



DESIGN- BUILD

**New Challenges
Require New Solutions**

Design-Build (DB) is no longer a niche procurement method. Increasingly utilized in both the public and private sectors, DB is being applied throughout the non-residential construction industry. Best known for its use in major DOT highway projects, DB is transitioning into smaller work in healthcare, education, public safety, and manufacturing.

The Design-Build Institute of America (DBIA) predicts the delivery model will account for as much as 44% of all non-residential construction spending by 2021. Why? DBIA studies show that DB costs are about 6.1% less than traditional Design-Bid-Build, and that the delivery speed is around 33.5% faster.

But what's behind the flashy numbers? How does DB drive down costs while shortening the construction schedule? If the answer could be boiled down to two words, they would be *freedom* and *innovation*.

The best solution to complex problems happens when design engineers work together with the contractor – from the outset. They bring a granular understanding of industry best practices and ability to execute high-level technological innovations. Design engineers offer information and capabilities that the public or private owner probably don't have at their disposal.



KEY CONCERNS IN SELECTING DELIVERY METHOD



SOURCE: Design-Build Utilization Combined Market Study June 2018: FMI/DBIA

Rather than working toward a predetermined outcome with predetermined plans, the Design-Builder exercises creative flexibility to meet the owner's goals and objectives while providing the best value. There are no restrictions from a design and execution standpoint; letting the engineers and contractors do what they do best, owners reap the rewards.

Does the owner lose some influence over the project? Yes. But in exchange, the Design-Builder is handed the

capability to deliver the project in a timely and cost-efficient manner through superior technical concepts addressing personnel, materials and equipment, safety, longevity, maintenance, and environmental permitting.

When a project owner seeks a high level of collaboration with the DB team, they may use an emerging delivery model called Progressive Design-Build. In Progressive Design-Build, the owner plays an active role in designing and pricing the project.



1-75, Hernando and Sumter Counties, FL

Prior to using Design-Build as a procurement method, an infrastructure owner must determine if they have the legal ability to do so. With no standard federal guidelines, regulations vary ([State Statute 2020](#).) Once it is determined that an owner can use DB, they must define the project's desired outcomes. In procurement, owners must carefully assess potential DB teams' qualifications and technical approaches. Does the DB team have the necessary experience? Do they fully understand the project's goals and objectives? Do they have technical solutions that achieve project goals and minimize risk? It is important to give serious consideration to these questions during your pre-procurement and procurement phases.

In DB and other alternative delivery models, much project risk may be shifted from the owner to the Design-Builder. These risks can include the typical project pitfalls like environmental permitting, utility agreements, and right-of-way; and the project evaluation process itself. In DB, risk is best placed on the party most able to control it. For example, permitting is typically best handled by project owners. Extreme uncertainty (and therefore risk) will increase the price of the work.

WGI is a leader in Design-Build and P3, amassing a wealth of knowledge about the tricky nuances that

make alternative delivery complex yet rewarding. WGI gladly shares its real-world experience with clients and teaming partners, seeing it as the foundation of the firm's place at the alternative-delivery industry's forefront.

In just the state of Florida, WGI was awarded a collective total of \$1.8 billion in 41 Design-Build projects. Knowing DB is not just a good choice for the funding and construction of toll roads and express lanes, WGI has used DB to deliver a road safety project with signals, safe routes, crosswalks, and drainage in the Florida Department of Transportation's District 1, which covers Charlotte, Collier, Desoto, Glades, Hardee, Hendry, Highlands, Lee, Manatee, Okeechobee, Polk, and Sarasota counties.

WGI is currently delivering Segment 6 of the Wekiva Parkway, a project including tolled and non-tolled roads, segmental bridges, and delicate environmental work over the designated wild and scenic Wekiva River. In the Jacksonville area, WGI won another project not through price, but through its proven technical ability to harness the power of 3D design and automated workflows.

For DB projects pursued last year, WGI achieved a 90% success rate for landing on the short list. With its own alternative-delivery team, WGI has both a stable of repeat contracting partners, and other contractors looking to join. WGI's Design-Build experience, particularly in Florida, dovetails with the larger industry trend. The South Atlantic census division, where WGI is active from Florida



Wekiva Parkway, Segment 6 bridge construction, Orlando, FL

to Virginia, is on pace to produce the highest growth rate in highway/street and water/wastewater DB construction through 2021.

WGI is also well-positioned in the Texas Triangle mega-region encompassing Houston, Dallas-Fort Worth, Austin, and San Antonio, and in Denver in the Mountain Region. In both, the firm expects to achieve the highest growth rate in non-residential DB construction through 2021. WGI looks to expand both its Design-Build and P3 offerings in both the West South Central and Mountain markets, actively seeking out teaming partners.

Design and construction are constantly evolving. The use of DB for non-residential construction in both

public and private sectors, and the increasing attractiveness of P3s for highway funding and construction, continue to reshape the way engineers, contractors, and owners do business. In this transitional time, when traditional Design-Bid-Build is giving way to alternative-delivery models, experience and ability are crucial.

WGI, with over \$2 billion in Design-Build work in its portfolio, has a proven track record with alternative-delivery models. The firm is also committed to being the industry leader wherever it works. If you need a trusted partner to deliver your project, saving you time and money through innovation and creative problem-solving, WGI should be your next conversation.



Park Place Parking Garage, Missoula, MT

LET'S TALK.

For more information about this study or to have a conversation with one of our experts, please contact us:



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