail how the Base Case Financial Model is handled in the Concession Agreement and how it addresses key events.

5.3.2 *Handling of the Base Case Financial Model*

The Base Case Financial Model is often submitted as part of a Developer's proposal in hard copy in the appendix of a signed Concession Agreement, with the software version maintained in an escrow (see below). The Base Case Financial Model in the Concession Agreement is used in commercial close and usually updated at financial close. Neither the Department nor the Developer can change the Base Case Financial Model assumptions or formulas without notifying the other party.

The Base Case Financial Model contains key Project financial and economic assumptions, including the following:

- Key dates, including when Availability Payments are expected to be made;
- Revenue projections;
- Operations and maintenance estimates;
- Description of capital expenditures and required technology enhancements;
- Debt service coverage ratios ("DSCRs") and other debt statistics;

- Equity IRR;
- Debt to equity ratios;
- Amounts held in debt service, Major Maintenance Reserve Account, Handback Reserve Account, and other accounts; and
- Hedging instruments (such as for interest rates), if appropriate.

Often the two most important parameters in the Base Case Financial Model are the DSCRs and the Equity IRR.

The preparation and submission of the Base Case Financial Model imposes obligations upon the Developer. In many Concession Agreements, the Developer must represent and warrant to the Department that the Base Case Financial Model and any subsequent changes:

- were prepared in good faith;
- fully disclose all cost, revenue and other financial assumptions that the Developer has used;
- were audited by an independent model auditor;
- take into account all requirements imposed by Applicable Laws related to taxes; and
- contain formulas that are the same as those that the Developer uses internally and in making disclosures to potential equity investors and Lenders.

Because the Base Case Financial Model is crucial in determining the financial consequences of events throughout the lifetime of the Concession Agreement, both the Department and the Developer have an interest in fair and realistic procedures for updates and/or adjustments. The procedures typically include a review by an independent auditor (including allocating responsibility for the fees and expenses of the auditor) and requirements resolving disputes arising out of the Base Case Financial Model. The Concession Agreement aims to ensure easy access to the Base Case Financial Model for both the Department and the Developer, and therefore will often prohibit password-protected files, or macros or hidden rows, columns, cells or worksheets.

An escrow agent often holds the Base Case Financial Model, financial modeling data, and any updates in escrow. Usually the Department, the Developer and their representatives have the right to examine the model at their convenience. Besides ensuring that the Base Case Financial Model is not changed, the Base Case Financial Model is kept with an escrow agent because it is often considered confidential and it contains significant, commercially sensitive information, which helps the Department avoid unintentional disclosures.

Financial modeling data can include:

- All back-up information which form the basis for Developer's assumptions, estimates, projections, and calculations;
- A data book fully describing all assumptions underlying the estimates, projections, and calculations;
- The step-by-step instructions on the procedure to run and to optimize the Base Case Financial Model formulas; and
- All other supporting data.

5.3.3 Using the Base Case Financial Model

Updates to the Base Case Financial Model consist of changes performed to reflect the financial consequences of certain events, including the incorporation of historical information. Typically, updates are performed in

order to account for the impact of Compensation Events, Delay Events, refinancing events, annual updates of audited financial information, and other circumstances that are deemed appropriate by the Department and the Developer. By comparison, adjustments to the Base Case Financial Model can include changes to assumptions, logic, mathematical formulas/calculations and forecasted information resulting from material changes to the Project, and generally require the agreement of both the Developer and the Department.

Adjustments Between Commercial Close and Financial Close

The first time the Base Case Financial Model is used is to recalculate the Availability Payment between bid submission and financial close on the basis of the changes in interest rates. The Base Case Financial Model is updated at financial close to take into account such changes, based on an established protocol in the Concession Agreement.

An example of such language is shown below.

> *… the [Maximum Availability Payment (MAP)] shall be adjusted (upward or downward) to offset the financial impact (positive or negative) to the [Developer's] financial plan of the actual interest rate change, if any, in all applicable benchmark interest rates between [Date [D]] and the earlier of (a) six months after the [Effective Date] or (b) the date of [Financial Close], such that the lowest possible [MAP] is achieved, while the [original Equity IRR] is maintained and the minimum prevailing debt covenants established in the funding documents are not violated.*

The Developer is usually obligated to supply the Department with relevant information detailing adjustments to the Availability Payment, which can include credit spread, swap fees, swap margin data, base interest rates, and base credit spreads, allowing time for the Department to review, and in some cases, approve them. Departments may also choose to obtain information from third parties to check this data or to use their data instead to adjust the Availability Payment. Furthermore, the Developer shows the Department how the calculations were made in an updated Base Case Financial Model.

To reduce the risk profile of the Department in these adjustments between commercial and financial close, a Department may limit the adjustment of the Availability Payments by a certain percentage that is established in the Concession Agreement or the bidding documents. A Department may also reduce this risk by limiting the period between commercial and financial close.

Refinancing Events

Concession Agreements in the United States and internationally use financial models to calculate how refinancing gains should be shared between the Department and the Developer, with some Concession Agreements sharing the gains equally between the Department and the Developer. The basis of this calculation typically is an updated Base Case Financial Model, reflecting all the actual changes in the Project just before the refinancing ("Pre-Refinancing Base Case Financial Model"). This will then be compared against an updated Base Case Financial Model that incorporates the effects of the refinancing ("Post-Refinancing Base Case Financial Model"), arriving at the exact same Equity IRR as just before the refinancing. The actual financial effect of the refinancing is typically calculated by subtracting the net present value of the distributions to Equity in both financial models. Because the Pre-Refinancing Base Case Financial Model is updated to reflect actual conditions immediately prior to the refinancing and is compared to the Post-Refinancing Base Case Financial Model immediately afterwards, the impact of the refinancing is isolated and the calculation is not influenced (positively or negatively) by other events of financial significance such as cost overruns during construction.

An example of how this is documented in a Concession Agreement is as follows:

The [Developer] shall provide the following information at least 35 days in advance to the proposed date for closing the refinancing:

(a) *The [Base Case Financial Model] with the original projections duly adjusted for any changes in the project structure; ([Department] changes);*

(b) *Details of the actual timing and amounts of [Equity Investments];*

(c) *Details of the actual timing and amounts of distributions to equity from the Effective Date to the Refinancing Date;*

(d) *Information on the actual cash flow of [Developer] from the Effective Date to the Refinancing Date;*

(e) *Term sheet and other relevant information on the terms of the refinancing;*

(f) *A [Pre-Refinancing Base Case Financial Model], which does not take into account the effects of the refinancing, as updated by [Developer] (i) for any changes in the Project and based on the actual performance of the project to the date of calculation and other macroeconomic assumptions and (ii) with projections for the cash flow of [Developer] from the estimated refinancing date to the end of the [Term], including projected equity distributions;*

(g) *A [Post-Refinancing Base Case Financial Model] which fully takes into account the effects of the refinancing as projected on the basis of the term sheet and new funding agreements, as updated by [Developer] (i) for any changes in the project and based on the actual performance of the project to the date of calculation and other macroeconomic assumptions and (ii) with projections for the cash flow of [Developer] from the refinancing date to the end of the term, including projected distributions with the refinancing;*

(h) *A calculation of the refinancing gain based on the above and following the provisions described below; and*

(i) *Information on the assumptions for the projections in the [Pre-Refinancing Base Case Financial Model] and [Post-Refinancing Base Case Financial Model].*

The [Pre-Refinancing Equity IRR] shall be calculated for the entire Term taking into account:

(a) *Timing and amounts of the [Equity Investments];*

(b) *Distributions received by [Equity] up to the estimated refinancing date; and*

(c) *Projected distributions as shown in the [Pre-Refinancing Base Case Financial Model].*

The [Post-Refinancing Equity IRR] shall be calculated for the entire term taking into account:

(a) *Timing and amounts of the investment by [Equity];*

(b) *Distributions received by [Equity] up to the estimated refinancing date; and*

(c) *Projected distributions as shown in the [Post-Refinancing Base Case Financial Model].*

The refinancing gain for any refinancing… will be equal to the greater of zero and [(A-B)-C] where:

A = the net present value of the distributions to be made from the estimated refinancing date to the end of the term as projected in the [Post-Refinancing Base Case Financial Model], discounted using the [original Equity IRR];

B = the net present value of the distributions to be made from the estimated refinancing date to the end of the term as projected in the [Pre-Refinancing Base Case Financial Model], discounted using the [original Equity IRR]; and

C = any adjustment required to raise the [Pre-Refinancing Equity IRR] to the [original Equity IRR].

Relief and Compensation Events

The Base Case Financial Model is also used to help calculate compensation owed to the Developer if Availability Payments are delayed due to Compensation Events. The Base Case Financial Model shows when such payments should have been made, the amount of principal that was outstanding, and the interest that can be used to calculate the compensation.

Some Departments allow for compensation of the Developer by adjusting the Availability Payments to realize the Equity IRR and to increase DSCRs to the appropriate levels. In this case the Developer demonstrates the amount of compensation it is owed based on the Base Case Financial Model calculations. This is documented as follows below.

The [Developer] shall provide the [Department] with the total amount of compensation that the [Developer] considers owed to restore the [Equity IRR] and debt service ratios in the [Base Case Financial Model] as a result of the [deferring compensation], including supporting calculations and documentation. If the [Department] disagrees with the amount sought by [the Developer], [the Department] shall pay the undisputed portion to the [Developer], and any amount determined to be due pursuant to [Dispute Resolution Procedures] will be paid in accordance with [Section [X]].

If an event occurs for which the Department is entitled to compensation from the Developer, then the Base Case Financial Model may be used to run projections and calculations and produce an update. For instance, if the Developer proposed a change in the Project and it results in net savings to the Developer, then the Department may be compensated taking into account the Base Case Financial Model, including the Equity IRR and DSCRs.

Early Termination

If the Department terminates the Concession Agreement for convenience, the compensation of the Developer will often also be based upon the Base Case Financial Model.

The [Termination for Convenience] amount shall be calculated as follows:

(a) The project debt termination amount; plus

(b) The amount of all distributions to equity members or their affiliates anticipated in the [Base Case Financial Model] to be paid between the early termination date until the date of expiration of the term, each amount discounted back at the [Original Equity IRR] from the date on which it is shown to be payable in the [Base Case Financial Model] to the early termination date.

Using the Base Case Financial Model Efficiently

Because of the costs of updating the Base Case Financial Model, including the cost of Department and Developer staff and advisors' time, some Concession Agreements contain mechanisms to limit financial updates to material and major events or on a periodic basis.

In addition, certain scenarios outlining the changes in the Availability Payment can be established at transaction close. For instance, if it is likely that the Department will require the Developer to make certain small, additional capital expenditures, then the consequences of these expenditures on the Availability Payment can be determined before financial close.

6 Insurance

6.1 General Insurance Requirements

The Concession Agreement will typically specify minimum insurance requirements applicable to the Developer and its Subcontractors during both the construction period and the operating period of the Project. The scope and amounts of insurance carried by the Developer are often of interest to the Department because they represent a significant resource on which the Developer will rely when unexpected and potentially expensive events occur. Unlike the construction performance security, however, which is not intended to be called upon except in severe circumstances, the insurance coverage is a resource upon which the Developer and its Subcontractors are expected to rely. Without adequate insurance coverage, there is an increased risk that the Developer may become unable to perform its obligations and/or enter bankruptcy. In addition, many of the other provisions of the Concession Agreement, such as the scope of Compensation Events and Delay Events, are drafted on the presumption that the Developer has adequately insured itself against the risks it is required to bear. As a result, the Department will typically want to be sure that the terms of the Concession Agreement require minimum levels of insurance coverage to be carried by the Developer.

The insurance policies that the Department will require the Developer to obtain and maintain during the construction and operating phases of the Project are typically listed in an exhibit to the Concession Agreement. During the construction phase of the Project, the required coverage will often include builder's risk, commercial general liability, pollution liability, professional liability, worker's compensation, automobile liability, excess/umbrella liability, railroad protective liability and marine or aviation liability if appropriate. During the operating phase of the Project, the required coverage will often include "all-risk" property coverage, commercial general liability, pollution liability, professional liability, worker's compensation, automobile liability, excess/umbrella liability, railroad protective liability and marine or aviation liability if appropriate. Additional types of insurance coverage may be specified depending on the needs of the Project or the environment in which it will be constructed. The insurance requirements will also typically include the minimum amount of the required coverage, requirements to name entities (such as the Department and, in some cases, Lenders) as additional insured parties, and other terms and conditions specific to each type of insurance coverage,

In addition to minimum insurance requirements, the Concession Agreement will often:

- specify a minimum financial size category rating according to the relevant insurance rating system for all insurers providing the required coverage;
- require evidence, delivered to the Department annually, that the required insurance policies are in place; and
- set out a procedure for adjusting minimum coverage amounts, if appropriate, from time to time.

The minimum requirements and other insurance terms will differ during the construction period and the operating period due to the different risks that the Project may encounter, and both sets of requirements should be developed in consultation with an insurance advisor experienced in P3 transactions that is under contract with the Department.

Many Concession Agreements will also state that if the Lenders require stricter insurance coverage than the Department, then fulfilling those requirements will be deemed to satisfy the Developer's obligation under the Concession Agreement.

6.2 Benchmarking of Insurance Premiums

The Maximum Availability Payment that the Developer is eligible to earn in an Availability Payment transaction is expected to cover all of the Developer's costs to meet its obligations under the Concession Agreement. The Developer is therefore responsible for managing its costs and is not typically permitted to seek additional compensation solely because of a cost increase. In the case of insurance premiums, however, there is a small but real risk that unforeseeable circumstances in the global insurance markets, like the September 11 attacks or the impact of Hurricane Katrina, can lead to significant short-term increases in insurance premiums.

Departments could require the Developer to take all risk associated with these unexpected increases, but because the likelihood of their occurring is low while the impact is quite significant, this will most likely result in the Developer maintaining a contingency, which is paid for by the Availability Payment, for an event that will probably not occur. As a result, Departments typically agree to provide additional compensation to the Developer if premiums increase by more than a certain percentage above an agreed benchmark, often by reference to a percentage of the premium cost above a risk sharing threshold. The risk sharing threshold is typically set at a level which is high enough to capture genuinely unique events and not ordinary shifts in the cost of insurance (the risk of which will remain with the Developer). The benchmarks are typically set with the advice of an insurance consultant prior to the submission of bids for a Project so that bidders are aware of the maximum volatility they will face in these costs, and actual costs are compared to the benchmarks at regular intervals during the O&M Period of a Project (typically every three years).

The premium price increases that trigger these protections are typically temporary shifts, rather than permanent increases in insurance costs. As a result, once the Department's obligation to pay a portion of the insurance premiums is triggered, the Developer will be required to enter the market at regular intervals to determine whether the price increase persists. If the cost of insurance premiums falls below the benchmark, the Department will no longer be required to make additional payments.

A similar mechanism in favor of the Department is also often included in a Concession Agreement, whereby the Department will receive a reduction in the Availability Payment in the event of an unusual decrease in insurance premium costs.

An example provision providing for additional compensation when the insurance premium benchmarks are exceeded is set forth below:

> *(a)* *If, following the completion of the [Insurance Premium Benchmarking Procedure], it is agreed or determined that there is an [Exceptional Cost], the [Department] shall within thirty (30) [Business Days] of completion of the [Insurance Premium Benchmarking Procedure] make a one-off lump-sum payment to the [Development Entity] equal to eighty-five percent (85%) of the [Exceptional Cost].*
>
> *(b)* *If, following the completion of the [Insurance Premium Benchmarking Procedure], it is agreed or determined that there is an [Exceptional Saving], the [Development Entity] shall within thirty (30) [Business Days] of completion of the [Insurance Premium Benchmarking Procedure] make a one-off lump-sum payment to the [Department] equal to eighty-five percent (85%) of the [Exceptional Saving].*
>
> *(c)* *Following the completion of the [Insurance Premium Benchmarking Procedure], if it is agreed or determined that there is neither an [Exceptional Cost] nor an [Exceptional Saving], any [Insurance Cost Differential] shall be borne by or benefit the [Development Entity].*
>
> *(d)* *For purposes of this [Concession Agreement]:*
>
> *(i)* ***Base Benchmarked Insurance*** *Cost means $[●].*

(ii) ***Exceptional Cost*** *means for an [Insurance Review Period], the extent to which there is an [Insurance Cost Increase] which exceeds 30% of the [Base Benchmarked Insurance Cost] for that [Insurance Review Period].*

(iii) ***Exceptional Saving*** *means for an [Insurance Review Period], the extent to which there is an [Insurance Cost Decrease] which exceeds 30% of the [Base Benchmarked Insurance Cost] for that [Insurance Review Period].*

(iv) ***Insurance Cost Decrease*** *means the [Insurance Cost Differential] if the value is less than zero, multiplied by minus one.*

(v) ***Insurance Cost Differential*** *shall, subject to the [Insurance Premium Benchmarking Procedure], be determined as follows:*

[Insurance Cost Differential] = ([ABIC] – [BBIC]) - (+/-[PIC]),

where:

(a) ABIC is the [Actual Benchmarked Insurance Cost];

(b) BBIC is the [Base Benchmarked Insurance Cost]; and

(c) PIC is any [Project Insurance Change].

(vi) ***Insurance Cost Increase*** *means the [Insurance Cost Differential] if the value thereof is greater than zero.*

(vii) ***Insurance Review Period*** *means the three year period beginning on the [Substantial Completion Date] and each subsequent three year period thereafter.*

6.3 Uninsurable Risks

In addition to the risk that the cost of insurance may temporarily increase in material and unexpected ways during the life of a Project, Developers also face the possibility that insurers may no longer provide coverage against certain risks the Concession Agreement requires the Developer to insure against. For example, the Concession Agreement may require the Developer to insure against the risk of damage from named windstorms, but insurers may no longer offer such coverage. Given the importance of insurance to any P3 transaction, the existence of such an "Uninsurable Risk" could place the Project in jeopardy if the applicable risk arose.

The concept of an "Uninsurable Risk" should not be confused with Force Majeure Events, however; a Force Majeure Event would not constitute an "Uninsurable Risk" unless the Concession Agreement required the Developer to insure against it and such insurance is not available (as described below). Departments, in consultation with their insurance advisors, do not typically require coverage on terms that cannot be obtained in the market from the outset. Provisions governing Uninsurable Risks are intended to address the possibility that the products and coverage offered in the insurance markets change over time. The minimum insurance requirements set by the Department in the Concession Agreement are likely to be reasonable and appropriate when originally mandated, but over the long Term of a Concession Agreement may be eclipsed by market practice.

An example definition of Uninsurable Risk is set forth below:

> ***Uninsurable Risk*** *means a risk for which:*
>
> *(a)* *insurance is not available to [Developer] in respect of the [Project] in the worldwide insurance or reinsurance markets on the terms required under the [Concession Agreement] with reputable insurers of good standing; or*
>
> *(b)* *the insurance premium payable for insuring that risk on the terms required under the [Concession Agreement] is at such a level that the risk is not generally being insured against in the worldwide insurance or reinsurance markets with reputable insurers of good standing by contractors in relation to transportation-related infrastructure projects in North America.*

If a risk becomes an Uninsurable Risk, the Department will typically have the right to choose whether to terminate the Concession Agreement and pay compensation to the Developer (see Section 6.4 below) or act as the insurer of last resort. In case of the latter, the Developer will not be required to pay any premium to the Department for the coverage. Instead, the Department is typically entitled to reduce the Maximum Availability Payment by the amount of the premium that the Developer was most recently paying for insurance to cover the relevant risk. If the risk occurs, the Department will pay the Developer an amount equal to the insurance proceeds that would have been payable by an insurer had the risk been insured against, though the Developer will be required to pay the applicable deductible.

As is the case with insurance premium benchmarking, if the Department is acting as insurer of last resort because a risk is determined to be an Uninsurable Risk, the Developer will typically be required to enter the market at regular intervals to determine whether the risk continues to be an Uninsurable Risk.

6.4 Unavailability of Insurance Conditions

Concession Agreements will also typically include provisions addressing a similar situation with respect to the requirements of insurance that are unrelated to the risks that must be insured against. For example, the Concession Agreement may require the insurance policies to name certain governmental entities as additional insured parties. If insurers are generally not willing to do so at some point in the future, then the Developer will be unable to meet its obligations under the Concession Agreement.

The Department might be unwilling to terminate the Concession Agreement for such a breach and may elect to waive it; however, under such circumstances the Developer would continue to receive Availability Payments that were sized to include the cost of all such conditions. By contrast, if the Concession Agreement treats such circumstances as an Unavailable Condition, the Developer will not be in breach of the Concession Agreement, but the Department will typically be entitled to reduce the Maximum Availability Payment by the amount of the premium that the Developer was most recently paying for insurance to cover the relevant Insurance Condition.

An example definition of Unavailable Condition is set forth below:

> *(a)* ***Unavailable Condition*** *means the occurrence of either or both of the following:*
>
> *(i)* *any [Insurance Condition] is not available to [Developer] in the worldwide insurance market with reputable insurers of good standing; and/or*
>
> *(ii)* *the insurance premium payable for insurance incorporating such [Insurance Condition] is such that the [Insurance Condition] is not generally being incorporated in insurance procured in the*

worldwide insurance market with reputable insurers of good standing by contractors in North America,

(b) ***Insurance Condition*** *means any terms and/or conditions required to be in a policy of insurance by the terms of the [Concession Agreement], but excluding any risk.*

Unavailable Conditions should be distinguished from Uninsurable Risks. An Unavailable Condition is generally related to the legal and commercial terms of the coverage, whereas Uninsurable Risks are generally related to the scope of risks against which coverage may be taken out. The occurrence of an Unavailable Condition is therefore not as significant to the Project's overall risk profile, since the risks themselves continue to be insured against albeit on different terms. As a result, the Department will not typically be given the option to terminate the Concession Agreement in the event of an Unavailable Condition.

As is the case with insurance premium benchmarking and Uninsurable Risks, if there is an Unavailable Condition the Developer will typically be required to enter the market at regular intervals to determine whether the Insurance Condition continues to be an Unavailable Condition.

7 Contract Term and Nature of the Proprietary Interest

7.1 Contract Term

In most Availability Payment P3s in the United States, the Department will specify the length of the Term of the Concession Agreement at the beginning of the Project procurement. In addition to restrictions in Applicable Law with respect to the maximum permitted Term, the fundamental principle that Departments should bear in mind is that a financeable Project must have a Term that is long enough to permit the Developer to spread out its debt service and other expenses over a sufficient number of years so that the expected Project cash flows cover the debt service and other expenses as they fall due. Consequently, the magnitude of construction costs to be financed and any constraints on the amount of Availability Payments that the Department is permitted or able to pay can play a key role in determining the Term of the Concession Agreement.

Departments should also bear in mind that although Lenders typically require debt to be repaid a few years prior to the expiration of the Term (in order to accommodate the risk of a potential restructuring of the debt at some point), there are limits to the length of time Lenders will wait to be repaid. Unlike in a toll concession Project, the Term in an Availability Payment Project need not extend substantially beyond the original final maturity date of the debt, because the Developer will not need to manage the risk of potentially varying cash flows due to circumstances beyond its control.

Other considerations are relevant to the Department's determination of the Term, such as the nature of the Project assets and the potential cost of the Developer undertaking critical life cycle maintenance to maintain such assets in the condition required to earn the Maximum Availability Payment. Even if it is possible for the Department to pay an Availability Payment that will permit the Developer to pay its debt service, operating and maintenance expenses and earn a reasonable return in a relatively short Term (such as 20 years), other considerations may lead the Department to prefer a longer Term that is subject to additional constraints (e.g., the Availability Payments required to pay such debt, expenses, and equity in a shorter Term would be prohibitively expensive or politically unfeasible). However, in setting a Term that extends over a period of decades, the Department should also take into consideration its loss of direct control over the Project. For example, the Developer could be underperforming, but not to such an extent that a Developer Default would arise. Consumer backlash could lead the Department to voluntarily terminate the Concession Agreement for convenience, although a longer Term in such a scenario could increase the cost of termination.

Potential tax benefits may also play a role in determining the length of the Concession Agreement, although their significance will vary according to a number of considerations, including the tax structuring choices made by the Developer, the rights granted to the Developer with respect to any existing assets in the Project Right of Way, and others. Both the Department and the Developer should consult their financial and tax advisors for advice on the potential tax ramifications of the proposed Term of the Concession Agreement.

One of the key features distinguishing an Availability Payment concession from a demand risk concession is that the Term in an Availability Payment may be measured by a fixed number of years beginning on the Substantial Completion Date, rather than by a fixed number of years beginning on the date when financial close occurs. This difference arises because in a demand risk concession, the Developer may be willing to take on the risk that construction is delayed, because the Term is typically longer overall and revenue may vary considerably from year to year, providing a reasonable likelihood that the debt can be repaid during the Term. In an Availability Payment concession, however, the Developer's maximum possible revenue is fixed so there must be a sufficient number of Availability Payments to match up with the maturity of the debt.

An example of the definition of the Term in an Availability Payment concession which is measured from Substantial Completion is set forth below:

> *The term of this [Concession Agreement] shall commence on the date of this [Concession Agreement] and shall end on the earlier of (i) the [30th] anniversary of [Substantial Completion] or (ii) the [Early Termination Date].*

The actual length of the construction period in an Availability Payment can therefore have an impact on the Term. If construction takes longer than expected, then the ultimate end of the Term of the Concession Agreement will occur later. Conversely, if construction is completed sooner than projected, the Term may end sooner. In such circumstances, the overall number of Availability Payments (and therefore the overall amount that may be earned by the Developer) will not change, but their timing will. Departments should therefore consider whether budgetary or other constraints place limits on their ability to pay Availability Payments earlier than scheduled, and if so, include within the Concession Agreement contractual limitations that discourage the Developer from early completion.

However, there are Availability Payment Concession Agreements that do not adopt this approach and instead have a fixed Term that begins on the date of financial close. In these transactions, delays in construction will reduce the number of Availability Payments that can be earned by the Developer. Lenders will therefore want to be confident that the debt is scheduled to be repaid early enough in the Term so that even if delays do occur, the value of the Availability Payments to be paid is sufficient to repay the debt in full. Conversely, the Department will be more concerned about the risk of early completion, since it will result in a higher number of overall Availability Payments. The Department may be happy to pay more overall in exchange for a Project completed ahead of schedule, but budgeting concerns may require Departments to specify that even if completion occurs early, the Developer will not be entitled to Availability Payments prior to a certain fixed date.

7.2 Nature of the Proprietary Interest

The Developer's "proprietary interest" refers to the extent to which the Developer has a tangible or intangible interest in the Project or the underlying real estate. This issue manifests itself when determining the legal means by which the Developer is granted the access rights needed to perform its obligations under the Concession Agreement. Broadly speaking, there are two principal means by which the Developer is afforded these rights: (i) a leasehold interest in the underlying real estate; and (ii) a contractual license/permit to use.

From a practical perspective, both approaches give the Developer substantially similar rights to access the Project and perform all of its obligations under the Concession Agreement. As a general rule, however, Departments are often reluctant to grant leasehold interests in their highways (the concern being that the grant of a leasehold interest implies that legal ownership of the highway has in some way been transferred to the private sector). Additional practical and legal considerations often influence the decision on which approach to take, such as:

- Taxes – a leasehold interest may be subject to State or local real property tax, transfer tax, and recordation tax, whereas an intangible right (such as license or permit to use) may not be subject to such taxes (or may be subject to similar taxes in lower amounts);
- Legal Rights – in some jurisdictions, a lessee may have the benefit of legal rights and remedies that both undermine the traditional risk allocation in a Concession Agreement and cannot, as a matter of law, be waived; and

- Underlying Property Interest – the Department may not be capable of granting a leasehold interest to the Developer in respect of the entirety of the Project. Although significant sections of the right of way for the Project will typically be owned by the Department, it is not uncommon for the Department to be incapable of granting a lease in respect of material sections of the right of way, particularly in respect of those sections of the right of way that are secured via access rights granted by way of contract with third parties (e.g., an easement granted to the Department to establish a bridge crossing a third party's property).

8 Supervening Events

8.1 Introduction

During the Term, the Developer may encounter events or circumstances that negatively impact its ability to perform its obligations under the Concession Agreement within the time and/or cost originally projected for the Project. Some of these risks may be beyond the control of the Developer; others may be best managed by the Department. Accordingly, one of the key exercises in the preparation of any Concession Agreement is to allocate risk appropriately between the parties. To the extent that a risk allocated to the Department under the Concession Agreement arises during the Term, the Concession Agreement will generally provide contractual protection to the Developer.

As the global P3 market has developed (including in the United States), three different categories of these Supervening Events have broadly evolved. Terminology for each category of these events varies from jurisdiction to jurisdiction (and from State to State), but for the purposes of this Guide, these three categories of Supervening Events can be described as follows:

- **Compensation Events** – a discrete set of events for which the Department broadly accepts the risk. To the extent that a Compensation Event arises during the Term, the Developer will typically be afforded sufficient protection in the Concession Agreement to ensure that, as result of the Compensation Event occurring, the Developer is not left in a better or worse position than it would have been had that Compensation Event not occurred. The aforementioned protection typically manifests itself in the form of monetary compensation, relief from deductions to the Availability Payments due to any failure by the Developer to comply with its obligations under the Concession Agreement as a direct result of the Compensation Event and (where necessary) extensions to deadlines that the Developer is required to meet under the Concession Agreement and is delayed in achieving as a direct result of the relevant Compensation Event.
- **Delay Events** – a discrete set of events typically outside of the Developer's control, the risk of which the Developer is (relative to the Department) best placed to manage. Although the Concession Agreement would not typically require the Department to pay monetary compensation to the Developer if a Delay Event occurs, the Concession Agreement would typically relieve the Developer from deductions to the Availability Payments due to any failure to comply with its obligations under the Concession Agreement that arise as direct result of the Delay Event and (where necessary) extend deadlines that the Developer is required to meet under the Concession Agreement and is delayed in achieving as a direct result of the relevant Delay Event.
- **Force Majeure Events** – Force Majeure Events are generally a subset of Delay Events that are likely to have a catastrophic effect on the Project if they occur. In practice, their occurrence is highly unlikely, but termination rights can arise if they do occur.

8.2 The Role of Insurance to Mitigate Against Risk

Insurance is a key risk mitigant in any Project and for this reason it is not unusual for the Department to retain external insurance advisors regarding a Project. The Developer will generally be able to take out advance loss of profit or business interruption insurance to mitigate certain risks or events that arise during the Term, thereby providing a replacement revenue stream for Lenders and other parties dependent on the revenue of the Project. Such insurance will generally be subject to a deductible, so the occurrence of any such event may

result in a material cost to the Developer. It should be noted, however, that such insurance is generally only available where there is physical damage to the Project and for the period that the Project is being reinstated.

Of the P3 transactions that have closed in the United States to date, several have categorized events that are either insurable or best managed by the Developer as Force Majeure Events, meaning that the Developer has the ability to terminate the Concession Agreement if the relevant Force Majeure Event continues for an extended period of time. Additionally, some Projects have included insurable events as Compensation Events, albeit that the level of compensation payable by the Department in the event that such risk arises is generally paid net of any Insurance Proceeds that are capable of being recovered. These approaches generally run contrary to international best practice for two reasons:

- Except in exceptional circumstances (which are generally value-for-money driven), deductible risk and the risk of non-recovery under insurance policies is generally a Developer risk on the basis that the Developer is responsible for managing its insurance program; and
- The non-availability of insurance with respect to a risk should not, of itself, be sufficient justification for a particular risk being treated as a Force Majeure Event.

8.3 Categorization of Supervening Events

8.3.1 Compensation Events

Compensation Events consist of those events that are under the control of the Department, that are most efficiently managed by the Department or the risk of which represents value for money when assumed by the Department[5]. Such events are generally dealt with by compensation methods, rather than by being treated as defaults of the Concession Agreement by the Department, on the basis that termination should, at all times, be a last resort (although the Department may always elect to terminate the Concession Agreement at its convenience if it believes that the continuance of a Compensation Event renders the relationship between the parties untenable). The occurrence and/or continuance of a Compensation Event may cause the Developer to incur (a) a delay in the performance of its obligations under the Concession Agreement, (b) deductions to the Availability Payments, (c) an increase in its costs, or (d) buildup of third-party liabilities. Any compensation mechanism would generally allow the Developer to make a claim against the Department with respect to each of these exposures.

An example definition of Compensation Event is set forth below.

> ***Compensation Event*** *means the occurrence of any one or more of the following events or conditions:*
>
> *(a) Any breach of this [Concession Agreement] by the [Department];*
>
> *(b) Any violation of [Applicable Law] by the [Department];*
>
> *(c) A [Department Change] (other than a [Non-Discriminatory O&M Change]), a [Discriminatory O&M Change] or the issuance of any [Directive Letter];*
>
> *(d) The issuance by the [Department] of any [Safety Compliance Orders];*
>
> *(e) Any [Qualifying Change in Law];*

[5] Please see Section 8.3.4 below for a discussion of those risks that the Developer may encounter during construction that it may, on project specific grounds, represent value for money for the Department to take the financial risk of.

(f) *Any damage, interruption or interference to the [Construction Work] caused by a capital works project (other than the [Project]) by the [Department] or another [Governmental Entity] (or any contractor on behalf of the [Department] or another [Governmental Entity]) in the vicinity of the [Project Right of Way], excluding any [Utility Relocation Work] or work performed by a third party that is the subject of a [Third Party Agreement];*

(g) *The granting of access to the [Project Right of Way] that is subject to restrictions of use and/or right of entry permits in either case not specified in the [Concession Agreement];*

(h) *Any suspension of the [Construction Work] has occurred and is considered a [Compensation Event] pursuant to the [Concession Agreement];*

(i) *The execution by the [Department] of any [Third-Party Agreement] after the [Setting Date] on terms materially inconsistent with the versions referred to in the [Technical Requirements];*

(j) *Any breach of a [Third Party Agreement] by a third party, as applicable;*

(k) *Any amendment or variation to the terms and conditions of any [Third Party Agreement] or [Department-Provided Approval] after the [Setting Date] (including any variation to the terms and conditions of any final [Department Provided Approval] (or the terms and conditions of any extension or renewal thereof) as compared to the draft thereof provided to the [Developer] prior to the [Setting Date], except to the extent that such variation is the result of a difference between the [Reference Design] and the [Developer's] [Final Design]);*

(l) *Any physical damage to the [Project] directly caused by a capital works project (other than the [Project]) carried out during the [Operating Period] by a [Utility Owner] or any other [Person] acting under a permit issued by the [Department] in the vicinity of the [Project Right of Way];*

(m) *Issuance of a temporary restraining order, preliminary or permanent injunction or other form of interlocutory relief by a [Governmental Entity] or court of competent jurisdiction under [Applicable Law] that materially and adversely affects the [Department's] or the [Developer's] performance under the [Agreement], except to the extent resulting from the negligence, willful misconduct, recklessness, breach of contract or [Applicable Law], or violation of a [Governmental Approval], by any [Developer-Related Entity];*

(n) *Issuance of a rule, order or directive from U.S. Department of Homeland Security or comparable [State] agency regarding specific security threats to the [Project] or the region in which the [Project] is located or which the [Project] serves, to the extent such rule, order or directive requires specific changes in [Developer's] normal design, construction, operation or maintenance procedures in order to comply;*

(o) *discovery of archeological, paleontological or cultural resources on the [Project Right of Way], excluding any such resources known to the [Developer] on the [Setting Date]];*

(p) *any release of [Hazardous Substances] into the [Project Right of Way] by the [Department] or any [Department Related Party];*

provided, however, that each of the above events does not arise by reason of:

(1) *the negligence or misconduct of the [Developer] or its [Subcontractors]; or*

(2) *any act or omission by the [Developer] or its [Subcontractors] in breach of the provisions of the [Concession Agreement].*

8.3.2 Delay Events

Delay Events are events typically outside of the Developer's control, the risk of which the Developer is (relative to the Department) best placed to manage. Although the Developer typically takes any financial risk associated with the occurrence of Delay Events, the Concession Agreement would typically provide a reasonable extension to any deadlines that the Developer is required to meet under the Concession Agreement and is delayed in achieving as a direct result of the relevant Delay Event, and would also provide relief from any Developer Default associated with the accumulation of Noncompliance Points or arising as a result of the Delay Event.

An example definition of Delay Event is set forth below.[6]

Delay Event *means the occurrence of any one or more of the following events or conditions:*

(a) *a [Force Majeure Event];*

(b) **[the discovery of an [Unknown Geological Condition] during the carrying out of the [Construction Work]];*

(c) **[the discovery of any [Unknown Endangered Species] during the carrying out of the [Construction Work]];*

(d) **[the discovery of any [Unknown Hazardous Environmental Condition] during the carrying out of the [Construction Work]];*

(e) **[the discovery of any [Unforeseen Utility] during the carrying out of the [Construction Work]];*

(f) **a failure to obtain, or an unreasonable and unjustifiable delay in obtaining, a [Governmental Approval] by the deadlines specified in the [Concession Agreement];*

(g) *any [Change in Law] that is not a [Qualifying Change in Law];*

(h) *any [Non-Discriminatory O&M Change];*

(i) *any release of [Hazardous Substances] into the [Project Right of Way] after the [Setting Date] other than by the [Developer] or its [Subcontractors];*

except, in each case, to the extent attributable to any breach of this [Concession Agreement] by, or any negligent act, or negligent omission of, the [Developer] or any of its [Subcontractors].

** see Section 8.3.3 for a discussion of the circumstances in which the Developer may be granted a Compensation Event relief in respect of these matters.*

8.3.3 Unanticipated Circumstances during Construction

One of the key benefits of a greenfield project being undertaken as a P3 transaction is the transfer of certain risks associated with the Site to the Developer. The transfer of these risks is not wholly unique to a P3 transaction, but it is often more comprehensive than other procurement methods. Given that the level of Site related risks that the Project may be exposed to is, in part, a function of the Developer's design, Departments are typically reluctant to retain any Site related risks (including permitting) in relation to the Project.

Notwithstanding the typical reluctance of Departments to retain Site related risks in respect of the Project, international experience (including in the United States) has demonstrated that the value for money impact of

[6] For further clarification and context, please see also Section 8.3.3 (*Unanticipated Circumstances during Construction*).

transferring Site related risks (including permitting) to the Developer needs to be carefully considered. In practice, the value for money of transferring these risks to the Developer is directly linked to (as relevant):

- the quality (and timing of provision) of relevant information made available to Proposers during the procurement process; and/or
- the extent to which Proposers are permitted to undertake their own Site investigations during the procurement process; and/or
- the extent to which Proposers are permitted to interact with (particularly in respect of permitting and utility related matters) the relevant governmental agencies and/or utility providers; and/or
- the location and/or nature of the Project.

It is extremely difficult to generalize about the extent to which unforeseen geotechnical risk, hazardous substance risk, utility risk and/or unanticipated discovery of endangered species should be treated as Compensation Events or Delay Events in Concession Agreements. By way of example, the Developer is likely to be much more sensitive to unanticipated risks relating to utilities on a downtown project than on a rural project. Similarly, risks associated with delays are far more readily capable of being mitigated on projects where the construction work does not have to be undertaken sequentially, than on projects where it does.

Given that the approach to risk allocation in relation to these matters can vary significantly from project to project the example definition of "Compensation Event" does not include events relating to such risks, but that is not to say that it is unusual for events relating to such risks to be included as Compensation Events. As previously mentioned, the circumstances surrounding any particular project may mean that it represents value for money for a particular risk to be accepted by the Department and included as a Compensation Event.

8.3.4 *Force Majeure Events*

The purpose of force majeure protection is to give the party affected by the relevant Force Majeure Event relief from liability and, if the event continues for an extended period, an opportunity to terminate the Concession Agreement. The definition of Force Majeure Event will generally be limited to those events that will likely have a catastrophic effect on either party's (although generally the Developer's) ability to fulfill its obligations under the Concession Agreement.

An example definition of Force Majeure Event is set forth below.

Force Majeure Event *means the occurrence after the date of this [Concession Agreement] of:*

(a) *war, civil war, invasion, violent act of foreign enemy or armed conflict;*

(b) *nuclear, chemical or biological contamination unless the source or cause of the contamination is brought to or near the Site by [Developer] or its [Key Contractors] or is as a result of any breach by [Developer] of the terms of this [Concession Agreement]; or*

(c) *ionizing radiation unless the source or cause of the ionizing radiation is brought to or near the Site by [Developer] or its [Key Contractors] or is as a result of any breach by [Developer] of the terms of this [Concession Agreement]; or*

(d) *any blockade or embargo;*

(e) *any:*

- *(i) official or unofficial strike;*
- *(ii) lockout;*
- *(iii) go-slow; or*
- *(iv) other dispute,*

generally affecting the construction industry or a significant sector of it;

(f) *any act of [Terrorism],*

> *in each case which directly causes either [Party] (the **Affected Party**) to be unable to comply with all or a material part of its obligations under this Agreement.*

In recognition of the general inability of the Developer to protect itself financially against the occurrence of Force Majeure Events through insurance, as well as the potential for Force Majeure Events to cause substantial damage to the Project and its long-term economic viability, the Concession Agreement will generally include an additional right of either party to terminate the Concession Agreement if a Force Majeure Event continues for an extended period of time. The other party will generally have a right to veto the election to terminate under these circumstances, provided that the vetoing party will be required to pay the cost of restoring the Project and continuing the Concession Agreement. In the event of a termination following an extended Force Majeure Event, the Concession Agreement generally requires the Department to pay termination compensation to the Developer as more fully described in Section 12.4 below.

Some transactions in the United States have also provided for a similar termination right if a Compensation Event or Delay Event continues for an extended period (often lasting several consecutive months). A Department may wish to consider the following points before agreeing to the inclusion of such a provision in a Concession Agreement:

- many Delay Events are insurable and provided the Developer places sufficient loss of revenue insurance to mitigate against the lost Availability Payments suffered as result of the occurrence of an insurable event, there should be no need for either party to have a right to terminate;
- in the event of a substantial loss of the Project, reinstatement of the asset could take a significant period of time, perhaps in excess of the extended period of time that would otherwise give rise for either party to have the right to terminate the Concession Agreement;
- in the international P3 market, the inclusion of such a termination right is the exception, rather than the norm, principally because in the event of a termination, the Department will be required to pay a significant level of termination compensation to the Developer and nevertheless have a need to complete the construction and/or reinstatement of the Project; and
- the benefits of considering the inclusion of such a termination right on a risk by risk basis, rather than generically in respect of all Compensation Events and/or Delay Events.

An example provision permitting termination for an extended Force Majeure Event is set forth below.

> *(a) No [Party] shall be entitled to bring a claim for a breach of obligations under this [Concession Agreement] by the other [Party] or incur any liability to the other [Party] for any losses or damages incurred by that other [Party] to the extent that a [Force Majeure Event] occurs and the [Affected Party] is prevented from carrying out obligations by that [Force Majeure Event]. During the continuance of any [Force Majeure Event], the [Affected Party] shall be excused from performing those of its obligations directly affected by such [Force Majeure Event]; provided, that the occurrence or continuance of any [Force Majeure Event] shall not excuse any [Party] from performing any payment obligations contemplated under this [Concession Agreement] or any other [Transaction Document].*
>
> *(b) On the occurrence of a [Force Majeure Event], the [Affected Party] shall notify the other [Party] as soon as practicable. The notification shall include details of the [Force Majeure Event], including the date of its commencement, evidence of its effect on the obligations of the [Affected Party] and any action proposed to mitigate its effect.*

(c) *As soon as practicable following such notification, the [Parties] shall consult with each other in good faith and use all [Reasonable Efforts] to agree on appropriate terms to mitigate the effects of the [Force Majeure Event] and facilitate the continued performance of this [Concession Agreement].*

(d) *If no such terms are agreed on or before the date which is [one hundred twenty (120) [Days]] after the date of the commencement of the [Force Majeure Event] and such [Force Majeure Event] is continuing or its consequence remains such that the [Affected Party] is unable to comply with its relevant obligations under this [Concession Agreement] for a continuous period of more than [one hundred eighty (180) [Days]] (including, if applicable, the [one hundred twenty (120) [Day]] period referred to above), then either [Party] may terminate this [Concession Agreement] by giving [thirty (30) [Days']] written notice to the other [Party] and the [Department] will pay to the [Developer] the [Extended Force Majeure Termination Sum].*

8.4 Types of Contractual Relief Generally Granted

8.4.1 Notice of occurrence of Supervening Event

The mere occurrence of a Supervening Event generally will not automatically entitle the Developer to relief. The Concession Agreement will often require the Developer to give notice of the occurrence of the Supervening Event within a specified period of time and to provide evidence to support the extent of the relief that is claimed. The burden of proof for any claim will be on the Developer, and the Department will generally be permitted to deny the requested relief if it is not sufficiently supported, subject to the right of the parties to submit any dispute relating to a claim (or denial thereof) to the Dispute Resolution Procedures set out in the Concession Agreement.

An example provision providing for this notice and the provision of associated supporting information, using a Compensation Event as an example, is set forth below.

(a) *If, as a direct result of the occurrence of a [Compensation Event], [Developer] becomes aware that the [Compensation Event] has caused or is likely to cause [Developer] to:*

(i) *fail to commence the [Construction Work] by the [Commencement Deadline] or (following the [Commencement Deadline]) suffer further delay in the commencement of the [Construction Work]; and/or*

(ii) *fail to achieve [Substantial Completion] by the [Baseline Substantial Completion Date] or (following the [Baseline Substantial Completion Date]) suffer further delay in the achievement of [Substantial Completion] and/or*

(iii) *fail to achieve [Final Acceptance] by the [Final Acceptance Deadline] or (following the [Final Acceptance Deadline]) suffer further delay in the achievement of [Final Acceptance]; and/or*

(iv) *fail to comply with its obligations under this [Concession Agreement]; and/or*

(v) *incur costs or lose revenue,*

then the [Developer] is entitled to claim:

a. *an extension to the [Commencement Deadline] and/or the [Long Stop Date] and/or the [Final Acceptance Deadline] (as relevant); and/or*

b. relief from compliance with its obligations under this [Concession Agreement]; and/or

c. compensation for any [Change in Costs] or [Financing Costs] that [Developer] will incur as a direct result of such [Compensation Event], in each case in accordance with this [Article [X]].

(b) Any claim made by [Developer] pursuant to clause (a) above must:

(i) be submitted to the [Department] as soon as practicable, and in any event within thirty (30) [Days] of [Developer] first becoming aware that the relevant [Compensation Event] would have the effect that is the subject of [Developer's claim;

(ii) as soon as is reasonably practicable following receipt by the [Department] of the claim referred to in clause (a) above, give full details of the relevant [Compensation Event] (as available to [Developer] after due inquiry) and the extension of time and/or relief from its obligations under this [Agreement] and/or any [Change in Costs] or [Financing Costs] claimed or reasonably likely to be claimed, including:

(A) a [Time Impact Analysis] (based on the [Project Schedule] most recently submitted to the [Department]) demonstrating that the relevant [Compensation Event] will result in an identifiable and measurable disruption to the [Work], which will impact a [Critical Path] activity (i.e., would consume all available [Float] and would extend the time required to achieve commencement of the [Work] or [Substantial Completion] or [Final Acceptance], as applicable);

(B) evidence demonstrating that no other concurrent unrelated delay to a [Critical Path] activity that is [Developer's] responsibility has occurred that has contributed to the delay for which relief is being sought; and

(C) evidence demonstrating that such event could not reasonably be avoided by [Developer] without material cost or delay, including by re-sequencing, reallocating or redeploying its forces to other portions of the [Work]; and

(iii) provide evidence to the [Department] demonstrating that:

(A) the [Compensation Event] was the direct cause or is reasonably likely to be the direct cause of:

(I) [Change in Costs] or [Financing Costs]; and/or

(II) any failure to commence the [Construction Work] by the [Commencement Deadline] or (following the [Commencement Deadline]) further delay in the commencement of the [Construction Work]; and/or

(III) a delay in achieving [Substantial Completion] by the [Baseline Substantial Completion Date] or (following the [Baseline Substantial Completion Date]) further delay in the achievement of [Substantial Completion]; and/or

(IV) a delay in achieving [Final Acceptance] by the [Final Acceptance Deadline] or (following the [Final Acceptance Deadline]) further delay in the achievement of [Final Acceptance]; and/or

(V) [Developer] failing to comply with its obligations under this [Concession Agreement];

(B) any [Financing Costs] claimed by [Developer] will only be incurred during the period (if any) that [Substantial Completion] is delayed beyond the [Baseline Substantial Completion Date] as a direct result of the relevant [Compensation Event]; and

(C) the [Change in Costs], [Financing Costs], extension of time and/or relief from the obligations claimed under this [Concession Agreement], could not reasonably be expected to be mitigated or recovered by [Developer] acting in accordance with [Good Industry Practice].

8.4.2 Relief for Nonperformance and Extension of Time to Key Dates

During the occurrence of a Compensation Event or Delay Event, the Developer will generally be excused from the performance of its obligations to the extent performance is prevented or delayed by the relevant Compensation Event or Delay Event. The Developer will often be required to continue performing those obligations not affected by the relevant Compensation Event or Delay Event and to mitigate the effects of the Compensation Event or Delay Event. Generally, the Developer's obligation to pay money and its obligation to comply with Applicable Law and the Project's technical requirements (except to the extent of a temporary inability to comply as a direct result of the relevant Compensation Event or Delay Event) will not be suspended.

The Developer's obligation to meet construction milestones or other deadlines will often be suspended and such milestones and deadlines will generally be extended as part of the relief the Department provides. However, the length of the extension may not necessarily be equal to the duration of the relevant Compensation Event or Delay Event. Concession Agreements will generally provide for an analysis of the critical path items actually impacted by the relevant Compensation Event or Delay Event, and may require that available float (or some portion thereof) in the then-current schedule be exhausted before an extension is granted. In addition, relief will not generally be granted where there are concurrent delays in the Work that are unrelated to the relevant Compensation Event or Delay Event (for example, where the Developer's D&C Contractor is merely late in completing the Work).

In the case of Delay Events only, the Developer will generally continue to incur noncompliance/performance points under the Concession Agreement to the extent its performance failures are the result of the Delay Event. As a result, the Developer will generally incur deductions from the Availability Payments as a result of Delay Events (including Force Majeure Events). However, any points or deductions accrued as a direct result of the Delay Event will not count towards the aggregate thresholds that lead to a Developer Default.

An example provision providing for the calculation of time relief in the context of Delay Events is set forth below.

(a) If the [Developer] has complied with its obligations to substantiate the occurrence of a [Delay Event] pursuant to [Section [X]] of this [Concession Agreement], then:

(i) in the case of a delay demonstrated pursuant to [Section [X]]

(A) the [Long Stop Date]; and/or

(B) the [other applicable deadline for performance],

shall be extended by such time as shall be reasonable for such a [Delay Event], but only to the extent that [Developer] demonstrates to the [Department] by way of [Time Impact Analysis] (based on the [Project Schedule] most recently delivered to the [Department]) that the relevant [Delay Event] will result in an identifiable and measurable disruption to the [Work], which will impact a [Critical Path] activity (i.e., would consume all available [Float] and would extend the time required to achieve [Substantial Completion] or [Final Acceptance], as applicable);

(ii) to the extent that any [Developer Default] arises solely as a result of the existence of any [Delay Event], such [Developer Default] shall, for the purposes of this [Concession Agreement], be deemed not to have occurred; and

(iii) nothing in this [Section [X]] shall affect the accrual of any [Non-Compliance Points] and [Unavailability Events] during the period in which the Delay Event is subsisting; provided, that any such [Non-Compliance Points] and [Unavailability Events] shall be disregarded for the purposes of determining whether or not a [Developer Noncompliance Trigger Event] or [Persistent Closure], respectively, has occurred.

*(b) For purposes of paragraph (a) above, **Time Impact Analysis** means a time impact analysis, (i) establishing the influence of an event on the most recent [Project Schedule], and will include a fragmentary network,[7] and for events that have not yet occurred, the fragmentary network will demonstrate how the [Developer] proposes to incorporate such event in the most recent [Project Schedule], and (ii) demonstrating: (A) the time impact based on the date the event occurred or notice of a proposed change is given to the [Developer], (B) the status of the [Work] at such point of time; and (C) the time computation of all affected activities.*

8.4.3 When Is Compensation Appropriate?

Calculating Compensation

In calculating the monetary relief payable to the Developer following a Compensation Event, the Concession Agreement will generally apply the principle that the Developer should be left in a no better or no worse position than it was in immediately prior to the Compensation Event. The Developer will typically be compensated for Capital Expenditures incurred at any time, Changes in Costs incurred prior to Substantial Completion, and additional Financing Costs incurred as a result of a delay to Substantial Completion, in each case to the extent directly resulting from a Compensation Event.

Capital Expenditures and Changes in Costs are intended to capture the amounts paid, or expected to be paid, by the Developer in order to comply with the Concession Agreement following the occurrence of the Compensation Event, including changes in the Work both during the Construction Period and during the Operating Period. They may be determined by a combination of (a) in the case of Capital Expenditures, reference to a Department's standard terms and provisions for pricing change orders on traditional design-build projects, (b) in the case of Changes in Costs, the output of the revised Base Case Financial Model, and/or (c) in either case, a negotiated settlement. To the extent such amounts relate to estimated future costs, they may be either paid as such costs are incurred or paid as a lump sum discounted to present value.

[7] A fragmentary network is generally a breakdown of the schedule into its component parts and (and their sub-parts) which substantiates the build-up of time needed to complete an activity.

Set forth below is an example provision describing the scope of Capital Expenditures and Changes in Costs that are typically compensated:

> *For purposes of this [Concession Agreement]:*
>
> *(a)* ***Capital Expenditure*** *means any expenditure which is treated as a capital expenditure in accordance with [GAAP] or equivalent auditing standards utilized and generally accepted in the country of incorporation of such party.*
>
> *(b)* ***Change in Costs*** *means, in respect of any [Compensation Event], the effect of that [Compensation Event] (whether of a singular or recurring nature, and whether positive or negative) upon the actual or anticipated costs, losses or liabilities of [Developer], including, as relevant, the following:*
>
> *(i) the reasonable costs of revising the [Base Case Financial Model] and changes in the [Work] pursuant to the [Concession Agreement], including the reasonable costs of preparation of design and estimates;*
>
> *(ii) the costs of continued employment of, or making redundant, staff who are no longer required;*
>
> *(iii) the costs of employing additional staff;*
>
> *(iv) reasonable professional fees;*
>
> *(v) the costs to [Developer] of financing any [Compensation Event] (and the consequences thereof) including commitment fees and capital costs, interest and hedging costs, lost interest on any of [Developer's] own capital employed and any finance required pending receipt of a lump-sum payment;*
>
> *(vi) the effects of costs on implementation of any insurance reinstatement in accordance with the [Concession Agreement], including any adverse effect on the insurance proceeds payable to [Developer] (whether arising from physical damage insurance or business interruption insurance (or their equivalent)) in respect of that insurance reinstatement and any extension of the period of implementation of the insurance reinstatement;*
>
> *(vii) operating costs, or life cycle, maintenance or replacement costs;*
>
> *(viii) [Capital Expenditure];*
>
> *(ix) the costs required to ensure continued compliance with the [Financing Documents];*
>
> *(x) any deductible or increase in the level of deductible, or any increase in premium under or in respect of any insurance policy; and*
>
> *(xi) [Losses];*
>
> *provided that in no circumstances shall [Change in Costs] include any [Revenue Impact].*

In addition to compensation for Capital Expenditures and Changes in Costs, Compensation Events also entitle the Developer to compensation for Financing Costs incurred as a result of delays to Substantial Completion. As described in Chapter 1 (*Completion Testing and Performance Security*) above, the occurrence of Substantial Completion is a significant event in Availability Payment transactions because it will result in the commencement of the Availability Payments, which the Developer will use to, among other things, repay the principal on the Project Debt. The Lenders will therefore set the terms of the financing so as to require principal repayments to begin (and the capitalization of interest to cease) on the projected date of Substantial

Completion. Delays to Substantial Completion will thus result in a funding gap for the Developer, since principal and interest will become due but no source of funding will be available to pay it.

The Concession Agreement will therefore include a mechanism to determine the amount of Financing Costs that the Developer incurs during the period of delay directly caused by a Compensation Event. As these amounts are intended to bridge a funding gap otherwise incurred by the Developer, the Department will typically be required to pay them as and when they fall due. Once Substantial Completion is actually achieved, the Developer and the Department will determine whether the amounts paid have left the Developer in a better or worse position than the Developer otherwise would have been, and an adjustment to the remaining Availability Payments will be made to offset any difference.

Set forth below is an example provision describing the calculation and payment of Financing Costs:

(a) *To the extent that [Substantial Completion] has not occurred by the [Baseline Substantial Completion Date] or (following the [Baseline Substantial Completion Date]) [Substantial Completion] is further delayed, the [Parties] shall determine, in accordance with the principles set out in this [Concession Agreement], the aggregate number of days (the* ***Department Delay Period****) beyond the [Baseline Substantial Completion Date] that [Substantial Completion] will be delayed as a direct result of the occurrence and subsistence of any [Compensation Event(s)].*

(b) *To the extent that any [Financing Costs] become due for payment or repayment by [Developer] during the [Department Delay Period], the [Department] shall pay to [Developer] an amount equal to such [Financing Costs] no later than five (5) [Business Days] prior to the date that such [Financing Costs] become due for payment or repayment.*

(c) *No later than thirty (30) [Days] after the [Substantial Completion Date], the [Parties] shall calculate (such calculation being referred to below as the* ***Reconciliation****), in accordance with the provisions of this [Concession Agreement] governing the [Base Case Financial Model], the extent to which [Developer] was left in a better or worse position as a result of the [Department Delay Period] caused by the [Compensation Event], taking into account the payments made to [Developer] by the [Department] pursuant to clause (b) above.*

(d) *To the extent that the [Reconciliation] demonstrates that [Developer] was left in a worse position notwithstanding the payments made to [Developer] by [Department] pursuant to clause (b) above, the [Department] shall, within thirty (30) [Days] of completion of the [Reconciliation], either make a lump-sum payment to [Developer] or adjust the [Availability Payments] to the [Developer], in either case in an amount equal to that which would result in [Developer] being left in a no better and no worse position.*

(e) *To the extent that the [Reconciliation] demonstrates that [Developer] was left in a better position as a result of the payments made to [Developer] by [Department] pursuant to clause (b) above, either [Developer] shall make a lump-sum payment to the [Department] or the [Department] shall adjust the [Availability Payments] to the [Developer], in either case in an amount equal to that which would result in [Developer] being left in a no better and no worse position.*

(f) *For purposes of this [Concession Agreement], the term* ***Financing Costs*** *mean, in respect of any [Department Delay Period], the aggregate of (a) all amounts of principal that will fall due for payment under the [Financing Document]s during that [Department Delay Period], and (b) all amounts (excluding default interest) of interest that accrue under the [Financing Documents] during that [Department Delay Period].*

Deductibles – Factors to Consider

Some Concession Agreements include so called "deductibles" in respect of certain Compensation Event claims that require the Developer to absorb the financial impact of specific risks before the Department is required to pay compensation. A deductible might be applied on a per claim basis or on an aggregate basis across all claims for a particular risk or basket of risks.

The merits of utilizing deductible arrangements in the context of Compensation Event claims are debatable and require complex analysis by Departments. On the one hand, the use of deductibles can be an attractive proposition to the Department as it reduces the likelihood of the Developer making claims against the Department during the Term. On the other hand, the Developer will most likely include a contingency in its calculation of the Availability Payment during the procurement (such contingency usually being greater if a per claims basis is adopted), and the inclusion of contingency by the Developer raises the possibility that the Department may ultimately pay for a risk that never materializes, which can be unattractive on public policy/value for money grounds.

Accordingly, to the extent that the Department proposes to apply deductibles to certain Compensation Event claims, it will be important for the Department to be confident that such an arrangement represents better value than fully compensating the Developer in respect of the financial impact of the relevant Compensation Event.

8.5 Government Approvals and Permits

Prior to commencing a particular activity in relation to the Project, a "Government Approval" may need to be acquired, either as a matter of law or otherwise. Accordingly, the Concession Agreement will allocate responsibility between the parties with respect to the procurement of Government Approvals and the associated costs in obtaining them. For the purposes of the Concession Agreement, "Government Approvals" may include all local, regional, State, and Federal agreements, studies, findings, permits, approvals, authorizations, certifications, consents, decisions, exemptions, filings, leases, licenses, registrations, rulings, and other governmental authorizations required to be obtained or completed under law prior to undertaking any particular activity contemplated by the Concession Agreement.

As a general matter, the Department will often procure certain Governmental Approvals in advance of (or in parallel with) the procurement of the Project, the most notable examples being environmental related Governmental Approvals required as a matter of Federal law, which are typically fundamental to the feasibility of the Project.

The Concession Agreement will typically set out a discrete list of Governmental Approvals that the Department is responsible for procuring and the Department will be required to procure them by defined dates. These permits will typically be those which are considered either fundamental to the feasibility of the Project or materially beneficial to the construction schedule (if procured in advance). Responsibility for procuring all other Governmental Approvals typically sits with the Developer, at its sole cost and expense, although the Department will typically agree to provide reasonable assistance and cooperation to the Developer in obtaining Governmental Approvals relating to the Project and any revisions, modifications, amendments, supplements, renewals, reevaluations, and extensions of Governmental Approvals. The Department may additionally agree that it will not unreasonably withhold or delay any Governmental Approval for which the Department is the issuing Governmental Entity with respect to the design, construction, operation, or maintenance of the Project.

It should be noted that, as a practical matter, certain Governmental Approvals obtained by the Department in advance of (or in parallel with) the procurement of the Project may need to be obtained on the basis of an assumed design. Accordingly, to the extent that the Developer proposes a design that differs from that assumed

when the relevant Governmental Approval was procured by the Department, the Developer may need to amend the relevant Governmental Approval or obtain a re-evaluation of the differing design by the relevant agency issuing the relevant Governmental Approval.

8.6 Utilities and Third Party Rights

8.6.1 Risk Allocation and Coordination with Utilities and Railroads

Most Projects will impact existing utility lines or other assets owned by third parties (such as railroads) that will need to be avoided, relocated, temporary disabled, or otherwise accommodated during the course of construction. The basic risks presented by these activities will be familiar to most Departments because they also arise in traditional construction arrangements. In a P3 transaction, the risk of cost and schedule impacts associated with unknown utilities or intransigent third parties is addressed largely in the same manner as the risk of differing site conditions. Developers are expected to budget and schedule for these impacts and limited relief may be provided in respect of risks that cannot be reliably quantified at the time the Concession Agreement is executed (often by reference to baseline information that the Department provides prior to submittal of the bids for the Project (see Chapter 1 (*Supervening Events*) for further information regarding the use of baselines).

Many Departments enter into master utility relocation agreements with utility companies governing the standard terms of any utility relocation that will be performed in connection with the Department's construction projects. These agreements typically contemplate that a Project-specific utility relocation agreement will be executed in connection with each Project, incorporating the terms of the master agreement and specifying the particular terms applicable to the individual relocation, particularly the extent to which the Department or the utility will bear the cost of any relocation. Concession Agreements will often provide that the Developer must perform the Department's obligations under these agreements. As such, to the extent the Department is obliged to pay for relocation under the utility relocation agreement, the Developer will be required to make a payment on behalf of the Department.

The principal difference between the management of these risks and other differing site conditions is the presence of third parties whose cooperation is required in order for the Developer to successfully perform the Work. When these third parties have been uncooperative with the Developer despite the Developer's best efforts, the Concession Agreement will often require the Department to use its own reasonable efforts to compel cooperation (typically excluding the use of eminent domain or the initiation of formal legal proceedings), and may entitle the Developer to claim a Compensation Event or Delay Event to the extent that it is prejudiced by the unreasonable failure of the third parties to cooperate.

8.6.2 Other Third Parties' Rights

In addition to railroads and utilities, a variety of other third parties' rights may be impacted in connection with any given Project (e.g., relevant local townships may have the right to review and comment on the design of portions of the Project or impose scheduling and other restrictions on the performance of construction work within their jurisdiction). These rights will typically be set out in existing contracts between the Department and the relevant third party. The terms of the Concession Agreement will often require that the Department assign, and the Developer accept, the Department's contractual rights and obligations under those contracts. The relevant third parties will need to be notified, and in some cases their consent, which may take considerable time to acquire, may be required in order to effect the assignment. Departments should therefore begin the process of identifying these contracts and contacting the relevant third parties relatively early during the procurement, in order to resolve issues as quickly and efficiently as possible.

Some third parties' rights may not be set out in contracts. It is not uncommon that when a Department begins to acquire right-of-way, the owners from whom it is acquired will negotiate certain rights in connection with the sale of their land. These rights may take the form of permanent or long-term real property interests, such as easements to cross the right-of-way, which are not set out in a contract but rather are recorded in the relevant government records. When describing the rights of access that the Developer will have to the right-of-way for purposes of constructing and operating the Project, it is therefore important to specify that the Developer's rights of access are subject to these real property interests. This is often accomplished by reference to a title report, produced by a title company on behalf of the Department. If existing real property interests are not reflected in the report, the Developer may be entitled to claim a Compensation Event for the impact to its rights of access.

8.6.3 Buy America Requirements

"Buy America Requirements" are Federal laws which require that steel and iron products permanently incorporated into Projects and paid for, in whole or in part, with Federal highway funds must be manufactured in the United States. Historically, these requirements were applicable only to contracts where Federal funds were actually used for the construction; however, section 1518 of MAP-21 recently expanded the applicability of these requirements to include any contract eligible for Federal funds for a Project within the scope of any applicable National Environmental Policy Act determination (regardless of whether Federal funds are actually used). As a practical result, to the extent that a utility relocation associated with a Project meets these new criteria, the "Buy America Requirements" will apply even if the utility relocation itself is not actually paid for with Federal funds.

9 Change in Law

9.1 Understanding the Concerns of All Parties

A core requirement of the Concession Agreement should be for the Developer to comply, and cause all of its Subcontractors to comply, with all Applicable Law in the development and operation of the Project. A failure to comply with this requirement may ultimately result in termination for Developer Default (see Chapter 1 (*Defaults, Early Termination, and Termination Compensation*)). Accordingly, to the extent that a Change in Law arises during the Term, the Developer may need to incur additional costs to comply with the requirements of the Change in Law.

Broadly speaking, there are two questions that are generally discussed when determining whether the Developer should be protected against the financial impact of a Change in Law:

- Was the Change in Law foreseeable (e.g., based on publically available information such as draft legislation) at the time the Developer submitted its final bid?
- In the absence of being contractually protected against any negative impact of a Change in Law on the Developer's business, is the Developer in any other way able to mitigate such negative impact without negatively impacting its own financial position?

Except in unique circumstances, costs and timing impacts of complying with current or foreseeable laws are generally for the account of the Developer and are therefore required to be priced into the Developer's bid. Thus, the question then becomes to what extent the Developer should be contractually protected when unforeseeable Changes in Law arise during the Term.

9.2 Unforeseeable Changes in Law—Relevant Considerations

Developers generally express the view that Change in Law is a risk that they cannot control and that the Department is better placed to manage. In practice, however, Departments only have influence over certain categories of legislation. Accordingly, some level of risk sharing is generally accepted as appropriate in respect of Changes in Law.

Consequently, most Departments have (consistent with international best practice) focused on the following three risk allocation issues when considering the extent to which the Developer should be protected against unforeseeable Changes in Law:

- Should the Developer be protected with respect to the negative financial impact of all categories of unforeseeable Changes in Law?
- Should the Department bear the risk of the negative impact on the Developer of Changes in Law introduced at all levels of government?
- Should the Developer be protected with respect to any increases in taxes or the introduction of new taxes that, in each case, either increase the Developer's costs or have a negative impact on the after-tax return of investors in the Developer?

Any consideration of the above issues is generally undertaken in conjunction with an assessment of the payment mechanism for the Availability Payment. This relationship is particularly relevant when considering the extent to which the Developer should be protected with respect to a Change in Law that results in an increase in the

Developer's operating costs, as the value of the Availability Payment will often include annual increases (see Section 5.1.7 above) and therefore provide a hedge against such Changes in Law.

9.3 Trends in the United States P3 Market

Consideration by Departments of the issues highlighted in Section 9.2 above has broadly resulted in the emergence of three relatively consistent themes:

- The Developer generally bears any negative financial impact associated with any unforeseen change in Federal law on the basis that (unlike in other transportation sectors (e.g., aviation)) regulation of highways is largely devolved down to State government and the private business community is as well (if not better) placed as any Department to address any unforeseen Change in Law, and (subject to the Availability Payment calculation) an increase in the Availability Payment may afford some level of "hedge" against any negative impact of such a Change in Law.
- With respect to any unforeseen change in a non-Federal law, the Department only bears any negative financial impact associated with such Change in Law to the extent that it is a "Discriminatory Change in Law" (see Section 9.5 below for a discussion of the definition of Discriminatory Change in Law).
- The negative financial impact associated with any "Non-Discriminatory Change in Law" is generally borne by the Developer.

9.4 Compensation, Relief from Delay, and Mitigation

Discriminatory Changes in Law (for which the Department bears all of the risk) are generally Compensation Events for which the Developer is entitled to claim compensation and performance relief (e.g., an extension of time), so as to ensure that the Developer is left in a no better and no worse position than it would have been in had such Discriminatory Change in Law not arisen. With respect to any other unforeseeable Change in Law, these are generally treated as Compensation Events for which the Developer is only afforded performance relief with respect to such Change in Law. Chapter 1 (*Supervening Events*) sets forth the process that applies to any Compensation Event or Delay Event claim that the Developer proposes to make during the Term.

As with any other Compensation Event, a key concern for the Department will be to ensure that that the Developer mitigates the negative impact associated with any Discriminatory Change in Law. Given that any Discriminatory Change in Law will most likely apply beyond the limits of the Project, this duty to mitigate should be capable of being measured, in part, by reference to the extent to which price increases in comparable sectors are experienced. It will also require the Developer to foresee and anticipate the effect of Changes in Law, particularly in relation to expenditures which it has already planned to incur in the performance of its obligations under the Concession Agreement. For example, the Developer cannot on one day replace the overhead lighting on the Project under its normal maintenance program and then argue that it immediately has to replace it due to a subsequent Change in Law which the Developer should have anticipated at the time of the replacement. For that reason, any compensation should reflect any anticipated future savings of maintenance costs.

9.5 Discriminatory Changes in Law

Generally, a Discriminatory Change in Law will arise if the relevant Change in Law is not applicable across all modes of business. For example, an increase in general corporation tax or capital gains tax of broad application will not constitute a Discriminatory Change in Law. Similarly, a Change in Law that relates to the operating standards of all highways in the United States (such as a change in Federal regulations requiring the replacement

of all guardrail along the Project) would not be considered to be a Discriminatory Change in Law. However, a Change in Law that is purely targeted at private operators of highways would be. In broad terms, the concept of equivalence determines whether a Change in Law can be categorized as a Discriminatory Change in Law: if the change is targeted at one business community or asset class that competes against another business community or asset class that is not impacted by such change, the relevant change will generally be considered to be a Discriminatory Change in Law.

9.6 Example Provisions

An example provision governing compliance with laws and its associated definitions are set forth below.

(a) *The [Developer], in addition to performing all other requirements of the [Transaction Documents], shall comply with, and require that all its [Subcontractors] comply with, all requirements of all [Applicable Law].*

(b) *To the extent that any [Discriminatory Change in Law] arises during the [Term], the [Developer] may exercise its rights pursuant to [Section [X] (Compensation Events)].*

(c) *To the extent that any [Non-Discriminatory Change in Law] arises during the [Term], either party may notify the other of the [Non-Discriminatory Change in Law's] likely effect on the [Project], including by (a) expressing an opinion on necessary changes to the Project and (b) proposing any amendments to the [Project Documents] to deal with the [Non-Discriminatory Change in Law].*

(d) *When a party receives a notice given pursuant to subsection (c), the parties shall discuss and agree on issues raised by the notice, including any ways in which the [Developer] can mitigate the effects of the [Non-Discriminatory Change in Law].*

Change in Law *means:*

(a) *the enactment of any [Law];*

(b) *any change, amendment to, repeal or revocation of any [Law] or in the interpretation or application thereof by any [Governmental Entity], excluding, however, any change in or new [Law] which was foreseeable as of the [Setting Date].*

Discriminatory Change in Law *means:*

(a) *any [Change in Law] [with respect to [Laws] of the State and any county, city or town of the State] that has the effect of discriminating solely against the [Project], the [Developer], any [Key Contractor], or private operators of substantially similar [transportation assets] in the State; or*

(b) *a [Change in Law] which involves [Capital Expenditure].*

Law *means all laws, treaties, ordinances, judgments, Federal requirements, decrees, injunctions, writs and orders of any [Governmental Entity], and all rules, regulations, orders, formal interpretations of any [Governmental Entity] that are applicable to the [Developer], the [Project] or the [Work]., in each case as the same may be amended from time to time.*

Non-Discriminatory Change in Law *means a [Change in Law] which is not a [Discriminatory Change in Law].*

Setting Date *means [the date falling [45] days prior to the [Proposal Due Date]].*

10 Department and Developer Changes

10.1 Department Changes

In order to limit potential claims from Developers with respect to Compensation Events, Departments will want to ensure that the specifications governing the Project (including the Technical Requirements and any applicable codes or standards) set out in the Concession Agreement account for the Department's long-term (not just current) requirements, and that these specifications anticipate changes that are reasonably foreseeable (e.g., any advancements in technology that the Department expects the Developer to adopt in the near future). However, Departments will also want a certain degree of flexibility to address unforeseeable advances or changes their requirements. To achieve this flexibility, the Concession Agreement will usually specify the Department's right to require changes to the Work (a "Department Change") subject to limited conditions (e.g., the changes cannot contravene Applicable Law), with the understanding that such changes constitute a Compensation Event and the Department will be required to compensate the Developer for the net impact of all increased costs (including the impact on future operations and maintenance costs) and decreased revenues associated with such changes.

Negotiations surrounding Department Changes, as with change orders in traditional construction contracts, can be contentious, so the Concession Agreement will generally specify the steps that each party must take once a Department Change is proposed in order to facilitate agreement on costs, likely impacts on the Developer and other relevant details. For example, the Concession Agreement may require consultation with an independent engineer. However, if the Department and the Developer cannot agree on the costs of a Department Change or whether the proposed changes qualify as a Department Change (i.e., whether the Department should bear the associated costs), the Concession Agreement will usually give the Department the right to issue a directive letter that requires the Developer to carry out the proposed changes specified therein regardless of any disagreements between the parties. In such cases, the associated costs, which are the responsibility of the Department, will typically be determined either through a pre-determined mechanism for reporting and calculating extra work costs (e.g., a force account mechanism) or the Dispute Resolution Procedures.

Notwithstanding the procedures and remedies typically available in the case of a Department Change, Concession Agreements in Availability Payment transactions will often preclude monetary compensation if the Department's standard operations and maintenance specifications applicable to the Project are changed and the same changes apply to comparable Department-maintained roadways. Such "Non-Discriminatory O&M Changes" are often viewed as an ordinary course cost of doing business, the risk of which should be borne by the Developer. Developers may seek limitations on what constitutes a Non-Discriminatory O&M Change (particularly where the Project is unique and the Department does not operate any comparable projects against which a comparison can be made), and they may seek compensation in the event that the cost of Non-Discriminatory O&M Changes exceeds a certain threshold in any given year or in the aggregate. The extent to which these variations are appropriate will depend on the circumstances of each individual Project, but in general Developers have accepted this risk because a change in the standards will only fall within this category if the Department is also abiding by the change, and Developers take comfort from the fact that such changes are typically not implemented very often due to the expense that the Department will incur on other comparable roadways.

10.2 Developer Changes

Developers, like Departments, will also seek flexibility to propose changes to the Project, especially in situations where such changes may decrease the Developer's costs without diminishing the quality of the

Project. The Concession Agreement will give the Developer a right to propose changes, which are typically subject to the Department's consent and must be performed at the Developer's sole cost and expense. Departments should note that there is precedent in the U.S. market for the Concession Agreement to require the Developer to share with the Department a portion of the savings realized by the implementation of a Developer Change.

11 Assignment and Changes in Equity Interests

11.1 Introduction

In the early stages of the procurement process for any P3 transaction, the Department will generally solicit requests for qualification from prospective bidder teams in the market. The Department will generally evaluate each respondent in a number of predetermined areas, concluding with the shortlisting of several bidders who are then invited to submit detailed proposals.

As part of the aforementioned evaluation, an assessment is generally undertaken of the respondent team's Equity Members' credentials, principally in the following areas:

- Availability of capital that can be committed to invest in the Project;
- Experience investing in similar projects;
- Demonstrated ability to manage effectively all aspects of future Work on the Project; and
- To the extent relevant, experience of managing the self-performance of operations and/or maintenance by special-purpose Developers that choose not to subcontract out those responsibilities on a long-term basis.

During the competitive bidding process, the Department will generally reserve for itself approval rights with respect to changes to certain key members of a bidder's team. The reservation of such rights affords the Department the opportunity to ensure that the qualifications of each bidder team (which led to those teams being shortlisted) cannot be eroded through changes being made to key members of the teams. As a general rule, if a bidder team requests approval of a change to a key member of its bidding team, the Department should only approve any such request if it can be confident that the proposed change does not have an adverse impact on the Department's original evaluation of the bidder team's credentials.

The Department's concerns with respect to changes to members of the bidding team during the competitive bidding process apply equally during the Term. Accordingly, the Concession Agreement will generally include provisions that require the Department's approval to certain changes in the identity of the Developer's investors or supply chain members.

For the purposes of this Guide, discussion is limited to the extent to which the Department should have approval rights with respect to any Change in Ownership of the Developer (i.e., changes in the ultimate ownership, either directly or indirectly, of the equity interest in the Project).

11.2 Assignments

11.2.1 Assignment by the Developer

For the reasons discussed above, the Concession Agreement will also typically prohibit the Developer from directly assigning or transferring its contractual rights under the Concession Agreement without the consent of the Department. An exception will generally be included in relation to an assignment to, or at the direction of, the Collateral Agent in an enforcement scenario in accordance with the terms of the Direct Agreement (see also Chapter 1 (*Lender Rights and Direct Agreement*)).

11.2.2 Assignment by the Department

The Department is also often restricted from assigning or transferring its rights under the Concession Agreement without the consent of the Developer. An exception is typically provided with respect to a transfer to a public agency permitted by law, which is sometimes restricted to those public agencies that succeed to the governmental powers and authority of the Department. The Department will generally have to give reasonable notice of this assignment (e.g., 90 days) and also provide assurances that the assignee is duly authorized and financially capable of performing the Department's obligations under the Concession Agreement. Developers and Lenders have a strong interest in transfers by the Department, since the credit quality of the entity to whom the transfer is made may have a significant impact on the perceived risk of payment of Availability Payments.

11.3 When Does a Change in Ownership Occur?

Broadly, a Change in Ownership can arise in one of two ways:

- **Directly** – i.e., through a change in the ownership of shares or membership interests in the Developer.
- **Indirectly** – i.e., as a result of a change in the ownership of shares or membership interests in any entity that is a direct or indirect holding company of shares or membership in the Developer.

Although the Concession Agreement will generally include provisions relating to direct changes in the ownership of shares or membership interests in the Developer, the Department will also generally seek to ensure that the provisions of the Concession Agreement capture a change in the ownership of any shares or membership of any entity in the vertical ownership chain between the Developer and the relevant investors that were first evaluated by the Department in putting together the shortlist of bidders for the Project.

The Department will want to ensure that any Change in Ownership restrictions cannot be circumvented through sophisticated legal structuring of equity transfers and accordingly, any such restrictions would generally capture transfers of any interest (whether such interest is legally held by the transferor (e.g. the owner of a share of stock in the Developer who wishes to sell it to a third party) or held by third party for the benefit of the transferor (e.g. a trust that owns the stock in the Developer for the benefit of an owner, where the owner seeks to sell its beneficial interest to a third party)) in shares or membership interests, together with transfers of economic interest in the same (e.g., voting or dividend rights).

An example definition of Change in Ownership is set forth below.

> ***Change in Ownership*** *means:*
>
> *(a) any sale, transfer or disposal of any legal, beneficial or equitable interest in any or all of the shares or membership interests in the [Developer] and/or any [Related Entity];*
>
> *(b) in respect of any of the shares or membership interests referred to in (a) above, any change in the direct or indirect control over:*
>
> *(i) any voting rights conferred on those shares or membership interests; or*
>
> *(ii) any right to appoint or remove directors; or*
>
> *(iii) any right to receive dividends or distributions); and*
>
> *(c) any other arrangements that have or may have or which result in the same effect as paragraph (a) or (b) above,*

> ***Related Entity*** *means [Names of each entity to be incorporated from the Successful Proposer's Proposal] [Note to Proposers: Each [Related Entity] shall be those entities that were evaluated for the purposes of the RFQ short-listing process, or as otherwise approved by the [Department] pursuant to the RFP].*[8]

11.4 Common Equity Investor Concerns

In contrast to the concerns of the Department, the Equity Members in the Project will want maximum flexibility to transfer their interests in the Developer throughout the Term. Although such a level of free transferability is unlikely, Departments do generally recognize that permitting transfers of equity interests in projects allows Equity Members to free up capital for other projects and generally makes the market more liquid, which in turn can help improve pricing on the Project. Additionally, Equity Members in the Project, particularly investment or pension funds, may be required to diversify their interest in certain sectors over time, and restricting transfer, particularly in relation to a long-term concession, may have the effect of deterring potential investors in the Project.

11.5 Permitted and Prohibited Changes in Ownership

To the extent that the Developer's ability to perform its obligations under the Concession Agreement will not be prejudiced by a direct or indirect change in ownership, the Developer and its investors will generally maintain that the Department should not have an approval right over such Change in Ownership. However, best practice in the United States and internationally has tended to adopt the following principles in connection with permitted and prohibited Changes in Ownership:

- At all times during the Term, any Change in Ownership arising from a transfer of shares or membership interests to a Prohibited Person is prohibited.
- Subject to paragraph ☐ below, Changes in Ownership are prohibited until the end of the Defects Liability Period (generally two years following Substantial Completion, but occasionally longer if the Project is technically complex). Generally speaking, the Department will take comfort from the ongoing involvement of the original Equity Members in the Project until construction has been completed. Amongst other things, the concern for the Department will be that the incoming investor may disrupt momentum in the delivery of the construction and introduce new relationships into the Project at a critical time.
- Changes in Ownership that result from a transfer of shares or membership interests between affiliated entities are generally permitted.[9]

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[8] Depending on the Department's requirements with respect to indirect changes in ownership. This definition would generally include each entity in the ultimate ownership structure between the Developer and either (a) each relevant investment entity that was evaluated for the purposes of determining the shortlisted bidders in the Project and/or (b) any parent of such investment entity not evaluated for purposes of determining the shortlisted bidders in the Project but that the Department considers important to the success of the Project.

[9] With respect to transfers between affiliated funds, the Department may wish to ensure that a transfer of interests between two funds managed by the same fund manager represents a bona fide transfer between similar funds and that the fund manager is not simply "fronting" a new fund for the purpose of selling to a new investor.

- Once the Defects Liability Period has expired, Changes in Ownership are generally only prohibited to the extent that they would reasonably be likely to prejudice the Developer's ability to perform its obligations under the Concession Agreement. By way of example, if the Developer self-performed its operation and maintenance responsibilities (and its ability to do so was principally a function of the outgoing investor's experience in managing operation and maintenance), the Department may wish to consider the incoming investor's experience of managing the operation and maintenance of similar projects.

An example Change in Ownership provision is set forth below.

(a) *A **Restricted Change in Ownership** shall arise if:*

(i) *at any time on or before the last day of the [Defects Liability Period], any [Qualified Investor] ceases to own (directly or indirectly) the same percentage of the issued share capital or membership interests in the [Developer] that it owned (directly or indirectly) at the date of this [Concession Agreement];*

(ii) *a [Change in Ownership] occurs which involves the transfer of any shares or membership interests to a [Prohibited Person]; or*

(iii) *a [Change in Ownership] occurs which would be reasonably likely to have a material adverse effect on the [Developer]'s ability to perform its obligations under the [Transaction Documents], taking into account the financial strength and integrity of the transferee, compared to that of the transferor.*

(b) *Any [Restricted Change in Ownership] will constitute a [Developer Default] for the purposes of [Section [X] (Termination for Developer Default)].*

(c) *A [Restricted Change in Ownership] shall not arise pursuant to paragraph (a) above as a direct result of:*

(i) *the grant or enforcement of security in favor of the [Lenders] over or in relation to any shares or membership interest in the [Developer] under the [Financing Documents];*

(ii) *a change in legal or beneficial ownership of any shares that are listed on a recognized stock exchange, including without limitation such transactions involving any public offering; or*

(iii) *a transfer of interests between managed funds that are under common ownership or control or between the general partner, manager or the parent company of such general partner or manager and any managed funds under common ownership or control with such general partner or manager (or parent company of such general partner or manager), provided that the relevant funds and the general partner or manager of such funds (or the parent company of such general partner or manager) have been approved by the [Department] in writing prior to the date of this [Concession Agreement].*

(d) *For the purposes of paragraphs (a) through (c) above, a person will only be deemed to own shares or membership interests in another person if such person owns the legal, beneficial and equitable interest in the relevant shares or membership interests of that other person.*

(e) *Except in respect of any change in legal or beneficial ownership of any shares that are listed on a recognized investment exchange, the [Developer] shall provide the [Department] with at least [X] days prior written notice of any [Change in Ownership].*

(f)	*The [Developer] agrees to reimburse the [Department] for all reasonable out-of-pocket expenses (including, without limitation, reasonable and proper fees of consultants and legal counsel) incurred by the [Department] in connection with its review of any [Change in Ownership] that it receives notice of pursuant to (e) above.*

12 Defaults, Early Termination, and Temination Compensation

12.1 Introduction

The intention of the parties to any Concession Agreement should be that it will run its full course and terminate on the last day of its Term. However, situations may arise during the Term that take either party beyond its point of indifference where the ability to call a default is necessary, along with the ability to terminate the Concession Agreement in the absence of cure of the relevant default. Accordingly, the Concession Agreement will generally:

- Define the circumstances under which the Concession Agreement may be terminated early;
- Define the circumstances under which either party will be in default under the Concession Agreement;
- Where appropriate, provide the defaulting party with the ability to cure the relevant default;
- Set out the process that the non-defaulting party must follow if it elects to terminate the Concession Agreement; and
- Specify precisely what compensation (if any) is payable by the Department to the Developer if the Concession Agreement is terminated early.

Early Termination can generally be caused by Department Default, Developer Default, Uninsurable Risks or a Force Majeure Event. It can also generally be caused by the Department exercising a right to terminate the Concession Agreement voluntarily, for its own convenience. This Guide looks at each of these Early Termination scenarios and discusses the issues generally of concern to each party in the relevant scenario.

In addition to the termination scenarios described more fully below, Concession Agreements will also typically be terminable by the Department if the Developer fails to achieve the Financial Closing Date by a specified deadline. Where the failure to achieve financial close is outside the control of the Developer, the Department will, if permitted by Applicable Law, typically pay the Developer a fee to reimburse a portion of the Developer's costs associated with attempting to reach financial close.

Concession Agreements may also include a right of the Developer to receive termination compensation (typically equal to the amount that would be payable following a termination for extended Force Majeure Events, as described in Section 12.4 below) if a ruling is issued by a court of competent jurisdiction that declares the Concession Agreement void or unenforceable, or that renders performance substantially impossible. The inclusion of such a termination right may or may not be appropriate in the context of a particular Project, and Departments should consult their legal advisors to determine the scope of such a provision, if appropriate.

12.2 Termination for Department Default

12.2.1 Events Giving Rise to Department Default

The Developer is generally allowed to terminate the Concession Agreement in circumstances where the Department acts in a way which either (a) renders the parties' contractual relationship untenable or (b) completely frustrates the Developer's ability to perform the services that are the subject of the Concession Agreement. A minor breach of the Concession Agreement would not generally fall into this category and even a material breach is likely to be insufficient if the Department's actions do not have either of the

aforementioned effects. Termination by the Developer should be a last resort. It is important to ensure that there are no "hair trigger" defaults that could put the Department at risk of termination before it has had an opportunity to cure its default.

Accordingly, the Department needs to have a thorough understanding of both the scope of its obligations under the Concession Agreement and the likelihood of it breaching those obligations when determining both the scope of the definition of Department Default and the extent to which cure periods should be required in respect of Department Defaults. As a general point, however, when assessing the likelihood of a Department Default occurring under the Concession Agreement, Departments generally take comfort from the fact that their obligations under the Concession Agreement are far less substantive than those of the Developer.

Although the scope of a common definition of Department Default is, in contrast to the definition of Developer Default, very limited, Developers generally are comfortable with this approach because a failure by the Department to comply with its obligations under the Concession Agreement can in most cases be adequately dealt with by way of a Compensation Event (see Chapter 1 (*Supervening Events*)), and any failure by the Department to make a payment when due generally gives rise to interest on late payment being payable.

One issue that is unique to Availability Payment concessions as opposed to Toll Revenue concessions is that the Developer's sole source of revenue consists of payments made by the Department. It is therefore of paramount importance to the Developer that the Department is both authorized to make its Availability Payments and is in fact making them. The Department's failure to pay, as well as the Department's loss of its ability to make payments (such as by a failure to receive sufficient appropriations) may constitute a Department Default. Depending on the nature of the transaction, though, the risk to the Developer may differ. For example, a concession with an independent public benefit corporation may carry different payment risk to the Developer than a concession with a State agency that must be directly funded by legislative appropriation. Each Project will therefore be unique in this regard and Departments should consult with their legal and financial advisors when considering whether to include these events as Department Defaults.

An example definition of Department Default is set forth below.

Department Default *means the occurrence of any one or more of the following events or conditions:*

(a) *the [Department] fails to make any payment when due under the [Concession Agreement], provided, that in no case shall it be a [Department Default] where such payment is the subject of a good faith dispute between the parties;*

(b) *the [Department] ceases to be authorized to make any payment it is obligated to make under the terms of the [Concession Agreement];*

(c) *any representation or warranty made by the [Department] in this [Concession Agreement] is false or materially misleading or inaccurate when made or omits information when made;*

(d) *the [Department] fails to comply with or perform substantially all of its obligations under this [Concession Agreement] for a continuous period of [X] days, and such failure substantially frustrates or renders it impossible for [Developer] to perform its obligations under the [Concession Agreement]; or*

(e) *any confiscation, sequestration, condemnation or appropriation of a material part of the [Project], the equity interests in the [Developer] or the [Developer]'s rights under the [Concession Agreement], in each case except to the extent permitted under the terms of this [Concession Agreement].*

12.2.2 Department Default Cure Periods

To the extent that a Department Default arises, the Department would, except in limited circumstances, generally have the benefit of a cure period. The purpose of a cure period is to allow the defaulting party an opportunity to cure the relevant default and avoid the Early Termination of the Concession Agreement for its default. The appropriateness of a Department Default having a cure period is generally a function of the nature of the Department Default: a Department Default that is unlikely to be curable or that arises as a result of an affirmative action being taken by the Department would not generally benefit from a cure period.

The length of any cure period will be an issue of concern to both parties to the Concession Agreement. In particular, Developers are generally uncomfortable with long cure periods if they have no ability to terminate the Concession Agreement in the event that the Department is not taking positive action to cure the relevant Department Default. Accordingly, cure periods for covenant defaults of the Department are often set at relatively short periods (e.g., 30 days), but may then be extended (provided that the Department is diligently attempting to cure the default and subject to a maximum extension period) if the initial period is an insufficient period of time for the Department to cure the relevant Department Default. Payment defaults of the Department, however, typically have a relatively longer cure period (e.g., 45-60 days), but will not be subject to any extension. No cure period is appropriate for a Department Default that is incapable of cure, such as if the legislature revokes or materially limits the Department's statutory authority to make payments under the Concession Agreement.

With reference to the example definition of Department Default shown in Section 12.2.1 above, an example provision relating to the cure period for a Department Default is set forth below.

(a) The Developer shall provide written notice to the [Department] of the occurrence of a [Department Default]. Upon receipt of the [Developer]'s notice, the [Department] shall have the following cure periods with respect to the following [Department Defaults]:

(i) for a [Department Default] referred to in paragraph (a) of that definition, a period of [X] days after the [Developer] delivers to the [Department] the written notice of such a [Department Default];

(ii) for a [Department Default] referred to in paragraph (c) or (e) of that definition, a period of [X] days after the [Developer] delivers to the [Department] the written notice of such a [Department Default] or, to the extent that the [Department Default] is capable of cure and the [Department] has, despite using its best efforts, failed to cure such [Department Default] within the [X] day period, such cure period may be extended by such additional period as may be reasonably necessary to cure such [Department Default], subject to a maximum extension of [X] days; and

(iii) for any other [Department Default] not referred to in paragraph (a), (c), or (e) above, there is no cure period.

(b) Any extension of a cure period in accordance with sub-paragraph (a)(ii) above is subject to the [Department] continuing to use its best efforts to cure or cause to be cured such [Department Default] during the period of such extension.

(c) In the event that a [Department Default] occurs and it has either (i) not been cured within any relevant cure period, (b) in the case of an extended cure period, the [Department] ceases to use its best efforts to cure the [Department Default], or (c) there is no cure period, the [Developer] may terminate this [Concession Agreement]in accordance with [Section [X] (Developer's Rights to Terminate for Department Default)].

12.2.3 Developer's Rights to Terminate for Department Default and Procedure

An example provision permitting the Developer to terminate the Concession Agreement for Department Default is set forth below.

(a)	*If a [Department Default] occurs and it has not been cured within any relevant cure period set out in [Section [X]], the [Developer] may serve a termination notice on the [Department] at any time during the ongoing continuance of that [Department Default].*
(b)	*A termination notice issued pursuant to paragraph (a) above must specify the [Department Default] that has occurred and has entitled the [Developer] to issue the termination notice.*
(c)	*This [Concession Agreement] will terminate on the date falling [X] days after the date the [Department] receives the termination notice.*
(d)	*If this [Concession Agreement] is terminated for [Department Default] in accordance with paragraphs (a) - (c) above, the [Department] shall pay the [Department Termination Sum] to the [Developer] in accordance with [Section [X]] of this [Concession Agreement].*

Many Concession Agreements will limit the ability of the Developer to terminate for a Department Default to circumstances where the Department Default arises from an uncured failure of the Department to pay a material sum due to the Developer. In some cases, it may be appropriate to expand this limitation to include performance-related Department Defaults where such Department Defaults have a direct impact on the Project's ability to generate profits and thus negatively impact the Developer's return on equity (e.g., the Department initiates an unpermitted condemnation or other confiscation of the Project).

12.2.4 Compensation on Termination for Department Default

Basis of Calculation

In the event of an Early Termination caused by a Department Default, the broadly accepted principle is that the Department should pay the Developer sufficient compensation to ensure that the Developer is left in a no better and no worse economic position than it would have been had the Early Termination not occurred and the Concession Agreement had continued until the last day of its Term. In practical terms, this broadly means that there will be three components to the amount of compensation that will be paid to the Developer by the Department as a result of an Early Termination of the Concession Agreement for Department Default:

- The value of the invested and committed equity (whether in the form of capital contributions or Shareholder Loans) in the Developer at the time of the termination;
- An amount sufficient to allow the Developer to repay all Project Debt, including amounts due as a result of the Early Termination of the Concession Agreement, such as breakage costs; and
- Reasonable costs and liabilities that the Developer incurs as a result of having to terminate Subcontracts as a direct result of the Early Termination of the Concession Agreement.

Valuing the Equity in the Developer

Determining the market value of the equity in the Developer in the event of an Early Termination of the Concession Agreement has been an issue encountered in most P3 transactions that have closed in the United States to date. The basic philosophy underlying the valuation methodology should be to ensure that the Equity Members are put in the same financial position that they would have been in had it not been for the Early

Termination. In other words, the Department should pay compensation that equates to the true market value of the equity in the Developer.

The sensitivity for both parties will generally be that any determination of the value of the equity in the Developer requires relatively speculative projections of future Availability Payments and costs which, by definition, involves the projection of future performance of the Project. To address this concern, the Concession Agreement will typically provide for payment to the Developer of a Termination Sum that is based on the remaining amounts scheduled to be paid by the Developer to its Equity Members as of the Early Termination Date in the most recent Base Case Financial Model, discounted to present value from the date on which such amounts are expected to be paid using the Equity IRR.

Calculating the Developer's Liabilities under its Financing Arrangements

To the extent the Termination Sum includes amounts that are calculated by reference to the amount of outstanding Project Debt, the Developer and the Lenders will seek to ensure that the provisions which calculate such amounts are sufficiently broad so as to accommodate all potential financing structures that the Developer may seek to use during the Term. The Department, by comparison, will need to ensure that amounts which are not genuine third party debt are not required to be paid and that the provisions do not permit legitimate amounts to be inflated or revised unexpectedly. Concession Agreements will generally include a defined term to encapsulate these amounts and related issues, the overall purpose of which is to properly describe only those debt obligations that the Department is willing to pay in the event of a termination of the Concession Agreement (whether in whole or in part, depending on the other provisions of the Concession Agreement).

When addressing the scope of obligations that may be included, Developers will seek to ensure that all potential debt financing solutions for the Project, including bank loans, bonds (including PABs), TIFIA loans, guarantee obligations, letter of credit obligations, and others, as well as related costs and expenses, such as interest, fees, hedging arrangements, and others are included. Departments should seek the advice of their legal and financial advisors when deciding whether to include or exclude particular items, as the market for financing opportunities is constantly changing. Departments should, however, be cautious wherever Developers seek to include any type of subordinated indebtedness within this definition because Developers may structure their equity investments as Shareholder Loans extended by Equity Members to the Developer to take advantage of tax benefits associated with the payment of interest. Shareholder Loans of this type will be subordinated to the debts owed to third-party Lenders, so it will be important to distinguish these Shareholder Loans from other debt that third-party Lenders provide that may also be subordinate to the debt the Developer's senior Lenders provide. For example, TIFIA loans are generally included within the scope of Project Debt compensated on termination, even though they are subordinate in payment to other sources of debt in the ordinary course. The Department may wish to provide protection to other bona fide subordinated third-party Lenders (or may not, if such Lenders are not secured lenders) and should consult with their financial advisors regarding the costs and benefits of doing so in the context of each individual Project.

Subcontractor Breakage Costs

The Developer may incur costs or liabilities (e.g., breakage costs in respect of cancellation of orders for materials and goods) as a direct result of the Early Termination of the Concession Agreement for Department Default. To the extent that the Developer will incur such costs, it would generally be included in the compensation payable by the Department on Early Termination. One point that Departments generally want to ensure in relation to the costs of breaking Subcontracts is that they are not required to pay any compensation with respect to future loss of profits or other consequential Losses.

An example definition of Subcontractor Breakage Costs is set forth below.

> ***Subcontractor Breakage Costs*** *means [Losses] that have been or will be reasonably and properly incurred by the [Developer] under a [Subcontract] as a direct result of the [Early Termination] of this [Concession Agreement] (and which shall not include lost profit or lost opportunity), but only to the extent that:*
>
> *(a) the [Losses] are incurred in connection with the [Project] and in respect of the works required to be provided or carried out, including:*
>
> *(i) any materials or goods ordered or [Subcontracts] placed that cannot be cancelled without such [Losses] being incurred;*
>
> *(ii) any expenditure incurred in anticipation of the provision of services or the completion of works in the future; and*
>
> *(iii) the cost of demobilization including the cost of any relocation of equipment used in connection with the [Project];*
>
> *(b) the [Losses] are incurred under arrangements and/or agreements that are consistent with terms that have been entered into in the ordinary course of business and on an arm's length basis; and*
>
> *(c) the [Developer] and the relevant [Subcontractor] have each used their reasonable efforts to mitigate such [Losses].*

12.3 Termination for Developer Default

12.3.1 Events Giving Rise to Developer Default

The Concession Agreement will generally provide for a series of events or circumstances that constitute Developer Defaults. Broadly speaking, such events occur when the Developer fails to perform its obligations or otherwise takes, or permits to be taken by its Subcontractors, some action that calls into question its fitness to continue performing under the Concession Agreement. A number of remedies are typically available to the Department following a Developer Default, such as stepping in and performing the Developer's obligations or drawing on any performance security which may have been provided by the Developer. The occurrence of a Developer Default will also generally permit the Department to terminate the Concession Agreement subject to additional procedures and conditions, though some Concession Agreements may permit the Department to terminate the Concession Agreement only in the case of a limited set of Developer Defaults which are designated as material.

The list of Developer Defaults contained in a Concession Agreement often ranges from a generic failure of the Developer to perform its material obligations under the Concession Agreement to more specific events, such as the bankruptcy of the Developer or violation of a State's anticorruption laws in connection with the award of the Concession Agreement. The precise set of Developer Defaults varies from Project to Project, but the goal is to clearly establish the Department's threshold for taking action relating to various acts or omissions of the Developer without creating a risk of a "hair trigger" that could discourage investors or Lenders from investing in the Project. Because the consequences of a termination for Developer Default are so severe, including the loss of potentially substantial amounts of money invested by both Equity Members and the Lenders, the list of Developer Defaults may be the subject of significant negotiation.

An example definition of Developer Default is set forth below.

Developer Default *means the occurrence of any one or more of the following events or conditions:*

(a) *the [Developer] fails to comply with, perform or observe any material obligation, covenant, agreement, term or condition in this [Concession Agreement] or any other [Project Document], which failure materially adversely affects the [Department]'s rights or obligations hereunder;*

(b) *any representation or warranty made by the [Developer] under this [Concession Agreement] is false or misleading in any material respect on the date made;*

(c) *the [Developer] fails (i) to pay to the [Department] when due any undisputed sum payable to the [Department] pursuant to this [Concession Agreement], or (ii) to deposit funds to any reserve or account, in either case in the amount and within the time period required by this [Concession Agreement];*

(d) *the [Developer] fails to commence the [Construction Work] within [X] days of the issuance of the notice to proceed;*

(e) *the [Developer] fails to achieve [Substantial Completion] of all of the [Project] by the [Long Stop Date], as such date may be extended pursuant to this [Concession Agreement];*

(f) *this [Concession Agreement] or all or any portion of the [Developer's Interest] is transferred, or there occurs a [Change in Ownership], in either case in contravention of this [Concession Agreement];*

(g) *a voluntary or involuntary insolvency event, including the commencement by any third party of liquidation, dissolution, reorganization or similar proceedings, arises with respect to (i) the [Developer], (ii) any investor in the [Developer], or (iii) the [Developer]'s [D&C Contractor] (but only during the [Construction Period]) or [O&M Contractor], in each case unless such [Subcontractor] is replaced by the [Developer] with a reputable counterparty reasonably acceptable to the [Department];*

(h) *the Developer abandons or otherwise ceases work on the [Project], or following a permitted suspension of the work ceases to resume the work, for more than [X] days, except as otherwise permitted under this [Concession Agreement];*

(i) *the [Developer] fails to comply with any permits or [Applicable Law] in any material respect;*

(j) *the [Developer] fails to obtain, provide and maintain the insurance policies in accordance with the [Concession Agreement];*

(k) *the [Developer] fails to comply with any written suspension of work order issued by the [Department];*

(l) *the [D&C Contract] or the [O&M Contract] is terminated (other than non-default termination on its scheduled termination date) and the [Developer] has not entered into a replacement of such contract with a reputable counterparty reasonably acceptable to the [Department]; or*

(m) *the [Developer], any investor in the [Developer], any [Key Contractor] whose work is not completed, or any affiliate of [Developer] for whom transfer of ownership would be permitted without the [Department]'s consent, or any of their respective officers, directors, employees or agents, is suspended or debarred, following exhaustion of all rights of appeal, or there goes into effect an agreement for voluntary exclusion, from bidding, proposing or contracting with any Federal or State department or agency.*

12.3.2 Cure Periods for Developer Default

Following the occurrence of a Developer Default and before the Department has the right to terminate the Concession Agreement, the Developer will generally have a period of time during which it may take corrective action to cure the Developer Default. If the Developer Default is corrected during the cure period, the Department will not be permitted to terminate the Concession Agreement (although the Developer may remain liable for Department losses attributable to the Developer Default).

The standard cure period for most Developer Defaults is often 30 days, running from the date on which the Department notifies the Developer in writing of the occurrence of the Developer Default. However, cure periods may vary depending on the nature of the Developer Default. For example, the cure period for a Developer Default consisting of the failure to pay money to the Department is often not more than 3–5 days because the only acceptable cure is actual payment, which under ordinary circumstances can be completed quickly. By comparison, the cure period for a Developer Default consisting of a general failure by the Developer to perform its material obligations may initially be 30 days, but if the circumstances giving rise to the Developer Default cannot be cured within the initial 30 days, but are nevertheless capable of being cured and the Developer is actually taking steps to do so, then the cure period may be extended up to a maximum of as long as 120 or, in some cases, 180 days.

Certain Developer Defaults indicating willful or otherwise affirmative acts suggestive of the Developer's unreliability or unsuitability to continue the Project, such as a failure to comply with an order to suspend work issued by the Department, may not be capable of cure. For these Developer Defaults, the Concession Agreement will generally not include a cure period or may expressly state that no cure period is afforded to the Developer.

Although the exact cure periods are often the subject of negotiation and will vary from one Project to another, the Concession Agreement should strike a balance between giving the Developer a meaningful opportunity to correct a Developer Default, on the one hand, and on the other, not unduly delaying the right of the Department to terminate the Concession Agreement.

A Concession Agreement may be drafted in one of two ways with respect to the description of the cure periods. First, the cure periods may be included in the description of the Developer Default, in which case the Developer Default and its consequences do not arise until the expiration of the relevant cure period.

An example provision drafted in this style is set forth below.

> *The [Developer] fails to comply with, perform, or observe any material obligation, covenant, agreement, term or condition in this [Concession Agreement] and such failure continues without cure for a period of [X] days following the date the [Department] delivers written notice thereof to the [Developer], or for such longer period as may be reasonably necessary to cure such failure up to a maximum cure period of [X] days; provided, however, that in the latter case, (i) the [Developer] is proceeding with all due diligence to cure or cause to be cured such failure, (ii) such failure is capable of being cured within a reasonable period of time, and (iii) such failure is in fact cured within such period of time.*

Second, the cure periods may be described in a separate provision of the Concession Agreement, such that the Developer Default arises immediately but the consequences are delayed until after the expiration of the relevant cure period.

An example provision drafted in this style is set forth below.

> *The [Department] shall provide written notice to the [Developer] of the occurrence of a [Developer Default]. Upon receipt of the [Department]'s notice, the [Developer] shall have the following cure periods:*

(a)	*for a [Developer Default] under [Section [X] of this [Concession Agreement], a period of [X] days after the [Developer] receives written notice from the [Department] of such [Developer Default];*
(b)	*for a [Developer Default] under [Section [X] of this [Concession Agreement]], a period of [45] days after the [Developer] receives written notice from the [Department] of such [Developer Default]; provided, however, that if such [Developer Default] cannot be cured within such time period, despite the [Developer]'s commencement of meaningful steps to cure immediately after receiving the default notice, the [Developer] shall have such additional period of time, up to a maximum cure period of [X] days, as is reasonably necessary to diligently effect cure; and*
(c)	*for any other [Developer Default] not referred to in paragraphs (a) or (b), there is no cure period.*

Either approach is generally accepted (although the latter style is more common in both the U.S. and international P3 market), but in cases where the cure periods are drafted into the description of the Developer Defaults, the Concession Agreement should not also contain a provision that grants the Developer an additional cure period following receipt of a notice of default, and vice versa.

12.3.3 Department's Right to Terminate for Developer Default and Procedure

The Department is generally permitted to terminate the Concession Agreement following the occurrence of a Developer Default and the expiration of any cure period associated with it. However, the Department's right to terminate the Concession Agreement is subject to the right of the Collateral Agent (acting on the instructions of designated senior Lenders, the composition of which may differ depending on the nature of the Project) to an additional cure period after the expiration of the Developer's cure period, during which time they will be permitted to cure any Developer Default on behalf of the Developer. The right of the Collateral Agent to cure a Developer Default will generally be set forth in a stand-alone Direct Agreement among the Collateral Agent, the Developer and the Department (see Chapter 1 (*Lender Rights and Direct Agreement*) for further information on such agreements). If the Developer Default is cured before the Department exercises the right to terminate the Concession Agreement, then the termination right will cease.

If the Project involves multiple assets—particularly if such assets are widely dispersed geographically—the Department may prefer that the Developer remediate its practices and procedures that gave rise to the Developer Default instead of terminating the Concession Agreement. For example, the Department may prefer that the Developer prepare a Remedial Plan that identifies how to cure ongoing Developer Defaults with respect to certain assets and lessen the likelihood of them recurring with respect to the remainder. This approach may be preferred by the Department because there may be substantial costs and delays in replacing a Developer that is engaged in a Project that is not confined to one particular asset. Where the Department elects to require a Remedial Plan, it will typically do so without prejudice to other rights it has under the Concession Agreement.

An example provision describing the Department's option to require the Developer to prepare a Remedial Plan following a Developer Default is set forth below.

(a)	*In the event that a [Developer Default] occurs and it has not been cured within the relevant time period set forth in [Section [X]] of the [Concession Agreement], or no cure period is afforded, the [Department] may give notice to require the [Developer] to prepare a remedial plan within [X] days. If the [Department] elects to require such remedial plan, it shall not prejudice any other rights or remedies available to it under the [Concession Agreement].*

(b)	*The remedial plan described in sub-paragraph (a) shall set forth (i) a schedule and specific actions to be taken by the [Developer] to cure the relevant [Developer Default], and (ii) specific actions the [Developer] shall take to reduce the likelihood of such defaults occurring in the future, which may include (without limitation) improvements to the [Developer's] quality management practices, plans and procedures, increased monitoring and inspections, changes to personnel or [Contractors], or other similar measures.*
(c)	*Within [X] days of receipt of the [Developer's] remedial plan prepared pursuant to sub-paragraph (a) and (b), the [Department] shall notify whether, in its sole discretion, the remedial plan is acceptable. If the [Department] finds the remedial plan acceptable, the [Developer] shall implement such remedial plan in accordance with its terms. If the [Department] finds the remedial plan not acceptable, the [Department] may terminate the [Concession Agreement] in accordance with the terms of [Section [X]].*

If the Department chooses to terminate the Concession Agreement, it will be required to deliver written notice of its decision to the Developer. The Concession Agreement may terminate immediately upon the Department's delivery of a termination notice to the Developer, or it may terminate automatically after the passage of a short period of time after delivery of the termination notice (generally not more than 60 days thereafter).

An example provision describing the Department's right to terminate the Concession Agreement is set forth below.

(a)	*Upon the occurrence of a [Developer Default] that has not been cured within the relevant cure period, the [Department] may, subject to the rights of the [Collateral Agent] under the [Direct Agreement], terminate this [Concession Agreement] by issuing a written notice of termination to the [Developer] specifying the [Developer Default] giving rise to the right of the [Department] to terminate this [Concession Agreement].*
(b)	*This [Concession Agreement] will terminate [immediately] [on the date specified in the termination notice referred to in paragraph (a) above, which must be a minimum of [X] days after the date of receipt of the notice by the [Developer]].*
(c)	*If this [Concession Agreement] is terminated for [Developer Default] in accordance with paragraph (a) and (b) above, the [Department] shall pay the [Developer Default Termination Sum] to the [Developer] in accordance with [Section [X]] of this [Concession Agreement]].*

12.3.4 Compensation on Termination for Developer Default

Following a termination of the Concession Agreement for a Developer Default, the Department will still generally be required to pay compensation to the Developer. Departments may find this unusual given that the termination will likely be caused by the act or omission of the Developer, whereas in many service contracts entered into by Departments, it is often the case that the contractor, not the Department, makes a payment on termination. In the context of a greenfield project, however, compensation is paid because upon termination the Department will receive an asset of potentially considerable value that it did not have before the Concession Agreement was entered into, and if compensation is not paid, then the Department will be unjustly enriched as a result. This principle is often considered alongside the need to impose a financial consequence on Developers (and their Lenders) to discourage them from walking away when the possibility of termination arises, while not imposing such drastic consequences that the risks are too high to justify investment in the Project. The amount of termination compensation payable will generally be adjusted to reflect other pools of cash available to the parties, such as Account Balances held by the Developer and

Insurance Proceeds received by the Developer (or that would have been received had the Developer procured or complied with the required insurance policies).

The amount of termination compensation payable following a Developer Default will depend on whether the construction of the Project is completed at the time of termination. If the construction of the Project is not complete, then the termination compensation will generally be calculated by reference to the value of the Work performed to date (taking into account the anticipated cost to the Department of completing the remaining Work) or the amount owed to the Developer's Lenders. This calculation provides the Developer's Lenders with some comfort that they will receive compensation in the event of a termination, but also provides the Department with the opportunity to ensure that it does not pay any more than is necessary to receive the Project it originally contracted for. Departments should confer with their legal advisors regarding applicable State law, however there is a low risk of claims against the Department for unjust enrichment in the event that the debt-based calculation is the lower of the two measures (i.e. where the value of the work completed is greater than the compensation to be paid), because it is the equity investors who will suffer a loss in that situation and their "at risk" position is accepted in the market.

An example provision describing the calculation of termination compensation payable prior to completion of the Project is set forth below.

On termination of the [Concession Agreement] following a [Developer Default] prior to the [Substantial Completion Date], the [Department] shall pay to the [Developer] an amount equal to the lower of:

(a) the [D&C Work Value], being equal to:

(i) the stated value of the [D&C Contract] for the [Project], less

*(ii) the [Cost to Complete], being equal to (A) those costs (internal and external) that the [Department] reasonably and properly projects that it will incur in carrying out any process to request tenders from any parties interested in entering into a contract with the [Department] to achieve [Substantial Completion], including all costs related to the preparation of tender documentation, evaluation of tenders and negotiation and execution of relevant contracts; plus (B) the costs that the [Department] reasonably and properly projects that it will incur in achieving [Substantial Completion]; plus (C) any other [Losses] that the [Department] would, but for the termination of this [Concession Agreement], not have incurred prior to [Substantial Completion]; minus (D) any insurance proceeds available to the [Department] for the purposes of achieving [Substantial Completion] (the **Insurance Proceeds**); and*

(b) the [Net Project Debt], being equal to:

(i) the [Project Debt], minus

*(ii) all amounts standing to the credit of any bank account held by or on behalf of [Developer] (excluding the [Handback Reserve Account]), or the value of any letter of credit issued in substitution for any bank account previously held by [Developer] (excluding the [Handback Reserve Account]), at the [Early Termination Date] (**Account Balances**); minus [Insurance Proceeds].*

If the construction of the Project is complete, then the termination compensation will generally be calculated by reference to the amount owed to the Developer's Lenders. During this period, the Department will generally be concerned about the cost to correct any outstanding maintenance issues rather than the Cost to Complete the Project. In addition, the Department will generally look to impose some financial consequences

on the Developer's Lenders and its Equity Members, because they have chosen not to cure the outstanding Developer Default that leads to termination.

An example provision describing the calculation of termination compensation payable after completion of the Project is set forth below.

On termination of the [Concession Agreement] following a [Developer Default] on or after the [Substantial Completion Date], the [Department] shall pay to the [Developer] the amount calculated at the date of such termination (without double-counting) as follows:

(a) [Project Debt] [[X%] of Project Debt]; minus

(b) [Insurance Proceeds]; minus

(c) [Account Balances]; minus

(d) all [Losses] that the [Department] determines it is reasonably likely to incur as a direct result of the termination of this [Concession Agreement], including the following:

(i) those costs (internal and external) that the [Department] is reasonably likely to incur as a direct result of carrying out any process to request tenders from any parties interested in entering into a contract with the [Department] to carry out [Maintenance Work], including all costs related to the preparation of tender documentation, evaluation of tenders and negotiation and execution of relevant contracts; and

(ii) those costs reasonably projected to be incurred by the [Department] in relation to: (A) remediation or, if remediation is not possible or would cost more than renewal, renewal of any defective [Work]; (B) rectification or cure of any breach of this [Concession Agreement] by the [Developer]; and (C) carrying out of all other matters necessary in order to ensure that within a reasonable period after the [Early Termination Date], the [Project] complies with the requirements of the [Project Documents] and has a reasonable prospect of continuing to perform to the same standard and cost that it would have continued to perform at had this [Concession Agreement] not been terminated and the [Project] been in compliance with all of the requirements of the [Project Documents]; minus

(e) any amount of unfunded equity that has been committed to the [Developer] and is shown to be available for use in the [Base Case Financial Model] prior to the [Substantial Completion Date], but only to the extent that the commitment to provide such amount is supported by an irrevocable on-demand letter of credit issued by or for the account of an [Equity Members] naming the [Developer] and/or the [Collateral Agent] as beneficiary and guaranteeing the provision of the committed amount by a date that is not later than the [Substantial Completion Date]; plus

(f) the balance standing to the credit of the [Handback Reserve Account] on the [Early Termination Date].

12.4 Termination for Extended Force Majeure Events or Uninsurable Risks

12.4.1 Rights of Either Party in the Event of Extended Force Majeure Events and Procedure

As described in Chapter 1 (*Supervening Events*), the Concession Agreement generally defines the Force Majeure Events that can lead to termination and provides for the rights of the parties if one occurs. If a Force Majeure

Event occurs and the parties cannot agree on a solution within a specified period of time, either party is generally entitled to terminate the Concession Agreement with compensation payable to the Developer as summarized in Section 12.4.2 below. However, it should be noted that in the event that the Developer elects to terminate the Concession Agreement due to the continuance of an extended Force Majeure Event, the Concession Agreement will often give the Department the right to prevent termination by allowing the Department to pay the Developer compensation as if the Project was continuing to perform at the same level as it was prior to the occurrence of the relevant Force Majeure Event. As discussed in Section 8.3.4 above, the Department may also expand this termination right to include any Compensation Event or Delay Event for which a solution is not agreed within a specified period of time, rather than just Force Majeure Events. For the sake of clarity, the following discussion refers only to Force Majeure Events, but would apply, subject to the considerations discussed in Section 8.3.4, to the extent the termination right is extended to these additional events.

12.4.2 Compensation on Termination for Extended Force Majeure Events

To the extent that the Concession Agreement is terminated due to the continuance of an extended Force Majeure Event, the Department will generally pay compensation to the Developer on the basis that the financial consequences of the Early Termination of the Concession Agreement should to some extent be shared. The justification for this approach is that the Early Termination is not the fault of either party.

In determining the extent to which the financial consequences of the Early Termination should be shared between the parties, a common approach is generally taken across all jurisdictions, which can be summarized as follows:

- Lenders do not take on the risk of Force Majeure Events and, accordingly, are compensated for all amounts owed to them by the Developer as a direct result of the Early Termination of the Concession Agreement;
- The Developer will generally be compensated for any Subcontractor Breakage Costs (see Section 0); and
- The Equity Members will generally be compensated an amount equal to the amount of any unrecovered equity invested in the Developer (i.e., capital contributions and Shareholder Loans).

In other words, the extent of the sharing of the financial consequences of Early Termination relates to the Developer indirectly foregoing all equity return that it has previously received prior to the Early Termination, together with any future equity return that it would have received had the Concession Agreement continued through to the last day of its Term.

Although the Department may be required to fund a material amount of compensation in the event of an Early Termination of the Concession Agreement due to an extended Force Majeure Event, it should be noted that the Early Termination may result in the Project effectively being acquired from the Developer by the Department at an undervalue. Additionally, the scope of the definition of Force Majeure Event is generally drafted very narrowly and with reference to extreme events, thereby reducing the likelihood of the Concession Agreement being terminated early due to the extended continuance of a Force Majeure Event.

An example provision calculating the Termination Sum due in the event of an extended Force Majeure Event is set forth below.

If the [Concession Agreement] is terminated following an extended [Force Majeure Event], the [Department] will pay to the [Developer] the [Extended Force Majeure Termination Sum].

> ***Extended Force Majeure Termination Sum*** *means the aggregate of (i) the [Project Debt], [(ii) all amounts at par paid by the [Equity Members] in the form of capital contributions or [Shareholder Loans] up until the termination date, less any amounts actually received by the [Equity Members] from the [Developer] as distributions or payment of principal and interest for such [Shareholder Loans], and (iii) all [Subcontractor Breakage Costs]; (iv) less [Account Balances]; and (v) less [Insurance Proceeds].*

12.4.3 Compensation on Termination for Uninsurable Risks

In the event that the Department elects to terminate the Concession Agreement following a determination that a risk has become an Uninsurable Risk (as described in further detail in Section 6.3), the Department will be required to pay to the Developer a Termination Sum that is typically equal to the Extended Force Majeure Termination Sum.

12.5 Termination for Convenience by Department

12.5.1 Termination for Convenience and Procedure

The intention of the parties to any Concession Agreement should be that it will run its full course. Concession Agreements are, however, long-term agreements and circumstances may arise where the Department is no longer willing or able to continue the relationship it has with the Developer under the Concession Agreement. For example, the Department may wish to grant a concession with respect to the facilities that are the subject of the Concession Agreement as part of a broader concession arrangement, perhaps as a result of a policy decision on the part of the Department to place operations and maintenance of all Projects in a region (including those that are the subject of the Concession Agreement) under common management. Additionally, notwithstanding the ability of many Departments (particularly those that are beneficiaries of P3-enabling legislation in their relevant jurisdiction) to enter into long-term Concession Agreements, most jurisdictions require (as a matter of public and administrative law) that the relevant government's ability to exercise its statutory powers should not be fettered by the terms of contracts that it enters into. Accordingly, it is generally considered a matter of best practice and common for Concession Agreements to include provisions that allow the Department to terminate the Concession Agreement at its convenience, whereupon compensation generally becomes payable by the Department to the Developer (see Section 12.5.2 below).

An example provision permitting the Department to terminate the Concession Agreement for convenience is set forth below.

> *(a) The [Department] may terminate this [Concession Agreement] at any time by issuing a termination notice to the [Developer] stating that:*
>
> *(i) the [Department] is exercising its right to terminate this [Concession Agreement] in accordance with its terms; and*
>
> *(ii) this [Concession Agreement] will terminate on the date specified in such termination notice, such date to be a minimum of [X] days after the date of receipt of the notice by the [Developer].*
>
> *(b) This [Concession Agreement] will terminate on the date specified in the termination notice referred to in (a) above.*

(c) If this [Concession Agreement] is terminated for convenience in accordance with paragraphs (a) and (b) above, the [Department] shall pay the [Termination for Convenience Termination Sum] to the [Developer] in accordance with [Section [X]] of this [Concession Agreement].

12.5.2 Compensation on Termination for Convenience

The Termination for Convenience Termination Sum is generally an amount equal to the Department Termination Sum (see Section 12.2.3 above). Choosing different approaches to how Early Termination compensation should be calculated for these two types of termination scenario could lead to the Department being incentivized to default in certain circumstances or, in the anticipation of a forthcoming Department Default, terminate the Concession Agreement for convenience, which is why it is common that the methods used for both Termination for Convenience and Termination for Department Default are the same.

12.6 Other Issues Related to Calculation of Compensation for Early Termination

12.6.1 Increased Termination Liabilities Arising from Changes to Financing Documents

To the extent that the amount of compensation payable by the Department to the Developer on an Early Termination is calculated in whole or in part by reference to the level of Project Debt that the Developer has outstanding at the time of the termination payment, the Department may seek to ensure that the level of Project Debt outstanding at any time is not inflated in a way that will significantly and unexpectedly increase the Department's liabilities on termination beyond the levels anticipated at the time the Concession Agreement was entered into. Examples of how such circumstances could arise include the borrowing of additional debt by the Developer during the Term or a rescheduling of the Developer's debt during the Term.

The approaches taken to this issue in Concession Agreements in the United States are relatively binary. Either any additional liabilities that arise as a result of the Developer refinancing or rescheduling its debt during the Term are automatically taken into account when calculating compensation on Early Termination or they are not. A specific provision is generally only included in the Concession Agreement with respect to this issue to the extent that the Department wishes to exclude additional liabilities from the compensation calculation to which it has not consented.

An example provision addressing such concern is set forth below.

No amendment, waiver or exercise of a right under any [Financing Document] shall have the effect of increasing the amount of the [Department]'s liabilities on [Early Termination] of this [Concession Agreement], unless the [Developer] has obtained the prior written consent of the [Department] to such increased liability for the purposes of this provision.

Another approach is to specifically exclude such additional amounts from the definition of Project Debt in the Concession Agreement.

To the extent that the Developer takes the risk of a future refinancing in the context of its financial plan for the Project, the Developer is likely to require some level of comfort in the Concession Agreement that any such future refinancing will be covered by the compensation on termination provisions in the Concession Agreement.

12.6.2 Rights of Set-off on Early Termination

The Department is generally entitled to exercise a right of set-off in respect of any outstanding liabilities of the Developer against the amounts it pays in compensation on an Early Termination of the Concession Agreement.

Notwithstanding the above principle, the Lenders (particularly non-governmental affiliated Lenders) will generally want to ensure that the Department's ability to set-off such liabilities cannot result in the amount of compensation payable on Early Termination being less than the amount of the Project Debt. This principle is often reflected in Concession Agreements, except in the case of a termination for Developer Default, where the Lenders have the opportunity to avoid the termination by exercising their rights to cure the Developer Default.

An example provision allowing the Department to exercise such right of set-off is set forth below.

> *The [Department] is not entitled to set-off any amount against the [Department Termination Sum], the [Termination for Convenience Termination Sum], or the [Extended Force Majeure Termination Sum] if the effect of exercising such right of set-off would be to reduce the amount payable to the [Developer] to an amount that is less than the amount of the [Project Debt].*

12.6.3 Timing of Payment

In the event of an Early Termination of the Concession Agreement, the Developer (and its Lenders) will want to ensure that the Department is required to pay the Termination Sum to the Developer within a reasonable period of time after the amount is calculated.

There is some significant divergence among Concession Agreements with respect to the length of time that the Department is afforded to make payment of the Termination Sum. In particular, this issue is frequently of concern to any Department that believes that an appropriation would need to be made at the relevant State level to fund the relevant payment. Experience has shown that, within reason, Developers and Lenders are willing to agree to the Department having a material period of time to pay the Termination Sum, particularly where an appropriation is required. However, the acceptability of this issue to Developers and Lenders is generally a function of the extent to which (in terms of both time period and interest rate) the Department is willing to pay interest on the Termination Sum between the date that the amount is finally calculated and the date that it is paid to the Developer.

12.6.4 Treatment of Assets on Early Termination

On the Early Termination of the Concession Agreement, any proprietary interest that the Developer may have in the Project (e.g., a leasehold interest) will automatically terminate (on the basis that the Developer's right to operate the relevant Project has come to an end) as the Department will need to be immediately able to continue to operate the Project and provide continuity of Service to the users of the Project. However, the reversion of the Project to the Department may not be sufficient to allow its continued and efficient operation by the Department. By way of example, if the Developer is collecting tolls from users of a Project on behalf of the Department, the Department may not be able to effectively operate the Project without the right to access intellectual property associated with toll collection equipment.

To address the above concerns, the Concession Agreement will generally include a provision that requires the Developer to transfer to the Department (as a condition precedent to the payment of the Early Termination compensation by the Department) certain Key Assets to the Department, such assets intended to be those that the Department needs access to provide continued and seamless operation of the facilities to its users.

An example provision providing for a transfer of assets is set forth below.

As a condition precedent to the payment of any [Termination Sum], the [Department] may require [Developer] to transfer its rights, title and interest in and to the [Key Assets] to the [Department].

***Key Assets** means all assets and rights to enable the [Department] or a successor contractor to own, operate and maintain the [Project] in accordance with this [Concession Agreement], including the following:*

(a) any land or buildings;

(b) any equipment;

(c) any books, records, drawings, surveys, designs and other design documentation (including operating and maintenance manuals, health and safety manuals and other know how);

(d) any borings, samples, spare parts, tools and other assets (together with any warranties in respect of assets being transferred);

(e) any policies of insurance including rights to outstanding claims;

(f) any contractual rights, including rights under the [D&C Contract] or [O&M Contract] or any other design-build agreement or operations and maintenance agreement then in effect; and

(g) any intellectual property.

12.6.5 Compensation on Termination as an Exclusive Remedy

During the negotiation of the Concession Agreement, significant time is generally spent by both parties assessing the adequacy of the compensation provisions related to Early Termination of the Concession Agreement. Accordingly, both parties generally expect that on an Early Termination, their respective liabilities to each other in connection with the Early Termination will be limited to the following:

- In the case of the Department, the Termination Sum payable to the Developer; and
- In the case of the Developer, the extent of any deductions that are made in the calculation of the Termination Sum.

Accordingly, it is common for both parties to agree that Early Termination compensation payments represent their exclusive and only remedy against each other with respect to the recovery of Losses incurred as a result of the Early Termination. As a consequence of this, the Developer and its Lenders (particularly non-governmental affiliated Lenders) will conduct significant due diligence over the scope of the compensation on Early Termination provisions, so as to ensure that they adequately compensate the Developer for the costs and Losses that it incurs in the context of the relevant termination scenario.

The exclusivity of this remedy for recovery of Losses that arise in the context of termination should not be confused with each party's ongoing right to pursue the other party for Losses associated with breaches of the Concession Agreement that arose prior to the Early Termination Date. Such rights of claim would generally fall outside of any exclusive remedy arrangements relating to compensation on Early Termination of the Concession Agreement.

Sample Provision

An example exclusive remedy provision is set forth below.

Any [Termination Sum] irrevocably paid by the [Department] to the [Developer] shall be in full and final settlement of each party's rights and claims against the other for breaches and/or termination of this [Concession Agreement] whether under contract, tort, restitution or otherwise, but without prejudice to:

(a) any antecedent liability of either party to the other that arose prior to the [Early Termination Date] (but not from the termination itself) to the extent such liability has not already been taken into account in the calculation of the [Termination Sum]; and

(b) any liabilities arising in respect of any breach by either party after the [Early Termination Date] of any obligation under this [Concession Agreement] that survives the [Early Termination Date], to the extent not taken into account in the calculation of any [Termination Sum].

13 Indemnities

13.1 Scope of Indemnities

The indemnity provisions in a Concession Agreement protect the Department against the risk that the Developer's actions generate liabilities for the Department outside of the Concession Agreement. The Developer will often be required to indemnify the Department and a class of other indemnified parties (including the Department's employees and officers, the State itself, and any other State agency or body associated with the procurement or management of the Project) against:

- claims made by third parties that arise out of the Developer's performance or non-performance of the Concession Agreement;
- violations of securities laws by the Developer in connection with the financing of the Project;
- patent or trademark claims associated with the Developer's use of intellectual property on the Project;
- damage caused to property or loss of life as a result of the Work performed by the Developer; or
- other matters relevant to the particular Project.

The Developer's indemnity obligation will usually not apply when the third party claim arises as a result of the gross negligence, willful misconduct or fraud of any of the Indemnified Parties, or where the third party claim arises due to the performance or non-performance by the Indemnified Party (including the Department) under the Concession Agreement. Departments and their legal advisors should balance the scope of indemnities with the risks the Developer is undertaking pursuant to the Concession Agreement.

13.2 Indemnification Procedures

Because the Developer will be required to pay the Department's losses associated with third party claims, the Concession Agreement will typically provide that the Department must give notice to the Developer upon receiving notice of such a claim and afford the Developer some level of control and/or management of the defense and settlement of the relevant claim. However, the extent to which such rights can be delegated to the Developer by the Department is often complicated by matters relating to sovereign immunity and legal restrictions in the relevant State. Additionally, some States will not permit the delegation of the defense of a claim to a third party without the prior approval of the relevant Attorney General's office.

14 Federal Requirements

In the event that the Project receives Federal assistance at any time pursuant to Title 23 of the United States Code (e.g., credit assistance in the form of a TIFIA loan or Federal grant assistance to the Department for a portion of the Availability Payment), the Developer is required by law to comply with multiple Federal laws and regulations as if the Developer were the Department. Therefore, the Concession Agreement will require that the Developer comply (and require its Subcontractors to comply) with such Federal laws, including compliance with Federal law pertaining to the use of Federal-aid funds. For example, the Concession Agreement will require that the Developer and its Subcontractors procure the Project in compliance with (among others): (i) Title VI of the Civil Rights Act of 1964 (prohibiting discrimination on the basis of race, religion, color, or national origin); (ii) the "Buy America Requirements" (requiring the use of domestically produced steel and see, e.g., Section 8.6.3 of this Guide for the applicability of such requirements in the context of utility relocations); (iii) the Davis-Bacon Act (requiring the payment of prevailing wages, as determined by the United States Department of Labor); (iv) Disadvantaged Business Enterprise regulations (requiring good faith efforts to hire minority, female-owned, veteran-owned, and other disadvantaged contractors); (v) Equal Employment Opportunity and affirmative action regulations (concerning employment of individuals who are members of protected categories); (vi) the applicable National Environmental Policy Act determinations; and (vii) any applicable Federal tolling and operational requirements and regulations. Additional requirements and restrictions under Federal law will apply based on a variety of factors unique to each Project, all of which the Developer will be required to comply with.

The FHWA has published a guide for how to apply Federal-aid requirements to P3 transactions. A copy of this Guide can be found at the following URL: http://www.fhwa.dot.gov/ipd/pdfs/fact_sheets/techtools_federalaid_funding.pdf.

As noted in Section 5.1.2, FHWA has established a methodology for calculating the Federal participation in an Availability Payment to the Developer. When a Federal TIFIA loan is part of the Developer's financial structure, the TIFIA debt service payments must be deducted as part of the calculation of the Federal participation rate. More information about the FHWA methodology can be found at the following URL: http://www.fhwa.dot.gov/ipd/pdfs/fact_sheets/techtools_federalaid_funding.pdf.

Departments and their financial advisors should engage with the FHWA to seek guidance when structuring transactions that will include Federal-aid participation in the Availability Payments.

15 Amendments to Key Developer Documents

The Concession Agreement will typically require the Developer to submit to the Department all of its primary contracts critical to design, construction, operations, maintenance, financing and any other similar activities related to the Project (the "Key Developer Documents") for review prior to execution thereof. This review is intended to ensure that these Key Developer Documents do not adversely impact or interfere with the Department's rights under the Concession Agreement.

Once executed, however, the Developer will want to retain some measure of flexibility to amend these Key Developer Documents going forward, while the Department will not want the Developer to simply rewrite them after they have been reviewed and accepted. Of particular concern to the Department will be amendments to Key Developer Documents that increase the Department's potential liabilities, both during the Term and on Early Termination of the Concession Agreement. The Department will typically want to ensure that its potential liabilities cannot be increased by way of an amendment, particularly in the case of the Developer's financing documents (which can generate substantial termination compensation obligations). To protect against the risk that Key Developer Documents will be amended in a manner detrimental to the Department, the Concession Agreement will typically state that amendments to Key Developer Documents cannot, in the absence of the Department's prior written approval of the relevant amendments, have the effect of increasing the Department's liabilities under the Concession Agreement.

16 Lender Rights and Direct Agreement

The Lenders that fund a Project have a vested interest in ensuring the Project is completed and generates the projected cash flows by which the Lenders will be repaid. Given that the Lenders are not generally party to the Concession Agreement, another mechanism is needed through which the Lenders' interests in the Project are protected. The rights of the Lenders with respect to the Concession Agreement are therefore typically documented in a Direct Agreement entered into among the Developer, the Department and the Lenders (or the Collateral Agent acting on behalf of the Lenders). This agreement is critical to the financing of any Project because it provides a direct contractual relationship between the Lenders (or their representative) and the Department pursuant to which the Department will provide the Lenders with certain assurances regarding their rights and under which the Lenders can enforce those rights directly against the Department. The Direct Agreement's most important provisions fall into three categories: (a) certain administrative acknowledgments by the Department, (b) the Lenders' right to take action in the event of a default by the Developer, and (c) in the event of a Developer Default, the Department's agreement not to terminate the Concession Agreement for a period of time, so as to afford the Lenders an opportunity to remedy the relevant default.

16.1 Administrative Acknowledgements

A basic provision in a Direct Agreement is the acknowledgment and consent from the Department that the Developer has granted the Lenders a security interest in its rights under the Concession Agreement. Although many Concession Agreements expressly permit the Developer to grant a security interest to its Lenders, this acknowledgment is important because it avoids any ambiguity regarding the rights of the Lenders or the extent to which the Department was aware of their interest. This provision may also contain an acknowledgment from the Department that it has no knowledge of, and has not consented to, the grant of a security interest in favor of any other Lenders to the Developer (although Developers are unlikely to have any other debt because they are typically special purpose vehicles formed specifically for the Project).

In addition, Direct Agreements generally contain an agreement from the Department to deposit any money owed to the Developer under the Concession Agreement into a particular bank account designated at the time of execution of the Direct Agreement. This provision is important for the Lenders because one of the key components of their security package is control over the bank accounts of the Developer and the funds held in them. They are concerned that money paid to the Developer (including both Availability Payments and funds payable by the Department as termination compensation) could be directed to an account outside of their control, and will therefore seek to protect against this risk.

16.2 Lenders' Right to Take Action

The Direct Agreement will generally provide that, upon the occurrence of a Developer Default under the Concession Agreement, the Department will provide a notice to the Lenders of the Developer Default (including an explanation of its nature and circumstances) and will agree not to terminate the Concession Agreement or initiate bankruptcy proceedings against the Developer for a specified period of time (the "Lender Cure Period"). The length of the Lender Cure Period will generally depend on the nature of the Developer Default. For example, the Lender Cure Period for remedying payment defaults is generally shorter than the Lender Cure Period for remedying non-completion defaults.

This stay on termination and/or bankruptcy proceedings is particularly important to Lenders because they have financed the Project on the basis of projected cash flows under the Concession Agreement (e.g., the expected Availability Payments), so if the Concession Agreement is terminated, Lenders will be unlikely to

recover the full amount of the Project Debt they have provided (even after taking into account the Termination Sum payable by the Department). Full repayment is generally possible only after the Project is completed and successfully operated for a significant period of time, so Lenders should be motivated to "revive" the Project. The Direct Agreement therefore permits the Lenders to take the actions described below during the Lender Cure Period.

16.2.1 Cure Rights

The simplest action that can be taken by the Lenders during the Lender Cure Period is to remedy a Developer Default on behalf of the Developer. The Direct Agreement will permit the Lenders during the Lender Cure Period (or during a shorter portion of the Cure Period) to cure a Developer Default without "stepping in" to the shoes of the Developer, thereby avoiding liability while pursuing such a remedy. As a result, the Lender can remedy the Developer Default while all liabilities continue to be borne by, and all obligations remain the responsibility of, the Developer. This mechanism works well for payment defaults because there is little risk to the Department that actions taken by Lenders to cure such a Developer Default could make matters worse. However, the absence of Lender liability may be of greater concern to the Department for non-completion defaults, where actions taken by Lenders to cure could put the Department in a worse position. Given such concerns, the Department may seek to limit the Lenders' right to cure without incurring liability to an initial period that is shorter than the total Lender Cure Period.

16.2.2 Step-In Rights

Where the remedy required to cure a Developer Default is more complex, the Collateral Agent (or a qualified substitute developer designated by the Lenders) may "step in" and become a party to the Concession Agreement, with joint and several liability with the Developer for all of its rights and obligations under the Concession Agreement. These "step-in" rights are broader in scope than the cure rights discussed above, giving the Lenders the ability to take greater action where necessary to remedy more complex breaches of the Concession Agreement (including directing the Department to ignore instructions or requests delivered by the Developer).

Once the Lenders have exercised their "step-in" rights, the Department will be prohibited from terminating the Concession Agreement until the expiration of the Lender Cure Period or the date when the Lenders relinquish their step-in rights, if earlier. Though Lenders are generally motivated to "revive" the Project (as discussed above), they will typically step-in only if there is a reasonable chance of success. It is therefore not unusual for the Lenders, following an exercise of these step-in rights, to agree with the Department on a plan for reviving the Project that may obligate the step-in entity to take certain specific actions – the breach of which would give the Department a new termination right – in exchange for more time (i.e., extended Lender Cure Periods). Notwithstanding this, Lenders will usually have the right to step-out and avoid further liability with respect to the Concession Agreement at any time during the Lender Cure Period. Stepping out before the Developer Default is cured is a significant decision for Lenders, as it will invariably lead to the termination of the Concession Agreement for Developer Default.

16.2.3 Substitution Rights

The most significant action the Lenders can take during the Lender Cure Period is to propose a substitute developer that assumes the Developer's role and to cause the Developer to assign all of its rights and obligations under the Concession Agreement to the substitute developer, including all unperformed obligations arising prior to the substitution date. Generally, in addition to having the legal capacity, power, and authority to become a party to, and perform, the Concession Agreement, the substitute developer will need to have available and committed to it the resources that are required to perform the obligations of the Developer under the Concession Agreement.

A substitution, if approved by the Department, will release the existing Developer (and any step-in entity then acting on behalf of the Lenders) from all of its obligations under the Concession Agreement as of the substitution date. The Lenders or the substitute developer may also pay to the Department any outstanding amounts owed by the Developer as a condition to the Department's approval, but once provided the Department will agree to waive its right of termination and any other rights the Department may have had which were suspended during the Lender Cure Period. Substitution effectively restores the Concession Agreement as if the Developer Default had not occurred, with the new developer permanently replacing the original Developer.

16.3 Subordination of Department's Rights

Both Lenders and the Department will generally enter into separate direct agreements with the Developer's D&C Contractor giving them rights to step into the shoes of the Developer under the D&C Contract in the event of a default by the Developer under the Finance Documents or the Concession Agreement, respectively. As a result, the Department and the Lenders will have competing step-in rights. Lenders will seek to address these competing step-in rights by requiring the Department not to exercise its step-in rights while the Lenders still have the right to exercise theirs. Departments typically agree to this arrangement in order to preserve the Lenders' incentive to monitor the Concession Agreement and take action to cure a Developer Default. However, the Department will generally not agree to subordinate its rights indefinitely and will often require the right to take action under its direct agreement with the D&C Contractor in certain circumstances, including at any point after:

- termination of the Concession Agreement;
- the expiration of the Lenders' rights under their own direct agreement with the D&C Contractor;
- receipt of confirmation that the Lenders do not intend to exercise their rights under their direct agreement or have no further claims thereunder; or
- the Lenders have stepped-out or otherwise relinquished control under their direct agreement.

16.4 Impact of Bankruptcy

In the event that the Developer is the subject of formal bankruptcy proceedings, there is a risk that the presiding judge will reject or terminate the Concession Agreement during the course of such proceedings. To provide comfort to the Lenders under these circumstances, Direct Agreements will typically allow the Collateral Agent (or any of its designees, including any substitute developer) to certify to the Department that it will perform all of the Developer's obligations under the rejected or terminated Concession Agreement and request that the Department deliver to the Collateral Agent a new Concession Agreement that includes the same terms as the rejected or terminated Concession Agreement (revised only to reflect the removal of obligations thereunder that have already been fulfilled). This feature functions as a backstop in the event that the Lenders' ordinary right to step in and cure a Developer Default is made impractical by ongoing bankruptcy proceedings.

The Lenders' right to designate a substitute developer should be distinguished from a Change in Ownership of the Developer that results from the enforcement by the Lenders of their security interest over the ownership of the Developer in the event of the Developer's default under the Financing Documents. Any Change in Ownership that results from such enforcement typically will not qualify as a Restricted Change in Ownership under the Concession Agreement and therefore, in contrast with the *substitution* of the Developer under the Direct Agreement, will not require the prior consent of the Department under the Concession Agreement.

17 Department Step-In

17.1 Events Triggering the Department's Step-In Rights

Under the Concession Agreement, the Department is typically given the right to "step-in" and perform the Developer's obligations following a Developer Default or in other circumstances where it may be in the public interest for the Department to temporarily take control of the Project.

The step-in rights of the Department are generally increased in certain default scenarios, such as closure of a part of the Project or failure to perform certain safety compliance obligations. In such circumstances, the Department will generally want the right to step-in, without waiting for any cure period of the Developer to lapse, in order to perform such actions as may be necessary to rectify the closure or danger to public safety.

17.2 Effect on the Obligations of the Developer

If the Department cures a Developer Default or otherwise steps-in to perform the Developer's obligations, the Developer will be obligated to indemnify the Department for the costs and expenses incurred by the Department in respect of such cure or performance.

17.3 Effect on Rights of the Department

Following a Developer Default, if the Department exercises its step-in rights, it does not affect the Department's other rights against the Developer arising from the Developer Default. In addition, the Department will generally not be liable for any act or omission of the Department during the course of remedying any Developer Default or stepping in to perform the obligations of the Developer under the Concession Agreement. Furthermore, even if the Department commences cure of the Developer Default or steps in to perform obligations of the Developer, generally the Department will not be required to continue to, or otherwise complete, the cure or performance.

18 Disputes

The Concession Agreement will generally establish procedures for the resolution of disputes between the Developer and the Department. The subject matter of such procedures is often broad and may include any claim, dispute, disagreement or controversy between the Developer and the Department concerning their respective actions, rights and obligations under the Concession Agreement. Typically, the Concession Agreement will provide that, in the event of a dispute, the Developer and Department will first attempt to resolve it through good faith negotiations between their designated representatives. If the dispute is not resolved within a period of time set forth in the Concession Agreement, either party will typically have the right to commence formal discussions between their executive-level representatives. If such discussions fail to resolve the dispute before a deadline prescribed by the Concession Agreement, then typically either the Developer or the Department may initiate non-binding mediation and, in the event that the dispute continues after the conclusion of mediation, each party will have the right to litigate the matter in accordance with the provisions of the Concession Agreement concerning venue and choice of law. Concession Agreements may contemplate the use of binding arbitration rather than litigation, although many Departments are bound by statutes requiring disputes to be heard in court, and some laws may specify special courts to address claims against State agencies. Typically, the parties will be required to bear their own costs during the course of a dispute, and the Concession Agreement will require them to continue to perform their obligations while a resolution is pending.

Where mediation of a dispute has been unsuccessful and the dispute is technical in nature (such as the proper application of particular engineering specifications, or the interpretation of technical requirements), the Concession Agreement may entitle either party to initiate a hearing of the dispute by a panel of independent subject matter experts appointed by the parties before commencing litigation. The decision of such a panel may entitle a party to interim relief relating to the dispute, but will not typically prejudice the right of either party to litigate the matter. In many cases, the Department cannot be party to an agreement that provides for binding arbitration of claims.

19 Intellectual Property

19.1 Ownership and Licensing of Intellectual Property

In most Projects, the Developer will need to use a variety of intellectual property in order to perform its obligations under the Concession Agreement. The intellectual property may be owned by the Department, the Developer or a third party. The Concession Agreement will usually specify that intellectual property owned by the Department, the Developer or a third party will remain the exclusive property of such party at all times. However, the Department and the Developer will typically be required to grant a license to each other for the use of intellectual property that they own. Where the intellectual property is owned by a third party, the Developer often bears the responsibility for procuring a license in favor of the Department that is similar in scope to the license it provides with respect to its own intellectual property.

Such licenses can be broad (i.e., for use in connection with the Project and other facilities or programs) or narrow (i.e., for use solely in connection with the Project). Whether a broad or narrow license is granted varies from one Project to another and can depend on the type of intellectual property in question. The Department will typically grant a narrow license to the Developer for intellectual property that is pre-existing and of general applicability ("background IP"). The Developer will typically grant a broad license to the Department for intellectual property developed specifically for the Project ("foreground IP") or at least provide the Department the right to purchase foreground IP for use in other facilities on commercially reasonable terms.

19.2 Intellectual Property Rights on Expiry or Termination of the Concession Agreement

Developers often seek to limit access to portions of their proprietary intellectual property which constitute patents or trade secrets, fearing that any public disclosure could deprive the Developer of the property's commercial value. Consequently, a Developer may insist that the Department only be permitted to exercise its license to such proprietary intellectual property upon the expiration or Early Termination of the Concession Agreement or exercise of the Department's step-in rights. Departments should be aware, however, that insolvency of the Developer could render a license ineffective, or that the Developer (or its Subcontractor who owns the intellectual property) may not cooperate in handing over the relevant intellectual property in a potentially contentious termination scenario. Each possibility presents a material risk that could jeopardize the Department's ability to operate the Project when it has assumed the obligations of the Developer under the Concession Agreement. One common means of mitigating this risk for the Department in a way that is satisfactory to the Developer is to require the Developer to place this proprietary intellectual property (such as software source codes and related documentation) in an escrow with an independent third party, subject to the express condition that it can be accessed by the Department upon the occurrence of certain termination and insolvency scenarios (e.g., termination for Developer Default).

20 Labor Best Practices

20.1 Introduction

As described in Chapter 14 ("Federal Requirements"), if a Project receives any Federal assistance pursuant to Title 23 of the United States Code, the Developer is required to comply (and require its Subcontractors to comply) with certain Federal laws, including labor laws, pertaining to the use of Federal funds. Additionally, all employers associated with a Project – including the Developer and any contractors, subcontractors, and concessionaires – are required to comply with any applicable Federal labor and employment laws, such as the Fair Labor Standards Act, the Family and Medical Leave Act, the National Labor Relations Act, Title VII of the Civil Rights Act of 1964, the Davis-Bacon Act, the Occupational Safety and Health Act, the Employee Retirement Income Security Act, as well as any relevant State and local requirements.

However, as a best practice, Departments and Developers are encouraged to consider adopting labor practices that provide worker protections beyond those that are required by law. Such practices can help ensure that a Project benefits the communities in which the Project is located by creating good middle-class jobs, and can also provide significant benefits to employers and taxpayers by encouraging efficiencies that result from the reduced worker turnover, increased productivity, higher-quality work, and more reliable performance produced by a well-trained, well-compensated workforce. By adopting or promoting adoption of such practices, Departments and Developers can reward employers who invest in their workforces, create and retain high-quality jobs, and deliver the best quality performance, and can leverage public investments to produce economic benefits even beyond the value of the Project. A Project that incorporates such practices can serve as a model for other projects and employers in the area and nationwide.

Some jurisdictions already encourage or require such practices in the P3 context. For example, Illinois, Indiana, Maryland, and Pennsylvania each has its own specific laws requiring contractors working on P3 projects to meet certain standards, such as the payment of prevailing wages and equal employment opportunity.

Where permitted by law, Departments can promote such "high road" labor practices in one of two ways – by incorporating them as preferences or requirements during the bidding process itself or by including them in contract requirements. Some of the sections below provide sample contract language to serve as examples for Departments choosing to incorporate these types of best practices into contracts with Developers and Subcontractors. Departments can also choose to incorporate these practices as preferences or requirements in the bidding process so that they are part of the criteria Departments use to evaluate bidders on a Project.

The sample contract language provided is intended only as guidance; it is expected that Departments will fashion their own provisions based on their specific needs, priorities, and preferences. As such, the sections below use descriptive rather than prescriptive terms in articulating the labor practices at issue. However, State and local governments are encouraged to consider implementing these practices given their benefits to workers, government entities, taxpayers, and the community at large.

The best practices and sample language included below are not intended to satisfy or replace any requirements imposed by Federal, State, or local law. Federal, State, or local law may mandate different or additional requirements or contractual clauses for certain types of contracts or subcontracts, including P3s, or may prohibit some types of arrangements or provisions. If so, the employer must follow those requirements, which may differ substantially from the sample provisions below. In particular, if a Project receives any Federal

assistance or involves a Federal contract or subcontract, Developers should ensure that they are in compliance with all relevant Federal requirements.[10]

Labor practices can be adopted on a jurisdiction-wide basis (typically through State or local laws and regulations) or on a Project-by-Project basis (typically through individual contracts). The sections below outline several labor practices that Departments and Developers can incorporate into P3 agreements. Such best practices may include: (i) prevailing wages and fringe benefits; (ii) employee benefits such as paid sick and family leave and health and retirement benefits; (iii) protections for incumbent and displaced workers; (iv) practices to promote apprenticeship and workforce development; (v) programs to promote workplace health and safety; (vi) practices to promote transparency in wage payment and the proper classification of workers; (vii) practices to promote equal employment opportunity; (viii) adoption of a project labor agreement; and (ix) a systematic approach that seeks to ensure that contractors and subcontractors on a P3 Project are employers whose history demonstrates responsibility and business integrity in their compliance with labor laws and other legal obligations.

20.1 Prevailing Wages and Fringe Benefits

The Federal Davis-Bacon Act ("DBA"), 40 U.S.C. Chapter 31, Subchapter IV, provides well-established standards for the payment of prevailing wages and fringe benefits for laborers and mechanics who work in construction, alteration, and repair (including painting and decorating). Likewise, the Federal Service Contract Act ("SCA"), 41 U.S.C. Chapter 67, provides well-established standards for the payment of prevailing wages and fringe benefits to service employees. Under the DBA and SCA, covered workers must be paid no less than the wages and fringe benefits that prevail for their classification (or occupation) in their locality.

The DBA and SCA apply to Federal contracts, and DBA requirements also generally apply to projects financed using Federal dollars, including federally assisted highway construction; transportation projects financed using Federal loans, loan guarantees, and credit under the Transportation Infrastructure Finance and Innovation Act of 1998 ("TIFIA") program; and any other transportation projects financed under Title 49, Chapter 53 of the U.S. Code.[11]

When employers involved in a P3 Project pay fair wages and benefits, they are better able to deliver a quality and timely product by attracting a stable workforce of high-quality, high-skilled, and experienced workers who will complete a job accurately and on time, reducing the high costs associated with absenteeism and worker turnover; lowering costs for recruiting, training, and employee supervision; increasing worker productivity; and receiving higher-quality performance. These outcomes benefit workers, employers, the Developer, investors in the Project, and the public at large. Departments pursuing P3 Projects that are interested in achieving such benefits are encouraged to consider including contract terms requiring that the

[10] The FHWA has published a guide for how to apply Federal-aid requirements to P3 transactions. A copy of this guide can be found at http://www.fhwa.dot.gov/ipd/p3/toolkit/publications/p3_oversight/default.aspx. Additional requirements will apply if the Project involves a Federal contract or subcontract.
[11] *See* 23 U.S.C. § 113; 23 U.S.C. § 602(c)(1); 49 U.S.C. § 5333(a). Other Federal funding laws that incorporate the DBA's prevailing wage requirements are listed at 29 C.F.R. § 5.1(a).

Developer, together with all contractors, subcontractors, concessionaires, and any other employers associated with a Project, pay their workers fair wages and benefits.

In the event a Project is not covered by the DBA and/or SCA,[12] Departments and Developers may be able to realize the public and private benefits of fair wages and benefits by drafting Concession Agreements requiring that all employers on a Project pay workers at least the prevailing wages and fringe benefits specified by the U.S. Department of Labor in the applicable DBA or SCA wage determination.[13] If workers are employed on a Project to which the DBA or SCA does not apply and are employed in classifications for which DBA and SCA wage and benefit rates are unavailable,[14] employers on the Project could pay such workers either the rates listed for the most analogous classification on the DBA or SCA wage determination for the relevant locality, or, for workers who do not have an analogous DBA or SCA classification, no less than the wages and benefits that prevail among the majority of employees who perform similar work in the geographic area at issue.[15] Federal DBA and SCA wage rates are publicly available.[16] If a State or locality has its own prevailing wage laws that exceed the requirements of the DBA and SCA,[17] it may be more appropriate to incorporate these laws into the P3 agreement rather than (or in addition to) the DBA and SCA.[18]

Finally, Departments can also choose to require a higher minimum wage "floor" independent of the applicable prevailing wage for workers on Concession Agreements. To that end, Executive Order 13658, Establishing a Minimum Wage for Contractors, establishes a minimum wage of $10.10, subject to annual increases based on

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[12] While the DBA applies both to Federal contracts and subcontracts and to most federally assisted projects, the SCA applies only to Federal contracts and subcontracts, but not to federally assisted projects.

[13] Under the DBA and SCA, covered contractors are free to satisfy any fringe benefits requirements by paying employees the cash value of the fringe benefits specified in a wage determination. Departments and Developers choosing to implement a fringe benefit component of a prevailing wage requirement for a P3 could include a similar option to maximize flexibility.

[14] *E.g.*, employees who are neither "laborers and mechanics" nor "service employees" as defined by the DBA and SCA. If a project is subject to the DBA or SCA and employs workers in classifications that are not included on an applicable wage determination, the classification must be added through a conformance procedure.

[15] If information is unavailable for the particular area, employers could use prevailing wages for similarly situated employees in a geographic area with a similar median income.

[16] Locality-specific wage determinations under the DBA and SCA can be found at Wage Determinations Online at http://www.wdol.gov.

[17] Neither the DBA nor the SCA preempts State or local prevailing wage laws.

[18] For example, Pennsylvania and Illinois laws governing transportation P3s require that agreements incorporate the requirements of the States' own prevailing wage laws. *See* 630 Ill. Comp. Stat. § 5/55 (citing 30 Ill. Comp. Stat. § 500/30-22); 74 Pa. Cons. Stat. § 9119(a)(2). Similar requirements exist in other States such as Maryland and Hawaii. *See* Md. Code, State Fin. & Procurement § 11-203(h)(2)(vi); Haw. Rev. Stat. § 104-2(a).

the Consumer Price Index, for workers on covered Federal contracts.[19] Departments could incorporate a similar provision into P3 agreements.[20]

An example provision requiring the payment of prevailing wages as well as a minimum wage "floor" is below:

> *(a) The [Developer] shall, and shall require that all its [Subcontractors], pay any laborers and mechanics, as defined in the regulations implementing the Davis-Bacon Act, 29 C.F.R. § 5.2(m), working at the site of the Project who work in construction, alteration, and repair (including painting and decorating) no less than the applicable prevailing wages and fringe benefits as set forth by the United States Department of Labor for such workers under 40 U.S.C. Chapter 31, Subchapter IV, otherwise known as the Davis-Bacon Act [or applicable State prevailing wage requirements];*
>
> *(b) The [Developer] shall, and shall require that all its [Subcontractors], pay any of their service employees, defined as any workers engaged in the performance of a contract the principal purpose of which is to furnish services (other than any workers employed in a bona fide executive, administrative, or professional capacity, as defined in 29 C.F.R. part 541), who are working on the Project no less than the applicable prevailing wages and fringe benefits set forth by the United States Department of Labor for such employees under 41 U.S.C. Chapter 67, otherwise known as the Service Contract Act [or the applicable State prevailing wage requirements];*
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> *(c) The fringe benefits specified in (a) and (b) may be satisfied through the [Developer's] or [Subcontractor's] irrevocably paying contributions to an independent trustee or other third person pursuant to an existing bona fide fund, plan, or program on the workers' behalf; by furnishing bona fide fringe benefits to the workers; by making equivalent payments in cash to the workers; or any combination of the above methods.*
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> *(d) For any workers of the [Developer] and its [Subcontractors] working on the Project for whom the prevailing wage and benefit determinations described in (a) and (b) are not available or do not exist, the [Developer] shall, and shall require that all of its [Subcontractors], pay such workers either*
>
> *1) No less than the prevailing wages and fringe benefits listed for a classification under the Davis-Bacon Act or Service Contract Act [or applicable State prevailing wage law] that is substantially similar to the worker's classification, or*
>
> *2) No less than the wages and fringe benefits that prevail among the majority of employees who perform similar work in [the geographic area].*
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> *(e) Notwithstanding the above provisions, the [Developer] shall, and shall require that all its [Subcontractors], pay each worker who performs work on the [Project] at least a minimum wage of [amount] per hour.*

20.2 Employee Benefits

20.2.1 Paid Sick and Family Leave

In addition to prevailing wage and fringe benefit provisions, another best practice is for Departments to ensure that employers associated with a P3 Project provide their workers with paid sick and family leave. The Federal Family and Medical Leave Act of 1993 ("FMLA") guarantees eligible employees of covered employers up to 12 weeks of unpaid, job-protected leave per year, with continuation of group health insurance coverage, to address a serious health condition of the worker or a close family member, care for a newborn, and attend to other needs. It also provides up to 26 weeks of leave to care for a covered servicemember recovering from a

[19] *See* E.O. 13658 §§ 2(a), 7.
[20] All Developers and Subcontractors must, of course, also comply with all applicable Federal, State, and local minimum wages laws and regulations.

serious injury or illness incurred in the line of duty on active duty. However, because of minimum requirements regarding employer size and length of employee service, the FMLA covers only about 60 percent of American workers and less than one-fifth of all new mothers.[21] Moreover, because FMLA leave is unpaid, many workers cannot afford to take the full amount of leave they need.

Even fewer American workers have access to paid sick and family leave. According to one survey, only 53 percent of workers reported having access to paid sick days to cover their own illness, only 48 percent reported being able to take paid leave to care for a family member, and only 39 percent reported access to paid family leave for the birth of a child.[22] Only 12 percent of American companies offer paid leave for new parents.[23]

Paid family and medical leave improves worker productivity, enables employees who are sick or injured to stay home and recover rather than working at less than full strength and potentially passing illnesses on to other workers, and saves employers costs, all of which benefit Projects. Additionally, paid sick and family leave policies can help employers recruit and retain talented workers, which increases the quality of the work performed on a Project and decreases the recruiting and training costs and productivity losses that result from excessive turnover.[24] For example, one survey showed that businesses with family-friendly policies including either paid or unpaid sick leave were more likely than other businesses to have above-average labor productivity.[25] As a result, Departments that require paid sick and family leave of P3 Developers and other employers will attract productive, cost-effective bidders.

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[21] Council of Economic Advisers, Executive Office of the President, *The Economics of Paid and Unpaid Leave* (2014) ("*Economics*"), at 3, http://www.whitehouse.gov/sites/default/files/docs/leave_report_final.pdf (citing Jacob Alex Klerman, Kelly Daley, and Alyssa Pozniak (prepared for U.S. Dep't of Labor by Abt Assocs.), *Family and Medical Leave in 2012: Technical Report* (2013), http://www.dol.gov/asp/evaluation/fmla/FMLA-2012-Technical-Report.pdf). For example, employees who work for employers with fewer than 50 employees within 75 miles of the employee's worksite are not eligible to take FMLA leave, and employees must have worked for an employer for at least a year and generally must have at least 1,250 hours of service in the prior year to be eligible. *See* 29 U.S.C. §§ 2611(2)(A), 2611(2)(B)(ii).

[22] Council of Econ. Advisers, *Economics*, at 9-10.

[23] *See* Soc'y for Human Res. Mgmt., *2014 Employee Benefits: An Overview of Employee Benefits Offerings in the U.S.*, at 28, https://www.shrm.org/Research/SurveyFindings/Documents/14-0301%20Beneftis_Report_TEXT_FNL.pdf.

[24] Council of Econ. Advisers, *Economics*, at 16-18.

[25] *Id.* at 18 (citing Shirley Dex and Colin Smith, *The Nature and Pattern of Family-Friendly Employment Policies in Britain* (2002), http://www.jrf.org.uk/sites/files/jrf/jr116-family-friendly-employment.pdf).

An example provision requiring the payment of paid sick and family leave is below:[26]

> *(a) The [Developer] shall, and shall require that all its [Subcontractors], permit each worker on the Project to accrue at least [number] days of leave per [time period], with full entitlement to the worker's pay, to be used for one or more of the following reasons:*
>
> *1) Because of the worker's physical or mental illness, injury, or medical condition;*
> *2) To obtain professional medical diagnosis or care or preventive medical care for the worker;*
> *3) Because of the birth of a child of the worker and in order to care for such son or daughter; or because of the placement of a son or daughter with the worker for adoption or foster care;*
> *4) To care for a child, spouse, domestic partner, parent, or [other close family member] who has any of the needs or criteria described in (1), (2), or (3);*
> *5) Because of a [qualifying exigency] arising out of the fact that a [close family member described in (4)] is on active military duty;*
> *6) An absence resulting from domestic violence, sexual assault, or stalking, if the time is to seek medical attention for the employee or the employee's [close family member described in (4)]; to recover from physical or psychological injury or disability caused by domestic violence, sexual assault, or stalking; to obtain or assist a [close family member described in (4)] in obtaining services from a victim services organization; to obtain or assist a [close family member described in (4)] in obtaining psychological or other counseling; to seek relocation; or to take legal action, including preparing for or participating in any civil or criminal legal proceeding related to or resulting from domestic violence, sexual assault, or stalking; or*
> *7) [Any other grounds the Department deems sufficient to warrant family or medical leave].*
>
> *(b) The [Developer] shall, and shall require that all its [Subcontractors], permit each worker on the Project to accrue at least [number] days of leave per [time period], with full entitlement to the worker's pay and benefits, to care for a military servicemember with a serious illness or injury if the worker is the servicemember's [close family member described in (4)] or next of kin.*[27]

[26] The example provision is adapted in part from the FMLA and the Healthy Families Act, proposed legislation that has been introduced in Congress. *See* Healthy Families Act, H.R. 932, 114th Cong. (2015). The Healthy Families Act would allow employees to accrue up to seven days of paid sick or family leave per year, but Departments may consider setting higher standards. For example, California's family leave law provides up to six weeks of paid leave at up to 55 percent of workers' weekly earnings up to a maximum weekly dollar amount. *See* Cal. Unemp. Ins. Code §§ 3301, 2655. In addition to sick leave and leave to care for a sick family member or new child, the sample provision here includes language modeled after the FMLA's "qualifying exigency" and "military caregiver leave," as well as a provision modeled after the Healthy Families Act's leave for absences resulting from domestic violence, sexual assault, or stalking.

[27] While the sample language does not include a suggested number of days of leave for the specified conditions, it includes a separate provision for military caregiver leave. This is modeled after the FMLA, which provides 26 weeks for military caregiver leave compared to 12 weeks of leave for the other conditions covered by the Act. *See* 29 U.S.C. § 2612(1), (3).

20.2.2 Health and Retirement Benefits

Like paid sick leave, health and retirement coverage benefits employees, employers, and the Department and its taxpayers. These benefits help attract and retain quality employees and reduce turnover, because the best and most capable workers are most likely to work for, and remain with, employers who provide these important benefits. Health benefits also enable employees to obtain quality, affordable care and treatment when they are sick or injured, and this care and treatment enables workers to return to their full productivity levels at work as soon as is practicable, saving a Project time and money. And employers who contribute to health and retirement plans are often able to realize tax savings because such contributions, as well as expenses associated with plans, can be tax-deductible. Finally, these benefits can promote a strong safety culture, because when companies make long-term investments in employees, they promote improved operational execution and productivity and a well-trained, knowledgeable, and stable workforce that is capable of meeting critical safety demands.

For these reasons, Departments may consider encouraging Developers and Subcontractors to provide health and retirement benefits through measures such as financial incentives and giving Developers and Subcontractors who provide such benefits preference or priority during the bidding process.[28] Departments should ensure that any such incentives or preferences are consistent with Federal, State, and local law, including the Employee Retirement Income Security Act of 1974 ("ERISA").

20.3 Incumbent Worker Nondisplacement and Protections

When a Department enters into a P3 to replace or take over a Project that was previously operated or maintained by a public entity (or by another private entity), the agreement may seek to retain workers previously working at that entity. If the P3 Project wholly displaces the existing workforce, the result can be harmful not only for the workers who lose their jobs but also for the Project, which will lose workers with a significant amount of expertise and knowledge. Additionally, if a P3 Project results in a decline in workers' wages, benefits, and other conditions of employment, it can impair worker recruitment and retention, and may also compromise the success of future P3 initiatives. Conversely, keeping existing workers provides continuity in the delivery of services and ensures that a Project has an experienced, trained workforce that is familiar with a worksite, its operations, and its unique requirements. As such, many Departments will find it

[28] As to health insurance specifically, the Affordable Care Act ("ACA") added new Internal Revenue Code provisions ("Employer Shared Responsibility provisions") that apply to certain large employers (generally, firms with at least 50 full-time and full-time equivalent employees in the prior year). Under these Employer Shared Responsibility provisions, if the applicable large employers do not offer affordable health coverage that provides a minimum level of coverage to their full-time employees (and their dependents), the employer may be subject to an Employer Shared Responsibility payment if at least one of its full-time employees receives a premium tax credit for purchasing individual coverage on one of the new Affordable Insurance Exchanges, also called a Health Insurance Marketplace. Many Developers and Subcontractors, due to their size, will be subject to the Employer Shared Responsibility provisions, but Departments may consider incentivizing Developers and Subcontractors who are not subject to these provisions to provide their employees with health benefits.

in their interests to include in P3 contracts, or in legislation, protections for incumbent workers affected by a P3.[29]

Federal law provides two general models for incumbent worker nondisplacement and other protections that Departments may consider adopting into P3s. One model provides incumbent employees with the right of first refusal of employment with the new employer. For example, Executive Order 13495, which applies to service employees on Federal contracts covered by the Service Contract Act, requires that when a service contract expires and a follow-on contract is awarded for the same or similar services as the same location, the new (successor) contractor generally must provide all of the service employees who had worked for the previous (predecessor) contractor during the last month of the predecessor contract the right of first refusal of employment with the successor contractor.[30] There are a few exceptions to this general rule. Most notably, the successor contractor may give priority to its own employees who worked for at least three months immediately preceding the new contract and would otherwise face layoff or discharge, it need not offer employment to workers who are being retained by the predecessor contractor, and the successor has discretion to employ fewer employees than the predecessor.[31] The predecessor contractor must provide notice to its employees of their rights under E.O. 13495.[32] Another example of this type of protection can be found in a regulation that applies when Federal government work is converted to private contract work.[33] This provision requires that a contractor give government workers who have been, or will be, adversely affected or separated from government service as a result of the new contract a right of first refusal for jobs under the contract for which they are qualified.

A more comprehensive model in Federal law for ensuring that a new project does not result in the worsening of employment conditions is Section 13(c) of the Federal Transit Act.[34] Section 13(c) protects employee rights, including collective bargaining rights, if they pre-existed Federal assistance. Under Section 13(c), as a condition of receiving financial assistance from the Federal Transit Administration to acquire, improve, or operate a mass transit system, the State or local entity receiving such assistance is required to put arrangements in place to protect the interests of employees who may be affected by such assistance. Arrangements under 13(c) must include provisions that may be necessary for (1) the preservation of rights, privileges, and benefits (including continuation of pension rights and benefits) under existing collective bargaining agreements or otherwise, (2) the continuation of collective bargaining rights, (3) the protection of individual employees against a worsening of their positions related to employment, (4) assurances of employment to employees of acquired public transportation systems, (5) assurances of priority of reemployment of employees whose

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[29] This may be particularly important where the previous workforce included veterans who held veterans preference under laws established by the public entity.

[30] *See* E.O. 13495, Nondisplacement of Qualified Workers Under Service Contracts (Jan. 30, 2009); *see also* U.S. Dep't of Labor, Wage & Hour Div., Final Rule on Nondisplacement of Qualified Workers Under Service Contracts, 76 Fed. Reg. 53720 (Aug. 29, 2011); 29 C.F.R. § 9.12(a).

[31] *See* 29 C.F.R. § 9.12(c)(1), (d). If the successor contractor employs fewer employees than its predecessor, it must still provide a right of first refusal to the predecessor's employees for 90 days after the contract begins to fill any vacancies that arise. For a complete list of exceptions to the nondisplacement rule, see 29 C.F.R. § 9.12(c) and (d).

[32] *See id.* § 9.11(b).

[33] *See* 48 C.F.R. § 52.207-3.

[34] *See* 49 U.S.C. § 5333(b).

employment is ended or who are laid off, and (6) paid training or retraining programs.[35] These arrangements must be certified by the Department of Labor. Departments can require similar arrangements in the P3 context to protect the rights of employees affected by a P3. While the 13(c) model may be particularly appropriate in the context of transit P3 Projects, it can be adapted to non-transit projects as well. The Department of Labor's website includes several model 13(c) agreements.[36]

Other models exist in which the P3 may maintain a closer relationship with the public entity that previously operated or maintained the Project. For example, under some circumstances, Developers and Subcontractors may continue utilizing the existing public entity and its employees to work on the Project, such as by using the public entity as a contractor to the Developer or a Subcontractor or by entering into an employee leasing arrangement with the public entity. Depending on the circumstances, these types of arrangements may enable the public employees to continue their government service and, if they are still considered common-law employees of the governmental entity, to retain their governmental pay, pension, and health benefits. For example, such an arrangement might enable the former public employees to retain the defined benefit pension plans in which they participated as public employees. Departments entering into these types of arrangements should ensure that they are in compliance with all relevant legal requirements, including regulations of the Department of Labor and the Internal Revenue Service that pertain to benefit plans.

State laws also provide useful examples for Departments seeking to require or encourage protective arrangements as a condition of entering into a P3. For example, Illinois legislation authorizing a P3 for Chicago Midway International Airport required the private entity to offer the public employees who would become employees of the private entity the economic equivalent of the standard of their public sector wages and benefits, and also required the government to offer substantially similar alternative jobs to those public employees.[37] Pennsylvania requires that for any P3 in the transportation context, the development entity must offer employment to any public employees in good standing who would lose their jobs due to the execution of a Concession Agreement, including "substantially identical" salaries and benefits to those they received as public employees.[38]

While the specific terms of a protective agreement in the context of a P3 will likely vary by Department and by Project, the inclusion of protections for incumbent workers, particularly those that protect such workers from displacement and maintain their wages and benefits, can yield benefits for workers, management, and Departments.

20.4 Workforce Development and Apprenticeship

Departments are also encouraged to consider promoting workforce development activities, including partnering with the public workforce system to assist in outreach, recruitment, screening, assessment, and job training for workers of Developers and their Subcontractors. Under these models, Developers and

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[35] *Id.* § 5333(b)(2).
[36] *See* U.S. Dep't of Labor, Office of Labor-Management Standards, Mass Transit Employee Protections, http://www.dol.gov/olms/regs/compliance/compltransit.htm. This web page includes a discussion of Section 13(c) as well as links to four Section 13(c) agreements endorsed by the Department, including the Unified Protective Arrangement, the Special Warranty Arrangement, the Nonunion Protective Arrangements, and the Model ("National") Agreement.
[37] 50 Ill. Comp. Stat. §§ 615/35, 615/40. The Midway P3 Project ultimately did not go forward.
[38] 74 Pa. C.S. § 9110(a)(19).

Subcontractors can be offered incentives or be required to work with the local Workforce Development Board to provide any or all of the following: notification of upcoming positions (including necessary experience and skills requirements), identification of on-the-job training opportunities, assistance in the development of customized training opportunities for positions associated with the project, and review of pre-screened applicants.

One specific area of workforce development includes Registered Apprenticeships. Apprenticeships – a combination of on-the-job learning and related instruction in which workers learn how to perform a highly skilled occupation – can yield valuable benefits for workers seeking to earn wages and learn skills, for employers striving to improve their own workforce, and for local and State governments wishing to create and sustain economic growth. As such, many Departments may encourage employers associated with a Project to participate in high-quality Registered Apprenticeship programs that can lead to sustainable careers in transportation and related industries like construction.

The U.S. Department of Labor administers the National Registered Apprenticeship system, which partners with employers, employer associations, labor management organizations, State and local governments, community organizations, and others to promote high-quality apprenticeship programs. In a successful Registered Apprenticeship program, the apprentice receives a combination of on-the-job training and structured learning. The apprentice begins working from day one and earns gradual wage increases as he or she gains the necessary skills. At the conclusion of the program, the apprentice receives a portable, nationally-recognized credential that certifies that he or she has reached a certain level of proficiency. In the United States today, there are over 19,000 active Registered Apprenticeship programs that offer training to over 410,000 Registered Apprentices.[39] Numerous industries that participate in Registered Apprenticeship programs are directly relevant to a transportation P3 Project, including construction, manufacturing, telecommunications, and information technology.

Developers and their Subcontractors who employ Registered Apprentices have the benefit of creating a pipeline of skilled workers who become, through their training, familiar with the specific needs and specifications of their industry and employer and, as a result, produce high-quality results. The on-the-job learning that apprentices receive from more experienced workers leads to increased productivity and knowledge transfer. Registered Apprenticeship programs also enhance employee retention; in 2011, 87 percent of apprentices who completed a Registered Apprenticeship program were still employed nine months after completing their apprenticeship.[40] And because apprenticeship programs emphasize safety training, they can reduce employer costs associated with workers who become injured or sick while on the job.

State and local governments also see economic benefits from Registered Apprenticeship programs. By expanding the number of highly skilled workers in a State or locality, a Registered Apprenticeship program can help jurisdictions recruit and retain businesses that require such skilled workers. Additionally, because apprentices pay income taxes on their wages, they can generate tax revenue. For example, it is estimated that every $1 the Federal government invests in Registered Apprenticeship programs yields more than $50 in

[39] U.S. Dep't of Labor, Employment & Training Admin., Data and Statistics: Registered Apprenticeship National Results, Fiscal Year 2014, http://www.doleta.gov/oa/data_statistics.cfm.
[40] U.S. Dep't of Labor, Employment & Training Admin., What Is Registered Apprenticeship?, http://www.doleta.gov/oa/apprenticeship.cfm.

revenue.[41] Finally, apprenticeship provides a path toward employment and higher earnings for a diverse workforce that includes minorities, women, veterans, youth, low-income individuals, and dislocated workers. For example, in 2009, Oregon passed legislation requiring the State's transportation department to use one-half of 1 percent of eligible Federal highway funds, up to $2.1 million every two years, to increase diversity in the highway construction workforce and to prepare workers who seek to enter the highway construction workforce.[42] Such spending is authorized by 23 U.S.C. § 140(b), and States and localities may wish to use this available funding as a means of promoting apprenticeship and diversity in the highway workforce.

Departments seeking to secure the benefits of Registered Apprenticeship in a P3 may encourage employers on a P3 to participate in a Registered Apprenticeship program by, for example, providing Developers and Subcontractors with incentives to participate in such programs or granting preferences to bidders who participate in such programs.[43] Departments should ensure that any policies pertaining to apprenticeship for P3s are fully consistent with Federal, State, and local law, including ERISA.[44] More information on these strategies can be found in the Department of Labor's Federal Resources Playbook for Registered Apprenticeship.[45]

20.5 Workplace Health and Safety

20.5.1 Safety and Health Management Programs

Employers who prevent workplace injuries and illnesses are not only protecting their workers' safety, health, and well-being; they are improving their own efficiency, quality, and bottom line. In a P3 Project, such savings can translate into lower cost, better value, more efficient and reliable performance, and higher-quality services for the Department and taxpayers.

Each year, approximately 4,500 workers are killed on the job and nearly three million suffer serious work-related injuries or illnesses.[46] These illnesses and injuries not only have a devastating immediate effect, but can

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[41] U.S. Dep't of Labor, Employment & Training Admin., *Registered Apprenticeship: A Solution to the Skills Shortage* (Part 2), http://www.doleta.gov/oa/pdf/fsback.pdf.

[42] *See* Or. Rev. Stat. § 184.866.

[43] Registered Apprenticeship programs are regulated by the U.S. Department of Labor's Office of Apprenticeship and apprenticeship agencies in about 25 States. *See* U.S. Dep't of Labor, Employment & Training Admin., *A Quick-Start Toolkit Building Registered Apprenticeship Programs*, http://www.doleta.gov/oa/employers/apprenticeship_toolkit.pdf. The Office of Apprenticeship's regulations are set forth at 29 C.F.R. Parts 29 and 30.

[44] In addition, if a Project is subject to the DBA, SCA, or E.O. 13658 and employs apprentices or trainees on the Project, it must do so in compliance with U.S. Department of Labor regulations. *See* 29 C.F.R. §§ 4.6(p), 5.5(a)(4), 10.2.

[45] *See* U.S. Dep't of Labor, Employment & Training Admin., *The Federal Resources Playbook for Registered Apprenticeship*, http://www.doleta.gov/oa/federalresources/playbook.pdf.

[46] *See* U.S. Dep't of Labor, Occupational Safety & Health Admin., *Adding Inequality to Injury: The Costs of Failing to Protect Workers on the Job* (2015), at 3, http://www.dol.gov/osha/report/20150304-inequality.pdf.

have long-term consequences as well; even with workers' compensation benefits, the incomes of workers who are injured are, on average, almost $31,000 lower over 10 years than if they had not been injured.[47] Workplace injuries have a particularly significant impact on low-wage workers, whose family members must often reduce their own hours of work and wages to care for a disabled partner or family member.[48]

In addition to the impact on workers, workplace illnesses and injuries cause employers to incur substantial costs and business disruptions. According to one study, the direct cost of the most disabling workplace injuries in 2012 was nearly $60 billion.[49] Another study estimated the annual workers' compensation benefits paid for all compensable injuries and illnesses in 2012 at over $61 billion.[50] Other direct costs may include potential fines from regulatory agencies for violations of workplace health and safety requirements. In addition to these direct costs, other indirect costs can include wages paid to injured workers for absences not covered by workers' compensation; time lost through work stoppages; administrative time spent by supervisors following injuries; employee training and replacement costs; lost productivity related to accommodation of injured employees and new employee learning curves; and replacement costs of damaged material, machinery, and property.

One way that employers can help ensure workplace safety and health is through a safety and health management program.[51] Such a program is a proactive process to help employers find and fix workplace hazards before workers become hurt or sick. Not only do employers who implement these programs experience dramatic decreases in workplace injuries, but they also often report a transformed workplace culture that can lead to higher productivity and quality, reduced turnover, reduced costs, and greater employee satisfaction. When workers and employers work together to develop a culture of safety, workers are encouraged to offer their ideas and contributions, which can result in greater employee loyalty and higher productivity. And through the process of comprehensively identifying, preventing, and controlling workplace hazards, workers and employers may also identify and correct other flaws and inefficiencies at the workplace, which can translate into increased output and quality.

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[47] *Id.* at 4.
[48] *See id.* at 4-5.
[49] Liberty Mutual Research Institute for Safety, *2014 Liberty Mutual Workplace Safety Index* (2014), http://www.libertymutualgroup.com/omapps/ContentServer?c=cms_document&pagename=LMGResearchInstitute%2Fcms_document%2FShowDoc&cid=1138365240689. The "most disabling" injuries are defined by this study as those causing the injured employee to miss six or more days of work.
[50] National Academy of Social Insurance, *Workers' Compensation: Benefits, Coverage, and Costs, 2012* (2014), at 1, http://www.nasi.org/sites/default/files/research/NASI_Work_Comp_Year_2014.pdf.
[51] Different entities use various terms to describe systematic approaches to reducing injuries and illnesses in the workplace. Consensus and international standards use the term "Occupational Health and Safety Management Systems," OSHA has sometimes used "Injury and Illness Prevention Programs" and also uses "Safety and Health Management Programs," and others use "Safety and Health Programs." All of these refer to efforts to systematically address workplace safety and health hazards on an ongoing basis to reduce the extent and severity of work-related injuries and illnesses.

Thirty-four States already require or encourage employers to implement safety and health management programs. Fifteen States have mandatory safety and health management program regulations for some or all employers, while others provide voluntary guidance, consultation, training, and other assistance; provide financial incentives for employers to implement such programs; or require mandatory safety committees of some or all employers.[52] In the construction industry, Occupational Safety and Health Administration ("OSHA") regulations already require employers to initiate and maintain programs that provide for frequent and regular inspections by competent individuals of job sites, materials, and equipment.[53] All employers, however, regardless of industry, may adopt safety and health management programs, and as noted above, such programs are effective in improving efficiency and performance and decreasing costs.

Safety and health management programs typically involve a number of elements, all of which are flexible and can be implemented by large and small businesses alike: management leadership, worker participation, hazard identification, hazard prevention and control, education and training, and program evaluation and improvement. These elements can include, for example, encouraging workers to report concerns, such as hazards, injuries, illnesses, and near misses; identifying workplace hazards through inspections, worker input, and investigations; informing workers of any hazards that may exist; implementing a plan to prioritize and control hazards; educating workers how to recognize hazards, how to assist in eliminating, controlling, and reducing them, and how to properly report injuries and illness; and periodically reviewing the overall program to determine whether it is effective or needs improvement.

In recognition of the benefits of safety and health management programs, Departments assessing candidates for a P3 project can prioritize bidders who implement safety and health management programs, or they can include contract terms requiring bidders to implement such programs. Guidance on implementing these types of programs can be found on OSHA's website.[54]

20.5.2 Proper Incentives for Reporting Workplace Injuries and Safety Violations

Employers can also promote workplace safety by ensuring that they do not establish programs and systems that – whether intentionally or unintentionally – discourage employees from reporting workplace injuries. For example, some employers may provide bonuses or other incentives for employees, teams, or worksites that have not experienced any injuries in a certain period of time. While these programs often are well-intentioned, they may discourage reporting because reporting an injury can eliminate or reduce employees' opportunity to earn the relevant reward. Additionally, to the extent that these programs effectively

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[52] The fifteen States with regulations requiring safety and health management programs of some or all employers are Arkansas, California, Hawaii, Louisiana, Michigan, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New York, North Carolina, Oregon, Utah, and Washington. *See* U.S. Dep't of Labor, Occupational Safety & Health Admin., Injury and Illness Prevention Programs –White Paper (2012), http://www.osha.gov/dsg/InjuryIllnessPreventionProgramsWhitePaper.html. The remaining States with regulations or incentives that promote such programs include Alabama, Colorado, Connecticut, Delaware, Idaho, Indiana, Kansas, Missouri, Nebraska, New Mexico, North Dakota, Ohio, Oklahoma, Pennsylvania, Tennessee, Texas, Vermont, West Virginia, and Wyoming. *See id.*

[53] 29 C.F.R. § 1926.20(b)(1-2).

[54] *See* U.S. Dep't of Labor, Occupational Safety & Health Admin., Injury and Illness Prevention Programs, http://www.osha.gov/dsg/topics/safetyhealth/index.html.

discriminate against workers who report injuries, they may be unlawful under Section 11(c) of the Occupational Safety and Health ("OSH") Act and other laws, and if they result in injuries not being reported, they may cause the employer to violate OSHA regulations that require employers to keep records of workplace injuries.[55]

To prevent such results and to promote true workplace safety, employers can use different types of incentives, such as those that encourage or reward workers for reporting injuries, illnesses, near-misses, and hazards, for participating in safety and health training, or for taking part in safety and health committees, and thus encourage workers to be actively involved in their employers' safety and health management system. Departments can use the terms of their contracts or solicitation requirements to encourage such practices, rather than those that may discourage workers from reporting injuries.

An example of a provision incorporating the health and safety protections described above is below:

> *(a) The [Developer] and each [Subcontractor] on a Project must initiate and maintain a written safety and health management program.*
>
> *(b) Such a program must provide for frequent and regular inspections of the job sites, materials, and equipment to be made by competent persons designated by the [Developer] or [Subcontractor].*
>
> *(c) Such a program must also involve:*
>
> *a. Participation by both management and workers;*
>
> *b. Initiatives to regularly and proactively identify, prevent, and control hazards and risks to worker safety and health;*
>
> *c. Regular education and training of management and workers; and*
>
> *d. Regular evaluations of the program and improvement as necessary.*
>
> *(d) Such a program may not use incentives that could discourage workers from reporting hazards, illnesses, or injuries, such as associating a benefit or reward for workers, managers, or teams with few or zero reported injuries over a given period of time.*
>
> *(e) The [Developer] and each [Subcontractor] may not discriminate or retaliate against workers who report hazards, illnesses, or injuries.*

20.6 Wage and Classification Transparency

Transparency between employers and workers about their pay and classification status can help workers understand their rights under wage payment and antidiscrimination laws and receive benefits for which they are eligible. Many workers are unaware of potential compensation violations because they lack information about the number of hours they have worked (including the number of overtime hours), whether any additions or deductions have been made from their pay, and whether they are being correctly classified by their employer as employees or independent contractors. Additionally, some employers prohibit employees from

[55] For additional guidance on safety incentives and disincentives, see OSHA's memorandum on Employer Safety Incentive and Disincentive Policies and Practices (Mar. 12, 2012), https://www.osha.gov/as/opa/whistleblowermemo.html, and Revised VPP Policy Memorandum #5: Further Improvement to the Voluntary Protection Programs (VPP) (Aug. 14, 2014), http://www.osha.gov/dcsp/vpp/policy_memo5.html.

inquiring about, disclosing, or discussing their pay with their fellow workers, which both decreases the likelihood that the most qualified and productive workers will be hired at the market price and prevents the employees from learning about any wage discrimination that may exist. Early identification of wage-related issues through wage and classification transparency can benefit a P3 Project, as it may help prevent disagreements about wages and employee classification from becoming prolonged disputes that have an adverse impact on the timely completion of a Project. By enabling workers to raise any concerns about their pay as soon as they arise, transparency encourages employers on a Project to resolve those concerns quickly and effectively.

Departments can encourage such transparency by requiring Developers and other employers associated with a Project to provide wage statements to their employees each pay period that contain information about the individual's hours worked, overtime hours, pay, and any additions made to or deductions made from pay, and by requiring a one-time notice of whether the employer is treating the worker as an independent contractor rather than an employee. Departments can encourage additional transparency by prohibiting employers on a P3 from taking adverse employment actions against workers and job applicants who inquire about, discuss, or disclose their own compensation or the compensation of other workers or job applicants.

An example of a provision incorporating these protections is below:[56]

> *(a) The [Developer] and all [Subcontractors] must provide each individual performing work on the Project, on each payday, with a document containing the following information for that individual:*
>
> *1) The worker's gross pay for the pay period;*
>
> *2) Any additions made to or deductions made from pay;*
>
> *3) The basis for how the worker is paid (e.g. by the hour, shift, day, week, salary, piece, commission, or other);*
>
> *4) The total number of hours worked by the worker during the pay period;*
>
> *5) The total number of overtime hours worked by the worker during the pay period, if the worker is eligible for overtime pay under Federal, State, or local law or receives overtime pay pursuant to a contract or collective bargaining agreement; and*
>
> *6) Whether the worker is eligible for overtime pay under Federal, State, or local law or receives overtime pay pursuant to a contract or collective bargaining agreement.*
>
> *(b) The [Developer] and all [Subcontractors] must provide each individual performing work on the Project, before the individual performs any work on the Project, with a document stating whether the employer has designated the worker as an employee or an independent contractor.*

[56] These provisions are adapted in part from section 5 of Executive Order 13673, Fair Pay and Safe Workplaces (July 31, 2014), and Executive Order 13665, Non-Retaliation for Disclosure of Compensation Information (Apr. 8, 2014). Executive Order 13673 requires covered Federal contractors and subcontractors to provide each of their workers with a wage statement each pay period, and also requires that such contractors and subcontractors provide notices to any workers they are treating as independent contractors rather than employees. The President signed Executive Order 13665 to prohibit pay secrecy policies for Federal contractors and subcontractors.

(c) The [Developer] and [Subcontractors] shall provide the documents described in section (a) and (b) to each worker in English and in any language(s) other than English in which a significant portion of the [Developer's] or [Subcontractor's] workforce is fluent.

(d) The [Developer] and [Subcontractors] shall not discharge, or in any other manner discriminate against, any worker or job applicant because such worker or job applicant has inquired about, discussed, or disclosed his or her own compensation or the compensation of another worker or job applicant.

(e) The prohibition in (d) shall not apply to instances in which a worker who has access to the compensation information of other workers or job applicants as a part of the worker's essential job functions (e.g. a worker in human resources) discloses without authorization the compensation of such other workers or job applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the [Developer] or [Subcontractor], or is consistent with the [Developer's] or [Subcontractor's] legal duty to furnish information.

Departments can also promote compliance with wage payment and classification requirements by requiring employers on a P3 to certify on a regular basis that they have complied with all relevant wage payment laws, have correctly classified their workers, and are complying with tax laws, workers compensation laws, and other relevant requirements – with penalties for failure to comply. This approach encourages employers who share the benefits of working on a P3 to proactively review their classification of employees.[57]

20.7 Equal Employment Opportunity

Equal employment opportunity principles help employers identify the person best qualified for a job, creating a more productive workforce. Many Developers and Subcontractors are bound by Federal laws governing equal employment opportunity. State and local laws and ordinances may prohibit discrimination on additional grounds and may extend nondiscrimination requirements to employers who are not covered by Federal law. As a best practice, Departments may also include nondiscrimination and equal opportunity requirements in their contracts with P3 Developers for employers that are not otherwise covered.

Most employers with at least a specified number of employees[58] are required to comply with certain Federal equal opportunity laws, including Title VII of the Civil Rights Act, the Age Discrimination in Employment Act, the Equal Pay Act, the Americans with Disabilities Act, the Genetic Information Nondiscrimination Act, and others. Additionally, if an employer working on a P3 project is receiving any Federal assistance, Title VI of the Civil Rights Act of 1964 prohibits the employer from discriminating on the bases of race, color, and national origin and provides that the Federal government may terminate its financial assistance to employers who fail to comply with these provisions.[59]

[57] Municipal ordinances in Boston, Somerville, and Worcester, Massachusetts follow this model. See City of Boston Mun. Code, ch. VIII, § 8-9.2(c)(4); Somerville, Mass. Code of Ordinances ch. 2, § 2-355(b)(5); Worcester Rev. Ordinances ch. 2, § 35(c)(4).
[58] Each statute specifies its own requirements for coverage.
[59] 42 U.S.C. §§ 2000d, 2000d-1.

Additional equal employment opportunity provisions apply to many covered Federal contractors, subcontractors, and federally assisted construction contracts, as well as to the Federal government itself. Executive Order 11246, as amended, bars discrimination by covered Federal contractors and subcontractors, as well as federally assisted construction contractors (*i.e.*, companies working on a construction contract that receives funds under a Federal program by means of a grant, loan, insurance, or guarantee), on the bases of race, color, religion, sex, sexual orientation, gender identity, and national origin. The Executive Order also requires covered employers to take affirmative action to ensure that equal opportunity is provided in all aspects of their employment. Section 503 of the Rehabilitation Act prohibits discrimination by covered Federal contractors and subcontractors against qualified individuals with disabilities and requires them to take affirmative action to employ, and advance in employment, such individuals.[60] Similarly, the Vietnam Era Veterans' Readjustment Assistance Act ("VEVRAA") prohibits discrimination by covered Federal contractors and subcontractors against qualified protected veterans and requires that they take affirmative action to employ, and advance in employment, such veterans.[61] Finally, Section 508 of the Rehabilitation Act requires that Federal agencies' electronic and information technology provide individuals with disabilities with access to, and use of, such technology that is comparable to that of individuals without disabilities, unless doing so would impose an undue burden.[62] This ensures that job applicants with disabilities can learn about and apply for jobs with Federal agencies, and that disabled employees of the Federal government can do their jobs with the aid of assistive technology when necessary.

Departments are encouraged to consider requiring or incentivizing nondiscrimination and incorporating equal opportunity provisions into their contracts with Developers and employers on P3s even if such steps are not required by law. For example, contractual provisions or bid specifications might require that all Federal, State, and local nondiscrimination laws and ordinances apply regardless of the number of workers employed by an employer. They might also include a requirement to employ affirmative efforts to promote equal opportunity, such as self-audits to avoid disparities in hiring, promotion, and compensation and to ensure effective recruitment, training, and educational programs. The affirmative action provisions of Executive Order 11246, Section 503 of the Rehabilitation Act, and VEVRAA and their implementing regulations may serve as helpful guidance for Departments and employers wishing to promote such practices. And the Section 508 standards for the Federal government – both the existing standards and newly proposed ones – provide models for Departments and Developers seeking to ensure equal employment opportunities on P3s for those with disabilities through the use of assistive technology.[63] Finally, Departments may consider requiring employers on P3s to maintain written equal employment opportunity policies that set forth the employers' policies and procedures for complying with equal opportunity laws and promoting equal opportunity in their workforces.

20.8 Project Labor Agreements

It is in the strong interest of a Department for employers on a Project to maintain positive and productive relationships with their workforce and to resolve issues related to labor management before a Project begins. One way to do so is through a Project Labor Agreement ("PLA"). A PLA is a pre-hire collective bargaining

[60] 29 U.S.C. § 793; 41 C.F.R. part 60-741. Section 503 does not apply to federally assisted construction contractors.
[61] 38 U.S.C. § 4212(a)(2), 41 C.F.R. part 60-300. VEVRAA does not apply to federally assisted construction contractors.
[62] 29 U.S.C. § 794d.
[63] The current Section 508 standards can be found at 36 C.F.R. Part 1194. On February 18, 2015, The United States Access Board released a proposed rule to update the standards to reflect developments since the original standards were published in 2000. The proposed standards can be found at 80 Fed. Reg. 10879 (Feb. 27, 2015).

agreement ("CBA") that governs terms and conditions of employment on one or more construction projects and lasts only as long as the project. In transportation projects, PLAs are typically negotiated between the State or local contracting agency and appropriate labor organizations, such as an area or State building and construction trades councils and relevant local unions.

PLAs can be valuable tools that can help ensure that Departments, taxpayers, and private investors receive quality projects that are delivered on time and under budget and create good jobs that benefit families and communities. They can be particularly useful in the construction context, as construction projects typically involve numerous employers at a single location working in tandem. PLAs can provide uniformity and certainty to the Developer and the Department by prohibiting work stoppages and providing for expeditious dispute resolution procedures (usually through binding arbitration), and by having one agreement govern the terms and conditions of employment of all contractors and subcontractors. They can save both taxpayers and private investors money by providing a steady flow of highly trained labor and guaranteeing labor peace that helps ensure timely completion of a Project. And by standardizing all labor conditions on a Project, PLAs can create a level playing field where the best, most efficient bidder is awarded a contract, rather than a bidder that provides the lowest wages and benefits.

PLAs can also protect workers by ensuring that they can collectively bargain for important terms and conditions of their employment such as workplace safety, grievance procedures, wages and benefits, training and apprenticeship, and other issues. PLAs can make workplaces safer, because they often include language establishing labor-management health and safety committees, and can also be used to create structures for recruiting and training junior construction workers and to further other goals such as opportunities for small or minority-owned businesses and the use of environmentally sustainable technologies.

To take advantage of these benefits, many public agencies will seek to enter into PLAs, which have been used on numerous large-scale public and private construction projects nationwide, from the Hoover Dam in the 1930's to schools, hospitals, roads, bridges, and baseball stadiums. PLAs have been used at a majority of the Department of Energy's ("DOE") key sites. DOE representatives have stated that PLAs have helped complete projects on time and within budget by providing a mechanism for coordinating wages, hours, work rules, and other terms of employment across the project; creating structure and stability for dispute resolution; prohibiting work stoppages, slowdowns, and strikes; and ensuring access to a well-trained, assured supply of skilled labor. The Tennessee Valley Authority ("TVA") has used PLAs on its construction projects for over two decades, during which there have been no formal strikes or organized work stoppages and a significantly reduced injury rate. The United States Navy recently entered into a PLA to facilitate the construction of a wharf on a naval base in Washington State. PLAs were also successfully used by the Los Angeles Unified School District to invest in the local workforce, promote apprenticeship, and provide opportunities for small and disadvantaged businesses,[64] and the Los Angeles County Metropolitan Transportation Authority approved a PLA for its construction projects, with specific goals for hiring workers in economically disadvantaged areas,

[64] *See generally* Uyen Le, *Project Labor Agreements: Pathways to Business Ownership and Workforce Development in Los Angeles* (2011), http://constructionacademy.org/wp-content/uploads/downloads/2012/03/LAUSD-PSA-Small-Business-Participation-CCA-11-18-11.pdf.

disadvantaged workers, and apprentices.[65] The State of Illinois requires contractors on P3s for new transportation facilities to enter into a PLA.[66]

A useful model for the types of provisions contained in a typical PLA is contained in Executive Order 13502, which encourages Federal agencies to consider PLAs for Federal construction projects.[67] The Executive Order does not require the use of a PLA on any project, but it requires that any PLA entered into by a Federal agency contain the following components: (1) it must bind all contractors and subcontractors on the project pursuant to appropriate specifications in solicitation provisions and contract documents; (2) it must allow all contractors and subcontractors to compete for contracts and subcontracts regardless of whether they are otherwise parties to CBAs; (3) it must contain guarantees against work disruptions, including strikes as well as lockouts; (4) it must stipulate "effective, prompt, and mutually binding" dispute resolution procedures; (5) it must provide other mechanisms for cooperation between labor and management on matters of mutual interest and concern, including productivity, quality of work, safety, and health; and (6) it must fully conform to applicable law.[68]

The above features are by no means exclusive; they serve merely as general guidelines to Departments that enter into PLAs with Developers.

An example provision requiring a PLA (adapting the requirements of the terms of Executive Order 13502) is below:[69]

> *(a) The [Developer] shall negotiate and enter into a Project Labor Agreement that:*
>
> *1) Binds the [Developer] and all [Subcontractors] on the [Project];*
>
> *2) Allows [Subcontractors] to compete for contracts to work on the [Project] regardless of whether they are otherwise parties to collective bargaining agreements;*
>
> *3) Contains guarantees against strikes, lockouts, and similar job disruptions;*
>
> *4) Sets forth effective, prompt, and mutually binding procedures for resolving labor disputes arising during the Project Labor Agreement;*
>
> *5) Provides other mechanisms for labor-management cooperation on matters of mutual interest and concern, including productivity, quality of work, safety, and health; and*
>
> *6) Fully complies with Federal, State, and local law.*

In addition to PLAs for the construction phase of a project, a Department may wish to consider a Labor Peace Agreement for the O&M phase. Such an agreement, entered into with a labor organization attempting to organize or representing the employees performing operations and maintenance work on the project, prohibits

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[65] *See* Los Angeles County Metropolitan Transit Auth., Project Labor Agreement & Construction Careers Policy, http://www.metro.net/about/pla/.
[66] 630 Ill. Comp. Stat. § 5/55(b).
[67] E.O. 13502, Use of Project Labor Agreements for Federal Construction Projects (Feb 6, 2009).
[68] *Id.* § 4.
[69] Departments should ensure that any PLA or provision requiring PLAs is in compliance with Federal, State, and local law.

work stoppages and may provide for neutrality in an organizing effort or dispute resolution measures, thus preventing disruption to the operation of the project after construction has been completed.

20.9 Responsible Contractor Policy

The above sections describe a number of labor practices and protections that Departments may consider requiring of employers on P3 Projects. Any of these provisions can be implemented through State or local legislation or as part of a Department's contract with the Developer. Another alternative is a "responsible contractor policy" in the form of a statute, ordinance, or regulation that requires all employers who bid on, or qualify for, contracts to work on a P3 Project to demonstrate their compliance with certain requirements or gives priority to employers that demonstrate compliance, such as by incorporating the labor practices of the Developer and Subcontractors into the technical scoring of a bid or proposal.

Several States and cities have adopted responsible contractor policies as part of State and local procurement statutes and ordinances. To be considered a "responsible bidder" on construction contracts in Illinois, a company must comply with State prevailing wage laws, Federal equal opportunity laws, and all State laws concerning the bidder's entitlement to conduct business.[70] Boston, Massachusetts, requires city contractors to comply with requirements that include payment of prevailing wages and proper classification of employees.[71]

Many responsible contractor policies require prospective bidders to disclose any history of violations of labor laws or other legal requirements. Disclosure enables the State or local government agency evaluating the bidder to have a complete picture of the prospective contractor's compliance with its legal obligations, which may be indicative of its ability to comply with its contractual obligations with the Department. The City of Los Angeles, for example, requires that prospective contractors complete a questionnaire that addresses, in addition to the contractor's technical qualifications and capacity to perform the work, whether the contractor has a "satisfactory record of compliance with relevant laws and regulations" and a "satisfactory record of business integrity."[72] Similarly, Executive Order 13673, Fair Pay and Safe Workplaces, when implemented, will require prospective Federal contractors and subcontractors whose contract value exceeds $500,000 to report any administrative merits determinations, arbitral awards or decisions, or civil judgments rendered

[70] *See* 30 Ill. Comp. Stat. § 500/30-22.
[71] City of Boston Mun. Code, Ch. VIII, § 8-9.2.
[72] *See* Los Angeles, Cal., Admin Code § 10.40.2(a). The questionnaires for construction contracts and service contracts, respectively, are located at http://bca.lacity.org/site/pdf/cro/CROQ%20Construction%20Questionnaire%20(rev%2012-05-11).pdf and http://bca.lacity.org/site/pdf/cro/CROQ%20Service%20Questionnaire%20Rev%201-20-12.pdf. The questionnaires ask for information about whether the prospective contractor has been "investigated, cited, assessed any penalties, or been found to have violated" certain Federal, State, and local laws, including wage and hour laws, civil rights laws, environmental laws, worker safety laws, licensing requirements, and others.

against them for violations of certain labor laws over the previous three years and to update this information semiannually following an award of a contract or subcontract.[73]

These types of comprehensive systems are easily translatable to the context of a P3 Project. Illinois has incorporated the "responsible bidder" requirements contained in the Illinois Procurement Code into its requirements for contractors and subcontractors working on transportation P3 Projects.[74] Maryland has similarly incorporated certain responsibility requirements applicable to State contractors, including nondiscrimination, prevailing wage rates, and a living wage requirement into public-private partnerships.[75] Such initiatives can help ensure that the potential cost savings that a Department may realize from a P3 Project do not come at the expense of workers and their families through the underpayment of wages and benefits, inadequate worker health and safety, or other legal violations. Additionally, they can help ensure that a P3 project progresses without the unpredictable delays and pitfalls that may result from enforcement investigations, labor disputes, private litigation, and other proceedings that may follow a contractor's or subcontractor's failure to comply with its legal obligations.

[73] E.O. 13673 § 2 (July 31, 2014). The Executive Order became effective immediately, and will apply to all solicitations for contracts as set forth by any final rule issued by the Federal Acquisition Regulation Council, which is forthcoming.
[74] *See* 630 Ill. Comp. Stat. § 5/55(a).
[75] *See* Md. Code, State Fin. & Procurement § 11- 203(h)(2). Departments should ensure that any responsible contractor policies for P3s are fully consistent with Federal, State, and local law, including ERISA and the National Labor Relations Act ("NLRA").

21 General Provisions

Each Concession Agreement will contain a number of general provisions that are relatively standard, not heavily negotiated, and accordingly have not been covered in this Guide. These provisions include conditions precedent, representations and warranties, record keeping, notice provisions, payments, interest on overdue amounts and governing law. The Department will still need to consider each of these provisions in the context of a particular Project.

Appendix A: Glossary of Terms

The glossary of terms provided below is designed to be used as an educational tool to assist in understanding the Model Public-Private Partnership Availability Payments Concession Contract Guide. The terms below are illustrative and should not be construed as legal advice, notwithstanding that a number of the terms contained below may also be used in example provisions provided in the Guide.

Term	Description
Account Balances	Amounts held in or credited to certain bank accounts of the Developer which reduce the total amount of the Termination Sum payable by the Department.
Applicable Law	Any local, State or Federal laws, rules or regulations that apply to the Developer or the Project.
appropriations risk	The risk that a State legislature will not appropriate or allocate to the Department sufficient funds to permit the Department to meet its payment obligations to the Developer under the Concession Agreement.
Availability	A concept, defined by a set of measurable conditions set forth in the Concession Agreement or other Project Documents that measures whether the Developer's performance of its obligations is sufficient to earn some or all of the Availability Payments. As used in this Guide, Available has a correlative meaning.
Availability Fault	An event or circumstance causing the Developer's failure to meet Availability Requirements, as described in Section 3.2.3 of the Guide.
Availability Payment	The amount earned by Developer commencing on the Substantial Completion Date as determined in accordance with the Concession Agreement, as adjusted to reflect.
Availability Requirements	An output-based set of requirements that define whether the Service is Available, as described in Section 3.2.1 of the Guide. Such requirements may also be known as "Service Requirements."
Base Case Financial Model	The financial model containing agreed projections and calculations regarding revenues, expenses, dividends and repayment of debt and equity relating to the Project as well as agreed economic assumptions, as described in Section 5.3 (Base Case Financial Model Adjustments). The Base Case Financial Model will be prepared in Excel format and may be used, among other things, to calculate the projected Equity IRR over the Term, as may be updated in accordance with the terms of the Concession Agreement.
Breakage costs	Any commercially reasonable costs, make-whole payments or other prepayment amounts (including premiums) that the Developer must pay under any Financing Document as a result of the early repayment of such debt prior to its scheduled maturity date.
Capital Expenditure	Any expenditure which is treated as a capital expenditure in accordance with Generally Accepted Accounting Principles (GAAP) or equivalent auditing standards utilized and generally accepted in a party's country of incorporation.
caps and floors	Terms derived from instruments used in the financial markets, which establish a maximum (cap) and minimum (floor) price, such as an interest rate, for a financial instrument. Often used together (in which case, a collar), caps and floors are considered cost-effective ways to financial risks, such as changes in interest rates.
Change in Law	A new or changed Law that is applicable to the Project as compared to that in effect when the Project was procured as described in Section 9.6 of the Guide.
Change in Ownership	A change in the direct or indirect ownership of the Developer, as described in Section 11.5 of this Guide.
Change Order	A written order from the Department to the Developer requesting a change in the Construction Work as compared to the Construction Work originally required to be performed by the Developer under the Project Documents.
Closure	The closure or blockage of all or part of any traffic lanes, ramps, cross roads, shoulders or sidewalks on the Project, or circumstances where the use thereof is otherwise restricted.

Term	Description
Collateral Agent	In circumstances where there is more than one secured Lender involved in a Project, the Lenders will often appoint a Collateral Agent that holds the collateral provided as security for the Project, such as a real property mortgage or an all-asset pledge agreement from the Developer, on behalf of the secured parties.
commercial close	The execution of the Concession Agreement.
Compensation amount	The amount of any monetary compensation payable by the Department to the Developer with respect to any Compensation Event designed to capture the Developer's Capital Expenditures, Changes in Costs, and Financing Costs, as described in Section 0.
Compensation Event	The occurrence of one or more events which delay or increase the cost of the Developer's performance of its obligations under the Concession Agreement or which reduce the Developer's revenue, as described in Section 8.3.1 of the Guide.
Concession	The contractual right granted by the Department to the Developer to design, build, finance, operate and maintain a particular asset owned by the Department, which will be documented and governed by the terms of a Concession Agreement.
Concession Agreement	This term is defined or otherwise described in Section 1.2 of the Guide. This document is also sometimes known in the market as a "Comprehensive Agreement", a "Concession and Lease Agreement" or a "Public-Private Partnership Agreement".
Construction Performance Security	A performance and/or payment security the Department may require the D&C Contractor to provide in light of the requirements of Applicable Law or the individual circumstances of the Project, as described in Section 2.5 of the Guide.
Construction Period	The period starting upon the commencement of construction of the new asset being developed as part of the Project, and ending at the achievement of Substantial Completion.
Construction Work	All Work to build or construct, make, form, manufacture, furnish, install, supply, deliver, landscape or equip the Project.
Cost to Complete	The cost to the Department to complete the Project following a Developer Default prior to Substantial Completion, as described in Section 12.3.4 of the Guide.
cure period	The period of time afforded to the Developer to cure or remediate a breach of the Concession Agreement or other failure to satisfy the requirements thereof, including the Availability Requirements.
D&C Contract	The contract between the Developer and the D&C Contractor pursuant to which the D&C Contractor agrees to carry out the design work and the Construction Work and related services on the Project.
D&C Contractor	The contractor hired by the Developer to carry out the design work, the Construction Work and related services on the Project pursuant to the D&C Contract. The D&C Contractor may be an affiliate of the Developer.
D&C Work Value	The value of completed Work for a construction project, calculated as described in Section 12.3.4 of the Guide.
Debt Service Coverage Ratio / DSCR	A key debt statistic that measures available cash flow for debt service divided by debt service on a periodic basis. Lenders often establish a minimum ration which they require to see in cash flow forecasts.
Defects Liability Period	A proscribed period (generally two years) following Substantial Completion of the Project during which time the D&C Contractor must account to the Developer for defects in the construction of the Project.
Delay Event	The occurrence of one or more events which delay the Developer's performance of its obligations under the Concession Agreement, as described in Section 8.3.2 of the Guide.
Demand and revenue risk	The risk that traffic demand for the relevant Project, and Toll Revenues received by the Developer, do not match the projections used to generate the Developer's expected rate of return.
Department	The public authority granting rights to the Developer to design, build, finance, operate and maintain the Project in accordance with the Concession Agreement.

Term	Description
Department Change	A right set out in the Concession Agreement through which the Department may authorize or require changes to the Work, as described in Section 10.1 of the Guide.
Department Default	The occurrence of one or more specified failures of the Department to perform its obligations under the Concession Agreement, as described in Section 12.2.1 of the Guide.
Department Termination Sum	The amount payable by the Department to the Developer following a termination of the Concession Agreement for a Department Default, as described in Section 12.2.4 of the Guide.
Developer	The private entity that contracts with the Department to undertake some or all of the design, construction, financing, operations and maintenance relating to a Project that is to become subject to a Concession Agreement.
Developer Change	A right set out in the Concession Agreement to propose changes to the Work, which are typically subject to the Department's consent and must be performed at the Developer's sole cost and expense, as described in Section 10.2 of the Guide.
Developer Default	The occurrence of one or more specified failures of the Developer to perform its obligations under the Concession Agreement, as described in Section 12.3.1 of the Guide.
Developer Default Termination Sum	The amount payable by the Department to the Developer following a termination of the Concession Agreement for a Developer Default, as described in Section 12.3.4 of the Guide.
Developer Noncompliance Trigger Event	A Developer Default that occurs when the Developer accumulates Noncompliance Points or Noncompliance Events in excess of pre-defined thresholds during one or more rolling periods. For example, a Developer Noncompliance Trigger Event may occur if the Developer accumulates more than [X] number of Noncompliance Points in any three month period, or [Y] number of Noncompliance Events in any six month period. The periods of time and the threshold number of points or events will vary for each Project, however the purpose of this term is to create a serious disincentive (Developer Default) for chronic under performance, such as a situation where the Developer might decide that it is more economical to repeatedly incur small deductions to the Availability Payment than to fix the underlying problem that causes the noncompliance.
Direct Agreement	The agreement between the Developer, the Department and the Collateral Agent under which, among other things, the Department provides consent to provision of security over the Developer's rights in the Project and grants the Collateral Agent step-in rights and cure rights in the event of a Developer Default under the Concession Agreement.
Discriminatory Change in Law	This term is defined or otherwise described in Section 9.5 of the Guide.
Discriminatory O&M Change	A change in the Technical Requirements relating to the O&M Work which is materially more onerous as applied to the Developer or the Project in question as compared to comparable project, or which is selectively applied to the Developer or the Project and not to other comparable facilities.
Dispute Resolution Procedures	The provisions contained within the Concession Agreement that outline how the parties will resolve disputes, which generally include an initial good faith effort to reach agreement, the use of a technical advisor and/or disputes review board, and the use of arbitration and traditional litigation.
Early Termination	Termination of a Concession Agreement for any reason prior to the original stated expiration of the Term, including by reason of a default by either party or a Force Majeure Event.
Early Termination Date	The effective date of Early Termination.
Element	Each individual component, system, or subsystem of the Project.
Equity IRR	The internal rate of return that the Equity Members have projected to be derived from the Project in accordance with the Base Case Financial Model, as may be updated in accordance with the terms of the Concession Agreement.
Equity Members	The entities which directly or indirectly own the Developer and invest equity into the Project, also known as "sponsors" or "shareholders".
Extended Force Majeure Termination Sum	The amount payable by the Department to the Developer following a termination of the Concession Agreement for a Force Majeure Event, as described in Section 12.4.2 of the Guide.

Term	Description
Escrow Agent	A third party hired to hold and control the Handback Reserve Account, as described in Section 4.4.1 of the Guide.
Final Acceptance Payment	The Milestone Payment made upon the Developer achieving Substantial Completion, as described in Section 5.1.3 of the Guide. This payment is typically reduced for Unavailability of existing highways impacted by construction or other violations of the contractual requirements prior to the Substantial Completion Date. May also be referred to as the "Substantial Completion Payment".
financial close	The satisfaction of all conditions precedent to the effectiveness of the Developer's substantive obligations under the Concession Agreement, which typically occurs on the same date as the first drawdown of debt by the Developer under the Financing Documents.
Financing Documents	All documentation relating to the financing of the Project (excluding Shareholder Loans), including loan documentation, security documentation, credit support documentation, hedging documentation and intercreditor documentation.
Financial Closing Date	The date on which the conditions precedent to the provision of financing to fund the Project have been met. These conditions include execution of the Transaction Documents, delivery of the Base Case Financial Model, delivery of requisite legal opinions and confirmation that the requisite equity investment or Shareholder Loan/s have been made by the Equity Members.
Force Majeure Event	One of a set of agreed events outside the control of either the Department or the Developer which may permit the Developer to seek relief under the Concession Agreement, as described in Section 8.3.4 of the Guide.
Guaranteed Substantial Completion Date	An agreed date set forth in the Concession Agreement by which the Developer must achieve Substantial Completion, as described in Section 2.2 of the Guide.
Guide	This Model Public-Private Partnerships Availability Payment Contract Guide.
Good Industry Practice	A standard of conduct applicable to the work which is typically based on the exercise of the degree of skill, diligence, prudence and foresight which would reasonably and ordinarily be expected from time to time from a skilled and experienced professional designer, engineer, constructor, operator or maintenance provider (as applicable) seeking in good faith to comply with its contractual obligations, complying with all Applicable Laws and Governmental Approvals, using accepted design and construction standards and criteria normally used on similar projects in the relevant jurisdiction, and engaged in the same type of undertaking in the United States under similar circumstances and conditions, including environmental conditions.
Governmental Approval	All approvals, permits, permissions, consents, licenses, certificates and authorizations required from time to time in connection with the Project whether issued by the Department or any Governmental Entity.
Governmental Entity	Any court, Federal, State, or local government, department, commission, board, bureau, agency or other regulatory or Governmental Entity, other than the Department.
greenfield project	In a P3 context, a greenfield project is one that requires the construction of a wholly new asset (rather than an expansion of an existing asset, which is often referred to as a "brownfield" project). The Concession Agreement in respect of the greenfield project will include the design and construction of the new asset, as well as the operation and maintenance of the asset.
Gross Revenues	All amounts received by the Developer in relation to the Project, including Toll Revenues, insurance proceeds (to the extent received to compensate for the loss of tolls and user fees) and interest income.
Handback	The return of the Project to the Department at the end of the Term, as described in Section 4.1 of the Guide.
Handback Inspections	Regular inspections conducted by the Developer during the Handback Period, as described in Section 4.3 of the Guide.
Handback Performance Security	Any performance security, including but not limited to Handback letters of credit, the amount of which is credited to the Handback Reserve Account.
Handback Period	The final years of the Term, during which the Developer is required to prepare for and manage the Handback of the Project to the Department, as described in Section 4.4.1 of the Guide.
Handback Requirements	The performance standards for the Project's major assets required to be achieved by the Developer prior to Handback of the Project to the Department, as described in Section 4.2 of the Guide.

Term	Description
Handback Reserve Account	The account in which the Handback Reserve Amount is held, as described in Section 4.4.1 of the Guide.
Handback Reserve Amount	An amount required to be held by the Developer to pay the cost of complying with the Handback Requirements, as described in Section 4.4.1 of the Guide.
Hazardous Substances	Any substance which is considered a contaminant, pollutant, dangerous substance, toxic substance, solid waste, or hazardous material which is deemed hazardous or toxic under, or otherwise regulated by, environmental laws.
highway project	The design, construction, finance, operation and maintenance of an asset comprising a highway.
Independent Engineer	An expert who is hired to review the completed Project against a set of technical standards and determine, objectively and independently, whether they have been met.
independent quality firm	A technical expert hired by the Developer who owes a duty of care to the Department to report on and assess the technical progress of the Project during construction and, in some cases, during major maintenance.
Insurance Proceeds	Any insurance proceeds available to the Department for the purposes of achieving Substantial Completion.
Key Assets	The assets and contractual rights necessary to enable the Department to continue a Project following a termination of the Concession Agreement, as described in Section 12.6.4 of the Guide.
Key Contractor	The relevant Subcontractor under designated "key contracts" relating to the Project, which will generally include the D&C Contract, the O&M Contract and any significant services contract with a value over a designated amount.
Key Developer Documents	All of the Developer's primary contracts critical to the design, construction, operations, maintenance, financing and any similar activities related to the Project. See Section 1 (Amendments to Key Developer Documents)
Law	All laws, rules and regulations applicable to the Developer or the Project, as described in Chapter 1 (Change in Law) of the Guide.
Lender Cure Period	A specified period of time provided to the Lenders under the Direct Agreement in which the Lenders are entitled to cure a Developer Default under the Concession Agreement, as described in Section 16.2.
Lenders	Each bank or financial institution, including the U.S. Department of Transportation via the Federal Highway Administration (as lender of a TIFIA loan), or any other entity that provides Project Debt (excluding Shareholder Loans or any other financing provided by Equity Members).
Life-cycle	In relation to an asset, the course of the Useful Life of that asset.
Life-cycle maintenance / investments / costs	In relation to an asset, money or materials invested to maintain the asset during the life-cycle of that asset.
Life-Cycle Maintenance Plan	The Developer's plan to manage its major maintenance and Handback obligations during the life of the Project, as described in Section 4.2.3 of the Guide.
Long Stop Date	The date, being a designated period of days following the date Substantial Completion is scheduled to occur, following which time, if Substantial Completion has not occurred, a Developer Default will occur under the Concession Agreement.
Losses	Any losses, liabilities, judgments, damages, fees, penalties, fines, sanctions, charges or out-of-pocket and documented costs or expenses actually suffered or incurred.
Maintenance Work	Work required to be undertaken by the Developer in relation to the maintenance of the Project, including routine maintenance and Renewal Work.
Major Maintenance Reserve Account	An account established by the Developer which must contain sufficient funds to pay for projected Renewal Work required over a given period in respect of the Project.
MAP Adjustment	A mechanism to adjust the Maximum Availability Payment on the basis of changes in interest rates and credit spreads between commercial and financial close, as described in Section 5.2.3.1 of the Guide.
MAP-21	Moving Ahead for Progress in the 21st Century Act.
Maximum Availability Payment	The highest Availability Payment that the Developer is eligible to earn for performing the Work, if no Payment Adjustments are assessed by the Department.

Term	Description
Milestone Payment	A payment from the Department to the Developer for achieving specified "milestones" in the construction, as described in Section 5.1.3 of the Guide.
Net Project Debt	The amount of the Developer's Project Debt less its Account Balances, as described in Section 12.3.4 of the Guide.
Non-Compliance Points	Numerical points assessed by the Department for Developer's failure to satisfy the performance requirements in the Concession Agreement, as more particularly described in Section 5.2 of the Guide.
Non-Discriminatory Change in Law	A Change in Law that is not a Discriminatory Change in Law, as described in Section 9.6 of the Guide.
Non-Discriminatory O&M Change	A change in the Technical Requirements applicable to the O&M Work that is not a Discriminatory O&M Change.
O&M	Operations and maintenance, in relation to the Project.
O&M Contract	The contract between the Developer and the O&M Contractor pursuant to which the O&M Contractor agrees to carry out operations and maintenance services for the Project.
O&M Contractor	The contractor hired by the Developer to carry out the operations and maintenance services on the Project pursuant to the O&M Contract. The O&M Contractor may be an affiliate of the Developer or the Developer may perform the Operations and Maintenance services itself.
O&M Violation	A failure by the Developer to operate, maintain and renew the Project in accordance with the Technical Requirements.
O&M Violation Adjustment	An adjustment to the Availability Payment resulting from an O&M Violation.
Payment Adjustments	Collectively, the Unavailability Adjustments and the O&M Violation Adjustments.
Payment Mechanism	An agreed mechanism between the Department and the Developer where the Department pays an Availability Payment to the Developer, taking into account deductions for failure to provide all the agreed Services in accordance with the Concession Agreement.
Permitted Closure	An agreed event or circumstance that permits the Developer to deviate from the Availability Requirements without incurring Unavailability Adjustments, such as planned maintenance or emergency response.
Persistent Closure	A Developer Default that occurs when the Developer accumulates Unavailability Adjustments or Unavailability Events in excess of pre-defined thresholds during one or more rolling periods. For example, a Persistent Closure may occur if the Developer accumulates more than [X] number of Unavailability Adjustments in any three month period, or [Y] number of Unavailability Events in any six month period. The periods of time and the threshold number of points or events will vary for each Project, however the purpose of this term is to create a serious disincentive (Developer Default) for chronic under performance, such as a situation where the Developer might decide that it is more economical to repeatedly incur small deductions to the Availability Payment than to fix the underlying problem that causes the unavailability.
Planned Maintenance	Maintenance Work that is performed by the Developer in the ordinary course in the manner and according to the schedule and plans approved by the Department in accordance with the Concession Agreement.
Post-Refinancing Base Case Financial Model	The Base Case Financial Model, after the Developer refinances, as described in Section 0 (Refinancing Events).
Pre-Refinancing Base Case Financial Model	The Base Case Financial Model, before the Developer refinances, as described in Section 0 (Refinancing Events).
private activity bonds (PABs)	A bond issued for the purpose of financing a Project. PABs are often issued via a conduit issuer (generally a finance vehicle of the State), which then on-lends the money to the Developer. The Developer (rather than the Department) is liable for the payment of interest and redemption of the PABs. When issued for a designated purpose and provided other Federal and State requirements are complied with, interest earned on PABs will be tax-exempt (though not exempt from the alternative minimum tax).
Prohibited Person	In the context of Change in Ownership provisions, and depending on the Department's requirements with respect to changes in ownership to particular entities of concern, those entities that give rise to concerns associated with national security, debarment from State or Federal procurement processes or egregious reputation who may not become Equity Members.

Term	Description
Project	The asset to be designed, constructed, financed, operated and maintained by the Developer pursuant to the terms of the Concession Agreement.
Project Debt	The bona fide indebtedness related to the Project, including bank debt, PABs, TIFIA loans, guarantees and credit support facilities. Project Debt includes not just principal and interest but also fees, expenses and any breakage costs. Project Debt does not include Shareholder Loans or any other financing provided by Equity Members.
Project Documents	All documentation relating to the design, construction, operation and maintenance of the Project, including the Concession Agreement, the D&C Contract and the O&M Contract.
Project Right of Way	The real property, which is necessary for the performance of the Work and operation of the Project.
Project Schedule	The construction schedule for the Project as agreed between the Department and Developer.
Project Value	The fair market value of the Developer's interest in the Project. This fair market value is generally determined by an independent appraiser and based on the projected cash flows of the Project as of the date of determination until the end of the original Term.
Proposal Due Date	The due date for potential Developers (or their Equity Members) to submit their proposals in response to a "Request For Proposals" issued by the Department in relation to an upcoming Project.
Public-Private Partnership / P3 / P3 transaction	A contractual arrangement between a Department and a Developer as described in Section 1.1 of the Guide.
Qualified Investor	A list of Equity Members in the Project that the Department has vetted as part of the procurement process and is comfortable with and has an interest in keeping as investors in the Project.
Refinancing Gain	The net financial gain the Developer may receive as a result of refinancing some or all of the Project Debt by, for example, securing lower interest rates as part of the refinancing or paying Equity Members a dividend with the proceeds.
Related Entity	In the context of Change in Ownership provisions, this would generally include each entity in the ultimate ownership structure between the Developer and the Equity Members, as well as all affiliated legal entities under common ownership and control.
Remedial Plan	Upon the occurrence of a Developer Default and the expiry of any applicable cure period, the Department may require the Developer to prepare a remedial plan, as described in Section 12.3.3 of the Guide.
Renewal Work	The renewal, repair or replacement of worn-out, obsolete, damaged or under-performing components so that the Project does not prematurely deteriorate and remains fully functional.
Residual Life	The approximate Useful Life of an asset less its age if the asset has performed in service in the manner and with the levels of traffic and wear and tear originally expected by the Developer and if the Developer has properly maintained the asset in accordance with its obligations under the Project Documents.
Residual Life Methodology	The methodology for calculating the Residual Life of an asset at the end of the Term of a Concession Agreement, as described in Section 4.2.2 of the Guide.
Residual Life Requirements	The required Useful Life an Element must have following Handback from the Developer to the Department.
Restricted Change in Ownership	A change in the ownership of the Developer that is restricted by the Concession Agreement, as described in Section 11.5 of the Guide.
Service	The service provided by the Developer to make available a highway or road pursuant to the Concession Agreement with the Department in return for Availability Payments, as described in Section 3.1 of the Guide.
Service Commencement	The opening of the Project for normal and continuous operations and use by the public.
Service Requirements	See Availability Requirements.
Set-off	The right of one party to deduct, from the amount owed to another party, any amount owed from such other person to the first person.
Setting Date	The date, typically occurring 4-6 weeks prior to the date when proposals for the Project are due, which serves as the reference point applicable to when parties were expected to have known or investigated information relating to the Project.

Term	Description
Shareholder Loans	Equity investments in the Developer which take the legal form of loans from the Equity Investor to the Developer.
Site	The development location of the Project.
State	Any state or territory of the United States of America and the District of Columbia.
State Highway	Any highway designated as a "State Highway" by the relevant State regulations.
Subcontract	An agreement between the Developer and a Subcontractor under which the Subcontractor will perform certain services contracted to be performed by the Developer under the Concession Agreement.
Subcontractor	The subcontractor under a Subcontract, including the D&C Contractor and the O&M Contractor.
Subcontractor Breakage Costs	Liabilities incurred in respect of demobilization of Subcontractors and the cancellation of orders for materials and goods which arise as a result of the Early Termination of the Concession Agreement, as described in Section 0 of the Guide.
Substantial Completion	When the Developer has completed all the Construction Work required by it under the Concession Agreement and the Project is substantially ready for normal and safe use and operation.
Substantial Completion Date	The date Substantial Completion is achieved, usually evidenced by a certificate issued by the Department.
Substantial Completion Payment	The Milestone Payment made upon the Developer achieving Substantial Completion, as described in Section 5.1.3 of the Guide. This payment is typically reduced for Unavailability of existing highways impacted by construction or other violations of the contractual requirements prior to the Substantial Completion Date. May also be referred to as the "Final Acceptance Payment".
Supervening Events	A set of defined events or circumstances giving rise to a claim for relief under the Concession Agreement, as described in Section 8.1 of the Guide.
Technical Requirements	A set of performance requirements and specifications agreed between the Department and the Developer as to the Work.
Term	The duration of the grant of the concession to the Developer under the Concession Agreement, usually from the date of the Concession Agreement for a fixed period of years, unless terminated early.
Termination for Convenience Termination Sum	The amount payable by the Department to the Developer following a termination of the Concession Agreement for convenience by the Department, as described in Section 12.5.2 of the Guide.
Termination Sum	The amount of compensation payable to the Developer from the Department in the event the Concession Agreement is terminated early, including, depending on the reason for the Early Termination, the Termination for Convenience Termination Sum, the Department Termination Sum, the Developer Default Termination Sum and the Extended Force Majeure Termination Sum.
TIFIA	The USDOT program administering loans under the Transportation Infrastructure Finance and Innovation Act, which provides Federal credit assistance in the form of direct loans, loan guarantees, and standby lines of credit to finance eligible surface transportation projects.
Time Impact Analysis	A method used to determine the extent of a delay in the critical path of a construction project, as described in Section 8.4.1 of the Guide.
Title 23 of the United States Code	The United States Code is a codification of the general Federal laws of the United States. Title 23 outlines the role of highways, including Federal-aid and other highways, highway safety and research and technology relating to highways.
Toll Concession	A concession granted to a Developer in relation to a toll road.
Toll Revenue	In a Toll Concession P3, revenues from user fees of the Project that form the basis for the Developer's compensation.
Transaction Documents	All documentation relating to the Project, including Financing Documents and Project Documents.
Transportation facilities	Facilities relating to transportation, including bridges, railways, freight ways, highways and toll roads.
Unavailability	A concept, defined by non-compliance with the set of conditions that constitute Availability under the Concession Agreement or other Project Documents, that warrants a reduction or suspension of Availability Payments to the Developer.

Term	Description
Unavailability Adjustment	An adjustment to the Availability Payment because of an Unavailability Event, as described in Section 5.1.4 of the Guide.
Unavailability Event	An event giving rise to an Unavailability Adjustment because of an unpermitted Closure or an uncured Availability Fault, as described in Section 5.1.4 of the Guide.
Unavailability Factor	The relative weighting applied to each performance requirement for purposes of calculating Unavailability Adjustments, as described in Section 3.1 of the Guide.
Unforeseen Utility	Public or private utility systems found on the Site or other Project Right of Way that were not contained in the site conditions report prepared for the Project or otherwise known (or should have been known) to the Developer.
Unknown Endangered Species	Endangered or threatened species found on the Site or other Project Right of Way that were not contained in the site conditions report prepared for the Project or otherwise known (or should have been known) to the Developer.
Unknown Geological Condition	Subsurface or latent geological conditions found on the Site or other Project Right of Way that were not contained in the site conditions report prepared for the Project or otherwise known (or should have been known) to the Developer.
Unknown Hazardous Environmental Condition	Hazardous Substances found on the Site or other Project Right of Way that were not contained in the site conditions report prepared for the Project or otherwise known (or should have been known) to the Developer.
Useful Life	The period a new, renewed, or replaced asset is expected to remain in service under ordinary/routine maintenance until it next requires major maintenance, reconstruction, rehabilitation, restoration, renewal, or replacement.
Work	All services required to be undertaken by the Developer in relation to the Project under the Concession Agreement, including design Work, Construction Work and Maintenance Work.