TOD and Infrastructure P3s:

Varieties of risk allocation and procurement[1]

This second article in a three-part series focuses on defining the major differences between two types of public-private partnerships for infrastructure (roads, public buildings) and transit-oriented development (TOD)/real estate (housing, offices, retail, and sometimes public buildings and infrastructure). In this article, we discuss how risk allocation, the core of a P3, differs between P3 types. Risk allocation entails identifying risks and determining how to and which party should manage them (see Annex 1 for examples of risks by P3 type). This can involve distributing all risk to one party or sharing it between them, with the shifting of risk driving project success. This risk allocation is codified in several critical project documents.

The key message of this article is that each P3 type allocates risk between the public agency and developer with a different degree of commitment to risk allocation at various times, **with infrastructure P3s requiring higher and more extensive commitment levels early on with consequential loss of flexibility.** TOD P3s, on the other hand, require fewer upfront commitments but eventually allocate most risks. The flexibility is a benefit for complex projects **but raises issues around competition and project control.**

1. INFRASTRUCTURE P3 PROCUREMENTS REQUIRE GREATER UPFRONT COMMITMENT, TOD P3 PROCUREMENTS ARE MORE "TBD"

The archetypical infrastructure P3 follows a **two-step, hard bid procurement process.** "Two-step" refers to the two distinct rounds of competition. First, the public agency selects a shortlist of several bidders during a request for qualifications (RFQ) stage solely based on qualifications. Second, the shortlisted bidders compete during a request for proposals (RFP) stage based on technical and financial proposals. The public agency selects the "preferred bidder" based on clearly defined evaluation criteria.

The hard-bid procurement method refers to the fixed nature of the project and the clearly defined evaluation criteria. The contract terms which govern the partnership and scope of the project profile—its technical requirements, performance specifications, payment mechanism, project components, design limitations, public objectives, etc.—are established by the public agency. In addition to conforming to these fixed terms, **proposals contain date-certain, "committed" financial offers,** in which the necessary financing is secured and committed by lenders and investors when bids are submitted (usually subject to final due diligence and internal approval). For these reasons, the developer faces significant **challenges in changing the project program later in the development process,** as these are typically pre-defined in the original scope and would necessitate complex financial restructuring.

In recent years there has been a movement away from the traditional two-step, hard bid procurement approach of infrastructure P3s that emphasize competition, to a "Progressive P3" or "Pre-Development Agreement (PDA)" model that places greater emphasis on flexibility. Box 1, below, goes into more detail.

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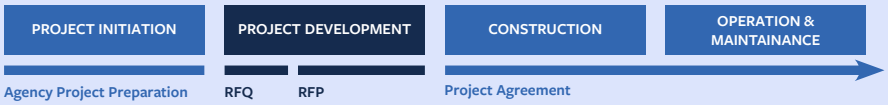
[1] This article by Sasha Page and adapted from the paper "Comparing and Contrasting Design-Build-Finance-Operate-Maintain (DBFOM) and Master Development Agreement (MDA) Public- Private Partnerships (P3)" (https://lnkd.in/dH8UTRvk) written by Sasha Page (Sasha.Page@RebelGroup.com), Christine Shepherd (Christine.Shepherd@RebelGroup.com), Marcel Ham (Marcel.Ham@RebelGroup.com), and Saunders Ruffin in conjunction with the Build America Center in October, 2024.

BOX 1: A MOVE TOWARDS THE PROGRESSIVE P3 MODEL

In many markets, infrastructure P3 procurements have normally followed a "two-step" RFQ and RFP process, culminating in the submission of a fully committed hard bid. Such a process (see Figure 1) was generally thought to result in the project being awarded to a price-competitive bidder with a strong track record.

Figure 1: Two-step, Hard Bid infrastructure P3 Process



For many reasons discussed in this article, bidders are more hesitant to engage in a hard bid procurement process[2]. As an alternative, there is growing support among practitioners to move towards a "Progressive P3 model," in which the procuring agency selects a private partner primarily based on qualifications and potential concept designs (see Figure 2). Both parties then enter into a pre-development agreement (PDA),[3] which enables the private partner to collaborate closely with the procuring agency to finalize detailed project design, estimate costs, and allocate risks transparently in an "open-book" process.[4] A PDA typically also grants the private party the first right to enter into the infrastructure project agreement and implement the project, should it proceed. Design progresses to at least 30% completion or until a price is agreed upon, after which contracts are finalized and financial close is attained. [5]

Figure 2: Progressive P3/PDA P3 Process

In an archetypical TOD P3, procurement follows either a one-step (RFP) process or a two-step (RFQ/RFP) process, depending on project size and complexity. Unlike the infrastructure P3s, the public and private parties enter into a pre-development agreement at an earlier stage of the project readiness continuum. Together, **both parties provide important input on the project's scope and negotiate open-ended contract terms**, typically outlining project timing, how the parties will work together, (termination clauses, etc.) and transaction structure, akin to the Progressive P3 model. (To be sure, that is not the case in all TOD P3s, as many do require a "hard bid" property value or lease amount, closer to an auction.) Therefore, submitted bids often contain schematic, high-level designs with financial proposals without full commitment. They are designed to "develop themselves" in response to market conditions over the agreement term. The procuring agency places greater evaluative weight on the **developer's qualifications** than price (such as developer lease payment to a public agency). Because of the indicative project scope, the developer may change the project program in the future (usually in agreement with the public agency). Further, the **entitlement process** (i.e., securing land use changes or zoning variances) is a critical step of project development, which often occurs after commercial and financial close but prior to construction.

[2] Squire, Patton, Boggs. Public-Private Partnerships in 2023's Economic Environment. Accessed via: https://www.lexology.com/library/detail.aspx?g=fb9e0947-ce13-41bc-88ea-5ebfd3e7b745, April 24, 2024

[3] PDAs can also take the form of an "exclusive negotiating agreement" (ENA) or an "interim agreement".

[4] "Open-book" processes are those that involve increased financial transparency (e.g., a bidder submits a dynamic financial model, instead of a static price sheet).

[5] Dugan, Brian. Improving P3 Procurement Through a Progressive Model. Accessed via: https://www.edgemoor.com/post/improving-procurement-through-a-progressive-model

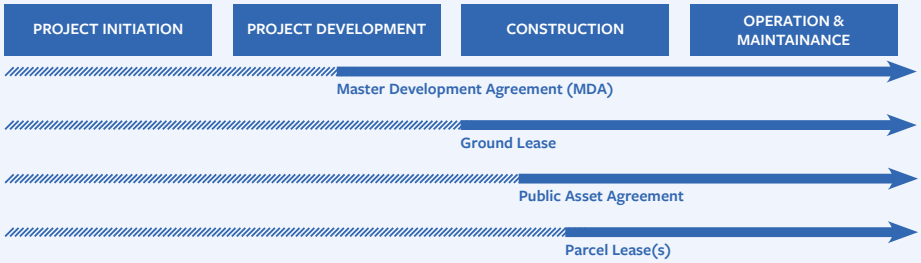
2. PROJECT AGREEMENTS, MASTER DEVELOPMENT AGREEMENTS, AND GROUND LEASES: FOUNDATIONAL INFRASTRUCTURE AND TOD P3S DOCUMENTS STRUCTURED DIFFERENTLY

It is helpful to examine some of the key documents that are the foundations of the business and legal terms of infrastructure and TOD P3s. In an archetypical infrastructure P3, a single, comprehensive **"project agreement"** contract governs the relationship between the public agency and the developer (see Figure 3. The developer typically subcontracts design, construction, operations, and maintenance duties to subcontractors. The developer will also sign financing agreements with lenders and equity investors—generally termed as loan and equity agreements, respectively. And the developer, lender, and the public agency may also sign a direct agreement, or something similar, that sets forth how they all work together.

Figure 3: Overview of Agreement in an Archetypical infrastructure P3

In a TOD P3, multiple agreements govern the relationship between the public agency and the developer (see Figure 4). The "master development agreement" (MDA) is executed following selection of the developer (sometimes "master developer") upon commercial close. After entitlements are secured, both parties execute a "ground lease," allowing construction to begin. If the developer chooses to procure the project components or individual parcels, it may sign several lease agreements with affiliates or third parties, so-called "parcel leases." Additionally, if the developer is responsible for delivering critical infrastructure to support the development, such as roads, transit stations, or utilities, then the public agency and the developer may sign a separate agreement for that component: a "public asset agreement" or a similarly-termed document. Each of these represents some type of risk transfer, usually between the public agency and developer.

Figure 4: Overview of Agreements in an Archetypical TOD P



Annex 2 summarizes the key differences between the contracts that govern the relationship between the public agency and private party in the archetypical infrastructure P3 and TOD P3.

3. INFRASTRUCTURE P3 AGREEMENTS HAVE CLEARER RISK ALLOCATION TERMS, AT LEAST AT PROCUREMENT START

In general, at the start of the contractual relationship between the public and private parties, the infrastructure P3 will detail risks and their allocation more so than the TOD P3. The two-step, hard bid traditional infrastructure P3 model **defines risk allocation in detail upfront,** whereas life cycle risks in the archetypical TOD P3 are not allocated in detail upfront and/or may be shared between public and private parties, often implicitly.

As discussed, the structuring of the infrastructure P3 project agreement focuses heavily on identifying, assessing, and allocating risks. During this structuring, the public agency first **identifies risks, collating them into a risk register** and then assessing them qualitatively and/or quantitatively to determine their potential impact. In some transactions, the public agency shares some of that information and receives input from developers on how to **mitigate risks before contract structuring.**

The infrastructure P3 project agreement also details how to handle circumstances that negatively impact the developer's ability to perform its obligations within the originally projected time and/or cost. It often lays out **supervening events in detail,** explaining how such events, such as unforeseen ground conditions or major weather events, are addressed—including through **compensation, performance, and/or schedule relief.**

In TOD P3s, there is less detail on these risks, and the primary way in which these are dealt with, if at all, is through **schedule relief.** TOD P3s generally have much less focus on these items early on because at the point in time the TOD MDA is executed, the ground lease(s), which specifically address(es) the rights and responsibilities related to the use and development of the land, are generally not yet executed (see Figure 2). Rather, these risks are often covered in the ground lease, e.g., development program, range of uses, density, land value, market risk, escalation, and interest rates. Further, TOD P3 leases generally focus on schedule relief to address most supervening events. Risks like environmental and ground conditions have generally been addressed by the public entity (to be clear, vertical structures usually face fewer of these risks compared to horizontal ones as well)

Figure 5 and Figure 6 illustrate the timing at which all risks are allocated in infrastructure P3s and TOD P3s respectively. The infrastructure P3 has generally allocated 100% of risk by signing of project agreement, whereas risks in the TOD P3 are more incrementally assigned as key agreements are signed.

Figure 5: Timing of Risk Allocation in infrastructure P3

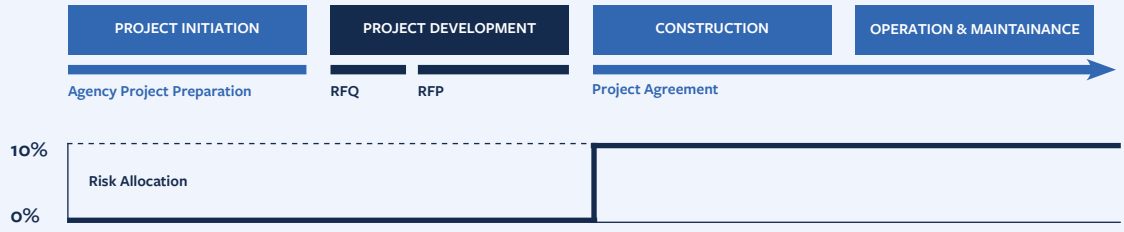
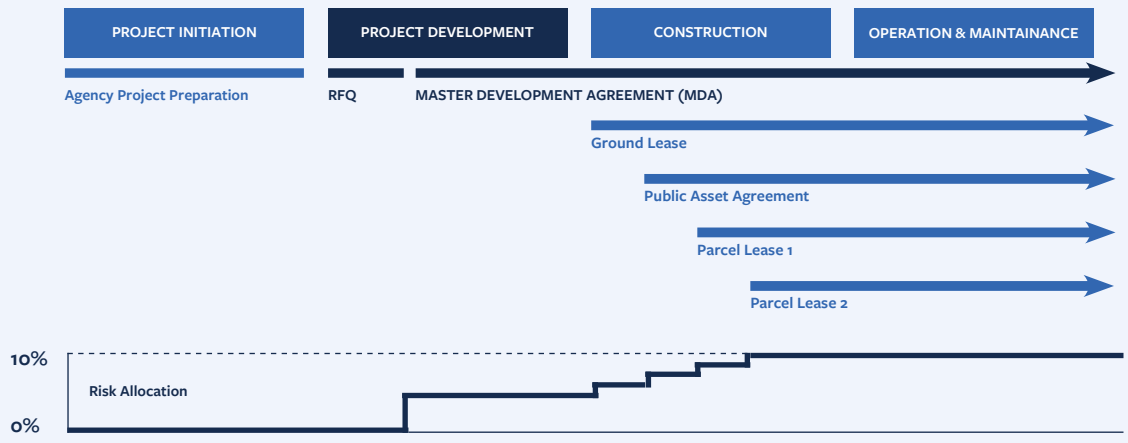


Figure 6: Timing of Risk Allocation in TOD P3



4. INFRASTRUCTURE P3S' LOSS IN FLEXIBILITY: TOD P3S' GAIN?

Recently, industry practitioners have noted that fixed risk allocation at procurement, the hallmark of the two-step, hard bid infrastructure P3, **might not always lead parties to the best possible project outcome.** In today's market of high inflation, high construction costs, and supply chain issues, infrastructure P3 developers have had difficulty pricing all risks at procurement and as a result, will price in more contingencies, resulting in higher bids, cancelled projects, and/or developers leaving the marketplace.

Thus, the trend of infrastructure P3s in using more risk-sharing mechanisms or a more progressive P3 model (see ***Box 1***)—which allows more collaboration between private and public parties and project flexibility in defining the project and risk allocation and has more similarities to the TOD P3 process—has accelerated.

Both P3 and project delivery mechanisms ultimately identify and allocate all risks, albeit at different points in the contractual relationship. While infrastructure P3s detail risks and allocation more upfront, TOD P3s also undergo exhaustive risk identification and allocation. However, the latter typically occur downstream of the project's commencement in a more incremental fashion, meaning that public and private parties implicitly share those risks until they are explicitly allocated.

TOD P3s afford greater flexibility in the risk allocation process, which lends itself to enabling real-time adjustments as circumstances change during the project's life cycle. This flexibility enables stakeholders to address risks and emerging challenges (e.g., changes in market conditions) more effectively. In infrastructure P3s, risk allocation occurs more **fixedly at procurement,** potentially leading to challenges in accurately pricing risks, especially in volatile market conditions. However, the recent trend towards the progressive model in infrastructure P3s allows for more collaboration between public and private parties, resembling the TOD P3 process.

The comparisons in this article between the two P3 types emphasize the negative aspects of infrastructure P3s and in so doing imply that TOD P3s have superior attributes in risk allocation and procurement because of greater flexibility. While this is our belief, we note that the downside of this greater flexibility for TOD P3s is the danger that it affords **too much negotiation power to developers.** It is difficult, after all, for a public agency to default a TOD developer for project delays if "market" factors are always the excuse. Unlike infrastructure P3s, TOD P3s may suffer from public perception that the flexibility of the procurement and development process **could stifle** competition and that developers pay **below market terms** in comparison to their infrastructure P3 brethren. The next and final article in this series will discuss this topic further.

ANNEX 1: EXAMPLES OF RISKS BY P3 TYPE

When we talk about project risks, we mean one or more events that can result in a material change to the project. P3 best practice is to identify risks ahead of time, find ways to mitigate them, and/or allocate them to the party best able to absorb those risks. Table 1 lists typical project risks for each P3 type and rates their significance on a scale of + to +++ based on our project experience. As Table 1 shows, risks vary because of the nature of the respective assets. Ground condition risks are very important for a tunnel. They are less so for a conventional office building. However, land use and zoning risks can be very high for the latter, especially if these are decided after the procurement of the developer.

RISK/ EXISTS IN:	INFRA P3	RATIONALE	TOD P3	RATIONALE
DESIGN	++	Poor design can lead to enormous costs and legal issues	+	Poor design can lead to costs and legal issues, although TOD P3 buildings are generally less complicated or architecturally significant
ENVIRONMENTAL	++/+++	Medium to high risks depending on location and nature of project	+	Lower risk unless project is built near environmentally sensitive areas
GROUND CONDITIONS	+++	High risks, especially where significant underground construction is needed, as in bridges or tunnels	+	Ground conditions can be an issue
LAND USE/ZONING	+	Less of an issue, since usually project consists of one public project (road or courthouse) with most related issues subsumed in environmental assessment	+++	Major issue since mix of uses and density rules are fundamental to project economics
PUBLIC OUTREACH	+++	Major risk depending on neighborhood or other stakeholder views	++	Major risk depending on neighborhood or other stakeholder views
FINANCING	++	Critical risk but usually addressed at project close since these usually have long-term, fixed-rate financings	++/+++	Critical risk especially for projects built in phases and ones financed with construction/take out financing
CONSTRUCTION (I.E., FOLLOW SPECS, COST, DELAY)	+++/++	Higher for horizontal, but even vertical suffer from major system issues (HVAC, elevators, etc.) and all can suffer from delays and cost overruns	+/++	Some risk depending on project complexity
OPERATIONS	+/++	Low for roads, higher for buildings, highest for transit systems in which operations and maintenance is outsourced	+	Lower risk for single-purpose assets (i.e., a multi-family housing tower in a master development)

In a master development with several phases, financing can be a project risk. Changes in the financial markets can result in higher-than expected costs for later phases, resulting in those phases being delayed or not financially feasible. In an availability payment infrastructure P3s, operating risks can be high if the developer has not set up a quality operations and maintenance practice. For most real estate assets, property management is a lower risk since the standards are generally lower and the buildings or assets less complex.

As discussed, the major point of this article is that these risks are identified and allocated at different times for infrastructure and TOD P3s with consequences for price and project flexibility.

ANNEX 2: AGREEMENTS IN AN ARCHETYPICAL INFRASTRUCTURE P3 AND TOD P3

CONTRACT	INFRASTRUCTURE P3	TOD P3
PROJECT AGREEMENT	A comprehensive agreement between the public agency and developer. It defines the infrastructure asset scope and specifies the technical requirements and performance standards it must meet, including performance deductions and other liquidated damages. The agreement allocates risks between the parties and governs all aspects of design, construction, financing, operations, and maintenance. It also outlines the delivery timeline, term length, hand-back requirements, and payment and compensation mechanisms between public agency and developer.	
MASTER DEVELOPMENT AGREEMENT		A framework agreement between the public agency and developer or master developer that outlines the overall development plan and phasing. It covers the obligations of the developer (securing entitlements, financing, construction schedule, etc.) and the public agency (land provision, infrastructure support, etc.). General risk allocations are established. The agreement sets conditions for executing future parcel-specific agreements.
GROUND LEASE AND PARCEL LEASE		Executed for the entire development parcel, the public agency leases the land to the master developer for a period generally up to 99 years. It specifies permitted uses, design guidelines, lease tenure, lease payments, and any conditions for transfer or subleasing of the parcel, typically registered as a "memorandum of lease" with the local registry of deeds.
PUBLIC ASSET AGREEMENT	+	These agreements govern the delivery of non-commercial/residential aspects of a master development, which typically fall into three categories: 1) public infrastructure (e.g., roads and utilities), 2) public spaces (e.g., parks), and 3) public facilities (e.g., transit stations and police stations). A single TOD P3 can include multiple agreements of this nature, typically using a design-build (DB) or design-bid-build (DBB) delivery format. They define the infrastructure scope and technical specification. These agreements also cover design, construction and completion requirements, payment terms (milestones, credits, public funding sources), and the process for ownership transfer and acceptance of the infrastructure by the public agency.
LOAN AGREEMENT	A loan agreement is a contract between the developer and the lender(s) to provide a loan(s), bond or bond-like instrument or other debt instrument—in various forms and priority levels—usually to a project subject to various business and legal terms.	
EQUITY AGREEMENT	An equity agreement is a contract between the developer and equity investor(s) to provide investment capital—in various forms—usually to a project subject to various business and legal terms.	
DIRECT AGREEMENT	A contract that facilitates a direct relationship between the project's lenders and the public agency. This agreement outlines the rights and obligations of the lenders, the public agency, and the concessionaire involved in the P3. Key provisions often include step-in rights for lenders, which allow them to intervene in the project prior to exercise of the public agency's rights under the project agreement if the private party defaults or fails to fulfill its contractual duties. The direct agreement aims to mitigate risks for lenders by providing mechanisms to ensure the continuation and stability of the project, thereby enhancing the project's overall bankability and financial security.	

Questions, comments, or new ideas?

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