For decades California has faced an infrastructure financing deficit, as federal and state support has declined and counties have become more dependent on local voter-approved sales tax for critical investments. Aggravating this situation, traditional public procurement processes have in many cases led to long to problematic liabilities for public entities and long delays in project launch and project completion, escalating total costs. This has occurred as large-scale overruns on major projects have escalated, due largely to procurement processes used in California and other states that premise project awards using the historically preferred Design Bid Build (DBB) method of procurement which focuses on low bids (lowest cost) but contractually opens the door to renegotiations and fails to account for a project's total lifecycle (operation and maintenance) costs.

One answer to this problem that has long been available but remains underutilized is the Design Build methods of procurement tied to a Public-Private Partnership (P3) model, which brings private capital and management to the table under contractual agreements with public entities. In the P3 framework the private partner is required to deliver and manage a project for an agreed period of time (usually 30 years), with contractually defined performance specifications including hand back provisions that return an asset to public control in a good state of repair. Failure to fulfill those terms can result in forfeiture of the contract and the asset. Through this process, performance risk is transferred to the private partner.

While the P3 model may appear to be more expensive when up-front costs are compared to the DBB method of procurement, it often represents a lower cost when evaluated on a full-term life-cycle basis. This is due to improved maintenance over the life of the project, faster project delivery, and an absence of change orders that typically burden the DBB process. Experience shows that most small projects ($100 MM or less) are best done using traditional procurement methods, while private involvement works best for large and more complicated projects of $100 million or more.

The UK and Canada have pioneered this procurement method and it is common throughout the world. California law currently authorizes P3 projects by local or regional agencies in specific areas including: airports (California Government Code section 50478), fee-producing infrastructure (section 5956), Enhanced Infrastructure Financing Districts (section 53398.50-53398.88), public transportation (California Public Contract Code section 3143), BART (section 20220-20229), the City of Long Beach (section 5975-5979), and specified projects excluding state highways (California Public Contract Code section 22160-69). At the state level P3 projects are permitted for court facilities (section 70391.4), the University of California (California Public Contract Code section 10506.4), California State University (California Public Contract Code section 10708), and California High-Speed Rail (California Public Utility Code section 185030-185038).

California has successfully developed a number of large construction projects using variations on the P3 formula. Examples include the Long Beach Courthouse, the Neuroscience Building at UCSF, and the campus buildout at UC Merced. There have only been a handful of transportation projects, however, the most recent in the Bay Area being the Presidio Parkway that links the Golden Gate Bridge with Lombard Street in San Francisco. In Southern California the Los Angeles Metropolitan Transportation Agency (MTA) has made extensive use of the model. The fact that transportation projects are not more common stems from their relative complexity but also from opposition by the union representing the State of California's public employee engineers, which has resisted innovation in transportation finance and management.

A provision in the recently passed $1.3 trillion federal Infrastructure bill, however, may reset the table. That provision requires a Value-for-Money (VfM) analyses – a key part of the P3 process – in order to receive federal funds for transportation projects above $750,000,000 financed through TIFIA (the Transportation Infrastructure Finance and Innovation Act) and Railroad Rehabilitation and Improvement and Financing Act (RRIFA).
A Value-for-Money analysis basically involves a decision-making tree that maximizes the delivery of infrastructure within the limitations of a state's budget (taking into account revenue, expenses and indebtedness) over the short, medium and long-term. The result should assure, in terms of cost and service, the greatest public benefit for the resources expended in light of all the available alternatives. Overall, the VfM process should reflect a life cycle planning and infrastructure investment process that makes the most of federal, state and local investment capacity; takes advantage of user fees where applicable; and assures that the most cost-effective method of investment is utilized. A rigorous VfM analysis produces an appraisal of a project’s financing sources prior to an investment and allows for an alternative investment route to be chosen if it offers better value for money than traditional (public) investment methods.

It is often argued that public-private partnerships (a model where the private sector partner builds, designs, finances, operates and maintains the asset – or DBFOM) are more expensive than public investment because the public sector can borrow more cheaply than the private sector. Typically financing costs make up from 20 to 25 percent of the net present value of the total project cost, and the differential between the public and private sector cost of infrastructure is in the range of 2.5 percent of the net present value of a typical project. The Value for Money case for P3 rests on the service provider being able to deliver cost savings over the life of the project that exceed the financing cost differential. A typical project model shows that a 2.5 percent public/private financing cost differential might result in a 3% to 5% difference in total project cost, while P3 in most cases offers 15% to 30% life cycle cost savings. The key to decision making and to understanding the true cost differential is a highly transparent and objective VfM analysis of a project.

Analysis of experience with the P3 model suggests that its greatest value comes in major infrastructure projects with complex design, engineering, construction, operations and maintenance requirements. In this type of project the public sector is best served when the public sector accurately defines its needs as service outputs, and where the nature of the assets to be produced allows them to benefit from life cycle costing and management. The PPP Model is less likely to deliver Value for Money in smaller projects, or in projects where fast-paced change makes a long-term contract structure inappropriate or where the financial costs of pursuing PPP investment are disproportionate to the benefits they bring.

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**Value-for-Money Analysis**

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**Value for Money in the Infrastructure Investment and Jobs Act (IIJA)**

Title VII of the recently passed federal Infrastructure Investment and Jobs Act (IIJA) contains the following provision, which imbeds the Value-for-Money process in transportation projects funded through TIFIA and the RRIFA and could be a game changer for California’s approach to infrastructure finance.

**Title VII – Public Private Partnerships**

Sec. 70701. Value for Money Analysis

(a) IN GENERAL. - Notwithstanding any other provision of law, in case of a project described in subsection

(b) the entity carrying out a project shall, during the planning and project development process and prior to signing any Project Development Agreement, conduct a value for money analysis or comparable analysis of the project, which shall include an evaluation of –

(1) the life-cycle cost and project delivery schedule;
(2) the costs of using public funding versus private financing for the project;

(3) a description of the key assumptions made in developing the analysis, including –

(A) an analysis of any Federal grants or loans and subsidies received or expected (including tax depreciation costs);

(B) the key terms of the proposed public-private partnership agreement, if applicable (including the expected rate of return for private debt and equity), and major compensation events;

(C) a discussion of the benefits and costs associated with the allocation of risk;

(D) the determination of risk premiums assigned to various project delivery scenarios;

(E) assumptions about use, demand, and any user fee revenue generated by the project;

(F) any externality benefits for the public generated by the project;

(4) a forecast of user fees and other revenues expected to be generated by the project, if applicable; and

(5) any other information the Secretary of Transportation determines to be appropriate.

(b) PROJECT DESCRIBED. – A project referred to in subsection (a) is a transportation project –

(1) with an estimated total cost of more than $750,000,000;

(2) carried out –

(A) by a public entity that is a State, territory, Indian Tribe, unit of local government, transit agency, port authority, metropolitan planning organization, airport authority, or other political subdivision of a State or local government; and

(B) in a State where there is in effect a state law authorizing the use and implementation of public-private partnerships for transportation projects; and

(3) (A) that intends to submit a letter of interest after the date of enactment of this Act, to be carried out with –

(i) assistance under the TIFIA program under chapter 6 of title 23, United States Code; or

(ii) assistance under the Railroad Rehabilitation and Improvement Financing Program of the Federal Railroad Administration established under chapter 224 of title 49, United States Code; and

(B) that is anticipated to generate user fees or other revenues that could support the capital and operating costs of such project.

(c) REPORTING REQUIREMENTS. –

(1) Project Reports. – For each project described in subsection (b), the entity carrying out the project shall –

(A) include the results of the analysis under subsection (a) on the website of the project; and

(B) submit the results of the analysis to the Build America Bureau of the Secretary of Transportation.

(2) Report to Congress. – The Secretary of Transportation, in coordination with the Build America Bureau, shall, not later than 2 years after the date of enactment of this Act –

(A) compile the analyses submitted under paragraph (1)(B); and
(B) submit to Congress a report that –

(i) includes the analyses submitted under paragraph (1)(B);

(ii) describes –

(I) the use of private financing for projects described in subsection (b); and

(II) the costs and benefits of conducting a value for money analysis; and

(III) identified best practices for private financing of projects described in subsection (b).

(d) GUIDANCE. – The Secretary of Transportation, in coordination with the Build America Bureau, shall issue guidance on performance benchmarks, risk premiums, and expected rates of return on private financing for projects described in subsection (b).

The effect of this provision is to require recipients to conduct VfM analyses in order to help public entities compare the P3 model against traditional public-sector procurement finance and funding methods, focusing on TIFIA and RRIFA supported projects. This is a new requirement for receiving federal funds for transportation projects for which applicable state law authorizes P3 procurement.

In addition, Section 11508 Subtitle E of the IIJA places a requirement in current federal programs to conduct Value-for-Money analyses in P3 projects costing $100 million or more. This section specifically requires that as a condition of receiving federal financing for a project developed as a public-private partnership the public partner must conduct a review of the private partner’s compliance with the terms of the public-private partnership agreement and certify that it is meeting the agreement’s terms, not later than three years after the opening of the project to traffic. It also requires the Secretary of Transportation to notify Congress when projects are carried out through public-private partnerships and requires project sponsors receiving federal loans or grants for projects that will be carried out through public-private partnerships to include a detailed Value-for-Money analysis in the financial plan. That analysis becomes an eligible expense under the Surface Transportation Block Grant program.

The effect of this provision is to embed the VfM process in P3 projects above $100 million that receive federal funds and create a record that will help public entities evaluate their effectiveness and identify best practices for project financing.

Application of the IIJA in California

Nationally, the trillion-dollar Infrastructure Investment and Jobs Act includes $639 billion in funding for surface transportation, $25 billion in funding for airports, and $17 billion in funding for ports and waterways. This includes a $475 billion five-year surface transportation reauthorization and $157 billion in supplemental one-time stimulus funding to be distributed through more than two dozen grant programs over five years (2022-2026).²

For decades California has faced an accumulating deficit in infrastructure investment. The American Society of Civil Engineers gives the state a C- grade for its infrastructure. Within the state 1,536 bridges and more than 14,220 miles of highway are on poor condition, impacting productivity. Based on formula funding alone, under the Infrastructure Investment and Jobs Act California can expect to receive $25.3 billion for federal-aid highway appropriated programs and $4.2 billion for bridge replacement and repairs. It can also compete for the $12.5 billion Bridge Investment Program for economically significant bridges and nearly $16 billion in national funding dedicated to major projects that will deliver substantial economic benefits to communities.

Public transit will also benefit. Based on formula funding alone California can expect to receive $9.45 billion over five years to improve public transit in the state. It can also expect to receive $384 million over five years to

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Public transit will also benefit. Based on formula funding alone California can expect to receive $9.45 billion over five years to improve public transit in the state. It can also expect to receive $384 million over five years to
support the expansion of EV charging networks and can apply for the $2.5 billion in grant funding dedicated to EV charging in the bill. Airports in California would receive approximately $1.5 billion for infrastructure development at airports.\textsuperscript{3}

The IIJA breaks new ground in transportation policy by mandating a value-for-money analysis for federally RRIFA funded transportation projects of more than $750,000,000 where state law authorizes P3 procurement. To benefit from that funding California must develop a clearly articulated, independent and transparent process for developing value-for-money analyses.

It should also enact legislation to more broadly enable the consideration of public-private partnerships in future transportation procurement and require use of the method of procurement that produces the best value for money. The IIJA offers California an opportunity to address its transportation infrastructure needs while achieving more efficiency in infrastructure investment and the use of public funds. Through the Value-for-Money mandate the IIJA also presents a window for the state to diversify its transportation finance options through the deeper consideration of public-private partnerships in its procurement processes.

\textbf{Endnotes}


\textbf{Image credits}

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