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CONTRACTORS AND TRANSPORTATION PUBLIC-PRIVATE PARTNERSHIPS

by Robert W. Poole, Jr.
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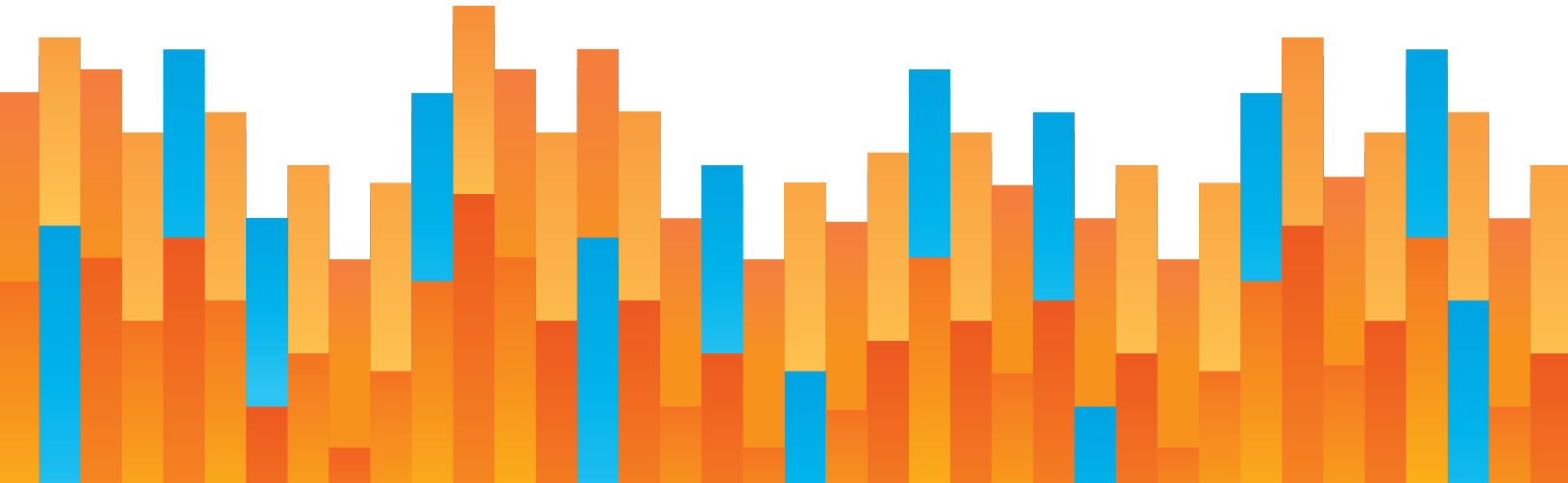

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PART 1

INTRODUCTION

Long-term public-private partnerships (P3) for transportation infrastructure are still relatively uncommon in the United States (though more widely used in Europe, Latin America, and the Asia/Pacific region). A recent policy paper lists 37 such projects that have been financed in the United States between 1993 and the end of 2022—less than two projects per year.[1]

Although 38 states (plus Puerto Rico and the District of Columbia) have enacted P3 transportation legislation, according to the National Conference of State Legislatures,[2] such projects have been financed and built in only 11 states (plus the Port Authority of New York & New Jersey). The majority of states that have enacted such P3 legislation either have not identified large projects suitable to this procurement approach or have included provisions in the legislation that create political risk, which deters investors. And two of the early-adopter states have ceased building P3 projects. California legislators allowed the state's P3 authorization to expire, and Texas legislators have imposed a moratorium on new toll and P3 projects.

1 Robert Poole, *Annual Privatization Report, Transportation Finance, 2023*, Table 8, Reason Foundation, April 2023.

2 Brian Tumulty, "NCSL Updates P3 Use by the States," *The Bond Buyer*, July 1, 2019.

One factor in the limited use of long-term P3s for major projects is opposition of some traditional transportation contractors to P3s. Their message to legislators has been that P3 procurements are unfair to state and local contractors, giving preference to global developers and offering little or no opportunities for traditional contractors.

One factor in the limited use of long-term P3s for major projects is opposition of some traditional transportation contractors to P3s.

This report examines those claims in light of the actual experience with P3 procurements of major highway, bridge, tunnel, and rail transit projects. It also explains the profound differences between traditional design-bid-build (DBB) projects and the P3 model that encompasses design-build-finance-operate-maintain (DBFOM) projects. Legislators need to understand these differences in order to better assess traditional DBB contractors' concerns about P3s.

PART 2

UNDERSTANDING DBFOM—A NEW PROCUREMENT MODEL

For about 100 years, design-bid-build (DBB) has been the primary procurement model for U.S. infrastructure projects. Typically, the government agency needing something built will develop a design *concept* and then contract with a design firm for the actual project design. With the design in hand, it will then seek proposals from construction firms to build the project. Bidders submit their estimated cost to build the project, and the lowest-priced bid wins.

This method dates back to the Progressive Era in the early 20th century. It was a response to public officials awarding contracts to politically connected firms at what were believed to be inflated costs. Lowest-price bidding was adopted as a good-government reform.[3]

Unfortunately, over its long history, DBB has exhibited a number of flaws, especially for large, complex projects. Among these are the following.

- **The design may not do what was intended:** Once the selected developer begins work on the project, it may discover aspects of the design that are difficult or impossible

[3] Erica Bosio, Simeon Djankov, Edward Glaeser, and Andrei Shleifer, "Public Procurement in Law and Practice," National Bureau of Economic Research, Working Paper #27188, 2020.

to implement. It will then propose change-orders, and if its case is sound, most of those will be approved. So the project will not get built at the low-bid price.

- **Bid low and make it up with change-orders:** Some firms are believed to bid lower than what they expect the project to cost, relying on change-orders to cover the actual cost. This can lead to large cost overruns, especially on megaprojects.

One reform that most states have adopted in recent decades is intended to deal with the limitations of DBB. In the *design-build (DB)* procurement model, the government seeks a single entity that will both detail-design and build the project. The aim is to reduce or eliminate change-orders, as well as reduce the time between DB contract award and project completion by eliminating the separate procurements of design and construction. DB has a growing and mostly positive record of shorter overall project time and fewer cost-overrun problems.[4] In contrast to DBB, a design-build procurement selects the winner based on best value, not lowest price. A proper DB procurement is based on a pre-announced set of criteria, which includes the price as one of several factors. DB is generally used on larger, more-complex projects.

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But DB fails to address another important issue: minimizing a project's life-cycle cost. Because municipal and state departments of transportation (DOTs) generally have limited capital budgets, their standards for highways and bridges, for example, may not emphasize longer-term durability, which would increase the cost of construction. So even a DB project may end up, over a 30- to 50-year life cycle, with considerably more needed maintenance to keep the facility in excellent condition for its users. The end result is that the life-cycle

[4] George Okere, "Comparison of DB to DBB on Highway Projects in Washington State, USA," *International Journal of Construction Supply Chain Management*, Vol. 8, No. 2, 2018; Peter Davich, "The Minnesota Department of Transportation on Using the Design-Build (DB) Method of Project Delivery," 2022, AASHTO Center for Excellence (https://environment.transportation.org/wp-content/uploads/2022/03/MN-case-study22-vers-2.pdf)

cost may be a lot higher than would have been the case if the project had been designed and built to more-durable standards.

Toll roads are generally built to more-durable standards, because the owner (either a government toll agency or a private developer-operator) understands the need to keep its conditions and performance better than what users are likely to experience on non-tolled roads. The investors who buy toll road bonds understand this and insist on toll roads setting aside maintenance reserves to ensure proper long-term maintenance and pavement condition.

> *Toll roads are generally built to more-durable standards…*

This brings us to one major benefit of the DBFOM procurement model, especially for major projects. Because the P3 developer that wins the competition for the project has responsibility not only for design and construction but also for long-term financing, operations, and ongoing maintenance, its performance will be similar to or better than a toll agency's.

In fact, the DBFOM model *minimizes life-cycle cost* by building more durably but also building with full responsibility for ongoing maintenance for the decades-long term of the P3 agreement, generally referred to as a concession. This performance is backstopped in two ways. First, the bond buyers of these projects have the same incentive to ensure excellent pavement and other conditions as toll agency bond-buyers. Second, the state DOT (or other government owner of the facility) builds in quantitative quality requirements (e.g., pavement roughness) that are enforceable over the life of the long-term agreement.

The DBFOM model has several other advantages: long-term financing, risk transfer, and increased overall infrastructure investment.

Long-term financing: The winning DBFOM team employs long-term financing for P3 megaprojects. This means needed projects can often be built years or decades sooner than if they had to be funded out of annual DOT appropriations. This feature is especially important in large, fast-growing states (such as Florida, Georgia, Tennessee, and Texas)

where multiple megaprojects are needed to cope with recent and projected growth. The financing of a P3 megaproject comes partly from equity invested directly into the project at the outset and partly from long-term bonds (such as tax-exempt Private Activity Bonds) and in some cases federal Transportation Infrastructure Financing & Investment Act (TIFIA) loans. In most highway P3 projects, the revenue that services the debt (and also provides the expected return on investors' equity) comes from user fees, usually tolls. Where tolls are not feasible, DBFOM projects are financed based on annual *availability payments* over many years. Since these payments come from the agency's budget, this version of DBFOM does not expand transportation funding, but by providing long-term financing of a major project, it can bring that project into being years before this would happen under conventional procurement.

Risk transfer: DBFOM procurement is used primarily for megaprojects, which have a global record for greatly exceeding their initial cost estimates.[5] In DB and DBB projects, the government (state DOT) takes the risk, meaning taxpayers pay for the cost overruns. But another key benefit of DBFOMs is that significant risks, including cost overruns, are usually shifted to the P3 company. Late completion is also a risk that may be transferred to the P3 company, which is motivated to complete the project on time, because there are no user-fee or availability-payment revenues until the project is open to traffic. In deciding whether a project is a good candidate for a DBFOM P3, the state DOT should carry out a Value for Money (VfM) analysis, which identifies which risks will be transferred and quantifies them for comparison to a traditional DBB or DB procurement. The agreed-upon risk transfers are included in the long-term contract agreed to by the public partner (state DOT) and the private partner (P3 company) and are legally enforceable.

Increased investment: As noted previously, many DBFOM P3 bridge and highway megaprojects are funded by new user-fee revenue streams, most often tolls. In some cases, the projected toll revenue for a needed megaproject does not fully pencil out—meaning that there is not likely enough projected revenue to fully service the project's debt and gain a target return on investment for the equity providers. According to a table of U.S. revenue-risk P3 projects, the average project relied on state DOT investment of 8.3% of total project cost (the range for the 21 revenue-financed projects was from 0% to 38%).[6] If the average DOT investment in a $2 billion megaproject was 10% of its cost, then the other 90% would

[5] Bent Flyvbjerg, Nils Bruzelius, and Werner Rothengatter, *Megaprojects and Risk*, Cambridge University Press, 2003.

[6] Robert Poole, "Annual Privatization Report: Transportation Finance," Reason Foundation, May 2023, Table 8.

be the responsibility of the P3 developer, based on the toll revenue. This means the DOT would be getting a project on which it would have spent $2 billion by spending only $200 million. That would free up the other $1.8 billion for non-P3 projects elsewhere in the state. This is how revenue-risk DBFOM P3s increase total investment in the state's transportation infrastructure, "expanding the size of the pie" for all construction firms.

Innovation: Where state DOTs are open to the P3 developer submitting "alternative technical concepts," significant innovation may be added to the project. A 2015 conference paper drew on several DBFOM P3 projects in Texas. Improvements to several express toll lane megaprojects reduced project costs and improved traffic flow.[7]

[7] Fidel Saenz and Nicolas Rubio, "Innovation Capture through the Alternative Technical Concept Process in PPPs in Texas," Proceedings of the 2nd International Conference on Public-Private Partnerships, Austin, Texas, 26-29 May 2015.

PART 3

CONTRACTORS AND DBFOM P3S

More than a decade ago, the Associated General Contractors of America (AGC) posted on its website a 15-page document called "AGC White Paper on Public-Private Partnerships."[8] It has not been changed since its original posting, so it presumably represents current AGC policy.

The first section explains the then-relatively-new concept of P3s (then referred to as PPPs), drawing on definitions from the Government Accountability Office (GAO) and the National Council for Public-Private Partnerships (NCPPP). It goes on to discuss mostly DBFOM procurement as a method by which a state or local government can bring additional investment to help reduce the gap between infrastructure needs and current government funding resources. It notes that "[t]he key ingredient that entices the private sector to be interested in a PPP is a long-term revenue stream."[9] The paper includes a list of potential benefits of P3s identified by Deloitte, including long-term financing, a track record of on-time, on-budget delivery, risk transfer, savings to the public entity budget, performance

8 "AGC White Paper on Public-Private Partnerships," Associated General Contractors of America, no date. (https://agc.org/sites/default/files/Files/Advocacy/PPP%20White%20Paper%20Final%202_0.pdf)

9 Ibid, 5.

requirements, and outcome-based public value.[10] It also discusses P3 legislative issues, including a list of key questions such legislation should address.

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The second section discusses P3 contractor issues. It explains that a DBFOM P3 involves partnering among firms and the different kinds of relationships for which contractors may need to be prepared. Roles can range from various kinds of subcontracting to being the design-build contractor as part of the P3 consortium. It further discusses situations where the private developer and/or investors may expect contractors to contribute to the equity investment needed for the project, and the degree of construction risk that may be expected of contractors. It also notes that those expected to have "skin in the game" and take on certain risks should be part of the negotiations of the long-term P3 concession.

Slightly revised portions of the second section are now available on the AGC website as "P3 considerations for contractors."[11] This 10-page brief explains that "[a] contractor's role in a P3 could simply be that of a low-bid subcontractor or as a design-build contractor, or any other traditional contractor role." It goes on to explain that the P3 concession approach provides for "an exclusive right for a consortium to plan, finance, construct, and operate [and maintain] a facility for a fixed period of time. This approach offers flexibility to the operators and encourages innovation in design, construction, operation and maintenance because the bottom line drives innovation." It also notes that "AGC promotes partnering in public and private work."

The AGC document goes on to explain that, in a P3 project, contractors "may face many new challenges." And that teaming agreements documented in a memorandum of

10 Deloitte, "Closing America's Infrastructure Gap: The Role of Public-Private Partnerships," 2007.

11 AGC, "P3 Considerations for Contractors," no date (https://www.agc.og/p3-considerations-contractors)

understanding (MOU) must be used to answer key questions. Among factors contractors must consider are what role(s) in a P3 consortium they will be well-suited for, whether they will be part of the public relations/community outreach effort, and (if they are a major construction contractor) their willingness to invest equity in the project along with the P3 developer firm and other equity investors (such as infrastructure investment funds). Several pages of the document discuss the risk transfers (from public sector to private sector) inherent in DBFOM P3s, and to what extent certain risks are shifted to (at least) the design-build contractor. A table in the document lists 21 risks that will or might be transferred to the P3 consortium.

The main takeaway from this document is that AGC, the national organization representing construction contractors, is supportive of DBFOM P3s as a way to stimulate innovation, build on the general success of design-build contracting, and expand the size of a state's transportation investment. But it also advises contractors, of whatever size, to look before they leap, because DBFOM P3s are fundamentally different from DBB and DB.

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At the risk of oversimplification, there are two main types of contractor participation in DBFOM P3s: the consortium's DB contractor and an array of (often local) subcontractors.

For DB contractors, potential P3 consortia may select and negotiate a tentative agreement with their preferred DB contractor prior to the stage where the state DOT requests potential teams to submit their request for qualifications (RFQ). Typically, three such teams may be judged best-qualified to submit proposals, after which the DOT issues its RFP only to the shortlisted teams. Since only one of those teams will ultimately be selected to negotiate the long-term DBFOM agreement that enables the project to be financed, in most cases each shortlisted team will negotiate the DB agreement with its DB contractor prior to

submitting its proposal to the DOT. And as the AGC document explains, that DB agreement *may or may not* include some degree of equity investment by the DB contractor. The consortium and the DB contractor will also have likely agreed on the amount of construction risk the contractor agrees to accept.

The other main contractor role is that of subcontractors, many or most of which are usually local firms. As the AGC document explains, "Construction teams are often local teams who are well-known in the community. Contractors knowledgeable about local zoning laws and procedural requirements are experts in gaining public consensus for community improvements. [Such] contractors can significantly increase the public acceptance of a project, especially when the developer or concessionaire is not local." Local contractors are also far more likely to be knowledgeable about utility relocations, which can be a significant problem for urban megaprojects.

PART 4

CONTRACTOR ARGUMENTS AGAINST P3S

Not all contractors have accepted DBFOM P3s. In Texas, lobbying by members of AGC of Texas (along with anti-tolling, anti-P3 concerns expressed by populist groups such as Texans Uniting for Reform and Freedom (TURF)) persuaded the legislature to enact two measures that have prevented approval of any additional P3 projects since 2007.

- The first prevents Texas DOT from putting any of its state highway funds into a tolled highway or bridge project. The six major P3 projects now operational in Texas required an average of 12.3% state support, rather than 100% if procured conventionally.[12] That is excellent leverage of taxpayers' money.
- The second measure is the rejection, in each biennial legislative session since 2007, of every project on TxDOT's submitted list of potential P3 highway or bridge projects.[13]

Opposition to P3s has not gone that far in any other state with enacted transportation P3 legislation. However, contractor opposition to P3s in other states (such as Illinois) has been

12 Poole, "Annual Privatization Report," Table 8.

13 Kyle Shelton, "Tapping the Brakes on Public-Private Partnership in Texas," *The Avenue*, Brookings Institution, 16 May 2017.

discussed at annual conferences of the American Road & Transportation Builders Association (ARTBA) P3 Division.

Here is a set of claims made by AGC of Texas in a member video script in which staff of member companies are given talking points to make to state legislators.[14]

Claim #1: *"Private investment financing of a TxDOT project . . . has the potential to artificially increase the cost of a project by restricting competition within the contracting community."*

Response #1: There is intense competition among the pre-qualified teams, leading to a best-value selection that takes into account minimizing the project's life-cycle cost (construction plus long-term operation and maintenance). DB contractors with no P3 experience are less qualified than DB contractors that have P3 experience. In addition, long-term P3 agreements transfer significant risks from taxpayers to the P3 company, which can shield TxDOT and Texas taxpayers from risks such as cost overruns.

Claim #2: *"[P3s in Texas] generally have a term of over 50 years. A long-term contract like this can have the effect of tying the hands of future transportation planners for more than half a century."*

Response #2: Long-term P3 contracts have provisions for dealing with future contingencies, spelling out how to handle such developments as an unanticipated need for a new interchange. These contracts also have early termination provisions: (1) for the state's *convenience* prior to the end date, with compensation per an agreed-upon formula, and (2) for *cause*, if the P3 company repeatedly fails to live up to the terms of the long-term contract, with no compensation.

Claim #3: *"Private investment financing of a TxDOT project utilizes private debt, which obligates future revenue generated by the project and restricts the ability of the public partner (TxDOT) to capture and re-invest those revenues to construct and maintain other needed projects."*

Response #3: First, the tax-exempt revenue bonds used for P3 projects are very similar to the tax-exempt revenue bonds issued by public-sector toll agencies in Texas. Second, unlike DBB and DB projects, a DBFOM project provides for a 50+ year guarantee of proper

[14] AGC of Texas, "AGC of Texas Member Video Script," 2021.

ongoing maintenance, unlike regular Texas freeways, which must depend on annual appropriations. Third, TxDOT's long-term P3 agreements include revenue sharing, based on a formula in each long-term agreement. The more that toll revenue exceeds the agreed-upon baseline, the higher the fraction that goes to TxDOT.

AGC of Texas seems to imply that no DB contractors succeed in being the contractor in a DBFOM P3. In fact, on the first U.S. long-term P3—the 91 Express Lanes in Orange County, California—the design-build contractor was Kiewit. That company was also the DB contractor for the Central 70 project in Denver, Colorado. Other large U.S. DB contractors that have taken part in large P3 projects include Flatiron, Fluor, Granite, Lane Construction, and Walsh.

In some cases, the U.S. affiliate of a global P3 company has a construction division, and that company's P3 team often includes that sister company.

In some cases, the U.S. affiliate of a global P3 company has a construction division, and that company's P3 team often includes that sister company. But that team may well be competing against teams with an experienced P3 developer teamed with a U.S. DB contractor. For example, for Transurban's first major P3 projects in Virginia, its DB contractor was Fluor. For reasons of its own, several years ago Fluor decided to exit the DBFOM U.S. P3 market.

There will likely be more U.S. DB companies participating in DBFOM P3s when more than a handful of U.S. DB companies gain experience on medium-size P3 projects and become comfortable with the teaming arrangements.

As AGC of America points out, there are numerous opportunities for experienced local subcontractors to become part of a P3 developer's overall project team. Local contractors have extensive local knowledge about how large transportation construction projects work, and especially such potentially time-consuming and cost-increasing subjects like utility relocation.

One other major point for contractors to understand is that revenue-financed P3 projects expand the size of a state's transportation investment. As noted earlier, the average amount of TxDOT investment in the six major highway P3s now in operation in Texas was just over 12% of the project's total cost. In other words, instead of paying 100% of a $1 billion project, TxDOT spent only 12%. That kind of leverage—getting a $1 billion project for just $120 million—is dramatic leveraging of taxpayer dollars.

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In a recent presentation at the annual Tarrant Transportation Summit, the author of this brief noted that, because of the current bans on P3s and tolling, TxDOT plans $8.1 billion worth of highway expansions in Austin, Dallas, and San Antonio. These projects will add carpool lanes rather than the originally planned P3 express toll lanes. The presentation argued that, were those projects instead constructed as DBFOM P3s with as much as 20% state support, it would free up $6.5 billion in TxDOT funds that could be spent on numerous projects in smaller cities and rural areas. Most of the existing express toll lanes in the Dallas-Fort Worth and Houston metro areas were developed under long-term DBFOM P3s.

PART 5

CONTRACTOR INVOLVEMENT IN DBFOM P3 PROJECTS

To what extent are large and small U.S. contractors taking part in large U.S. transportation P3 projects? Table 1 presents data on 18 DBFOM P3 projects financed since 2007. In each case, the table lists the lead firms comprising the P3 developer that was awarded the DBFOM concession and a measure of the construction cost called EPC (Engineering, Procurement, and Construction cost). For each project, the portion of the EPC spent on subcontractors is listed, along with subcontractor cost as a percentage of the EPC and the number of subcontractors. The last column lists the DB contractor(s).

The EPC numbers in Table 1 come from the P3 projects database maintained by *Public Works Financing*, which derives this information from financial disclosures required for bond issuance.[15] The EPC cost is used in the table to provide a consistent definition of the project cost, which different companies may define in slightly different ways.

[15] Michael Bennon, editor of *Public Works Financing*, email to Robert Poole, March 7, 2023

TABLE 1: U.S. P3 PROJECTS DATABASE BY *PUBLIC WORKS FINANCING*

Project	State	Developer	EPC Cost ($M)	Subs Cost ($M)	% of EPC	# Subs	DB Contractor
Port of Miami Tunnel	FL	Meridiam	$902	$425	47%	831	Bouygues
Central 70	CO	Meridiam, Kiewit	$811	$396	49%	800	Kiewit
NTE 1	TX	Cintra, Meridiam	$1,807	$1,109	61%	57	Ferrovial
NTE 2	TX	Cintra, Meridiam	$1,100	$712	65%	49	Ferrovial
LBJ I-635	TX	Cintra, Meridiam	$2,069	$1,291	62%	53	Ferrovial
I-77	NC	Cintra	$441	$326	74%	98	Ferrovial
I-66 OTB	VA	Cintra, Meridiam	$2,232	$1,473	66%	165	Ferrovial
I-595	FL	ACS	$1,220	$805	66%	805	Dragados
Goethals Bridge	NY	Macquarie	$934	$624	67%	264	Kiewit
I-495 Express	VA	Transurban, Fluor	$1,347	$548	41%	250	Fluor
I-95 Express	VA	Transurban, Fluor	$691	$224	32%	125	Fluor, Lane Construction
I-395 Express	VA	Transurban	$301	$125	42%	85	Lane Construction
Rapid Bridges	PA	Plenary	$899	$600	67%	300	Granite, Walsh
Purple Line	MD	Meridiam	$2,000	$1,000	50%	115	Dragados, OHL
SH 288	TX	ACS, Star America	$800	$624	78%	66	Dragados
Ohio River Bridges	IN	Vinci	$772	$300	39%	40	Walsh and Vinci
US 36	CO	Plenary	$120	$50	42%	15	Granite, Ames Construction
Belle Chasse Bridge/Tunnel	LA	Plenary	$148	$49	33%	20	Traylor Bros., Massman Construction
AVERAGE			**$1,033**	**$593**	**54%**	**230**	

Data on the number of subcontractors and the fraction of the EPC spent on subcontractors were obtained by the author from each of the listed P3 developers. On projects that averaged just over $1 billion (EPC) each, the average fraction of EPC devoted to subcontractors is 54%, and the average number of subcontractors is 230. These figures may surprise P3 skeptics and opponents.

On projects that averaged just over $1 billion (EPC) each, the average fraction of EPC devoted to subcontractors is 54%, and the average number of subcontractors is 230.

The CEO of the U.S. branch of a global P3 developer noted that:

> *…[w]orking on large P3/DBFOM projects significantly benefits small subcontractors by allowing them to upskill themselves by working with a national/international prime contractor with a high level of safety and quality. It can also allow them to expand their business through larger-size subcontracts. In my experience, small subcontractors who perform well are given incrementally more scope as the project progresses. Utilizing one of these projects as a reference is also helpful for future business and raises their company profile.*[16]

Several of the P3 developers stressed the important role played by local subcontractors. For the Port of Miami Tunnel, the P3 team carried out an extensive local subcontractor recruitment/hiring program, leading to the largest number of subcontractors in Table 1.[17] Several developers also stressed governmental small/disadvantaged/local participation goals. One of them stressed the social responsibility aspect of local hiring: "The impact of a large construction project on a local community can be great. … When the project is hiring small/disadvantaged/local companies to participate in the project, the community is being served in a way that makes a larger impact and overall economic growth."[18]

The final column in the table lists the DB contractor(s) for these P3 projects. Of the 18 projects listed, six had U.S. DB contractors (Ames, Fluor, Granite, Kiewit, Massman, Traylor, Walsh), two are mixed (Fluor with Italian-owned Lane Construction; Walsh with French-owned Vinci), and the others are French company Bouygues, and Spanish companies Dragados and Ferrovial.

These data show that large U.S. DB contractors are not being excluded from DBFOM projects.

These data show that large U.S. DB contractors are not being excluded from DBFOM projects. Six DBFOM projects were built wholly by U.S. DB contractors. For the smaller U.S. DB contractors, their experience on smaller DBFOM projects will increase their

16 Nicolas Rubio, CEO Americas, Meridiam, email to Robert Poole, January 18, 2023

17 Chris Hodgkins, CEO Miami Access Tunnel, email to Robert Poole, February 1, 2023.

18 Steven DeWitt, SVP Business Development, ACS Infrastructure, email to Robert Poole, January 25, 2023.

qualifications to take part in larger DBFOM projects in future years. And as more states make use of DBFOM P3s, opportunities for U.S. DB contractors will increase, especially for those gaining experience from recent P3 projects.

PART 6

SUMMARY AND CONCLUSIONS

This policy brief has examined opposition to DBFOM P3s by some members of the construction community. The research sought to understand why some large and small contractors, and some contractor organizations, have opposed this relatively new (to the United States) method of procuring large highway and transit projects.

Legislators hearing concerns from contractors may lack a full understanding of the DBFOM model and how significantly it differs from traditional DBB and DB procurement with which contractors and legislators are far more familiar. When large contractors allege that P3s limit competition for U.S. DB contractors, legislators may not understand that in order to be qualified as part of a P3 team competing for a major project, prior experience with the DBFOM model is important.

The data presented in this report show that a number of U.S. DB contractors have been selected as part of winning P3 teams for a number of projects, thereby gaining experience and expertise with this still-new (to the United States) procurement model. It is not surprising that half the U.S. P3 projects in Table 1 used a European DB contractor that has decades of experience with DBFOM projects in other countries where DBFOM is far more common. The good news is that U.S. DB contractors are gaining experience with this model as more states offer more such projects.

Small and usually local subcontractors play a large role in U.S. DBFOM P3 projects, as Table 1 documents. Their local knowledge adds value to the DBFOM projects, and it is rational for the P3 consortium to rely heavily on local subcontractors.

Small and usually local subcontractors play a large role in U.S. DBFOM P3 projects…

Finally, the most important benefit of the DBFOM model, when financed by project-generated user fees, is the large increase in transportation infrastructure investment that use of this model adds to a state DOT's major project agenda. A $2 billion project that would normally consume $2 billion of the DOT's budget would require only $200 million if 90% of its cost could be long-term financed (by investor equity and long-term revenue bonds). The other $1.8 billion in state DOT funds would then be available for other projects statewide that would not be feasible as DBFOM P3s. Expanding the state DOT's agenda would create numerous additional projects for state and local contractors.

In sum, wise use of DBFOM P3s for major transportation projects considerably expands the "size of the pie" for transportation infrastructure. This is a win-win for the transportation construction industry as well as for highway users.

ABOUT THE AUTHOR

Robert W. Poole, Jr. is founder and former president of Reason Foundation, a national public policy think tank based in Los Angeles. He is nationally known as an expert on privatization and transportation policy.

During the 1970s he worked as a consultant on state and local public service delivery for several California-based research firms. He was the first person to use the term "privatization" to refer to the contracting-out of public services. His 1976 booklet on contracting-out municipal services led to a book contract for what became the first-ever book on privatization, *Cutting Back City Hall*, published by Universe Books in 1980.

He launched the Reason Foundation in 1978 as a think tank dealing with public policy issues, including privatization. It took over publication of his newsletter, *Fiscal Watchdog*, later renamed *Privatization Watch*—the first-ever newsletter on privatization. Under Reason's auspices, he conceived and edited three books: *Instead of Regulation* (1982), *Defending a Free Society* (1984), and *Unnatural Monopolies* (1985), all published by D.C. Heath/Lexington Books. With Virginia Postrel, he edited *Free Mind & Free Markets: 25 Years of Reason* (Pacific Research Institute, 1993). His book *Rethinking America's Highways* was released by the University of Chicago Press in 2018.

During the Reagan years he consulted on privatization with the White House Office of Policy Development, and he testified before the President's Commission on Privatization. He worked with the Bush White House on what became Executive Order 12803 on

infrastructure privatization. During the Clinton years he advised Vice President Gore's National Performance Review and the White House National Economic Council on privatization issues. In 2000–2001 he was a member of the Bush-Cheney transition team on transportation policy. He is a member of the boards of Reason Foundation, and the Public-Private Partnerships division of the American Road & Transportation Builders Association. He is also a member of the Transportation Research Board's P3 Subcommittee and a former member of its Managed Lanes Committee.

He is the author of dozens of policy studies and journal articles on transportation issues. His popular writings have appeared in national newspapers, including *The New York Times* and *The Wall Street Journal*; he has also been a guest on such network TV programs as "Crossfire," "Good Morning America," and "The O'Reilly Factor," as well as ABC and NBC News.

He received his B.S. and M.S. in mechanical engineering at MIT and did graduate work in operations research at NYU.