# Public-Private Partnerships: Design-Build Revolution or Evolution?

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The 21st century has ushered in a revolution in construction delivery methods in the United States away from the separatist traditional design-bid-build method and toward a more integrated approach of which design-build is at the forefront. Public-Private Partnerships (P3s) represent an extension or evolution of the integration efficiencies seen in design-build construction for appropriate infrastructure projects. P3's focus on the integration of the design-build with the long-term operation and maintenance of public infrastructure assets represents an important evolution of infrastructure development.

Although P3s generate excitement for its innovative financing opportunities for public works, its most important feature likely lies in improving the integration of projects to involve the life-cycle operations and maintenance needs and costs of complex structures at the front end of the design and construction cycle. In an era turning its focus more to the long term energy usage and costs of its building infrastructure with conservation standards and certifications such as LEED and Net Zero Energy, P3 provides public entity owners with building performance guarantees and incentives with long term cost savings ramifications that can dwarf its more traditional delivery method competition.

The Industrial Revolution of the 19th and 20th centuries saw the emergence of the traditional design-bid-build delivery method in the U.S. The Industrial Revolution brought the need for bigger, faster, more powerful infrastructure, and the systematic application of scientific knowledge to the manufacturing process. Taller buildings powered by complex machinery and equipment required more specialized engineering and architectural knowledge. This, and the perceived need to prevent corruption and encourage competitive pricing, brought a separation of design and build for complex public works projects and many private works projects. This era of separation was legislated by the federal Miller Act in 1935 requiring the traditional design-bid-build method for most federal public works projects, and copied by most states for their own state and local public works.

However, separation of design and build proved to be an inefficient method of constructing complex buildings and other infrastructure. Statistics published by the U.S. Department of Commerce show that from 1964 to 2004, spurred by the Technological Revolution, labor productivity in all non-farm industries in the U.S. increased by a whopping 120 percent. During this same period, however, construction productivity decreased by over 20 percent. In short, construction productivity was a dismal failure during the 20th Century. Any construction lawyer who has handled delay and disruption/lost labor productivity claims that have commonly arisen from complex construction projects over the past 30 years can tell you that there is little doubt the separation of design and build bears a substantial part of the blame.

Viewed in this context, it is hardly surprising that the 21st century has seen a revolution of integration and collaboration in all aspects of construction. Recent statistics published by RS Means demonstrate that the design-build delivery method has gone from being used in only a small minority of large non-residential construction projects to being the market leader in such projects today. Other construction methodologies which are trending such as integrated project delivery and lean construction all have two things in common with design-build: integration and collaboration. Indeed, the technological revolution finally has found its way onto the construction project with advanced BIM modeling and new software and hardware products that allow the

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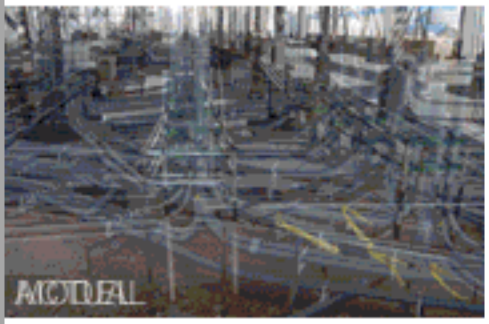

designers and builders to collaborate and communicate in the design, scheduling and building of complex projects like never before. Design and schedule changes can be effectively communicated and shared via smart phones and tablets in real time with all workers on the jobsite, who also can immediately communicate their ideas and concerns.

P3s also enhance efficiency by shifting key areas of responsibility and risk of infrastructure asset development to those in the private sector more experienced to handle them, while retaining ownership and control in the public entity owner.

In short, the advantages of P3s for appropriate public works projects are immense and, hence, the interest and excitement surrounding P3s in the U.S. is palpable and should be no surprise. A recent study by Moody's Investment Service has concluded that "[t]he U.S. has the potential to become the largest P3 market in the world, given sheer size of its infrastructure and its growing urban populations."

For the U.S. P3 market to reach this potential, however, the laws enabling our public entities to effectively utilize the P3s in the U.S. must continue to evolve. At present, 36 states plus Puerto Rico have some form of P3 enabling legislation and, while the federal government has programs like TIFIA and WIFIA, assisting state transportation and water agencies to use P3s, the federal GSA accounting scoring methods present an unfortunate hindrance to the use of P3s on a federal level. Of the 36 states that have P3 enabling legislation, 35 enable P3 transportation infrastructure, but only 14 enable social infrastructure (i.e., buildings). Moreover, some of those enabling statutes must be modernized to take full advantage of the modern trend toward the availability paymentmodel of P3, rather than the old toll or revenue payment" P3 model. For example, California's general statute enabling transportation, rail and social infrastructure P3 projects is limited to building fee producing" projects. (See Cal. Gov't Code Sec. 5956.) However, because of its increased efficiencies discussed above, the use of the P3s makes sense whether the resulting structure is fee producing or not.

California's Administrative Office of the Courts ("AOC") just completed the first P3 performance-based" social infrastructure project in the U.S.—the Long Beach Courthouse—a courthouse that produces little revenue or fee. The Long Beach Courthouse project was a P3 project utilizing the availability payment approach—in other words, the public agency agreed to pay the private developer a stipend but no significant construction payment until the facility was complete and available for the agency's use. The project was enabled under a special California statute authorizing the California Judicial Council to use aP3 for construction of its California Courthouses and related facilities. (See Cal. Gov't Code Sec. 70391 et seq.)

As a recent post-completion study performed by the California Judicial Council has reported, the Long Beach Courthouse project was completed on time and under budget. By contrast, the study reports, the completion of a similar AOC courthouse construction project utilizing a design-bid-build construction manager at-risk delivery method and traditional public bond financing, the San Bernardino Justice Center, was delayed for 75 weeks after the planned completion. The report also determines that the key assumptions made in the value for money" analysis that convinced the AOC to utilize the P3 approach for the Long Beach Courthouse rather than more traditional delivery methods were validated through the actual construction completion of the facility. Simply put, the Long Beach Courthouse was completed on time, on budget and successfully transferred risks, including life-cycle building operations and maintenance risks, to the private developer.

In addition to the further enactment of P3 enabling legislation in the U.S., the federal and state governments need to establish centralized bodies—Centers of Excellence–to help public agencies identify when the use of P3s is appropriate and provide the expertise to help them implement P3s effectively. Smaller, local public agencies, in particular, often do not have the expertise necessary. Once these foundation blocks are in place, there will be no holding back the evolution of P3s in the U.S.

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**About the Author**

William Eliopoulos has over 25 years of experience as a trial and construction lawyer. He has assisted clients in connection with a wide variety of infrastructure and other complex construction projects including those involving creative delivery methods such as P3s. He is a partner in Rutan's Trial Section, Co-Chair of its Construction Law Group and Managing Partner of the firm's Silicon Valley Office. (650) 320-1501 WEliopoulos@rutan.com