

Design-Build at 20 – Emerging Trends and Lessons Learned in the First 20 years of Design-Build



“Integration is Our Foundation”

Copyright © 2012

Rex Huffman, DBIA



- **President
Huffman Consulting, LLC
New Smyrna Beach, Florida**
- **Rex Huffman is President of Huffman Consulting, LLC, and offers various construction industry training and consulting services across numerous design and construction markets. Mr. Huffman has worked in the construction industry for over 40 years, focusing primarily on design-build project delivery. He has personally managed multiple public and private sector design-build projects, including process industrial, buildings, water and wastewater, railroads, highways and bridges and recreational. He has led the design-build sales, marketing and operations departments of three national design-build companies.**
- **Mr. Huffman earned a BS degree in Civil Engineering at Iowa State University and is a Certified General Contractor in Florida. He has been a member and actively involved with the Design-Build Institute of America since 1994; served on the National DBIA Board for six years; chaired the DBIA Civil/Infrastructure Committee and Certification Board; is a Designated Design-Build Professional; is an approved instructor for the DBIA certification courses; and is currently serving as Thought Leader for the Transportation Markets Committee.**



Project Delivery Method Market Share for Non-Residential Construction



Analysis by RSMeans Business Solutions a div of Reed Construction Data

- ◆ Design - Build
- ▲ CM-at-Risk
- × Design-Bid-Build

Design-Build Performance

(Comparison of Design-Build vs. CM-at-Risk vs. Design-Bid-Build)

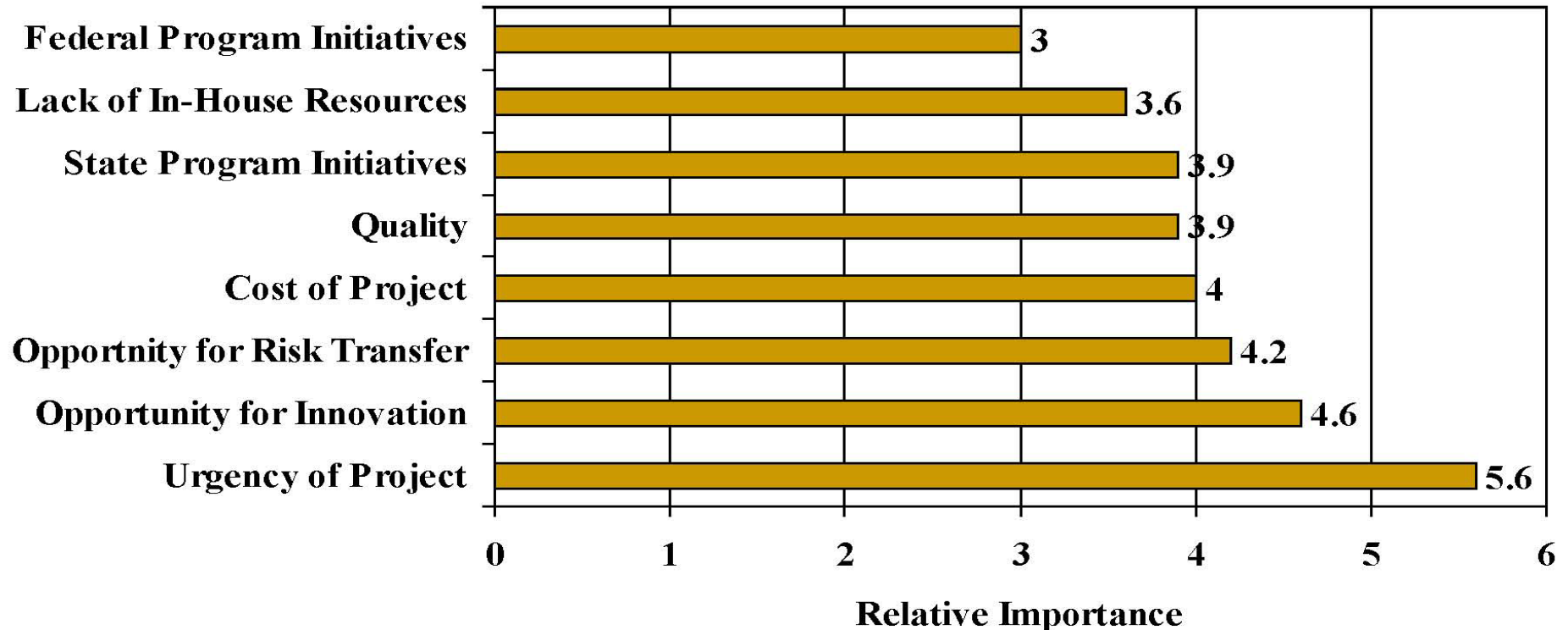
- **6% Lower Cost**
- **12% Faster Construction Time**
- **33% Faster Project Completion**
- **Higher quality in all measured categories**

SOURCE: Construction Industry Institute (CII)/Penn State Research comparing 351 projects ranging from 5K to 2.5M square feet. Projects were of various types and from various industries.



Making the Design-Build Decision

Relative Importance of Factors Considered in Deciding Whether to Use Design-Build



DBIA Core Curriculum

- **Fundamentals of Project Delivery** -This course provides a general overview of the attributes of all the major project delivery systems, procurement methodologies and contracting approaches. It sets the stage for DBIA's other three core courses. (6 CEUs)
- **Principles of Design-Build Project Delivery** - This course addresses the use of design-build as a project delivery method, focusing on essential concepts and characteristics, as well as critical elements of the RFQ/RFP process and overall project management. It is an interactive, problem-solving course where students can take part in a structured team-learning environment. (8 CEUs)
- **Design-Build Contracts and Risk Management** - This course focuses on applying effective contracting language as well as insurance, bonding and surety products and strategies to successful design-build project delivery. Key issues relevant to public and private sector owners and design-build entity teams are addressed, making this seminar a must for anyone utilizing integrated project delivery. The course emphasizes providing relevant legal, contracting, insurance and risk management knowledge with strategies for applying this knowledge to the evaluation of your existing risk mitigation measures. (8 CEUs)
- **Post-Award Design-Build** - This course addresses the use of design-build as a project delivery method, focusing on essential concepts and characteristics, as well as critical elements of the RFQ/RFP process and overall project management. It is an interactive, problem-solving course where students can take part in a structured team-learning environment. (8 CEUs)



Certification Workshop

- A five-day intensive program including DBIA's four core-courses required for certification and the exam prep course.

Workshop Schedule - 8:00am-5:00pm (includes breakfast and lunch each day)

Day 1: Fundamentals of Project Delivery

Day 2: Principles of Design-Build Project Delivery

Day 3: Design-Build Contracts and Risk Management

Day 4: Post Award Design-Build

Day 5: Certification Exam Prep Course



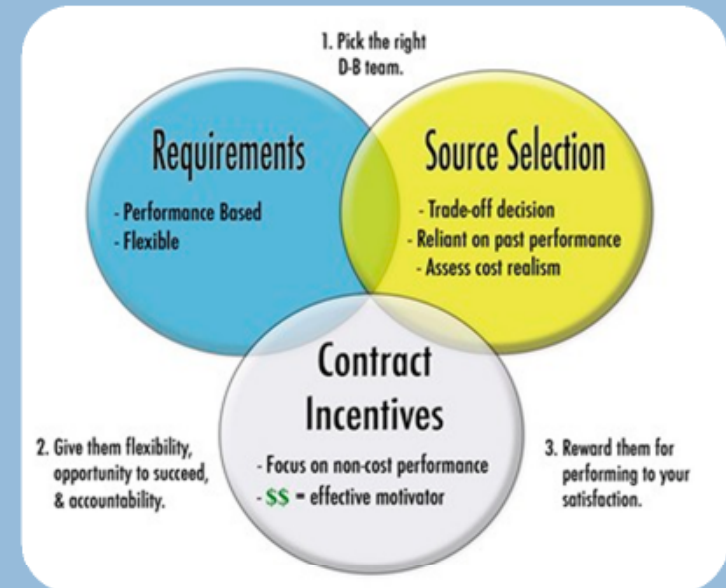
Owner-Directed Education

Successful design-build offers owners expanded opportunities and requires a different skill set than traditional design-bid-build. Maximizing design-build project delivery requires a synergistic, three-pronged approach that includes:

PERFORMANCE REQUIREMENTS that clearly articulate owners' needs while providing flexibility, opportunities for creativity and accountability;

SOURCE SELECTION processes that ensure the right team gets the job; and

Rewards for high performance through **ASPIRATIONAL CONTRACTS** with **AWARDS** and **INCENTIVES**.



In addition to the owners' series of education courses, DBIA is seeing an increase in owners seeking DBIA certification to demonstrate to industry their in-depth knowledge of design-build.



In-House Training

Whether a government agency/private owner or an industry firm, DBIA has both the coursework and experts to train your team in the key elements of “design-build done right.” DBIA has worked with hundreds of owners and industry firms to conduct company based training to optimize and expedite the learning process for groups of individuals within one organization who want and need to learn the design-build benefits and process as a team. Approximately half of the company-based training conducted by DBIA each year is for repeat clients who understand the value of high-quality education, and who have made a commitment to keep their team on the cutting edge.

Whether you want one day or one week, DBIA has a package to fit your needs. The most popular options are outlined below. The cost of company based training varies dependent upon the number of students and the location. However, you always recognize savings by eliminating expensive airfare and hotel costs for your team.

DBIA recommends a minimum of 10 students in order to make company based training your most cost-effective option. If you don't have 10 on your staff, we highly recommend partnering with the owner you are working with, or other industry partners to conduct a joint company based training



DBIA Elective Courses

- **BIM Execution Planning For Design-Build Projects** - This course will focus on execution planning for Building Information Modeling (BIM). Different use cases for implementing BIM will be discussed (e.g., authoring the design, cost estimating and 4D modeling), but the course will not focus on how to create any specific model. In other words, this will not be a computer modeling course, but instead it will focus upon what model content should be developed and shared throughout the project lifecycle, as well as focusing on the process for managing the information flow. (8 CEUs)
- **Conceptual Estimating** - One of the hallmarks of design-build project delivery is early knowledge of costs. This course will introduce the fundamentals of conceptual estimating and how you go about assessing risk and calculating costs before the design is complete. At the end of this course students will be able to: Describe the role of the estimator in design-build; describe the various influences affecting building costs; describe the various types of estimates; describe how estimates are organized using standard estimating formats; explain how to use an estimating manual; describe how unit prices are developed; explain the fundamental concepts of value engineering; explain how to manage and control costs throughout the design process; describe the various checks and balances needed to ensure the reliability of the estimate. (6 CEUs)
- **Design Management Fundamentals** - Effective integration of the distinctly different design and construction processes is a critical management responsibility for a successful design-build project. This new course, along with DBIA's Design Management Guide, explores the fundamental aspect associated with successful management of design within an integrated delivery framework.
(8 CEUs)



Online Learning

Bridging Documents: Benefits, Risks and Effects on Liability

By the end of this online course you will:

- Know how bridging differs from design-build relying on performance criteria;
- Identify potential benefits and disadvantages from use of bridging documents;
- Appreciate how bridging affects the liability of project participants; and
- Understand best practices associated with use of bridging.

Design-Build Sustainability

By the end of this online course you will :

- Know the history of sustainability and effects on the environment;
- See the relationship between sustainable design and design build
- Review current standards, codes, mandates and incentives for green design
- See how important BIM is as a tool to integrate design Have reviewed a few design techniques to help reduce carbon emission
- Be able to see how a whole building mindset is important when using life cycle costing analysis and value engineering early in the design process
- Know how to put the right team together to avoid contractual risk
- See how a completed design build project was successful in collaboration and achieving sustainable goals to receive a LEED certification



Online Conference Education Sessions

- The 2012 Design-Build Conference and Expo sessions is available for viewing at <http://www.prolibraries.com/dbia/>. Enter our conference code: **DBIA12**
- The 2013 Design-Build in Transportation sessions is available for viewing at <http://www.prolibraries.com/dbia/>. Enter our conference code: **TRANS13**.



Design-Build Institute of America

1331 Pennsylvania Ave NW, Suite 400

Washington, DC 20004

(202) 682-0110

www.dbia.org

Rex D. Huffman

XXX



“Integration is Our Foundation”

Copyright © 2013