



METHODOLOGY & OVERVIEW

Welcome to Husch Blackwell's inaugural Public-Private Partnership Trends Report.

During the past year, our team reviewed the agreements for every public-private partnership (P3) project in the United States that reached a financial close between January 1, 2016, and December 31, 2017. Our findings and insights are set forth here.

Our study began with identifying the cohort of projects. To this end we utilized multiple public and proprietary project databases. The initial list was then refined further to remove post-agreement transactions, such as refinancings and equity sales, as these fall outside the scope of our inquiry. We then added one project to the list—the University of Kansas Central District—because we thought that, despite the project's lack of private financing, it satisfied basic criteria to warrant consideration as a P3 project. The final cohort numbered 16 projects.



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P3 PROJECT COHORT

- Long Beach Civic Center (CA)
- UC Merced 2020 Campus Expansion (CA)
- Denver Airport (Jeppesen Terminal) (CO)
- I-70 East (CO)
- I-285/SR 400 (GA)
- State Street Redevelopment (IN)
- University of Kansas Central District (KS)
- Purple Line (MD)
- Wayne State Student Residential (MI)
- LaGuardia Airport Terminal B (NY)
- Ohio State Energy Project (OH)
- Pennsylvania CNG Fueling Stations (PA)
- SH 288 (TX)
- Vista Ridge Pipeline (TX)
- I-395 (VA)
- Transform 66 (VA)

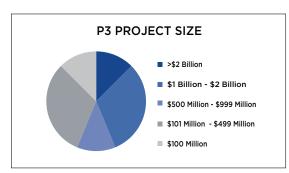
GENERAL CHARACTERISTICS

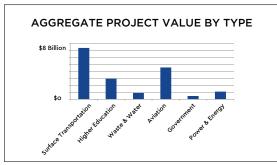
THE GROWTH OF PUBLIC-PRIVATE PARTNERSHIPS AS A VIABLE DELIVERY MODEL FOR LARGE INFRASTRUCTURE PROJECTS CONTINUES TO GAIN STRENGTH FROM A NUMBER OF MACROECONOMIC AND FINANCIAL FACTORS.

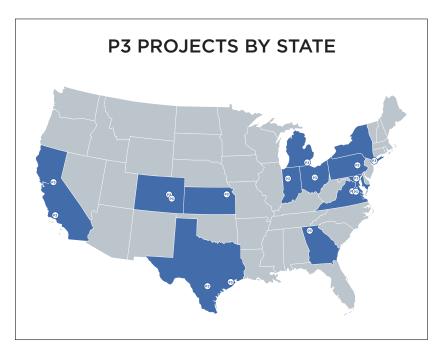
Perhaps most importantly, municipal and state budgets remain under pressure, creating a need for cities, states and other governmental entities to consider alternative methods for developing large projects. Other rationales, however, are converging to create a moment in time when P3 deals make a lot of sense, both in terms of sharing the risks associated with complex infrastructure projects, as well as in accounting for the full life-cycle costs of these projects.

Because of this, P3 projects are pushing into new areas of investment. Of the 16 projects to have reached financial close since the end of 2015, several represent novel applications of the P3 model. In Texas, for instance, the City of San Antonio closed on the first large-scale P3 project involving a water pipeline. Similarly, Moody's Investors Service characterized the City of Long Beach's Civic Center closing as "the first local-government availability-payment P3 to reach financial close in the U.S." P3 also continues to be a popular model for colleges and universities to manage their portfolios of capital projects.

Increasingly, there is no *typical* P3 deal; rather, public and private partners are striking upon an array of approaches to fit the P3 model to any number of uses and circumstances.









PROJECT SCOPE

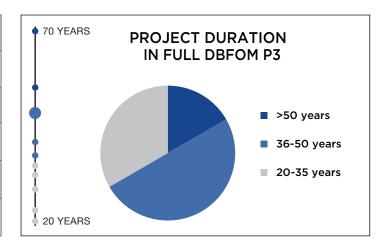
A FULL P3 PROJECT ESTABLISHES A PARTNERSHIP SPANNING ALL PHASES OF A PROJECT FROM DESIGN/BUILD AND FINANCE TO OPERATIONS AND MAINTENANCE. HOWEVER, THERE ARE MANY OPTIONS AND VARIETIES FOR STRUCTURING PROJECTS BASED ON THE GOALS AND OBJECTIVES OF THE PARTNERS INVOLVED.

The P3 project model is in reality many models; however, for the purposes of this report, the base model encompasses a public-private partnership covering—at the very least—a project's design/build (DB) phase plus one other phase (finance, operations and/or maintenance). The "full model" for P3 projects includes all five areas, and 14 of the 16 projects in our report utilize the full model.

The scope of P3 projects is greatly affected by project type. The full P3 model, or DBFOM, is most often found in projects where the public partner's operations and maintenance (O&M) expertise is limited or nonexistent or where there is a strong desire by the public partner to focus on core capabilities. For instance, institutions of higher education have been increasingly moving toward the full DBFOM model for the development of a variety of infrastructure, not just student housing. Ten years ago, there were but four higher education P3 projects. Today, we are approaching three dozen with many of those utilizing the full DBFOM model.

Aside from the type of infrastructure being developed, contemplating the scope of P3 projects is at root an exercise in intergenerational risk management. The length of the underlying partnerships spans decades, so it is imperative that all partners understand their desired level of risk not just for today, but over the long term. These risk evaluations—and how they are calculated in a value-for-money (VfM) analysis—are essential to determining project scope.

1	D	В	F	0	М	The private partner designs and builds the facility, but has no responsibility for maintenance and operations	
PRIVATE PARTNER	D	В	F	0	М	Same as above, except the private partner must maintain the facility after it is built	
	D	В	F	0	М	Same as the top category, except the private partner operates the facility	
	D	В	F	0	M	The private partner designs and builds the facility and then operates and maintains it over the course of the P3 agreement	
RISK TO	D	В	F	0	М	The private partner adds private debt or equity to the capital stack for capital expenditure, in addition to design/build responsibility	
+	D	В	F	0	М	The private partner is involved in all project phases and bears risk in each area—political, developmental, financial and operational.	



PAYMENT METHODS & REVENUE STRUCTURES

A CORE ELEMENT OF MANY P3 PROJECTS INVOLVES TASKING THE PRIVATE PARTNER WITH ONGOING OPERATIONS AND MAINTENANCE OF A FACILITY OVER THE LONG TERM. REACHING SATISFACTORY AGREEMENTS IN THESE INSTANCES OFTEN DEPENDS ON STRIKING THE RIGHT BALANCE OF RISK AND REWARD.

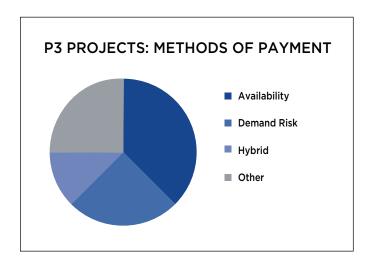
When viewed as stand-alone items, the O&M phases of P3 projects do not appear very different from many of the agreements and contracts that public-side entities strike every day, such as operating contracts, management agreements, ground leases and facility leases. However, as the table on the prior page demonstrates, risk and reward become more difficult to project as different phases are bundled into the P3 agreement. Yet it is that very bundle of services that can provide the favorable value-for-money proposition that benefits the parties of a P3 agreement.

For projects that utilize the full DBFOM model, determining how the private-side provider of operations and maintenance will be compensated is one of the most important factors in striking the right balance between risk and reward for all parties, particularly when operating the facility generates a stream of revenue. As with most commercial endeavors, the revenues generated by P3 projects are subject to considerable risk, particularly given that P3 project life-cycles can extend to 30—sometimes 70—years.

When public entities seek to offload a greater share of the operating risk onto the private partner, they very often will utilize a **demand-risk concession** model that allows concessionaires the exclusive right to collect tolls, fares or sales. While concessionaires enjoy the exclusivity of collecting revenue, they also usually bear the entire risk related to those revenues, which is impacted by factors such as the volume of ridership or usership over a long period of time. Additionally, agreements frequently employ a profit cap to guard against the political risk of granting concessionaires too sweet a deal over the long term.

Not all projects are well-suited to the demand-risk model, and not all private partners tasked with O&M wish to bear the revenue risk involved in collecting fees and tolls. These projects will generally employ **availability payments**, whereby the public partner will pay the concessionaire directly according to a predetermined formula and schedule.

These revenue and payment structures, while differing significantly, are not mutually exclusive, and we are seeing more and more hybrid models emerge. Notably, the two airport projects in our cohort—Denver and New York City—have put forth hybrid payment schemes.



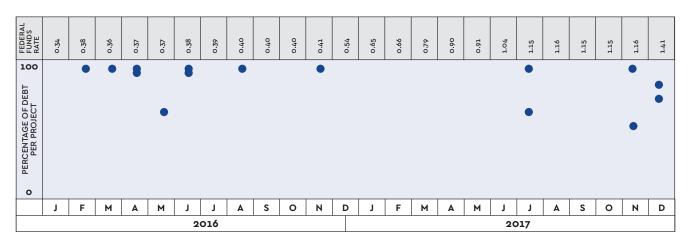


PROJECT FINANCE

A PROJECT'S FINANCIAL STRUCTURE REPRESENTS THE BEATING HEART OF A P3 DEAL. LONG AFTER A PROJECT HAS BEEN DESIGNED AND BUILT, THE FINANCIAL AGREEMENT IN PLACE TIES PARTNERS TOGETHER—WITH THE ATTENDANT RISKS AND LIABILITIES—FOR DECADES, AND OFTEN, IT IS THE SINGLE-GREATEST VARIABLE DETERMINING A PROJECT'S OVERALL LIFE-CYCLE COST.

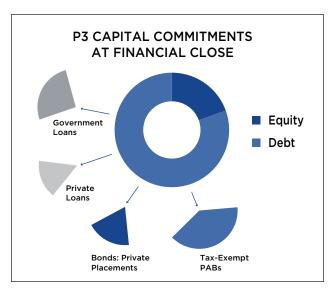
Given the low cost of capital over the past few years, P3 projects have generally favored the issuance of debt. Twelve of the 16 projects in our cohort saw large percentages of debt—over 70 percent—in the overall capital stack at financial close. Government loans by themselves accounted for \$2.9 billion during our report period. This represents nearly 62 percent of all P3 project loans for the period. Since many of these projects involved surface transportation, practically all of the government loan financing took the form of TIFIA loans. (Of the seven surface transportation P3 projects in our study period, four utilized TIFIA loans.)

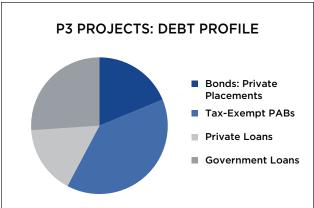
By far the largest component of the debt stack during the study period was tax-exempt public activity bonds (PABs). These were particularly important in the higher education space, where three major building projects—the UC Merced 2020 Campus Expansion, the University of Kansas Central District and the Wayne State Student Residential Project—were almost entirely funded with PABs. Furthermore, 13 of the 16 projects we studied employed PABs to some extent, including the \$2.3 billion of bonds issued to support the development of LaGuardia Airport's Terminal B, the single-largest capital commitment of any P3 project since the end of 2015.



This chart plots the amount of debt in the capital stack of each project since January 2016 at the point the project reached financial close. The top row represents the Effective Federal Funds Rate.

Equity accounted for a small portion of the P3 capital stack overall, but the era of cheap debt that supported this circumstance is drawing to a close. While nowhere near historically "normal" levels, the effective federal funds rate has begun to climb slowly but steadily during our report period, as seen in the table on the previous page. It is too early to tell how this might impact P3 project finance, although the far right end of our table could be the leading edge of a turn toward greater equity financing. Time will tell as interest rates rise.





THE IMPACT OF NEW TAX LEGISLATION

In the fall of 2017, the United States Congress began working on a comprehensive tax reform bill proposing significant changes to the Internal Revenue Code of 1986. The initial version of the bill proposed by the House of Representatives Ways and Means Committee threatened to repeal the tax-exempt status of public activity bonds (PABs) in that the interest paid on PABs issued after December 31, 2017, would be includible in the gross income of the taxpayer. This change would have had a profound effect on the industry by raising borrowing costs and eliminating a significant portion of the tax-exempt bond market. This provision, however, was dropped from the final version of the bill.

On December 22, 2017, President Donald Trump signed into law H.R. 1, also known as the Tax Cuts and Jobs Act. The Act preserved PABs' tax-exempt status; however, pursuant to the Act, after December 31, 2017, tax-exempt bonds can no longer be issued to "advance fund" prior exempt issuances. In the past, advance refunding had allowed nonprofit borrowers to save interest costs with respect to bonds that were outside their redemption period. There has been an effort by some members of Congress to restore the tax exemption for advance refunding bonds.



WINDFALL & DYNAMIC PROVISIONS

NO MATTER HOW SOPHISTICATED AND KNOWLEDGEABLE THE ARCHITECTS OF A P3 DEAL ARE, STRIKING A FAIR AND EQUITABLE BALANCE AMONG PARTNERS OVER MANY DECADES IS A NEXT-TO-IMPOSSIBLE TASK. THAT'S WHY IT IS VITAL THAT P3 PROJECTS BE FLEXIBLE ENOUGH TO ACCOMMODATE A VARIETY OF EXOGENOUS FACTORS OVER THE LONG TERM THAT COULD DISRUPT DELICATE CALCULATIONS OF RISK AND REWARD.

REFINANCING GAINS

Over the past four years we have seen on average one major P3 refinancing transaction close per year. This would appear to be a relatively low number, but when you factor in the duration of a typical P3 agreement, it seems likely that most P3s utilizing loans will refinance at some point. How to distribute the gains from refinancing, then, becomes an important provision of the initial agreement.

There is no standard formula for how to do this. On one end of the spectrum, some agreements have all the gains flowing to the developer, as with the Long Beach Civic Center. Other projects share in the gain. SH 288, UC Merced and Maryland Purple Line projects split the gains equally, while the I-285 project sets forth that 75 percent of the gain flows to the owner with possible reductions of project payments based on reduced financing costs. In the case of LaGuardia Airport, the developer has to use gains to fund certain pre-determined costs and expenses.

The question of how to handle refinancing gains tends to reflect other, larger questions relating to how risk is allocated. Given that a refinancing is highly likely over a 30- or 40-year period, the anticipated gains can be an important lever in negotiating provisions in other key areas that might have a higher priority or more immediate impact on the balance sheet of the partners involved.

COST SAVINGS

Cost-saving provisions are typically employed to incentivize developers and concessionaires to be innovative in their approaches to containing and trimming project costs, and these incentives take several forms. One common approach is windfall sharing, where both the public and private partner share the monies generated from a cost-saving alteration in a project. For instance, the UC Merced project agreement contains a 50/50 split of monies if a developer-suggested change results in savings. Whether the share is equal or not, the split or share approach is best utilized when the public-side partner is not so concerned with the total value of the cost savings that flow back to the private partner.

If there is concern that the private partner's windfall share could grow too large, there is always the option of capping private-side monies generated by cost savings. A P3 project at the University of Massachusetts-Boston (this project falls outside of our cohort) caps the developer cost-savings windfall at \$833,333; the rest of any potential gains would flow to the university.

If this is less a concern for the public entity—or if there is a desire to maximize the incentive—cost savings can flow directly to the private partner in the form of a project payment. The Wayne State student housing project does precisely this, allowing the net difference between actual construction costs and funds available for payment to flow through to the developer as an accelerated project payment.

CHANGE-IN-CONTROL PROVISIONS

Much study and deliberation takes place when contemplating entry into a partnership, particularly when a public entity chooses to collaborate with a private partner. Therefore, it is only fitting that a great deal of thought be given to the potentiality of future equity sales that could result in new partners joining or controlling a venture. Typically, public entities least desire changes in control during a project's riskiest phases, i.e., during construction and the transition from construction to operations. To prevent these changes at inopportune times, facility owners will often lock in investors for a fixed time period early in the project timeline. For example, the SH 288 project in Texas allows for the assignment of rights only at the owner's sole discretion within the first five years of the O&M period. Similarly, the Maryland Purple Line project agreement states that any proposed changes in developer equity must occur prior to two years after construction is complete and only if change is in the best interest of the owner.

As projects move fully into the O&M phase, the restrictions or required permissions on equity sales tend to loosen. After all, it benefits both owner and investor to have a robust and liquid marketplace for equity positions in infrastructure. Nonetheless, changes in control among equity-holders can become one of the most hotly litigated disputes between P3 partners.

DISPUTE RESOLUTION

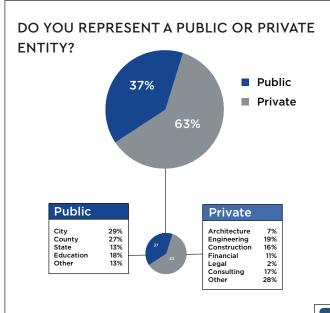
Given the costs associated with litigation, P3 project partners have a strong vested interest in developing alternative means to resolving disputes. Most frequently, P3 project agreements contain provisions that allow for a gradual escalation—from some kind of informal, voluntary mediation at one end to full-blown litigation on the other—where potential litigants must pass through stages of dispute resolution. This stepped or staged approach often allows disputants to settle differences on their own or with the help of a mediator.

Several of the agreements we studied set up a Review or Resolution Board, sometimes with different boards established to handle disputes at different points in the project timeline or concerning specific subject matter. The Purple Line project in Maryland, for instance, establishes different boards to handle financial and technical disputes. The method for choosing board members differs from project to project, sometimes hinging on the level of technical competence required to properly mediate a dispute or arbitrate between parties. Notably, the SH 288 road project in Texas allows the parties to appoint members, while other projects appoint independent members depending upon the project stage.



2018 P3C SURVEY HIGHLIGHTS

FOR THE FOURTH CONSECUTIVE YEAR, HUSCH BLACKWELL SURVEYED REGISTRANTS OF THE P3 CONFERENCE & EXPO TO GAUGE MARKET SENTIMENT TOWARD THE P3 PROCUREMENT AND DELIVERY MODEL. BELOW, WE PRESENT THE RESPONSES COVERING KEY TOPICS AND ASSESSING THE OVERALL APPETITE FROM PUBLIC AND PRIVATE MARKET PARTICIPANTS.



WHAT TYPE OF P3 PROJECTS COULD YOUR ORGANIZATION PURSUE OVER THE NEXT THREE YEARS?



Energy 17.5% Public 39% Private



Public Facilities 62.5% Public 55% Private



Government **Facilities** 57.5% Public 63% Private



Social Infrastructure 30% Public 51% Private



Facilities 40% Public 45% Private



Transportation 52.5% Public 69% Private



Water & Environment 17.5% Public 46% Private



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			91%	
100 —	81%		T	
80 —	<u> </u>	62%		
60 —	53%	37%		
40 —		0770		
20 —				
0 —	Public Private	Public Private	Public Private	
	My organization is currently involved in a P3 project.	My organization has successfully executed a P3 project.	My organization expects to pursue multiple P3 projects in the next three years.	

Most Compelling Reasons	Strong or Good Reason		
for NOT Doing a P3 Project	Public	Private	
Public opposition	73%	64%	
Lack of project and operational control	77%	58%	
Risk-return limitations	79%	77%	
Quality of partners	69%	66%	
P3 agreement more favorable to other partners	79%	76%	
Current lack of understanding P3 approach/models	64%	48%	
Lack of federal government backing	44%	69%	
Limited financial upside	71%	69%	

ABOUT HUSCH BLACKWELL'S P3 PRACTICE

HUSCH BLACKWELL KNOWS THE P3 INDUSTRY INSIDE AND OUT. WE HELP PRIVATE BUSINESSES AND PUBLIC AGENCIES FORM PARTNERSHIPS AND SHARE THE RESOURCES, RISKS AND REWARDS OF P3 PROJECTS. WE COUNSEL CLIENTS ON BASIC AND COMPLEX P3 AGREEMENTS AND GUIDE THEM THROUGH THE NEGOTIATIONS, COORDINATION AND CLOSINGS OF CONTRACTS INVOLVING DESIGN-BUILD, FINANCE, OPERATION, MAINTENANCE AND TRANSFER COVENANTS. OUR TEAM HAS EXTENSIVE EXPERIENCE AND DEEP UNDERSTANDING OF HOW TO MANAGE THE LEGAL, POLITICAL AND COMMERCIAL COMPLEXITIES OF P3. OUR CLIENTS INCLUDE:

- Airport terminal investors/developers
- Call center operators
- Commercial and industrial developments
- Corporate complexes
- Healthcare companies
- High-tech industrial developments
- Higher education campus facility developers
- Historic property developers
- Hotel and resort property developers
- Institutional buildings and complexes

- Museum operators
- National retailers
- Office and retail building owners
- Public facility and transit authorities
- Residential property developers
- Retail center developers
- Sports and retail district developers
- Sports franchise facilities
- Water-based infrastructure

RECENT WORK HIGHLIGHTS

Counsel to Edgemoor Infrastructure & Real Estate, Developer

University of Kansas Central District – \$350 million

 Finalist, Best Social Infrastructure Project, 2016 P3 Awards Counsel to Garney Construction, Developer and Eventual Controlling Shareholder

San Antonio Water System (SAWS) Vista Ridge Water Supply Project – \$3.4 billion

- Best Utilities Project, 2017
 P3 Awards
- Water Deal of the Year, 2017 Global Water Intelligence
- North American Deal of the Year, 2016 Project Finance International
- North America Water Deal of the Year, 2016 IJGlobal Awards

Counsel to City of Kansas City, Owner

Kansas City International Airport – \$964 million

ABOUT OUR FIRM

Husch Blackwell is an industry-focused litigation and business law firm with offices in 18 cities across the United States. We represent clients around the world in major industries including energy and natural resources; financial services and capital markets; food and agribusiness; healthcare, life sciences and education; real estate, development and construction; and technology, manufacturing and transportation.

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