

meeting common goals with design-build

by Steve Kimball



With over 40 years in the AEC industry, I have developed a professional appreciation for the merits of Design-Build delivery. While Design-Build is not the solution for every client and project, it continues its growth cycle in many segments of the marketplace.

A successful Design-Build (D-B) process requires a collaborative effort between the design team, construction team, and the client throughout the entire design and construction process. The project team's commitment to a collaborative, open approach is necessary to achieve the best results. This approach leverages the expertise of all involved to maximize quality, efficiency, and cost considerations.

This paper presents an overview of Design-Build delivery and its benefits when the client, project, location, and team are well suited for the effort. A wealth of supporting industry data and benchmarking information is available from FMI Consulting and the Design-Build Institute of America (DBIA).

The process should begin with a clearly defined Request for Qualifications (RFQ) or Request for Proposal (RFP) that communicates the project's goals, priorities, objectives, and scope of work. The review and discussion should address site planning; program and space requirements; utilities; building materials; and mechanical and electrical systems. Additional considerations should include schedule, budget, and the construction means and methods best suited to successfully complete the project.

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benefits of design-build

There are several advantages that make Design-Build an attractive option for many projects.

SINGLE POINT OF RESPONSIBILITY

The client has the benefit of a single contract entity, the Design-Builder, for design and construction. This streamlines contractual responsibility, communication, decision-making, and accountability, allowing for early and continued value-based delivery throughout the design and construction process. Elimination of conflict management is a key benefit.

COLLABORATION AND INNOVATION

Design-Build incorporates “cradle-to-grave” client/contractor/designer collaboration throughout the project duration. Early engagement from concept through schematic design is critical to leverage time, value, and quality results. Harnessing the broad, collective knowledge of the client, contractor, and designer early in the process can lead to innovative solutions, efficient construction processes, and an expedited quality result.

PROJECT “BUY-IN”

Project collaboration should include early engagement with the major subcontractors. Initial and ongoing topics during the life of the project include pricing, vendors, value options, schedule considerations, staffing management, and execution strategy.

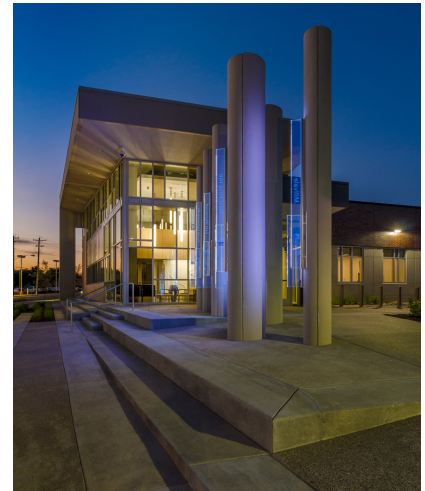
EXPEDITED PROJECT DELIVERY

The nature of Design-Build collaboration facilitates expedited delivery and schedule control. The “Just-in-Time” design process incorporates design “packaging” for early construction release with coordinated / overlapping design and construction activities.

Additional benefits of D-B include identification of “long lead” materials, products, and labor activities. Early assessment of “long lead” considerations provides an opportunity for cost and schedule mitigation through pre-purchase strategies, pre-fabrication opportunities combining design and shop drawings, and /or alternative labor considerations.

COST SAVINGS

Cost savings derive from Client / Contractor / Designer collaboration resulting in the ability to reduce the need for extensive design documentation, development of an expedited schedule, and reduced administration and management costs.



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QUALITY CONTROL

The integrated Client / Contractor / Designer team provides a mechanism for open communication, brainstorming, and access to collective team knowledge and experience resulting in informed value-based decision making throughout the design and construction process. The value-based decision-making process ensures quality and cost objectives are aligned with established project goals.



REDUCED RISK

Design-Build aligns Client / Contractor / Designer goals and objectives through a single point of responsibility. Early development of project scope, goals, and objectives through the Design-Build team approach establishes the basic groundwork for planned project success.

The nature of Design-Build goal setting with early, continuous project team coordination and communication will reduce the opportunity for conflict which mitigates the single largest cause of litigation: the failure to communicate and resolve issues early.



selection methodology

A well-structured, two-step Design-Build selection methodology is key to positioning the project for success.

STEP 1 – REQUEST FOR QUALIFICATIONS (RFQ) SOLICITATION

The solicitation should focus on “shortlisting” qualified contractors to move on to Step 2: Request for Proposal (RFP).

Elements of the RFQ should include:

- Project description and location.
- Scope of services.
- Design and construction project schedule.
- Delivery method: Design-Build.
- Outline the “shortlist” process qualifying a select number of contractors (3 to 5) eligible for the Step 2 Request for Proposal (RFP).
- Site visit.
- Process and deadline for written questions and responses.
- RFQ response submittal deadline date.
- Date to “shortlist” contractors.
- Submission requirements.
- Evaluation and best value selection criteria.



STEP 2 – REQUEST FOR PROPOSAL (RFP)

Elements of the RFP should include:

- Notification of “shortlisted” contractors.
- Process for selection and award.
- Cost / cost structure.
- Additional site visits (as needed).
- Submission of additional information (as needed).
- Process and timeline for written questions & responses.
- Shortlist interview timeline, location, and requirements.
- Selection date of successful contractor.



well-executed design-build projects

When structured and executed well, Design-Build replaces potential adversarial relationships between owner, designer, and contractor with a collaborative, open-book, team approach.

KEY ELEMENTS NECESSARY FOR DESIGN-BUILD SUCCESS:

- Establish a comprehensive, “two-step” RFQ / RFP solicitation and award process.
- Establish a limited RFQ / RFP invitation list.
- Restrict the “shortlist” number invited to participate in Step 2 (RFP) to 3 teams.
- Establish clear project goals focused on all team members’ involvement.
- Establish clear and open communication protocols throughout the entire process (RFQ / RFP through project closeout).
- “Open Book” materials / subcontractor / vendor selection and pricing.
- Budget a reasonable project design & construction contingency.
- Collaborative best-value problem solving.

MISNOMERS ABOUT DESIGN-BUILD INCLUDE:

- Design-Build is only for small and/or simple projects.
- Design-Build is only appropriate for new construction.
- Design-Build compromises the owner’s relationship with the designer.
- Design-Build delivers substandard craftsmanship, products, and materials.



DESIGN-BUILD IS NOT FOR EVERY PROJECT. WHAT TO AVOID:

- Forced teaming relationships.
- “Top down” mentality.
- Bringing a Design-Bid-Build attitude to the D-B process.
- Not committing the personnel and time necessary for engagement.
- Procurement and/or process requirements not conducive to D-B.
- Regulatory restrictions.

data

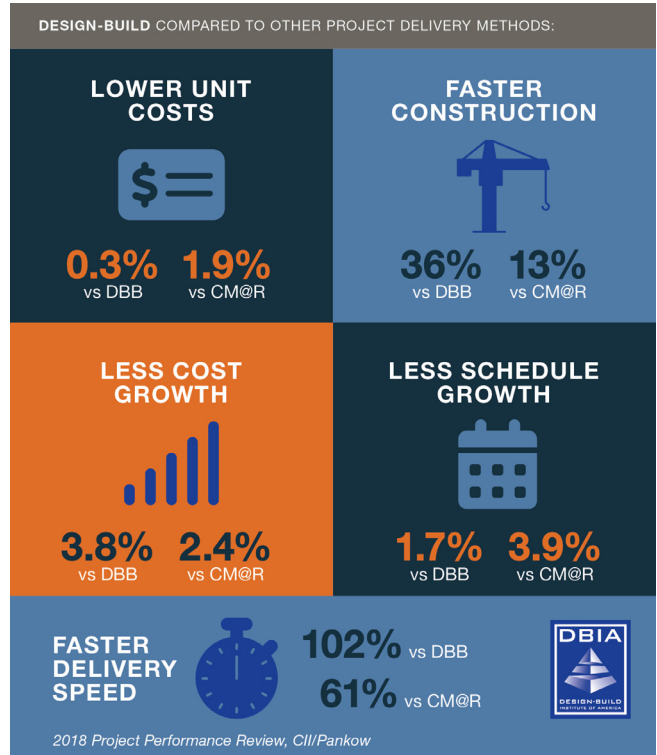
The Design-Build Institute of America (DBIA) provides comparative data on Design-Build and other project delivery methods across key metrics:

- Initial Cost
- Schedule
- Cost Growth
- Schedule Growth
- Delivery Speed

Beyond the quantitative benefits of Design-Build, early buy-in from all major stakeholders—owners, designers, contractors, and subcontractors—fosters collaboration, replaces the traditional siloed approach, and aligns the team toward a shared project goal.

summary

Design-Build delivery attributes of single point of responsibility, collaboration & innovation, and project “buy-in” provide a platform for improved quality, cost savings, and reduced project risk. Overall, the Design-Build process is favored for its efficiency, collaboration, and potential for cost savings, making it a compelling choice for many construction projects.



about the author



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