Design PROFESSIONALS JOIN Design-Build Movement

-G. William Quatman, Esq., FAIA, DBIA

General Counsel & Sr. VP, Burns & McDonnell Engineering; National Board Chair, DBIA



Photo: Jason Dailey.

The concept of integrating design and build functions to create highly collaborative projects has been around since the pyramids in ancient Egypt. Over time, this became known as the master builder concept, or "capomaestro" during the Italian Renaissance. But a desire to separate the art of architecture from the craft of the construction trades in the mid-1800s and into the early 1900s slowly separated the very professionals who should be working closely together. Silos were created and collaboration suffered until owners began to demand a better way of delivering projects. Today, the architect/engineer (A/E) community is not only on board the design-build train, but many of their members are even leading it. I am the third design professional in a row to serve as chairman of the Design-Build Institute of America (DBIA) Board of Directors, and next year another architect will become its chair. That is because the design community has come to realize that when contractors join the design process, one group's goals become the entire team's goals, producing projects that showcase design excellence and innovative solutions to unique challenges.

THE STATE OF DESIGN-BUILD

When DBIA was established in 1993, only three U.S. states had legislative authority to use design-build for public projects. Slowly but surely, DBIA National and our 14 affiliated regions have worked with public owners to achieve some level of design-build authority in all 50 states. Two federal laws passed in 1994 and 1996 opened the door to "best value" selection of design-build teams by federal agencies, using a two-step process. And as of this year, after legislation passed in my home state of Missouri, half of the states have full design-build authority for all types of public design and construction projects.

Design-build is being used across all sectors as well. In fact, 40% of all buildings are now completed using design-build (a

10% point increase from a decade ago), and more than half of building projects over \$10 million are delivered using design-build. A 2014 McGraw Hill Construction survey showed that architects, contractors and owners expect the use of design-build to grow more than any other delivery method.

Additionally, DBIA is in the middle of surveying state Departments of Transportation, and has so far found a whopping 600% increase in completed transportation design-build projects since 2002, and transportation owners who have used designbuild like it. In fact, 87% of respondents said they would use design-build again, and of the 13% who said they wouldn't, their primary reason was a lack of statutory authority.

DESIGNERS IN DESIGN-BUILD

The idea that architects are opposed to design-build is no longer true. From 1909 to 1976 the American Institute of Architects (AIA) had an ethical rule that barred their members from "engaging in building contracting." That rule was repealed in 1978 and the AIA began publishing design-build contracts in 1985. In 2005, the AIA Board adopted a policy statement that encouraged architects to take the lead role in design-build. What a difference 100 years makes! Now, more than ever, architects are recognizing the benefits of working alongside the contractor and owner from the beginning to the end, as a collaborative team. The aforementioned McGraw Hill Construction survey showed that both architects and contractors say design-build is the best delivery method for improving process efficiency and producing the fewest change orders.

In 2007, I chaired the AIA's Design-Build Knowledge Community, which led a series of successful seminars coast-to-coast and internationally, including programs in San Juan, Puerto Rico, and London England. The programs were packed at each venue with architects who reacted positively to the institute's suggestion that architects can take on the lead role in designbuild, with many members and seminar attendees reporting that their firms had made this move with great financial success. The AIA's endorsement of this method gave encouragement to its membership to "be a leader." Not just architects, but engineers have embraced design-build, and today we see many of the top design-build contractors being engineering firms that have brought construction inhouse.

Early on, insurers and lawyers cautioned design professionals about the risks of design-build. But many have come to realize that through teaming with trusted partners, collaboration in all phases, and more control over the entire process, claims can be avoided. Insurance statistics have found fewer claims against A/E firms on design-build projects than on traditional design-bid-build. And, designers are having more fun by staying connected with their projects in all phases rather than throwing a set of plans over the wall to an unknown contractor who is tasked to interpret the design and build it properly. Just attend one DBIA regional or national conference and watch the interaction among designers and construction professionals.

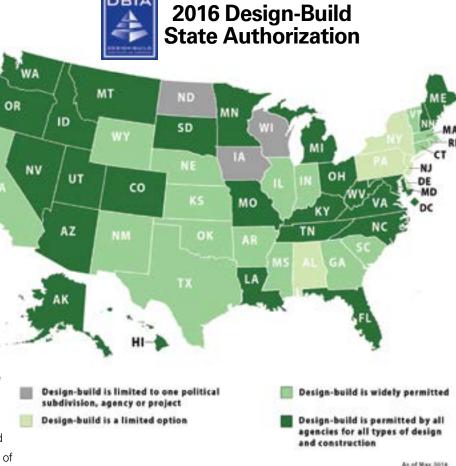
It is a new era in this industry, and exciting to be a part of.

RESEARCH DEMONSTRATES BENEFITS

Architects surveyed by McGraw Hill said that design-build was the best delivery method to reduce project schedule, which is supported by multiple studies going back to the pivotal Construction Industry Institute/Pennsylvania State University (CII/Penn) study demonstrating design-build is 33% faster than design-bid-build on average. A 2016 follow-up CII/Penn study also showed that more than a quarter of design-build projects have less than 0% cost growth, while only 12% of design-bid-build projects can brag about the same.

DBIA LEADING THE WAY

DBIA members span the entire spectrum of design and construction professions, of course, including architects, engineers, specialty contractors, subcontractors, public and private facility owners, attorneys, industry consultants, business development professionals, students and faculty. As use of design-build grows, our members are finding the



connections they've made to the entire design and construction industry at DBIA to be incredibly valuable in forming joint ventures and identifying willing partners for a design-build team. This diverse membership means our resources are rarely tailored to just one sector. Our best practices, primers, contract documents, webinars and courses are often geared to the entire project team to encourage the collaboration that is essential to innovative problem-solving.

DBIA was founded not only to expand authority for the use of design-build in all 50 states, but also to define and teach best practices in the delivery method. Our top award given to leaders in design-build is named for an architect, Filippo Brunelleschi of Florence, Italy, making a complete circle back to the days of the master builder, or capomaestro. As more professionals take our courses and become certified every year, some owners are explicitly looking for DBIATM or Assoc. DBIATM certified team members. After 23 years as an association, DBIA feels confident that Design-Build Done RightTM has shaved years off of countless projects, held down construction costs, reduced project claims and litigation, and helped produce the highest-quality projects. We hope you will join us in this movement, whether you are a design professional, contractor, owner or other member of a construction team.