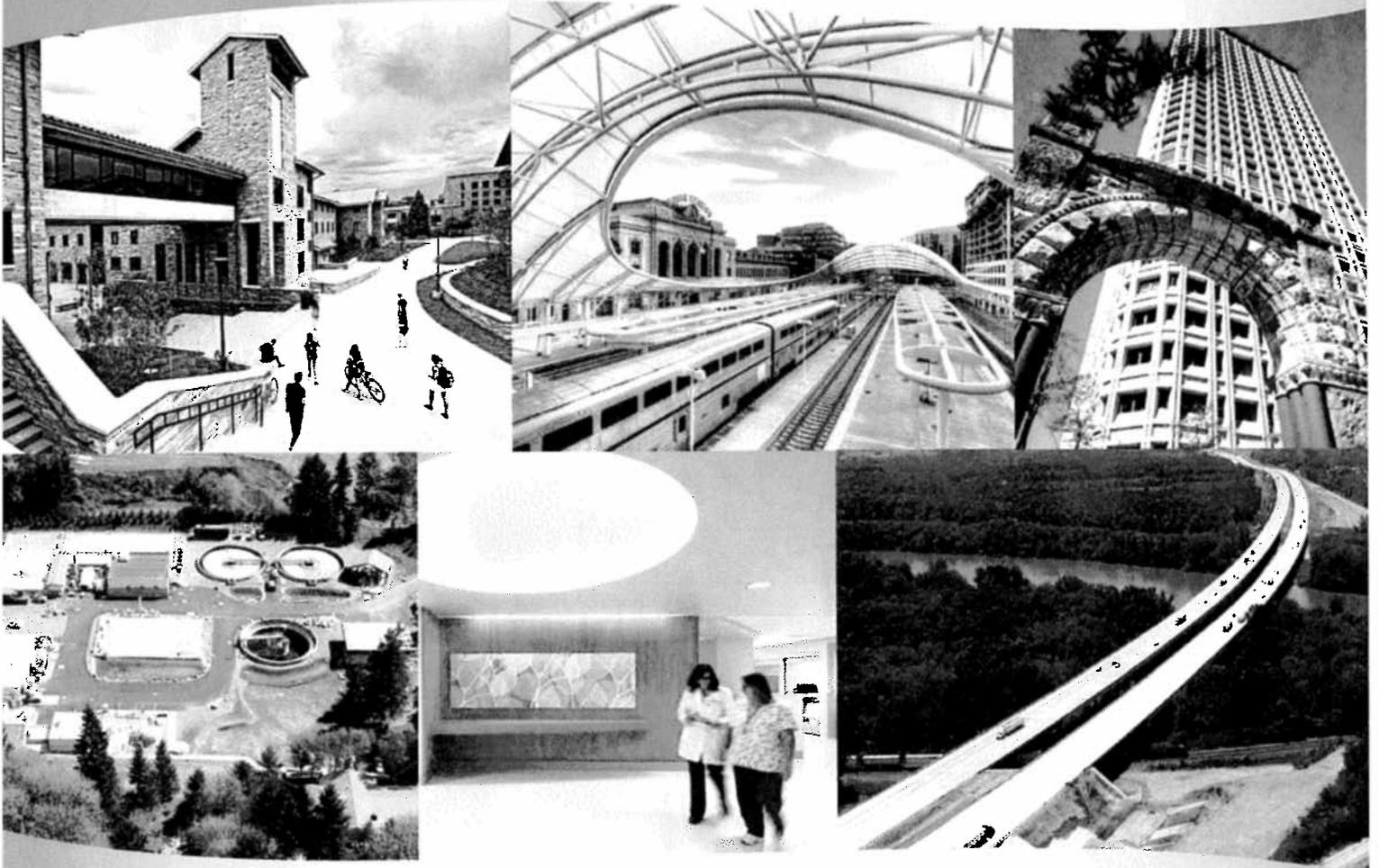


WHAT IS DESIGN-BUILD?

A Design-Build Done Right Primer



John A. Raimondo, P.E.
President, DBIA Michigan Chapter
Director, Roncelli, Inc.
jraimondo@roncelli-inc.com

RONCELLI 



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WHAT IS DESIGN-BUILD?

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DESIGN-BUILD IS A SYSTEM OF PROJECT DELIVERY.

By **Project Delivery**, we mean a comprehensive process including planning, design and construction required to execute and complete a building facility or other type of project.

Within the construction industry there are a number of project delivery systems that owners may choose to complete their project. Design-build is one of those choices.

Over the past few decades, use of design-build in both private and public sectors has greatly accelerated in the United States, making design-build one of the most significant trends in design and construction today.

Among the project delivery systems that owners may choose are traditional design-bid-build, multiple-prime contractors, construction management at risk and design-build^{1,2}. Choosing the right project delivery system is a critical part of the strategic acquisition plan every owner must develop when embarking on a new project. Owners can influence desired results from everyone involved by the way they strategically and proactively plan from the beginning of the project.

DESIGN-BUILD IS SOLE-SOURCE RESPONSIBILITY.

Design-build is where one entity, the design-builder, enters into a single contract with the owner to provide both design and construction services.

In all other project delivery systems, there are separate contracts for design and construction. The single contract for both design and construction is the design-build distinction.

A single contract changes everything.

With one design-build entity, the roles of designer and constructor are integrated. One entity drives one unified flow of work from initial concept through completion.

Streamlining project delivery through a single contract between the owner and the design-build team transforms the relationship between designers and builders into an alliance that fosters collaboration and teamwork. United from the onset of the project, an integrated team readily works to successfully complete a project faster, more cost effectively, and with optimized project quality.

Change orders and disputes are rare in well organized, performance-based design-build projects, because the sole-source responsibility of a single contract for both design and construction clearly places the responsibility for coordinating all project elements squarely in the hands of the design-build team.

By contrast, in all other systems of project delivery, the owner must manage two separate contracts, one for design and one for construction. (Or in the case of multiple-prime delivery, many contracts for construction).

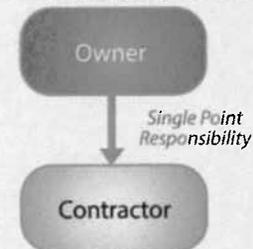
In all other forms of project delivery, the owner becomes the middleperson and potentially becomes engaged in disputes between the designer and the contractor(s).

The frequency and intensity of those disputes are often exacerbated by the contractual nature of traditional design-bid-build project delivery.

Architects and engineers provide design services under the legal concept of a Standard of Care. They prepare plans and specifications to the best of their abilities, but do not warrant those documents to be perfect and free of human error.

The designer then presents the completed plans and specifications to the owner, who in turn, distributes those documents to the contracting industry in the form of an invitation for bids. The Spearin Doctrine is a legal concept that goes into effect when the owner requests bids from

ONE CONTRACT FOR DESIGN AND CONSTRUCTION



¹ For a more complete description of the features of the various project delivery systems available to owners, see DBIA's Design-Build Done Right! Primer on "Choosing a Project Delivery System" ² "Integrated Project Delivery" or "IPD" refers to a contractual model where the owner, constructor, designer and potentially others enter into a single, multi-party contract. Although there have been relatively few projects delivered through the use of this multi-party model, the contract forms currently available anticipate that the owner, constructor and designer will enter into the same agreement, share some of the risks and rewards of the contract and potentially limit the liability among the parties. Due to the limited history of IPD, it is not included in the list of predominant project delivery systems.

contractors and eventually enters into a contract for construction of the project. Under the Spearin Doctrine, when the owners give the designer's documents to the contractor, they do so with an implied warranty of sufficiency; in essence, a promise by the owner that the plans and specifications contain information entirely sufficient for the contractor to bid and build the project.

In all other forms of project delivery, the owner is caught in the middle of a liability gap.

It is not uncommon under traditional forms of project delivery that the information provided is not sufficient to bid and build the project. When this happens, disputes, claims and change orders are often the result, with the owner caught in the middle of the finger-pointing between the designer and the contractor.

With two contracts, the designer and contractor can easily blame one another for cost overruns and other problems.

The advantages of the single contract in the design-build model are many.

A single contract for both design and construction transfers the majority of responsibility for the completeness, accuracy and integration of the design and construction processes to the design-build entity. In design-build, the owner is no longer at the fulcrum of the liability gap between Standard of Care and the Spearin Doctrine.

Also, with the designers and constructors forming a unified, integrated team at the onset of the project, typically among parties that have an affinity for working together, the opportunity to actually coordinate and optimize the design effort with the construction effort is greatly enhanced over any other system of project delivery.

That is why a single contract for both design and construction is a distinctive feature of only the design-build system of delivery.

If there is more than one contract, it is not design-build.

DESIGN-BUILD IS ALSO A MINDSET.

As much as design-build is defined by a sole-source contract for design and construction services, design-build is also defined by the attitude of everyone involved in the project. In successful design-build projects, everyone makes the mental shift to think and act as a single entity.

Design-build is often compared to the concept of the Master Builder which existed in ancient times and into the Renaissance. Many of the great wonders of the world were created using this methodology. The Master Builder was not a contractor, an architect or an engineer. The Master Builder was the embodiment of all three disciplines. The Master Builder concept depicts the earliest model for delivering design and construction as an integrated service.

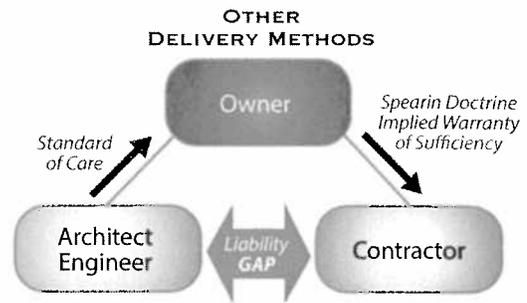
Toward the end of the Renaissance, design and construction began to separate. Individuals began to identify themselves as either designers or construction tradesmen. Guilds were formed. As the Industrial Age unfolded, specialization affected all aspects of Western culture. Professional associations and societies came into being, further defining the separation between architects, engineers and contractors. Specialization continued to support more segregated project delivery models throughout the nineteenth and early twentieth centuries.

Over the years, the design and construction industry degenerated from a culture of cooperation, teamwork, trust and mutual respect to one of fragmentation and inefficiency. There are many historical reasons this happened, but in the past few decades, many organizations are making efforts to restore the design and construction industry to its collaborative roots. Design-build has thrived because owners see the need for change in the way projects are delivered.

Design-build is intended to be a highly collaborative, fully integrated process that is built on trust, mutual respect, teamwork, innovation and creative problem solving. Design-build unleashes the power of team to deliver projects faster, better and for optimum cost – best value for the money, time and effort invested. Owners find that when design-build is done right, their level of engagement with the entire team is more meaningful than is experienced with other delivery methods.

Across the country and around the world, design-build successfully delivers both horizontal and vertical construction projects with superior results, no matter what the project type.

For additional information and resources, including award-winning design-build projects of all types from all over the nation and world, visit www.dbia.org.





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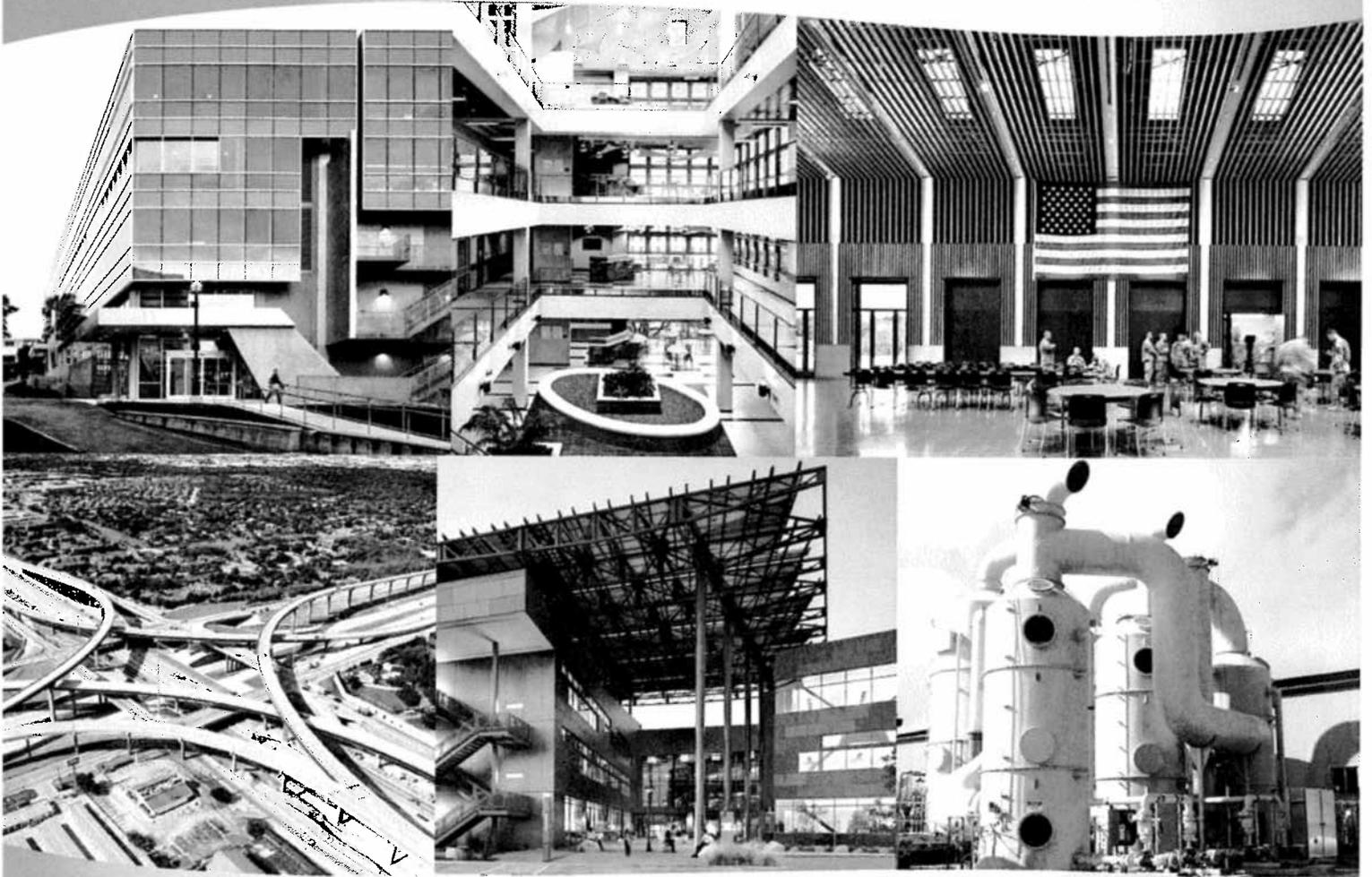
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DESIGN-BUILD DONE RIGHT

Universally Applicable

- » any project type
- » any sector
- » any size

BEST DESIGN-BUILD PRACTICES



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The practices identified in this document have two basic characteristics:

1 | They are written to be universal in applicability, spanning any type of design-build project:

- public or private
- vertical or horizontal
- large or small

2 | They are important enough to directly affect project performance.

Stated differently, implementing these practices on any type of design-build project increases the probability of a successful project that meets the expectations of all stakeholders. If these practices are not implemented, there is an increased probability that the project's performance will be compromised and that some or all of the stakeholders will be disappointed.

For ease of reference, this document is organized into three primary sections:

- (I) Procuring Design-Build Services
- (II) Contracting for Design-Build Services
- (III) Executing the Delivery of Design-Build Projects

Each section contains overarching principles that represent the "best practice." Each best practice is supplemented by several techniques that provide guidance on specific ways to implement the best practice – essentially "mini-best practices." The combination of best practices and implementing techniques are the basis for "design-build done right."

DBIA recognizes that there are real-world differences among design-build market sectors (e.g., water/wastewater, transportation, federal projects), and that specific implementation techniques might differ slightly from one market sector to another. DBIA also recognizes that some owners and practitioners may want further explanation to fully appreciate the thought behind the principles in this document. Additionally, DBIA expects that many users of design-build would benefit from having more detailed guidance on how to put these best practices and implementing techniques into use in different design-build market sectors. Given this, DBIA intends to continually update its portfolio of publications, tools and other resources so that design-build stakeholders will have access to leading-edge information that will allow them to do design-build "right" in accordance with the concepts expressed in this document.

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I. PROCURING DESIGN-BUILD SERVICES

An owner's choices of project delivery system and procurement approach strongly influence project results. These choices are among the first decisions an owner makes on a project, and they form the foundation for how the project will be developed, procured and executed, and how the key project stakeholders communicate and relate to each other. In making these choices, it is critical for an owner to consider the particulars and circumstances of each project, including the procurement options available to the owner. After thoroughly considering these issues, an owner should make a strategic decision as to how to take full advantage of the many benefits that are inherent in the design-build process.

DBIA considers the following as three (3) best practices for owners as they make their project delivery and procurement decisions.

1. An owner should conduct a proactive and objective assessment of the unique characteristics of its program/project and its organization before deciding to use design-build.

In furtherance of this practice, the following implementing techniques apply:

- a. Owners should understand the potential benefits, limitations, and attributes of design-build and make an informed decision as to whether the use of design-build will benefit their program/project.
- b. Owners should create an organization that supports the successful procurement and execution of a design-build project, with key personnel (including those advising/representing the owner) educated and trained in, among other things: (a) the procurement, contracting and execution of design-build projects; and (b) the importance of setting expectations and fostering a collaborative relationship among all members of the project team.
- c. Owners should identify and involve key project stakeholders at the early stages of project planning, as stakeholder goals, expectations, challenges, constraints, and priorities should guide all project planning and procurement activities, including the determination and implementation of design excellence and sustainability goals.
- d. Owners should involve senior leadership that is committed to the success of the design-build process, as this will foster a healthy and trusting relationship among the entire project team.
- e. Owners should carefully research and assess current market conditions as they plan their design-build programs, as this will identify potential risks and opportunities. Among the issues to be researched and assessed include: (a) procurement actions that could limit or expand competition; (b) projected labor, material and equipment availability; (c) lessons learned from similar projects; and (d) realism of budget and schedule estimates.



Left to Right:

Mason Conservation Studies Program Residence Hall and Dining Facility, Owner: George Mason University, 2013
Design-Build Honor Award

Nova Southeastern University Ocean Center of Excellence for Coral Reef, Owner: Nova Southeastern University, 2013
National Design-Build Award

I. PROCURING DESIGN-BUILD SERVICES (CONT.)

- f. Owners should use a rigorous and equitably-balanced project risk assessment process early in the procurement process and update/refine the risk assessment as the project proceeds from procurement through project execution.
- g. Owners should understand all procurement constraints imposed or flexibilities afforded by their legislative, regulatory, or internal requirements.
- h. Owners should make an early determination of their programmatic position on conflicts-of-interest policy for design-build procurements and promptly disclose this policy to the marketplace that will likely pursue these design-build procurements.
- i. Owners should make an early determination about their expectations for the design-builder's role in the start-up, commissioning and operations of the project and reflect expectations in their procurement approach.

2. An owner should implement a procurement plan that enhances collaboration and other benefits of design-build and is in harmony with the reasons that the owner chose the design-build delivery system.

In furtherance of this practice, the following implementing techniques apply:

- a. Owners should use a procurement process that: (a) focuses heavily on the qualifications of the design-builder and its key team members rather than price; and (b) rewards design-build teams that have a demonstrated history of successfully collaborating on design-build projects.
- b. Owners should use a procurement process that encourages the early participation of key trade contractors.
- c. Owners should develop their design-build procurement with the goal of minimizing the use of prescriptive requirements and maximizing the use of performance-based requirements, which will allow the design-build team to meet or exceed the owner's needs through innovation and creativity.
- d. Owners should develop realistic project budgets, and provide clarity in their procurement documents about their budgets, including, as applicable: (a) identifying "hard" contract cost/budget ceilings; (b) stating whether target budgets can be exceeded if proposed solutions enhance overall value; and (c) stating whether the owner expects proposers to develop technical proposals that will encompass the entire target budget.
- e. Owners should consider the level of effort required by proposers to develop responsive proposals, and should limit the deliverables sought from proposers to only those needed to differentiate among proposers during the selection process.
- f. Owners who require project-specific technical submittals (e.g., preliminary designs) for evaluating and selecting the design-builder should: (a) use a two-phase procurement process; and (b) limit the requirement for such submittals to the second phase, where the list of proposers has been reduced.

3. An owner using a competitive design-build procurement that seeks price and technical proposals should: (a) establish clear evaluation and selection processes; (b) ensure that the process is fair, open and transparent; and (c) value both technical concepts and price in the selection process. In furtherance of this practice:

- a. Owners should perform appropriate front-end tasks (e.g., geotechnical/environmental investigations and permit acquisitions) to enable the owner to: (a) develop a realistic understanding of the project's scope and budget; and (b) furnish proposers with information that they can reasonably rely upon in establishing their price and other commercial decisions.
- b. Owners should appropriately shortlist the number of proposers invited to submit proposals, as this will, among other things, provide the best opportunity for obtaining high quality competition.

- c. Owners should provide shortlisted proposers with a draft design-build contract at the outset of the second phase of procurement, which: (a) provides proposers with an opportunity to suggest modifications during the proposal process; and (b) enables proposers to base their proposals on the final version of the contract.
- d. Owners should conduct confidential meetings with shortlisted proposers prior to the submission of technical and price proposals, as this encourages the open and candid exchange of concepts, concerns, and ideas.
- e. Owners should protect the intellectual property of all proposers and should not disclose such information during the proposal process.
- f. Owners should offer a reasonable stipend to unsuccessful shortlisted proposers when the proposal preparation requires a significant level of effort.
- g. Owners should ensure that their technical and cost proposal evaluation team members are: (a) trained on the particulars of the procurement process; (b) unbiased; and (c) undertake their reviews and evaluations in a manner consistent with the philosophy and methodology described in the procurement documents.
- h. Owners should ensure that technical review teams do not have access to financial/price proposals until after completion of the scoring of the technical proposals.
- i. Owners should provide unsuccessful proposers with an opportunity to participate in an informative debriefing session.



Counter-Clockwise from Top:
Cargill Grain Transfer Facility, Owner: Cargill, Inc., *2013 Design-Build Honor Award*

I-15 Corridor Expansion I-15 CORE, Owner: Utah Department of Transportation, *2013 National Design-Build Award*

Federal Center South Building 1202 Redevelopment, Owner: U.S. General Services Administration, Acquisition Solutions Branch, *2013 National Design-Build Award*

Pierce College Maintenance and Operations Facility and Net-Zero Plant, Owner: Los Angeles Community College District (LACCD) and Pierce College, *2012 Design-Build Merit Award*

II. CONTRACTING FOR DESIGN-BUILD SERVICES

The use of fair and clear contracts is fundamental to any delivery process. Because there are some important differences between design-build contracts and those for other delivery systems, it is particularly important for the individuals who administer the design-build procurement and execution to understand the contract's language and its practical application. DBIA also recognizes that the construction industry currently tends to focus on the contract between the owner and design-builder. For design-build to succeed, however, the principles must also be incorporated into the contracts of those subconsultants, subcontractors and major suppliers working within the design-build team.

DBIA considers the following as three (3) best practices in design-build contracting.

1. Contracts used on design-build projects should be fair, balanced and clear, and should promote the collaborative aspects inherent in the design-build process.

In furtherance of this practice, the following implementing techniques apply:

- a. Contracting parties should proactively and cooperatively identify significant project-specific risks and clearly identify in the contract how such risks will be handled.
- b. Contracts should reasonably allocate risks to the party that is best capable of addressing and mitigating the risk.
- c. Contracts should use language that is understandable to those personnel **who** are administering the project.
- d. Contracts should encourage, **rather than hinder**, communications among project stakeholders.
- e. Contracts should contain a fair process that facilitates and expedites the review and resolution of potential changes to the contract and adjustments in the contract price and time.
- f. Contracts should contain a **dispute** resolution process that promotes the prompt identification and resolution of disputes at the lowest possible level of hierarchy within the parties' organizations.



Left to Right:
Colonel James Nesmith Readiness Center, Owner: Oregon Military Department, 2013 National Design-Build Award

Stockton Delta Water Supply Project, Owner: City of Stockton, 2013 Design-Build Merit Award

II. CONTRACTING FOR DESIGN-BUILD SERVICES (CONT.)

2. The contract between the owner and design-builder should address the unique aspects of the design-build process, including expected standards of care for design services.

In furtherance of this practice, the following implementing techniques apply:

- a. Owners should, consistent with their overall procurement strategy, evaluate and use appropriate contractual incentives that facilitate the alignment of the performance of their design-build teams with the owner's project goals.
- b. If the design-builder is expected to meet performance guarantees, the contract should clearly identify such guarantees, and the guarantees should be capable of being measured and reasonably achievable by a design-builder performing its work in a commercially reasonable fashion.
- c. The contract should clearly specify the owner's role during project execution, particularly relative to: (a) the process for the design-builder reporting to and communicating/meeting with the owner; (b) the owner's role in acting upon design and other required submittals; and (c) the owner's role, if any, in QA/QC.
- d. The contract should clearly define the role of the designer(s)-of-record and how it/they will communicate with the owner.
- e. The contract should clearly define the commissioning and project closeout processes, including documentation associated with such processes.
- f. The contract should clearly define requirements for achieving project milestones, inclusive of substantial completion, final completion and final payment.

3. The contracts between the design-builder and its team members should address the unique aspects of the design-build process.

In furtherance of this practice, the following implementing techniques apply:

- a. During the proposal phase, the design-builder should use written teaming agreements with each team member to develop and capture an understanding of their relationship and key commercial aspects of their relationship.
- b. The design-builder and its designer(s) should develop an understanding, at the outset of their relationship, of the key commercial aspects of their relationship, including: (a) the designer's compensation, if any, during the proposal period; (b) the designer's role in reviewing/approving the proposal; (c) the contractual liability of the designer for problems, including delays, during execution; and (d) the designer's right to use project contingency for its execution-related problems, and capture these understandings in the written teaming agreement.
- c. The contract should reflect that designer(s)-of-record are regularly and actively involved throughout the project's execution.
- d. The contract should establish the role and primary responsibilities that each party has relative to the design process.
- e. The contract should ensure that there is a clear understanding as to how the team members will communicate with each other and with the owner, including meetings that each party is expected to attend.
- f. The contract should have a clear and commercially-appropriate "flow-down" of obligations from the prime design-build contract.

III. EXECUTING THE DELIVERY OF DESIGN-BUILD PROJECTS

DBIA recognizes that the best practices associated with the execution of a design-build project are similar to those projects delivered under other systems. It is not the intent of this document to focus on identifying general best practices associated with design, construction or project management. Rather, this document's best practices for project execution focus on unique features of the design-build process, where successful execution is based upon relationships built upon trust, transparency and team integration. Individuals not only need to be competent in their specific areas of responsibility, but they also must understand the design-build process and that success is directly dependent upon the ability of the entire team to work together collaboratively.

DBIA considers the following as four (4) best practices in the execution of a design-build project.

1. All design-build team members should be educated and trained in the design-build process, and be knowledgeable of the differences between design-build and other delivery systems.

In furtherance of this practice, the following implementing techniques apply:

- a. All members of the design-build team must understand that the project's success is dependent on the ability of the team members to work collaboratively and to trust that each member is committed to working in the best interests of the project.
- b. Projects should be staffed with individuals that are educated and experienced in the implementation of design-build best practices, and whose personalities are well-suited to the collaborative nature of the design-build process.
- c. All project teams should have senior leadership committed to the success of their projects and actively supportive of design-build best practices.
- d. The design-builder should recognize the benefit of including experienced design-build trade contractors on its team.

2. The project team should establish logistics and infrastructure to support integrated project delivery.

In furtherance of this practice, the following implementing techniques apply:

- a. Owners and the appropriate members of the design-builder's team should co-locate when justified by project characteristics (e.g., project's complexity and volume of design submittals).
- b. Design-builders should strive to have their design and construction teams working in the same place as often as possible, including co-location if practical.
- c. Owners and design-builders should ensure that the administrative processes established for project execution are appropriate, well-understood and expeditious.

3. The project team, at the outset of the project, should establish processes to facilitate timely and effective communication, collaboration, and issue resolution.

In furtherance of this practice, the following implementing techniques apply:

- a. The owner and design-builder should develop and use a structured partnering process, scaled appropriately to reflect the project's size and complexity.

III. EXECUTING THE DELIVERY OF DESIGN-BUILD PROJECTS (CONT.)

- b. The owner and design-builder should create an executive leadership group, including individuals from key members of the design-builder's team (e.g. designer(s)-of-record and key subcontractors) to meet regularly, monitor the project's execution, and facilitate the understanding and achievement of the parties' mutual goals.
- c. The owner and design-builder should develop processes that enable key stakeholders (e.g., government agencies and third-party operators) to interface directly with the design-builder and its design professionals on significant elements of the work.
- d. The owner and design-builder should, at the outset of the project, endorse and liberally use techniques that effectively integrate design and construction activities and take steps to continue these processes throughout the duration of the project.
- e. The owner should be fully engaged and prepared to make the timely decisions necessary to facilitate the design-builder's performance, including being represented by staff that has the authority to make decisions and perform its project functions.
- f. The design-builder should clearly, thoroughly and expeditiously advise the owner about any issues that might impact the contract price or schedule, as this will, among other things, enable the owner to make an informed decision as to how to address such issues.

4. The project team should focus on the design management and commissioning/turnover processes and ensure that there is alignment among the team as to how to execute these processes.

In furtherance of this practice, the following implementing techniques apply:

- a. The owner and design-builder should acknowledge the significant level of effort required to manage the development and review of the design and, consequently: (a) dedicate sufficient resources to foster a collaborative environment for this work; and (b) mutually develop a realistic design development plan that efficiently engages the owner and key members of the design-builder's team (e.g., designer(s)-of-record and key subcontractors) in purposeful meetings.
- b. The owner and design-builder should agree upon clear, realistic and expeditious submittal and review/approval processes that are in harmony with the parties' schedule and other project-specific goals.
- c. The design-builder should ensure that design advancement and changes to the contract documents are clearly, thoroughly, and contemporaneously documented, and that there is a clear understanding as to when the owner is integrated into the decision-making process for and notified of such advancement and changes.
- d. The design-builder and its team should: (a) establish a trend system early in the design development process to identify, track and evaluate any potential changes before they adversely impact the project's cost or schedule; (b) clearly, thoroughly, and contemporaneously communicate to the owner the information derived from the trend system; and (c) maintain the trend system throughout the construction process until it is no longer needed.

Left to Right:

George Mason University Northwest Housing VIII, Owner: George Mason University, 2013 National Design-Build Award

2.0-MGD Nanofiltration Water Treatment Plant Addition, Owner: City of Dania Beach, 2013 National Design-Build Award



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Questions or Comments? Email BestPractices@dbia.org

The term "best practices" itself connotes an evolving process of continuous improvement. DBIA views this document to be the first of what will undoubtedly be many iterations of best practices and implementing techniques. As such, DBIA fully expects that the concepts expressed here will be refined and modified over time.

DBIA is the only organization that defines, teaches and promotes best practices in design-build project delivery. Owners choose design-build to achieve best value while meeting cost, schedule and quality goals.

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January 2014



MISSION:

DBIA promotes the value of design-build project delivery and teaches the effective integration of design and construction services to ensure success for owners and design and construction practitioners.

VISION:

DBIA will be the industry's preeminent resource for leadership, education, objective expertise and best practices for the successful integrated delivery of capital projects.

VALUES:

- Excellence in integrated design-build project delivery, producing high value outcomes.
- An environment of trust characterized by integrity and honest communication.
 - Mutual respect for and appreciation of diverse perspectives and ideas.
- A commitment to innovation and creativity to drive quality, value and sustainability.
 - Professionalism, fairness and the highest level of ethical behavior.

"DESIGN-BUILD DONE RIGHT" AND CERTIFICATION

Certification provides the only measurable standard by which to judge an individual's understanding of "design-build done right."

DBIA™ certification in design-build project delivery educates owners as well as designers and builders on team-centered approaches to design and construction. Owners want successfully executed design-build projects and are looking for a demonstration of both relevant continuing education and experience – both of which can be gained through DBIA certification.

DBIA offers two types of Certification.



Attaining the DBIA™ requires from two to six years of hands-on experience of pre and post-award design-build. Credential holders who display "DBIA" after their names come from traditional design and construction backgrounds; they are private or public sector architects, engineers and construction professionals. Some attorneys and academic practitioners who specialize in design and construction generally and design-build specifically may also fulfill the DBIA™ requirements.



Unlike the DBIA™ credential, obtaining the Assoc. DBIA™ does not require hands-on field experience. Instead, this credential is focused on three key types of individuals who possess a different type of experience: (1) pre-award professionals focusing on critical aspects of the design-build process such as business development and acquisition/procurement; (2) seasoned professionals who are new to design-build project delivery, but not new to the design and construction industry; and (3) emerging professionals such as recent college graduates with relevant educational background in the AEC industry. The requirements for obtaining each credential are listed below.

For more information, visit www.dbia.org/certification





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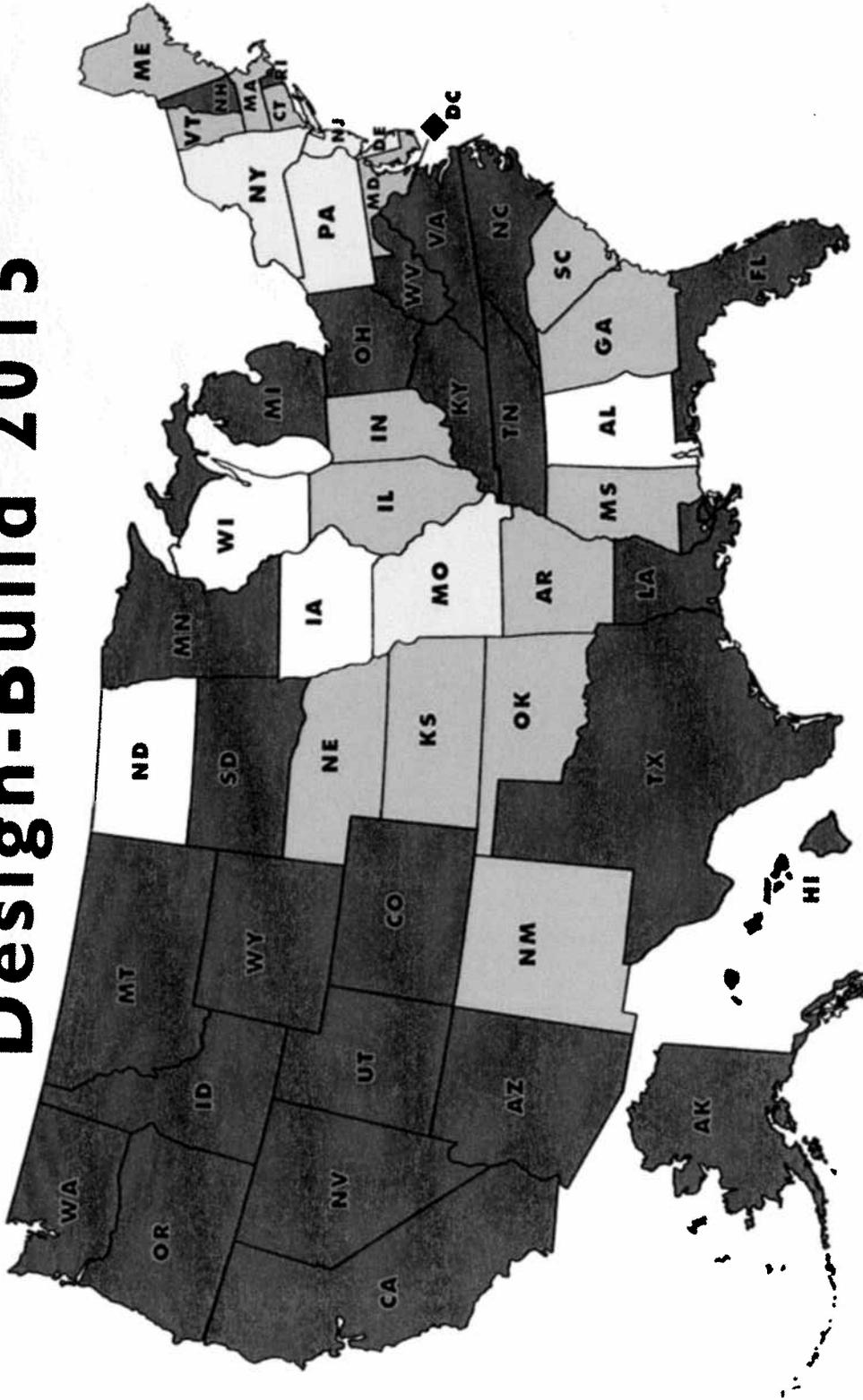
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President/CEO
Capital Project Strategies, LLC
Reston, VA

Diana R. Hoag, DBIA

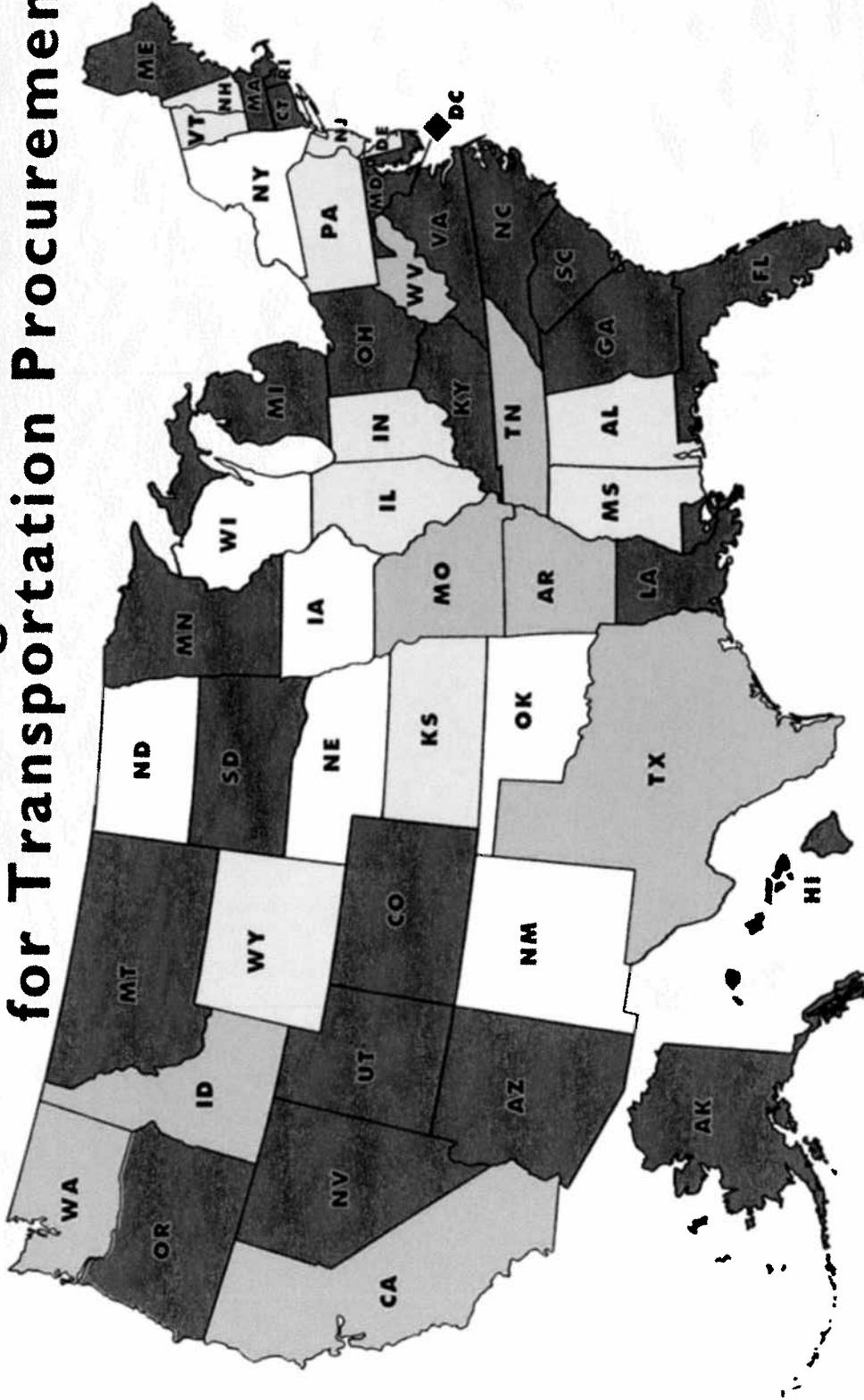
Senior Consultant
Xceli Group, LLC
Dayton, OH

Design-Build 2015



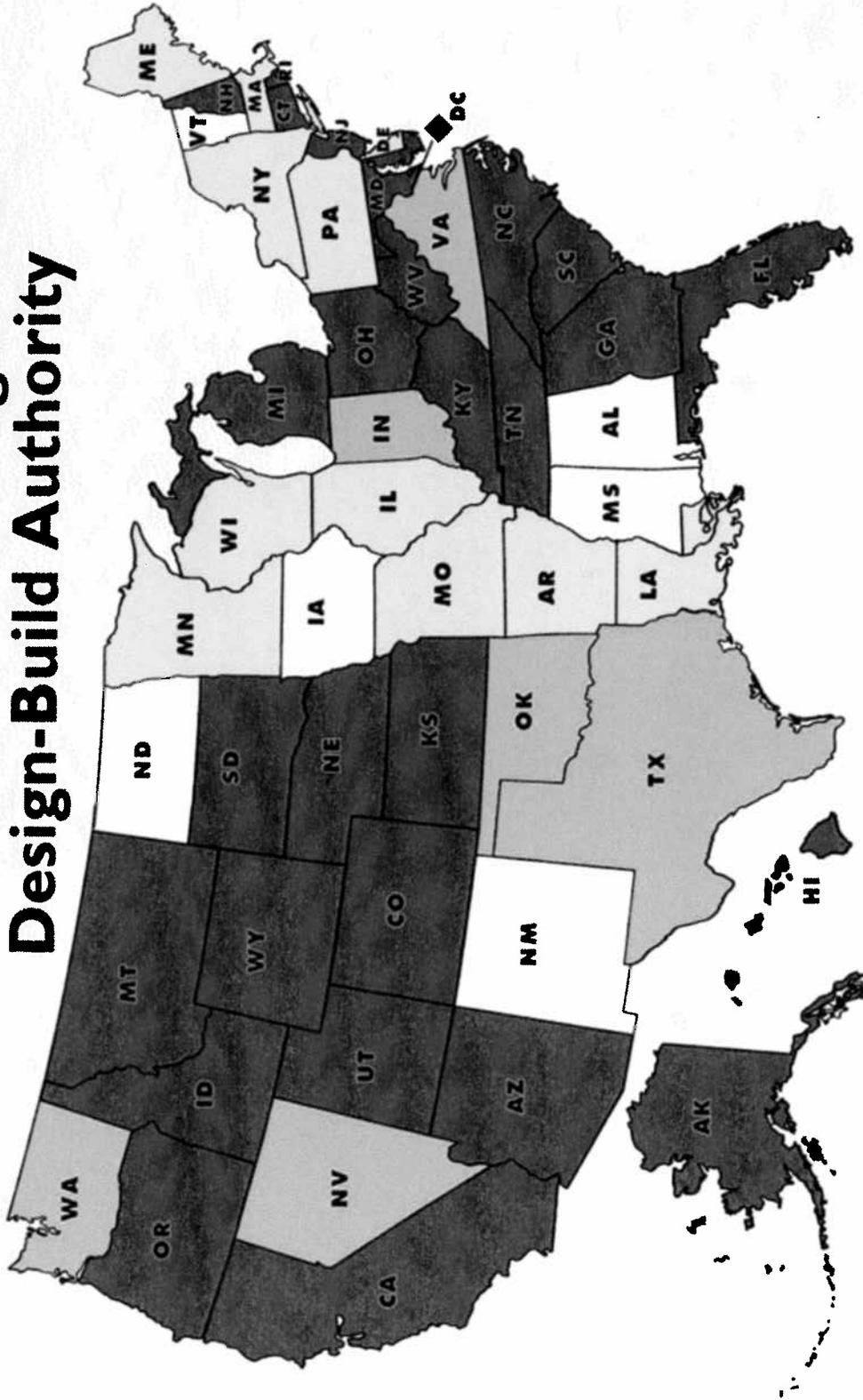
-  Design-build is limited to one political subdivision, agency or project
-  Design-build is a limited option
-  Design-build is widely permitted
-  Design-build is permitted by all agencies for all types of design and construction

2015 Design-Build State Laws for Transportation Procurement



- Design-build is not specifically authorized
- Design-build is authorized with certain limitations
- Design-build is widely permitted
- Design-build authority is fully authorized

2015 States Granting Local Design-Build Authority



-  Design-build is limited to one political subdivision, agency or project
-  Design-build is widely permitted
-  Design-build is permitted by all agencies for all types of design and construction

Design-Build Institute of America



2013 State Statute Report

A guide to state design-build laws that provides owners, lawmakers and industry professionals with statutory information to guide them in their project delivery decision making.

State	Design-Build and Public Procurement Laws	Comments
AK	<ul style="list-style-type: none"> • Design-Build is authorized for all state agencies. (Ak. Stat. § 36.30.200) • Negotiation may be used on design-build contracts. Best value, two-phase and low bid may be used as methods as a basis for award. (2 AAC 12.943) • The procurement officer may conduct a design-build procurement process only if the commissioner of transportation and public facilities determines in writing that it is advantageous to the state. (2 AAC 12.933-) 	<p>DOT Procurement Process: competitive sealed proposals if appropriate findings are made; otherwise, competitive sealed bids. (AK. Stat. § 36.30.200)</p>
AL	<ul style="list-style-type: none"> • The Alabama Toll Road, Bridge and Tunnel Authority have full authority to enter into design-build, design-build-own, design-build-own-operate, or design-build-own-operate-maintain contracts. Best Value or QBS selection is authorized on these contracts. (Al. Code § 23-2-145) 	<p>QBS design-build is authorized for at least one state agency.</p> <p>DOT Procurement Process: May be evaluated and awarded by Authority based on qualifications of participants or best value or both taking into consideration the best interest of the state. (Al. Code § 23-2-145)</p>
AR	<ul style="list-style-type: none"> •• The Arkansas State Highway Commission has authorization to use qualifications based, design-build services.. (Ark. Stat. Ann. § 27-67-206(j)2) • Municipalities and sanitation authorities are authorized to enter into design-build-operate- maintenance contracts for water, waste water, storm water, treatment systems or any combination. (Ark. Stat. Ann. § 22-9-203) • Any school district may use design-build construction as a project delivery method for building, altering, repairing, improving, maintaining, or demolishing any structure, or any improvement to real property owned by the school district. (Ark. Stat. Ann. §19-11-807). <p>The Arkansas State Highway Commission has authorization to design, construct, improve and maintain qualified design-build projects when state highway revenues are used until 2023 and an unlimited number of projects when state funds are used. ASA §207 27-67-206(j)2)</p>	<p>DOT Procurement Process: To be established by the Commission; award "on a qualification basis that offers the greatest value for the state". (A.C.A. § 27-67-206)</p>
AZ	<ul style="list-style-type: none"> • Design-Build is authorized for all State agencies and school districts (Ariz. Rev. Stat. § 34-602 & Ariz. Rev. Stat. § 41-2582) <p>Design-build, design-build-maintain, design-build-operate-maintain, or design-build-finance-operate-maintain agreements are permitted for Public Private Partnerships on transportation projects. (Ariz. Rev. Stat. § 28-7703)</p> <ul style="list-style-type: none"> • The following delivery methods are authorized on Public Projects design-bid-build, construction-manager-at-risk, design-build and job-order-contracting. Design-build, construction-manager-at-risk, or job-order-contracts may be awarded using best value or qualifications based. (Ariz. Rev. Stat. § 41-2582) <p>The Arizona Board of Regents has the discretion to use its own procurement methods and has authorized the use of design-build. (Ariz. Rev. Stat. § 41-2582)</p> <p>The state board of education shall adopt rules authorizing school districts to procure construction services by construction-manager-at-risk, design-build, qualified select bidders list and job-order-contracting methods of project delivery. (Ariz. Rev. Stat. § 15-213)</p> <ul style="list-style-type: none"> • Local governments have the discretion to adopt their own procurement methods. (Ariz. Rev. Stat. § 34-602, A.R.S. § 34-102-103,) 	<p>QBS design-build is authorized for at least one state agency.</p> <p>QBS design-build is authorized for all local governments.</p> <p>DOT Procurement Process: Two-phase process: pre-qualification then proposal; award is to lowest score when price is divided by technical score; time valued adjustments may be made to score. Ariz. Rev. Stat. §§ 28-7363 - 28-7365</p>

<ul style="list-style-type: none"> • Transportation-- allows Public Private Partnerships in transportation projects • DOT may use design-build on up to 10 transportation projects through 2024 • Local Agencies with design-build statutes: • Regional governments are authorized to use design-build on transportation projects until 2024 • Cities-- Sunset date: January 1, 2016- Buildings and related improvements exceeding \$1 million (PCC § 20175.2) • Cities, counties and special districts-- Sunset Date: January 1, 2020- Regional and local wastewater treatment facilities, solid waste facilities, and water recycling facilities exceeding \$2.5 million; limit 20. (PCC § 20193 EDC § 81700) • Counties-- Sunset date: Jan 1, 2014- Buildings and related improvements and county sanitation wastewater treatment facilities exceeding \$2.5 million. (PCC § 20133) • Orange County Sanitation District-- Sunset date: Jan 1, 2013- Projects, including public wastewater facilities exceeding \$6 million. (PCC § 20785) • Redevelopment Agency-- Sunset date: Jan 1, 2016- Public improvement projects exceeding \$1 million; limit 10. • Santa Clara Valley Transportation Authority-- Sunset date: None- Transit center or station, transit park-and-ride lot, bus and light rail maintenance facility, office building, and the Fremont-South Bay Commuter Rail Project. (PCC § 20301.5) • Santa Clara Valley Water District-- Sunset date: Jan 1, 2011- Projects exceeding \$2.5 million. (PCC § 21162) • School Districts-- Sunset date: Jan 1, 2011- Projects exceeding \$2.5 million. (EDC § 17250.10) • Sonoma County Health Care District-- Sunset date: Jan 1, 2011- Buildings and improvements directly related to a Sonoma County Health Care District hospital or health facility building exceeding \$2.5 million • Transit Operators-- Sunset date: Jan 1, 2015- Capital maintenance or capacity-enhancing rail projects exceeding \$25 million and non-rail transit projects exceeding \$2.5 million. (PCC § 20209.5) 	<p>DOT Procurement Process: Three step procurement process: RFP (including competitive sealed proposals), prequalification requirements, selection; for non-rail transit projects that exceed \$2.5 million, the transit operator may award the project to the lowest bidder or by using best value method; in no case may the transit operator award a contract to a design-build entity pursuant to the authority granted under the Public Contract Code for a capital maintenance or capacity-enhancing rail project unless that project exceeds \$25 million in cost; no cost threshold for acquisition and installation of technology applications or surveillance equipment.</p>
<p>CA</p>	<p>QBS design-build is authorized for at least one state agency.</p> <p>QBS design-build is authorized for all local governments.</p> <p>Colorado is the only state that has codified and authorized Integrated Project Delivery on public projects.</p> <p>DOT Procurement Process: Two-phase "adjusted score" process; shortlist followed by proposals; preference allowed to Colorado residents (suspended if it would cause denial of federal funds); award to proposal providing best value to department. (C.R.S. 43-1-1401)</p>
<p>CO</p>	<p>All state agencies are authorized to use any project delivery method, including, design-build, construction management and integrated project delivery when it is in the best interests of the state. (CRS § 24.101-103.203)</p> <p>The Colorado Department of Transportation is authorized to use design-build on transportation projects. (C.R.S. 43-1-1403)</p> <p>Any agency is authorized to use Integrated Project Delivery (C.R.S 30-20-104)</p> <p>The state and local governments are authorized to enter into Public Private Partnerships for the construction of transportation projects using design-build. (C.R.S. 43-1-102)</p>
<p>CT</p>	<p>At the municipal level, cities and towns have discretion as to procurement.</p> <p>Design-build is authorized for the University of Connecticut and state agencies with legislative authorization for build construction and renovations. (CGSA §§ 4b-91)</p> <p>The State Board of Education through a pilot program is authorized to use design-build on two projects per year. (CGSA §§ 10-285F)</p> <p>The Commissioner of Transportation may, as an alternative to using a design-bid-build contract pursuant to chapter 238 of the general statutes, designate specific projects to be completed using a (1) construction-manager-at-risk contract with a guaranteed maximum price, or (2) design-build contract. (2012 CT PA 70 § 1)</p>

Sources: State Law Matrix; Lexis Nexis; and the individual contributions of DBIA Regions, Members and Staff.

DC	<ul style="list-style-type: none"> The following project delivery methods are authorized for procurements within the scope of this subchapter: <ol style="list-style-type: none"> Architectural and engineering services; Construction management; Construction management at risk; Design-bid-build; Design-build; Design-build-finance-operate-maintain; Design-build-operate-maintain; and Operations and maintenance. Design-build is authorized for the construction and renovation of public works projects. Both best value and qualification. (D.C. Code § 2-356.01) The design-build is authorized for the Delaware Transportation Department for 12 transportation infrastructure projects as part of a pilot program. (2011 Del. ALS 76) All provisions of the procurement statute may be waived to meet the critical needs in an emergency or where it is determined to be in the best interest of the Agency. (29 Del. C. § 6963, 29 Del. C. § 6907) 	<p>Projects are authorized on a project-specific basis i.e. SB 190 for Kent County Courthouse- 2009</p>
DE	<ul style="list-style-type: none"> Design-build is authorized by the state with legislative approval. All state agencies are authorized to use design-build using the best value or qualification based selection to award the contracts (FL § 287.055). Counties, municipalities and other political subdivisions of the state are authorized to use design-build contracts as permitted by local ordinance agency. Local government bodies may use best value or qualifications-based selection to award such contracts or perform a qualifications-based selection process. (FL § 255.20) FDOT has a goal of 25% of its projects delivered using design-build by 2014. (FL. § 337.11) The Florida Statewide Passenger Rail Commission is authorized to use design-build. (FL. § 341.301) 	<p>QBS design-build is authorized for at least one state agency.</p> <p>QBS design-build is authorized for all local governments.</p> <p>DOT Procurement Process: Governed by rules adopted by DOT (which must include prequalification requirements, public announcement procedures, short-listing criteria, proposal requirements).</p>
FL	<ul style="list-style-type: none"> Georgia Department of Transportation is authorized to use the design-build procedure for buildings, bridges and approaches, rail corridors, and limited or controlled access projects or projects that may be constructed within existing rights of way where the scope of work can be clearly defined or when a significant savings in project delivery time can be attained. In contracting for design-build projects, the department shall be limited to contracting for no more than 30 percent of the total amount of construction projects awarded in the previous fiscal year. After July 1, 2014, in contracting for design-build projects, the department shall be limited to contracting for no more than 15 percent of the total amount of construction projects awarded in the previous fiscal year. (O.C.G.A. § 32-2-81) The GDOT is authorized to solicit, receive, consider, evaluate and accept a proposal for a public-private initiative. Such proposals must be in compliance with all of the requirements of O.C.G.A. § 32-2-79. Where the scope of work can be clearly defined or there is a significant savings in delivery time design-build contracts may be used on GDOT projects including buildings, bridges, approaches and rail corridors. (O.C.G.A. § 32-2- 78-80) 	<p>A request for proposals is issued to initially request pre-qualification of offerors, in order to select from among them a short list of up to three responsible offerors;</p> <p>DOT Procurement Process: Allows discussions with offerors within competitive range; award to most advantageous offer.</p>
GA	<ul style="list-style-type: none"> Local governments are authorized to use design-build. (O.C.G.A. § 36-91-2) All state agencies and counties have discretion in choosing their project delivery methods and design-build has been used on public projects. Stipends are authorized on design-build projects. (HRS §§ 103D-303) Design-build is authorized for state educational facilities including the University of Hawaii. (HR 304A-2691) 	
HI		

Sources: State Law Matrix; Lexis Nexis; and the individual contributions of DBIA Regions, Members and Staff.

IA	<ul style="list-style-type: none"> The state armory board is authorized to use design-build. No state statutes permit or prohibit design-build contracts. (IA Code § 29A.57) <p>Cities contracts relating to public utilities or extensions or improvements thereof, may be awarded by the governing body at it deems to be in the best interests of the city. (Iowa Code § 26.9)</p> <ul style="list-style-type: none"> The director of the department of administration, or his designee, is authorized and empowered, subject to the approval of the permanent building fund council, to employ the use of the design-build method of construction in the letting of any and all contracts for the construction, alteration, equipping, furnishing and repair of any and all buildings, improvements, or other public works of the state of Idaho. (Idaho Code §67-5711A) No more than twenty percent (20%) of the DOT's annual highway construction budget for the state transportation improvement program shall be used for design-build and construction manager/general contractor contracts combined. No less than thirty percent (30%) of any design-build contract awarded shall be self-performed by the design-build firm awarded such contract. (Idaho Code § 40-904) <p>The design-build method of construction may be employed by public officials in contracts for the construction, repair, or improvement of public works, public buildings, public places or other work. (Idaho Code § 67-2309)</p>	
ID	<ul style="list-style-type: none"> In general, all state agencies, counties, townships, and municipalities are required to use competitive bidding procedures when awarding public contracts, unless the procurement is expressly exempt by statute. Some Local governments (Cook County until 2018) are authorized to use design-build like (30 ILCS § 500/30-15) Public Building Commission projects may use design-build. (50 ILCS § 20/2.5). Chicago Park District authorized to use design-build. (70 ILCS 1505/26.10-8) Regional Transportation Authorities are authorized to use design-build. (70 ILCS § 3615/4.06) State Universities are authorized to use design-build for energy conservation projects. (110 ILCS 62/5-10) North Shore Sanitary District is authorized to use design-build. Capital Development Board may be allowed to use the design-build delivery method for public projects. (30 ILCS §§ 537/5) State agencies are authorized to use design-build. (30 ILCS § 535/75) <p>Design-Build is authorized under the Public-Private Partnership for Transportation Act for transportation agencies. (630 ILCS § 5/25)</p> <ul style="list-style-type: none"> Localities, public education, departments of aviation, airport authorities and state agencies (except transportation) may use the design-build project delivery method. (Ind. Code Ann. § 5-30-2-1 et seq) Before entering into a design-build contract for a public project, the public agency must adopt a resolution authorizing the use of design-build for the public project. (Burns Ind. Code Ann. § 5-30-5-6) <p>The Indiana DOT does use low bid design-build. (Burns Ind. Code Ann. § 8-23-9-4)</p>	<p>DOT Procurement Process: Projects for the Public Building Commission and Capital Development Board must use a 2-phase evaluation; shortlist based on qualifications then proposals; award based on technical criteria and cost.</p>
IL	<ul style="list-style-type: none"> Public Building Commission projects may use design-build. (50 ILCS § 20/2.5). Chicago Park District authorized to use design-build. (70 ILCS 1505/26.10-8) Regional Transportation Authorities are authorized to use design-build. (70 ILCS § 3615/4.06) State Universities are authorized to use design-build for energy conservation projects. (110 ILCS 62/5-10) North Shore Sanitary District is authorized to use design-build. Capital Development Board may be allowed to use the design-build delivery method for public projects. (30 ILCS §§ 537/5) State agencies are authorized to use design-build. (30 ILCS § 535/75) <p>Design-Build is authorized under the Public-Private Partnership for Transportation Act for transportation agencies. (630 ILCS § 5/25)</p> <ul style="list-style-type: none"> Localities, public education, departments of aviation, airport authorities and state agencies (except transportation) may use the design-build project delivery method. (Ind. Code Ann. § 5-30-2-1 et seq) Before entering into a design-build contract for a public project, the public agency must adopt a resolution authorizing the use of design-build for the public project. (Burns Ind. Code Ann. § 5-30-5-6) <p>The Indiana DOT does use low bid design-build. (Burns Ind. Code Ann. § 8-23-9-4)</p>	<p>DOT Procurement Process: Projects for the Public Building Commission and Capital Development Board must use a 2-phase evaluation; shortlist based on qualifications then proposals; award based on technical criteria and cost.</p>
IN	<ul style="list-style-type: none"> Public Building Commission projects may use design-build. (50 ILCS § 20/2.5). Chicago Park District authorized to use design-build. (70 ILCS 1505/26.10-8) Regional Transportation Authorities are authorized to use design-build. (70 ILCS § 3615/4.06) State Universities are authorized to use design-build for energy conservation projects. (110 ILCS 62/5-10) North Shore Sanitary District is authorized to use design-build. Capital Development Board may be allowed to use the design-build delivery method for public projects. (30 ILCS §§ 537/5) State agencies are authorized to use design-build. (30 ILCS § 535/75) <p>Design-Build is authorized under the Public-Private Partnership for Transportation Act for transportation agencies. (630 ILCS § 5/25)</p> <ul style="list-style-type: none"> Localities, public education, departments of aviation, airport authorities and state agencies (except transportation) may use the design-build project delivery method. (Ind. Code Ann. § 5-30-2-1 et seq) Before entering into a design-build contract for a public project, the public agency must adopt a resolution authorizing the use of design-build for the public project. (Burns Ind. Code Ann. § 5-30-5-6) <p>The Indiana DOT does use low bid design-build. (Burns Ind. Code Ann. § 8-23-9-4)</p>	<p>DOT Procurement Process: Projects for the Public Building Commission and Capital Development Board must use a 2-phase evaluation; shortlist based on qualifications then proposals; award based on technical criteria and cost.</p>

<p>DOT Procurement Process: Multi-phase evaluation process</p>	<ul style="list-style-type: none"> The Kansas Alternative Delivery Building Construction Procurement Act authorized the use of design-build on county and state construction projects. The design-build alternative delivery process may not be used for designing, constructing, altering or repairing a public highway, road, bridge, dam, turnpike or related structures or stand-alone parking lots. Except a project selected as part design-build pilot program. (Kan. Stat. § 75-37, 145) KDOT is authorized to use design-build on one pilot project in Johnson County The construction management at risk project delivery method is authorized on certain research projects under the jurisdiction of the state university board of regents. (Kan. Stat. § 76-786) 	<p>DOT Procurement Process: Multi-phase selection process based on qualifications, experience, technical requirements, guaranteed maximum price and other criteria set forth in the request for proposals.</p>
<p>DOT Procurement Process: Multi-phase selection process based on qualifications, experience, technical requirements, guaranteed maximum price and other criteria set forth in the request for proposals.</p>	<ul style="list-style-type: none"> All state agencies and political subdivision are authorized to use the design-build, design-bid-build and construction management-at-risk project delivery methods for capital projects. (KRS §§ 45A.180) All local governments are authorized to use design-build using best value selection. <ul style="list-style-type: none"> A selection committee's procedures will be applied when capital project are constructed utilizing the design-build method. (KRS §§ 45A.182) Authorizes use of a design-build finance capital projects delivery method by the Finance and Administration Cabinet when a written funding is approved by the Governor. Design-build-lease projects are permissible Pursuant to KRS § 176.080 highway projects are awarded on the basis of "lowest and best offer". (KRS § 56.8161) <p>The Transportation Cabinet is authorized to use design-build on up to 5 projects per year.</p>	<p>DOT Procurement Process: Two-phase selection process; DOT will identify the specific requirements for the second phase depending on the complexity of the project; the selection method uses an adjusted score determined by three components: (1) technical score; (2) time value; and (3) the price proposal. DOT must submit any project selected for design-build to the House and Senate Transportation, Highways and Public Works Committees for approval.</p>
<p>DOT Procurement Process: Pre-qualification, request for proposals, possibly oral presentation; award to developer who best meets the selection criteria for the benefit of the Commonwealth; selection of other than lowest-overall-cost is allowed if a written explanation of the reasons is given.</p>	<ul style="list-style-type: none"> All state agencies are authorized to utilize design-build subject to legislative approval. (La. Rev. Stat. §§33.2740.70; La. Rev. Stat. §33.2740.27) Design-build is authorized until July 10, 2014 for the construction of Edna Karr HS, GW Carver HS, Martin Berthman HS, Sherwood Forest ES, Paul Habans ES. The Sewerage and Water Board of New Orleans is authorized to use design-build until July 10 2015 (La. Rev. Stat § 38:2225.2.1; La. Rev. Stat § 38:2225.2.2; La. Rev. Stat. §§ 29:42; 38:85) Design-build is authorized for Jefferson Parish for flood control and hurricane protection projects, Algiers and Gentilly Development Districts for public improvements and facilities.(La. Rev. Stat § 38:85) If the secretary determines it is in the best interest of the taxpayers, the Department of Transportation and Development, with approval of the House and Senate transportation, highways, and public works committees, may use design-build on highways, bridges and interchanges. (La. Rev. Stat. 48:250.2) The Downman Road Economic Development District is created and authorized with design-build authority. (La. Rev. Stat 33:2740.70.1) <p>Ports are authorized to use the design-build method as a pilot program on a limited number of construction projects; (La. Rev. Stat. 34:3523)</p>	<p>DOT Procurement Process: Pre-qualification, request for proposals, possibly oral presentation; award to developer who best meets the selection criteria for the benefit of the Commonwealth; selection of other than lowest-overall-cost is allowed if a written explanation of the reasons is given.</p>
<p>DOT Procurement Process: Pre-qualification, request for proposals, possibly oral presentation; award to developer who best meets the selection criteria for the benefit of the Commonwealth; selection of other than lowest-overall-cost is allowed if a written explanation of the reasons is given.</p>	<ul style="list-style-type: none"> State agencies are authorized to use design-build for the construction, reconstruction, alteration, remodeling or repair of any public works project in excess of \$5,000,000 (ALM GL 149 §14) DOT is Authorized to use Design-Build, Design-Build-Finance-Operate-Maintain, Design-Build-Finance-Maintain, and Design-Build-Operate-Maintain. (ALM GL 6c § 63) <p>Local governments have the discretion to use design-build where it is permitted by ordinance.</p>	<p>DOT Procurement Process: Pre-qualification, request for proposals, possibly oral presentation; award to developer who best meets the selection criteria for the benefit of the Commonwealth; selection of other than lowest-overall-cost is allowed if a written explanation of the reasons is given.</p>

<p>DOT Procurement Process: Competitive sealed proposal process allows best value selection; award must be advantageous to the state, considering price and other evaluation factors set forth in the request for proposals. (Md. STATE FINANCE AND PROCUREMENT Code Ann. § 13-103)</p>	<ul style="list-style-type: none"> • Maryland law authorizes the use of design-build contracts on public work projects. (Md. Code Ann. State Fin. & Proc. § 3-602). • Design-build is authorized on Washington Suburban Sanitary District projects. (Md. Code Ann. Art. § 20-104) • Design-build and Public Private Partnerships are permitted on elementary and secondary schools. (Md. EDUCATION Code Ann. § 4-126) <p>The Baltimore City Public Schools Construction Authority is authorized to use design-build (Md. Code Ann. Art. § 4.126</p>	<p>DOT Procurement Process: Low-bid award or best-value award. If best value is used, award should be submitted to the department in two components-- technical and sealed price proposal. (23 M.R.S.A. § 4244)</p> <p>Award by means other than competitive bidding is allowed if Department affirmatively finds that it is in the public interest; Department must report these findings to the State Transportation Commission and Appropriations Committees. Michigan laws are quite vague and give agencies discretion in procurement.</p>
<p>DOT Procurement Process: Two-phase proposal process; first phase is short-list; second phase is based on evaluation of price and technical proposal; oral portions of presentations are allowed. (Mo. Rev. Stat § 227.107 (DOT))</p>	<ul style="list-style-type: none"> • Design-build is authorized for all state agencies for any public improvement subject to approval by the Office for Administration and Finance. (5 M.R.S.A. § 1743) • Allows design-build for locally funded school projects. (2011 Me. HP 413) 	<p>Each contracting entity in the state, whether local or state is required to award the contract through competitive bidding but the discretion to choose the method. (MCL § § 18.1240 -1250)</p>
<p>DOT Procurement Process: DOT authorized to procure design-build contracts using either a two-step best value selection process or a low bid process; light rail contracts may be awarded on the basis of the RFQ or RFP without bids; trunk highways may be awarded by a best value selection process; Commissioner shall submit a list of executed design-build contracts to the Governor each year. (MSA §§161.3410- 161.3428)</p>	<ul style="list-style-type: none"> • All state agencies are authorized to use design-build. (MSA §§ 383B.158 - 383B.1585) • The University of Minnesota may use design-build on projects with an estimated cost greater than \$2 million. MSA - 4 16.C.33; §§16.B.31) • The Minnesota State Colleges and Universities System are authorized to use design-build. (MSA - 4 16.C.33; §§16.B.31) • Metropolitan Council is authorized to use design-build. (Minn. Stat. § 473.3995) • Counties and Cities may use design-build on up to 10 transportation projects as part of a pilot program. • The Metropolitan Sports Commission is authorized to use design-build • Hennepin and Ramsey counties are authorized to use design-build. • State agencies, the Metropolitan Sports Commission, Board of Regents and State College and University System are authorized to you use CM@ Risk • Metropolitan counties are authorized to use CM@Risk on Solid Waste Facilities • The Commissioner of Administration is authorized to enter into a contract with a developer for the design and construction of a minimum security correctional facility in any city located within at least four counties. Selection is to be made on the basis of lowest and best proposal based on pre-established criteria. (Mo. Rev. Stat § 221.500) • The DOT is authorized to use DB on up to 2% of its projects. (Mo. Rev. Stat § 227.107 (DOT)) • Missouri State Transportation Commission's design-build authority extends from 2012-2018 on the construction/reconstruction of the US 40/6a, I-64 bridge. Metropolitan (St. Louis/St. Louis County) sewer districts are authorized to use design-build for projects that exceed \$1 million.—SB 173/HB 430 <p>The cities of St. Louis, Kansas City and Columbia have passed ordinances authorizing the use of design-build.</p>	<p>Each contracting entity in the state, whether local or state is required to award the contract through competitive bidding but the discretion to choose the method. (MCL § § 18.1240 -1250)</p>
<p>DOT Procurement Process: Two-phase proposal process; first phase is short-list; second phase is based on evaluation of price and technical proposal; oral portions of presentations are allowed. (Mo. Rev. Stat § 227.107 (DOT))</p>	<ul style="list-style-type: none"> • The cities of St. Louis, Kansas City and Columbia have passed ordinances authorizing the use of design-build. 	<p>Each contracting entity in the state, whether local or state is required to award the contract through competitive bidding but the discretion to choose the method. (MCL § § 18.1240 -1250)</p>

Sources: State Law Matrix; Lexis Nexis; and the individual contributions of DBIA Regions, Members and Staff.

MS	<p>• State agencies are authorized to use design-build method or the dual-phase design-build method of contracting for capital construction projects when specifically with legislative approval. For design-build to be used, the state must determine that using the dual-phase design-build method for a particular project satisfies the public need better than the traditional design-bid-build method based on the following criteria: (a) the project provides a savings in time or cost over traditional methods; and (b) the size and type of the project is suitable for design-build. Agencies allowed to use design-build are: DOT, State Institutions of Higher Learning, State Port Authorities, Airport Authority and Department of Finance and Administration. (Miss. Code Ann. §§ 31-7-13.1, 31-11-3(9))</p> <ul style="list-style-type: none"> • The board or State Port Authority, in its discretion, may use the design-build method of contracting until July 2015 (Miss. Code Ann. § 59-5-37(3)) • Design-build may be utilized for privately financed projects on state universities. The requirements in § 31-7-13.1 apply. Board of Trustees of State Institutions of Higher Learning may authorize design-build if they make the determination that it is in the best interest of the public to enter into a design-build contract. (Miss. Code Ann. § 37-101-44) • Performance and payment bonds required when using design-build or construction manager at risk methods of project delivery. (Miss. Code Ann. §§ 31-5-52, 31-7-13.2) <p>• The DOT is authorized to use design-build for the following:</p> <ol style="list-style-type: none"> projects for the Mississippi Development Authority pursuant to agreements between both governmental entities any project with an estimated cost of not more than \$10 million, not to exceed two projects per fiscal year any project which has an estimated cost of more than \$10 million, not to exceed 1 project per fiscal year. (Miss. Code Ann. § 65-1-85(11)) 	<p>DOT Procurement Process: DOT shall establish detailed criteria for the selection of the design-build contractor; for each project DOT must file a report with the Legislature evaluating the design-build method of contracting by comparing it to the low-bid method. (Miss. Code Ann. § 65-1-85(11))</p>
MT	<p>• Alternative project delivery contracts (design-build, construction management and contractor management) are authorized for state, county, municipal construction projects, airports, counties, and sewer districts. (MCA § 18-2-501-503)</p> <p>• Design-build is authorized for DOT contracts. (MCA § 60-2-111-112; 60-2-137)</p>	<p>DOT Procurement Process: two-phase proposal process; first phase involves evaluation of qualifications and second phase involves evaluation of technical and price proposals.</p>
NC	<p>• Design-build and Public private Partnerships are authorized for construction projects on state, county and municipal projects. Qualifications Base selection is permitted. (NCGS §§143-64.31)</p> <p>• The DOT is authorized to award 25 design-build projects each fiscal year. (NCGS §§136- 28-11)</p> <p>• Turnpike Authority may use alternative procurement process if conditions are met. (NCGS. §136-89.194)</p> <p>• North Carolina permits CM at Risk. (NCGS §§143-128.1)</p>	<p>QBS design-build is authorized for all local governments with legislative approval.</p> <p>DOT Procurement Process: None itemized. DOT statute requires DOT determination that delivery of the projects must be expedited and that it is not in the public interest to comply with normal design and construction contracting procedures. DOT is specifically authorized to use design-build on Accelerated Pilot Toll Bridge Project and on the Herbert C. Bonner Bridge Replacement Project. (NCGS. §136-89).</p>
ND	<p>• The state water Commission is authorized to use design-build for construction of the Devils Lake Outlet. (NDCC 61-02-23.2)</p> <p>• Municipalities and political subdivisions are authorized to combine price and technical evaluation selection process. They must choose the lowest and best bid. NDCC 44-08-01.1</p>	

Sources: State Law Matrix; Lexis Nexis; and the individual contributions of DBIA Regions, Members and Staff.

NE	<ul style="list-style-type: none"> All political subdivisions (cities, counties, school districts, state and community colleges, airports and sewer districts) are authorized to use design-build using best value or qualifications based selection for all projects except: roads, streets, highways, water or utility projects. (Neb. Rev. Stat. §§ 13-2908; Neb. Rev Stat. §§ 13-2903) 	<p>QBS design-build is authorized for at least one state agency.*</p> <p>QBS design-build is authorized for all local governments.*</p> <p>* Except roads, streets, highways, water or utility projects.</p>
NH	<ul style="list-style-type: none"> The Department of Administrative Services is authorized to use design-build for any capital projects that are subject to approval of the capital budget overview committee. (N.H. RSA §§ 21-I: 80) The DOT is authorized to use design-build on projects that do not exceed \$25 million. (N.H. RSA §§ 228-4(c)) Design-build projects in excess of \$25 million are permitted if the department demonstrates that the concept benefits the state more than conventional methods. (N.H. RSA §§ 228-4(d)) Local governments have the authority to use design-build. (N.H. RSA §§ 21-I: 80) Design-build is permitted on transportation projects. (N.J. Stat. § 27:25-11) Design-build is permitted on public-private partnership projects at State Colleges. (NJSA 18A:64-85). Local governments are authorized to use design-build; the New Jersey Schools Development Authority is authorized to use design-build. (N.J.A.C. 19:36-3.3) Design-build is authorized on public works (excluding road and highway construction) The contractor is selected during a two-phase process based on ranking. Unsuccessful short listed firms may receive a stipend to cover proposal expenses. (NMSA §§ 13-1-19.1) 	<p>DOT Procurement Process: Selection to be based on objective standard and measurable criteria for evaluation of proposals.</p>
NJ	<ul style="list-style-type: none"> CM @ Risk is authorized on educational facility projects. (NSMA §§ 13-1-124.2 - 124.5) State agencies and local governments may contract with a design-build team for the design and construction of a public work that is a discrete project, if the public body has approved the use of a design-build team for the design and construction of the public work and the public work is the construction of a park or appurtenances thereto, the rehabilitation or remodeling of a public building the construction of an addition to a public building, or the project has an estimated cost that exceeds \$10,000,000. (NRS §§ 338.1711 - 338.1727) Design-build is permitted on certain NDOT projects. NRS §§ 408.388 and 408.5471 - 408.549 set forth criteria for eligible projects and threshold project values. (NRS §§ 408.3875 - 408.3886; 408.5471 - 408.549) Regional transportation authorities are permitted to use design-build on public private partnership projects. (NRS §§277A.280) CM @ Risk is authorized for the construction of a specific capital improvement project to "expedite completion". (Chapter 13 Statutes of Nevada 2007 NRS § 338.1717 (CM Agent)) 	<p>DOT Procurement Process: Two-phase RFP process using best value, stipend to unsuccessful bidders.</p>
NM	<ul style="list-style-type: none"> CM @ Risk is authorized on educational facility projects. (NSMA §§ 13-1-124.2 - 124.5) State agencies and local governments may contract with a design-build team for the design and construction of a public work that is a discrete project, if the public body has approved the use of a design-build team for the design and construction of the public work and the public work is the construction of a park or appurtenances thereto, the rehabilitation or remodeling of a public building the construction of an addition to a public building, or the project has an estimated cost that exceeds \$10,000,000. (NRS §§ 338.1711 - 338.1727) Design-build is permitted on certain NDOT projects. NRS §§ 408.388 and 408.5471 - 408.549 set forth criteria for eligible projects and threshold project values. (NRS §§ 408.3875 - 408.3886; 408.5471 - 408.549) Regional transportation authorities are permitted to use design-build on public private partnership projects. (NRS §§277A.280) CM @ Risk is authorized for the construction of a specific capital improvement project to "expedite completion". (Chapter 13 Statutes of Nevada 2007 NRS § 338.1717 (CM Agent)) 	<p>DOT Procurement Process: request for preliminary proposals followed by issuance by request for final proposals to "finalists"; award based on most cost effective and responsive proposal using criteria and weight assigned to each factor; preference for local contractors if not federally funded.</p>
NY	<ul style="list-style-type: none"> Most public contracts are limited by Wicks Law. (see comments) The Department of Transportation, Thruway Authority, Office of Parks, Recreation and Historic Preservation, Department of Environmental Conservation, and the Bridge Authority have design-build authority through December 2014. The projects must be in excess of \$1.2 million. (New York Investment Act, December 2011) Design-builds is authorized on State University Construction Fund projects. (NY CLS Educ § 373) New York City has the discretion in regards to it project delivery methods and is authorized to use design-build. 	<p>The Wicks Law requires separate prime contracts between the public entity and contractors providing the following three subdivisions of work: 1) Plumbing and gas fitting, 2) Steam heating, hot water heating, ventilating and air conditioning apparatus; and, 3) Electric wiring and standard illuminating fixtures. While a separate prime contract with a general contractor or construction manager is allowed, it is impermissible to delegate all supervisory and coordinative work. Exceptions: a) Projects for the State University Construction Fund; b) Projects for the State Environmental Facilities Corporation; c) Construction of a county stadium in the county of Erie; and, d) Construction of a civic center in the county of Albany.</p>

Sources: State Law Matrix; Lexis Nexis; and the individual contributions of DBIA Regions, Members and Staff.

OH	<ul style="list-style-type: none"> • All state agencies, state institutions of higher education, counties, townships, municipal corporations, school districts, or other political subdivisions are authorized to use design-build.—HB 153 • ODOT is authorized to use design-build on projects totaling \$1 billion annually. They are authorized to use "best value" on design-build projects and stipends. ODOT is authorized enter into 3P agreements.—HB 114 • Design-build and CM at Risk are not authorized without the approval of the Director of Central Services or his designee. These project delivery methods shall not be used for any project unless the project meets the criteria established by the administrative rules promulgated as required by this act. Such methods shall not be used unless there is a need for compressed construction time as required to respond to a natural disaster or other emergency situation affecting public health and safety, or all of the following criteria for designation are met: <ol style="list-style-type: none"> 1. The project benefits the public; 2. There is a need for cost control; and 3. The need exists for specialized or complex construction methods. (61 O.S. § 202.1) • Municipalities, counties, public trusts or any other political subdivisions are not required to obtain approval of any other state agency in order to use construction management or at-risk construction management as a construction management delivery method. (61 O.S. § 202.1 (A)) 	
OK	<ul style="list-style-type: none"> • Design-build is authorized on public projects; transportation and buildings. DOT toll way projects. (ORS. §§ 383.005-383.017) • Procurement of bridges, highways and other transportation facilities are subject to DOT authority. (OR Rev. Stat. § 279A.050(3)(b)) 	
OR	<ul style="list-style-type: none"> • Commonwealth agencies are authorized to use design-build. (62 PCSA § § 322(2)) • County governments are authorized to use design-build as a delivery method. (16 PSA § § 2317, 5517) • The DOT is authorized to use design build on bonding projects in excess of \$100 million. (75 PSA § 9511) • Municipalities are not authorized to use design-build. • PennDOT is authorized to use a variety of project delivery methods including: <ol style="list-style-type: none"> (1) Predevelopment agreements leading to other implementing agreements. (2) A design-build agreement. (3) A design-build-operate agreement. (4) A design-build-maintain agreement. (5) A design-build-finance-operate agreement. (6) A design-build-operate-maintain agreement. (7) A design-build-finance-operate-maintain agreement. (8) An operate-maintain agreement. (9) A concession providing for the development entity to design, build, operate, maintain, manage or lease a transportation facility. (10) Any other innovative or nontraditional project delivery method or agreement or combination of methods or agreements that the public entity determines will address the transportation needs of the Commonwealth and the public entity and serve the public interest. (74 Pa.C.S. § 9108) 	<p>DOT Procurement Process: Award of toll contract either by competitive process or by "private negotiation with one or more entities" or by a combination of competition and negotiation. Amount of the tolls and classification of the traffic using the toll way must be approved by the DOT. DOT contracts may be exempted from low bid requirements if the DOT finds that an exemption will not diminish competition and will result in substantial cost savings.</p> <p>DOT Procurement Process: request for proposals, then the responsible offeror whose proposal is determined in writing to be the best value for and in the best interests of the public entity, taking into consideration all evaluation factors, shall be selected for contract negotiation.</p> <p>Only low bid DB is authorized. Shortlisting and best value procurement are not allowed by PennDOT (<i>Brayman Construction Corp., et al. v. Commonwealth of Pennsylvania Department of Transportation</i>)</p>
PA		

PR	<ul style="list-style-type: none"> • The Port Authority of the Americas is authorized to use design/build, design/build/operate, design/build/transfer/operate, and design/build/operate/transfer contracts. (23 LPRA § 2910) • The Secretary of Transportation and Public Works has discretion to use whatever project delivery method is advantageous for Puerto Rico. (9 LPRA § 2004a-2004c) 	
RI	<ul style="list-style-type: none"> • The state has the authority to utilize any type of contract, which will promote the "best interests" of the state. (RIGL 37.2.27 and 37.2.31) • Design-build and Construction management are authorized public works projects for all state agencies and the Howard Development Corporation, Water Resources, Board Corporation, Blackstone Valley Sewer District, Narragansett Bay Water Quality District, Convention Center Authority and the Channel 36 Foundation. (180 RIGL 13) • Design-Build is authorized on projects in excess of \$2.5 million. (CRIR 10-05-004) 	
SC	<ul style="list-style-type: none"> • State law authorizes the following project delivery methods: <ul style="list-style-type: none"> ◦ design-bid-build ◦ construction management at risk, operations and maintenance ◦ design-build ◦ design-build-operate-maintain ◦ design-build-finance-operate-maintain <p>(S.C. Code Ann. §§ 11-35-3005)</p>	<p>DOT Procurement Process: Selection criteria shall include project cost and may include contractor qualifications, time of completion, innovation, design and construction quality or other related criteria.</p>
SD	<ul style="list-style-type: none"> • Design-build is authorized for all public agencies. (SDCLA § 15-18b-20) 	<p>DOT Procurement Process: Performance criteria on a project by project basis (assuming the DOT is a "public corporation")</p>
TN	<ul style="list-style-type: none"> • The DOT is authorized to use design-build for up to 15 projects in a fiscal year if the contract is less than \$1 million and not more than 5 projects if the contract is in excess of \$1 million; design-build projects in excess of \$70 million must be included in the departments transportation improvement program submitted annually to the general assembly. (T.C.A. § 54-1-119) • Public Building Authorities are authorized to use design-build, construction manager, or CM at Risk. (T.C.A. § 12-10-124 (c), (d)) 	<p>Selection criteria shall include cost, qualifications, technical approach, staff availability, minority participation.</p> <p>Departments must file report with the Legislature on the effectiveness of design-build once three projects have been completed.</p>

<ul style="list-style-type: none"> • Texas law permits state agencies to use design-build for the construction of public buildings, water and waste water facilities. Design-build is permitted on up to two DOT transportation projects per fiscal year in excess of \$50 million. Authority expires August 31, 2015 (Tex. Transpo. Code 223.242) • Local governments are permitted to use design-build on public buildings without restriction for design-build authority for local water, wastewater projects. Local governments must have a population of 100,000 or more to enter into design-build contracts. There are also limitations on the number of design-build projects a locality can procure. Local governments with a population between 100,000 and 500,000 are limited to four design-build projects each fiscal year. Local governments with populations over 500,000 may award up to six projects in a fiscal year. ---Tex. Local Gov't Code Ann. Chapter 271, Subchapter H (local governments construction §§ 271.111 et seq.); Tex. Local Gov't Code Ann. 271, Subchapter J ("local governmental entity" civil works construction projects, Tex. Water Code § 60.454; 	<p>DOT Procurement Process: May Solicit proposals or accept unsolicited proposals; if an unsolicited proposal is received, DOT must request competing proposals and qualifications; selection is based on "best value". (Texas Gov't Code Ann. §§ 2166.251-2166.2531 (state construction))</p>
<p>TX</p> <ul style="list-style-type: none"> • Municipally owned water utilities with separate governing boards appointed by the governing body of a municipality with a population over 500,000 may enter into two design-build project per fiscal year. Any additional design-build contracts would count toward the limitations of that municipality described in the previous paragraph-- Tex. Water Code § 60.454; • In Texas, the selection is a two step process with RFQ and RFP phases. In both phases local governments may use best value design-build but qualifications based selection (QBS) is prohibited. • Local governments are required by law to select or designate an engineer independent of the design-build firm to act as its representative for the procurement process and throughout the project. If the engineer is not a full-time employee or staff member of the local government then the engineer must be selected on the basis of demonstrated competence and qualifications. • Authorizes all state agencies except the DOT and Institutes of Higher Learning; local governments, counties, school districts, and any other special district commission nto use any kind of procurement method that provides the best value, including design-build. This statute does not apply to highways, water/waste water, wharf, dock or any other civil engineering project—HB 628 • Relates to the creation of the public and private facilities and infrastructure authoring design-build.—SB 1048 	<p>DOT Procurement Process: Two-phase process use RFQ and short listing not prequalification.</p>
<p>UT</p>	<p>The Economic Development Authority is authorized to use design-build. (29 V.I.C. § 1107)</p> <ul style="list-style-type: none"> • State agencies are authorized to use design-build. (Va. Code Ann. §§ 2.2-4306- 2.2-4308) • Counties, cities, towns are authorized to use design-build. (Va. Code Ann. §§ 33.1-223.2;16) • Public Private Partnerships and Unsolicited Bids are authorized. (Va. Code Ann. §§ 2.2-4301, 2.2-4306, 2.-2-4307, 2.2-4308, § 2.2-4301, § 30-278) • Design-build projects are authorized for use by the Department of Buildings and General Services. (29 V.S.A. § 161) • The Department of Transportation is authorized to use design-build using best value or low bid selection. (19 V.S.A. § 10) • CM at Risk is also authorized on DOT projects.
<p>Virgin Islands</p>	<p>VA</p>
<p>VT</p>	

Sources: State Law Matrix; Lexis Nexis; and the individual contributions of DBIA Regions, Members and Staff.

<p>The Capitol Projects Advisory Review Board (CPARB) has established the Project Review Committee (PRC) to review and evaluate alternative procurement projects and public entities that are qualified to administer these projects. Appropriate design-build projects must meet the criteria established by the statute, and the public entity must either have in house or outside expertise in the appropriate alternative delivery method.</p> <p>DOT Procurement Process: Requires DOT to develop a process for awarding design-build contracts for projects over \$10 million; this process must, at a minimum, include the scope of services, prequalification requirements, criteria for evaluating technical information and project costs, contractor selection criteria and issue resolution procedures.</p> <p>Two-phase competitive selection process; pre-qualification then proposals; evaluation criteria must include qualifications, quality, completion time and cost.</p> <p>DOT Procurement Process: Award shall be based on low-bid or value-based selection process combining technical qualifications and competitive bidding elements. Award shall be based on low-bid or value-based selection process combining technical qualifications and competitive bidding elements.</p>	<ul style="list-style-type: none"> • WA allows design-build for projects in excess of \$10 million. RCW 39.10.300. Public entities who want to use design-build must be certified either by the Capitol Project Advisory Review Board or by the Project Review Committee as capable of self-determining the appropriate delivery method, or if the public entity is not certified, the PRC must approve the project. RCW 39.10.270-280. For pre-engineered metal buildings and parking garages, the public entity may utilize design-build regardless of the cost of the project. In addition, public entities may use design-build for projects between two and ten million dollars, subject to review by the PRC. RCW 39.10.300. The Alternative Procurement Statutes sunset on June 30, 2013. • The state's general preference for competitive bids has several exceptions including emergencies and small works. In addition, general contractor/construction management contracts on projects in excess of \$10 million may be awarded to "general contractors/construction manager" and two pilot projects for correctional facilities under \$10 million have been authorized (RCW § 39.04.220). • WSDOT may use design-build for projects in excess of \$10 million and for 5 pilot projects between \$2 million and \$5 million. RCW 47.20.780-785. • Design-build contracting is permitted only on a limited number of bridge projects. (WS § 84.11(5)(n)) • The Wisconsin Building Commission has is authorized to utilize "innovative" contracting practices when it is in the best interest of the state. (WS § 13.48(19)) • All state departments, agencies, authorities, quasi-public corporations and all political subdivisions, including cities, counties, boards of education and public service districts are authorized to use design-build. (W. Va. Code §§ 5-22A-1-11) • W.Va. Division of Highways is authorized to use design-build may expend up to \$50 million per year. Unused funds may be rolled over to the following year but no more than \$150 million may be used on design-build projects in one year.. (W. Va. Code § 17-2D-2) • All state, city, county, and local governments are authorized to use design and construction management delivery methods. (Wyo. Stat. § 6.6.101-107)
<p>WA</p>	<p>WI</p>
<p>WV</p>	<p>WY</p>

**LEGISLATING BEST PRACTICES IN
DESIGN-BUILD PROCUREMENTS ON
PUBLIC WORKS PROJECTS
IN WASHINGTON STATE**



www.DBIA.org

**Prepared by the Northwest Region of the
Design-Build Institute of America**

www.DBIANWC.org

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I. INTRODUCTION OF THE DESIGN-BUILD DELIVERY METHOD

A. What is Design-Build?

Washington law defines a design-build relationship as a "contract between a public body and another party in which the party agrees to both design and build the facility, portion of the facility, or other item specified in the contract."¹ DBIA defines design-build as a method of project delivery that combines the design and construction functions and vests single-point responsibility for those functions with one entity: the design builder.

The design-build process changes some fundamental relationships between the owner, the designers and contractors. With the traditional design-bid-build method, the owner must manage two separate contracts between two entities whose interests are not aligned: the designer and the contractor. The contractual structure actually creates conflict between the parties. In addition, the owner carries the risk of the performance of the project. The designer's obligation to the owner is that it will provide a general "standard of care" that allows for defects and mistakes. The owner then takes those designs and warrants, through legal device called the *Spearin* doctrine, to the contractor that the designs are sufficient to construct the project. If there are problems in the design, the owner is legally stuck between the designer and the contractor and must intervene to resolve disputes. The problem is that the owner is usually neither in the design nor the construction business. Typically, the owner is not in the best position to manage this risk.

With the design-build delivery method, the public entity enters into one contract with the design builder who then utilizes an integrated team to both design and construct the project. Disputes between the designer and constructor are managed by the design-builder, and the owner is outside that process. When a single entity both designs and constructs the project, it provides a warranty to the owner that the project will perform as expected. This warranty is a higher standard than one provided by either the designer or the contractor in design-bid-build.

B. Advantages of the Design-Build Model

There are many advantages to the design-build model. The private sector has recognized this model of procurement and has taken advantage of savings in the schedule and costs. In addition, because the design builder is a single point of responsibility, the owner has lower risk and fewer claims. Finally, and most importantly, the flexibility of design-build fosters innovation and provides a better design more quickly and at lower cost.

1. Schedule and Costs

The design-build method of procurement will often lower the overall project costs because the design and construction personnel work and communicate as a team. They are able to evaluate alternate materials and construction methods more efficiently and accurately and without the adversarial tension that often exists in the traditional design-bid-build model. In addition, there is a focus on value engineering and constructability during the design, when innovative solutions to problems can occur at the earliest, the most efficient, and the least

¹RCW 39.10.210(4).

expensive point in the process. In this critical way, design-build goes one step further than GC/CM.

Because design and construction are overlapped, bidding periods and re-design time are eliminated. Therefore, total design and construction time can be significantly reduced utilizing design-build. Design-build is ideal for the application of “fast track” construction techniques. With design-build, procurement and construction work begin before the working drawings are fully completed. In construction, time means money. It is an axiom that the longer the project lasts, the more it will cost. Therefore, the resulting time savings translates into lower costs and earlier utilization of the completed facility.

Because design-build is an integrated and streamlined process, the owner’s administrative burden can be reduced. Although DBIA recommends that the owner be fully engaged in the design-build process, one place where the owner is does *not* have to invest precious time and resources is in the coordination and arbitration of disputes between separate design and construction contracts. The owner is, therefore, able to focus on scope definition and timely decision making.

With the design-build procurement system, guaranteed construction costs are known far earlier than in other delivery systems. The entity responsible for design is simultaneously estimating construction costs and can accurately conceptualize the completed project well before design is complete.

2. Risk Allocation

In the traditional design-bid-build project, the owner is often caught in the “liability gap.” The architect’s responsibility under its contract is to comply with the standard of care of other professionals performing similar work in the area. This standard assumes that there will be a few changes in the documents and that no set of design documents is perfect. The owner, on the other hand, warrants – as a matter of law - the sufficiency of the documents to the contractor. A “liability gap” is created because the owner is responsible for paying for the changes; however, the owner cannot easily pursue the architect and must prove malpractice to recover.

Under the design-build delivery method, the owner enters into one contract. Disputes between designer and the contractor are eliminated vis a vis the owner because the designer and the constructor are on one integrated team. Therefore, the owner’s risk of loss and liability are substantially reduced.

Owners should be cautioned, however, not to shift unnecessary risk onto the design builder. Risk should be allocated to the party who is best able to manage, price or insure the risk. If a party cannot properly do any of these three tasks, then it is not appropriate for that party to assume the risk. Allocating an inappropriate level of risk onto one party puts the project in jeopardy of failing and unnecessarily increases the cost of the project. The alternative procurement statute requires the owner to maintain a contingency for unforeseen conditions. We suggest that owners carefully examine the risks unique to their project to determine whether they need to increase the contingency in excess of the statutory minimum.

3. Flexibility for Public Agencies

When the designer and builder are on a single, integrated team, there is greater opportunity for identification of multiple approaches to constructability. The builder is involved

in the project during the design phase, so the builder can weigh in on different methods of construction. This interaction often results in increased design and construction quality. In addition to reducing claims, the collaborative process that is created fosters both innovation and a collaborative effort. Owners have the ability to provide input into the design and construction process.

II. IMPROVING THE WASHINGTON LEGISLATION

Washington State's alternative procurement legislation is once again facing sunset. Design-build has been an important project delivery model for public owners and has been implemented in Washington and across the country with great success. The procurement method used by an owner for any delivery method is a critical step in the success of a project. Washington's current procurement process does not reflect industry best practices. The DBIA NW Region's proposals in this white paper provide solutions to assist Washington State to implement those best practices through the alternative procurement legislation in RCW 39.10.

A. Eliminate or Substantially Reduce the Threshold Amount for Projects

RCW 39.10.270 and 39.10.300 limit the use of design-build to projects in excess of \$10 million. However, the reality is that there are many projects under \$10 million that are perfect candidates for design-build. Hospital districts could utilize the delivery method for a specialized space such as an operating facility. Cities could use design-build for the renovation of buildings that must be occupied during construction. Departments of transportation would benefit from the use of design-build for smaller but complex traffic modifications.

The \$10 million threshold amount is simply an arbitrary number that was created when the design-build delivery method was in its infancy in Washington State. Design-build is no longer a "new" or untested delivery method, and there is no reason that owners should be required to reserve it for only the largest of projects. The limitation on design-build projects should be in the description in RCW 39.10.300 and not in an arbitrary and outdated number. Even if the threshold is not eliminated, it should be substantially reduced so that more projects and owners can benefit from the design-build delivery method.

One of the goals of lowering the threshold is to increase competition at all project levels. Public owners are not likely to take a chance on an inexperienced design-builder for a large project; however, they are more likely to do it for a smaller project, in the hopes of eventually expanding the competitive field in the larger projects. In fact, if the threshold is not eliminated or reduced, these smaller firms might not ever be able to compete for these projects. This goal refutes the argument in favor of the threshold, which is to protect the market for small to medium sized construction firms who don't believe that they can compete in a design-build procurement. In fact, lowering the threshold will increase, not decrease competition and competitiveness.

The current legislation allows design-build for projects between two and ten million dollars for a limited number of pilot projects. However, all public entities have to apply to the Project Review Committee for these projects, even certified public agencies. Certified public agencies will attest that although they believe smaller projects would benefit from the use of the design-build delivery method, this additional hoop is not usually justifiable for a smaller project. One way to test the viability of lowering the design-build threshold is to allow certified public

agencies to do a limited number of design-build projects for between two and ten million dollars without going to the PRC for approval. The certified public agencies would still have to report data from the projects, and the certified agencies could each have a limited number of projects. DBIA is confident that when the data from these projects is reviewed, owners will experience early cost certainty, low cost growth and successful project delivery, thereby paving the way for a permanent lowering of the threshold amount.

Note that DBIA NW Region has also suggested that two alternates currently in the statute be eliminated: the process for parking garages and for pre-fabricated modular buildings. The reason for these suggested deletions is tied to the elimination of the \$10 million threshold. If the threshold is not eliminated, DBIA NW Region would suggest re-instating these provisions.

B. Create State-Wide Uniformity for Projects that Qualify for Design-Build

Currently, there are two different standards for projects to qualify for design-build procurement in the State of Washington. One is located in RCW 39.10.300, and one is in RCW 47.20.785. DBIA proposes that the state create a uniform standard for all design-build procurement and that RCW 39.10.300 be modified to mimic the requirements in RCW 48.20.785, with only a few changes so that it reads as follows:

- (a) The construction activities are highly specialized and a design-build approach is important ~~critical~~ in developing the construction methodology; or
- (b) The projects selected provide opportunity for greater innovation ~~and~~ efficiencies, and/or collaboration between the designer and the builder; or
- (c) Significant savings in project delivery time would be realized.

In its current form, RCW 39.10.300 does not reflect best practices. Subsection (a) is similar to RCW 47.20.785; however, the transportation statute has a clearer definition of the type of project that should qualify, and in the interest of uniformity, DBIA prefers the clarity of RCW 47.20.785.

RCW 39.10.300, subsections (b) and (c) are simply not in keeping with DBIA best practices. Subsection (b) allows for design-build when “the project design is repetitive in nature and is an incidental part of the installation or construction.” However, the design is always an important part of any project. Subsection (c) provides that design-build can be used when “regular interaction with and feedback from facilities users and operators during design is not critical to an effective facility design.” Subsection (c) doesn’t make sense because owner interaction is crucial to the success of every design-build project.

In addition to the changes to RCW 39.10.300, RCW 39.10.280 should also be modified to delete subsection 2(a) which requires the Project Review Committee to determine that:

“The alternative contractor procedure will provide a substantial fiscal benefit or the use of the traditional method of awarding contracts in lump sum to the low responsive bidder is not practical for meeting desired quality standards or delivery schedules.”

First, the criteria in this subsection is extremely difficult to substantiate and should be eliminated altogether. An argument could be made that to adequately evaluate this factor, the Project Review Committee would have to examine a financial prospectus for a hypothetical project that would never be constructed. This exercise not only requires the public body to submit extremely speculative evidence, it unnecessarily increases the cost of the procurement. If a project meets the criteria proposed for RCW 39.10.300, that project should qualify for the delivery method.

Second, all of the information with respect to the criteria to use the design-build delivery method should be in one place: RCW 39.10.300. A public owner should not have to look in multiple places to determine whether the project qualifies.

C. Allow Public Bodies To Utilize State of the Art Procurement Methodologies to Meet the Needs of the Project.

Currently, RCW 39.10.330 states that public agencies must include “proposal price” as one of the evaluative factors in a design-build procurement. Although the statute does not dictate the extent to which price is a factor in the evaluation or that “price” mean “lump sum”, some public agencies have interpreted the statute to require that owners solicit a lump sum price when procuring design-build services. Lump sum pricing; however, is typically the least effective means of evaluating a proposal or procuring design-build services. Owners must have flexibility to match the pricing and procurement methodology to meet the needs of the project. In some cases, a cost plus with a guaranteed maximum price is the best way to achieve an owner’s goals. In other cases, qualifications only selection with subsequent price negotiation is the best means of procuring the project.

The DBIA NW Region proposes that RCW 39.10.300 allow owners to determine the form best suited for the project and suggests the following new language:

- (2) Procurement of public works using the design-build procedure shall be pursuant to RCW 39.10.330 and in the form best suited to the project, in the discretion of the public body, including but not limited to the following:
 - (a) A competitive procurement process based on qualifications, with price established at a point in the progress of the design as set forth in the design-build agreement;
 - (b) Procurement with price established in advance by the public body and selection based on selection criteria established by the public body; or
 - (c) Procurement based on a combination of qualifications and a pricing component which may include but is not limited to the following: cost of the work, design-builder fees, design fees, operations and maintenance costs, general conditions and/or other costs.

The first option allows for qualifications only selection, with price established through the negotiation process. This option is also known as “progressive design-build.” Owners who

use qualifications rather than price as the primary basis for selecting a design-build team reap substantial benefits such as increased teamwork, proactive behavior and collaboration that help achieve project success. This selection criteria mirrors the current method of selection for architectural and engineering services in Washington. RCW 39.80.010 declares the following as Washington state policy:

“The legislature hereby establishes a state policy, to the extent provided in this chapter, that governmental agencies publically announce requirements for architectural and engineering services, and negotiate contracts for architectural and engineering services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices.”

According to Washington State Attorney General Opinion AGO 1988 No. 4:

- “1. A public agency may not, in procuring architectural or engineering services, consider proposed price or cost in determining which firm is most highly qualified to provide services.
2. When a public agency selects a firm to perform architectural or engineering services, price and cost may be considered only after the most qualified firm has been selected, at which time the law provides for negotiation of a ‘fair and reasonable’ price.”

In selecting an architect or engineer, public agencies are guaranteed a fair price during the negotiation process. If the public agency cannot negotiate a fair price, then the agency may begin negotiations with the next most qualified firm.

The procurement of design-build services is the procurement of professional services. Design-builders not only provide the architectural and/or engineering services for a project, they also provide constructability analysis, complex construction management and collaboration, and an increased assumption of risk greater than that provided by either an architect or a contractor. A design-builder is an owner’s strategic partner in programming, project definition, technical innovation, creative construction means and methods, budgeting and scheduling.

Qualifications only selection is particularly well suited to projects on which the complexity, technical risks and/or evolving scope make it difficult to prepare a clear and stable criteria package upon which to base a competitive price selection. When owners attempt to procure these types of projects with an up front, lump sum price, the amount of preliminary work necessary to develop a price proposal can become exorbitant. Design firms, in particular, are not usually capable of putting forth the increased effort required to establish a lump sum. In an up-front, fixed cost procurement, a substantial amount of design needs to be performed or the parties simply will not have sufficient information to be able to assess, assign and properly price the risks associated with the project. To obtain the preliminary design, the owner either has to hire a designer to draft preliminary bridging documents or the procurement itself requires the proposers to perform so much preliminary design work that the procurement becomes cost prohibitive. *See* DBIA Position Statement, “Qualifications Based Selection,” Attachment B.

With a progressive design-build project, the price is negotiated with the selected design-builder once the preliminary engineering work is performed, but the fact that the owner is

working with the same design-builder to achieve this goal provides a substantial benefit in risk allocation, collaboration and innovation early in the project.

The second option suggested by the DBIA NW Region is known in the industry as “build to budget.” In this type of solicitation, the public entity provides the budget available for the project, and all of the proposers must adhere to the price. In response, competing teams propose an optimum approach to best meet owner requirements within that available budget. Because the price is fixed, price is not a factor in the procurement, and the owner can focus on the qualifications of the proposers and their technical approach. Build to budget is a fully cost-competitive method of proposal evaluation and source selection. It promotes innovation and creativity in problem solving and seeks the optimum solution to owner technical requirements at a specific price, rather than as the cheapest solution to fixed technical requirements.

The third option proposed by the DBIA NW Region is known as “Best Value”. The public entity would select a design-builder based on the design-builder’s qualifications as well as a number of price related factors; however, the language is clear that the owner is not limited to an up front, lump sum type of contract. In addition to the cost of the work, the owner could consider a number of different price-related factors, including fixed fee, general conditions costs and/or operations and maintenance costs. In a Best Value procurement, DBIA best practices promote that non-cost/price evaluation and selection factors should dominate the owner’s selection criteria. *See* DBIA Position Statement “Principles of Best Value Selection,” Attachment C.

DBIA also proposes deleting the limitation on Design-Build-Operate-Maintain (“DBOM”) projects in RCW 39.10.300. DBOM projects, such as the Benjamin D. Hall Interdisciplinary Research Building on the University of Washington campus, requires the design-builder to be responsible not only for the cost of construction but also the project’s operations and maintenance costs for a specified number of years. With the design-builder responsible for the operations and maintenance costs, the design-builder had substantial incentive to incorporate innovation into the building, creating life cycle costs savings. In addition, relieved from O&M responsibility, the University of Washington could waive its premium design standards and achieve the low first cost it needed to achieve the project’s goal of a market-rate lab building.

The purpose of the suggested alternates is to provide public owners in Washington the full range of design-build best practices and allow owners more flexibility so that they can design a procurement that will best assure a successful project. The statute continues to require Owners to follow other best practices such as transparency in procurement and competitive negotiation.

D. Allow the Public Body to Customize the Selection Criteria to the Needs of the Project

The current solicitation process is far too prescriptive for public owners to fully take advantage of the design-build delivery method. Projects that qualify for the design-build delivery method vary dramatically. Examples of design-build projects in Washington state include water/wastewater projects such as the Tacoma Central Water Treatment Plant Upgrade and Expansion, the Coyote Ridge Women’s Penitentiary, the upgrade and expansion of Interstates 5 and 405, Tacoma’s Cheney Stadium, the Tacoma Narrows Bridge and the King County Libraries

project. The selection criteria for these widely varied projects should differ significantly, and the public owners need the flexibility to establish their own criteria.

Instead of dictating the selection criteria in the statute, DBIA proposes replacing the prescriptive language in 39.10.330 (d) with the following:

“Evaluation factors and relative weight of the factors for request for qualifications and/or request for proposals are within the discretion of the public body and shall be stated in the request for qualifications. Neither design submissions specific to the project nor price-related factors are permitted in the request for qualifications phase.”

This language allows owners to examine the individual project and determine what factors are relevant for that project. Owners must divulge the specifics of the selection factors and their relative weight in the Request for Qualifications. That way, the process remains fair and transparent.

When there is a price component, best practices dictate that the public entity issues a Request for Qualifications to shortlist the proposers down to three finalists. The recommended number of finalists by DBIA is three because that number encourages the maximum competitive effort. Shortlisting more than three firms undermines the credibility of the process and discourages high quality proposals. Furthermore, the competitive proposal process becomes confused and cumbersome if numerous possible offerors, including those unqualified or unfamiliar with the process, are permitted to propose.

To implement its proposal for progressive design-build, DBIA also suggests modifying RCW 39.10.330 to allow for a one step, qualifications only selection. Because there is no price factor, the proposers need only submit qualifications. One of the substantial benefits of progressive design-build is its streamlined procurement process. The public body would be required to identify the process, either one step or two step, at the Request for Qualifications phase. With a single-step process, the amount of work required to submit a proposal should be greatly decreased; therefore, DBIA NW Region proposes deleting the requirement for an honorarium for single-step procurements.

Finally, DBIA proposes deleting the “best and final” option in RCW 39.10.330. As noted above, selecting a design-builder based on price rather than qualifications is not a best practice, and the “best and final” procurement process focuses almost exclusively on price.

III. DESIGN-BUILD BENEFITS ALL PARTIES

The design-build delivery method benefits all parties to the construction process. Design-build streamlines project delivery through a single contract between the owner and the design-build team. This simple but fundamental difference saves money and time by transforming the relationship between the designers and builders into an alliance which fosters collaboration and teamwork.

A. Benefits to the Public and the Public Owner

Faster Delivery. With collaborative, integrated project management, work is completed faster with fewer disputes.

Innovation. United from the outset, an integrated team produces innovative solutions to the problems presented by the project. In addition, with the design-builder responsible for the performance of the project, the design-builder has more opportunity to utilize innovative solutions to achieve sustainability goals and incorporate Building Information Modeling and Lean construction techniques.

Better Quality. Design-Builders are responsible for the performance outcomes for the project, which is a higher standard of care than that provided by either a designer or constructor alone. Because the design-builder must guarantee performance, the quality of the construction is generally higher.

Fewer Disputes. With the owner no longer managing the disputes between the designer and the constructor, the owner can concentrate on the project rather than the dispute process. In addition, any problems that may occur are generally discovered during the design process when the problem can be addressed with lower cost, rather than in construction, when any problem becomes more expensive.

Reduced Risk. Public owners are typically not in the business of either designing or constructing projects; however, the liability gap created by design-bid-build places the risk of the ultimate performance of the project on the owner. In design-build, the ultimate risk of performance is shifted to the design-builder who is in a much better position to manage this risk.

OMWBE/DBE Goals. With qualifications focused procurement, it is easier for design-builders to meet the OMWBE/DBE goals.

B. Designer Benefits.

Direct Access to the Constructor. Designers benefit from the experience and expertise of the constructor early in the project. Designers can then incorporate that expertise into the design of the project.

Integrated Teamwork. The designer and constructor work together on an integrated team. Communication and collaboration replace disputes and distrust. This situation not only benefits the project, the team members have a better overall experience as well.

Greater Opportunity For Reward. Design-build projects often include incentives when the team as a whole meets and/or exceeds the project goals. This type of incentive is rare in design-bid-build projects.

Reduced Litigation. An integrated team simply has fewer disputes than teams that are pitted against each other through the design-bid-build process.

C. Constructor Benefits.

Direct Access to the Designer. The constructor benefits greatly from being able to provide early input into the design process.

Integration, Collaboration, and Cooperation. The benefits described above for designers are also huge benefits for constructors. An integrated team simply works better and has fewer disputes than teams that are in constant conflict.

D. Specialty Contractor Benefits.

Early Input in the Process. Much of the innovation in the construction industry has come through the specialty contractors. With design-build, these specialty contractors can provide critical early input into the essential systems that create better projects.

IV. CONCLUSION

The design-build delivery method is an effective and efficient way to accomplish the goals of providing projects on time and under budget in the public sector. When implemented with best practices, the design-build delivery method can not only save time and costs, it can reduce many of the risks associated with traditional design-bid-build delivery and decrease the risk of claims between the parties.

Background on The Design Build Institute of America

The Design-Build Institute of America (DBIA) is a membership organization founded in 1993 to advocate and advance single source project delivery within the design and construction industry. DBIA members include public and private owners as well as practitioners from all project phases.

DBIA is a national resource for expertise on design-build procurement. In addition to the DBIA National Conference and Expo, it conducts three specialty conferences focused on the water/wastewater, transportation and federal construction. DBIA also has an extensive schedule of educational courses focusing on the design-build method of delivery and alternative procurement. These courses range from the fundamentals and principals of design-build delivery to more challenging courses in contracts and risk management and specialized instruction on estimating and procurement of design-build services. Individuals who have completed the requisite course work, have the required years of experience and pass a proctored examination are awarded the title “Designated Design Build Professional” and are entitled to utilize the DBIA initials after their name. DBIA also publishes a Manual of Practice and Position Statements that explain and advocate for best practices in design-build delivery.

The Northwest Region of DBIA was founded in 2002 and covers the states of Alaska, Idaho, Oregon and Washington. In addition to providing a forum for construction professionals to meet and discuss issues essential to the industry, the Northwest Region has regular educational opportunities that examine design-build issues and projects unique to this region. In addition, the Northwest Region advocates for improvements in the legislation governing alternative procurements and provides support to all of the various parties before, during and after the completion of a project.

The DBIA Northwest Region encourages questions and comments regarding this white paper. For more information contact:

DBIA NW Region Legislative Committee Chairs:

Robynne Thaxton Parkinson, JD, DBIA, Law Offices of Robynne Thaxton Parkinson
PLLC, rparkinson@rtp-law.com; (206)909-5290

Eric Smith, PE, DBIA, LEED AP, University of Washington, ecsmith@u.washington.edu;
(206)616-5497

DBIA NW Region Legislative Committee

Fred Aigbe, Seattle Public Utilities
Brian Aske, Lease Crutcher Lewis
Rodger Benson, Mortenson Construction
Ted Caloger, Mulvanny G2 Architecture
Michelle Dutro, Johnson Controls, Inc.
Garth Hornland, PCL Construction Services
Larry Hurlbert, Integrus Architecture
Chuck Monninger, Mowat Construction
James Parvey, City of Tacoma
Tom Rutherford, City of Tacoma
Darlene Septelka, Cemetra-USA
Rob Widmeyer, LMN Architects
Jim Yowan, Mortenson Construction

DBIA NW Region Executive Committee:

President: Larry Hurlbert, AIA, DBIA, Integrus Architecture, lhurlbert@integrusarch.com;
206-628-3138

Past President: Jim Yowan, DBIA, Mortenson Construction, (425)895-9000,
jim.yowan@mortenson.com.

Secretary: Brian Aske, DBIA, LEED AP, Lease Crutcher Lewis,
brian.aske@lewisbuilds.com, (206)622-0500

Treasurer: Ken Dyckman, PE, LEED AP, Hermanson, kdyckman@hermanson.com;
(206)575-9700

Executive Director: Louise Miller, MA, CAE, louise@dbianwc.org; (206)367-8704

www.dbia.org; www.dbianwc.org

Attachments:

- A. DBIA NW Region Proposed Legislative Changes
- B. DBIA Position Statement “Qualifications Based Selection”
- C. DBIA Position Statement “Principles of Best Value Selection”

Design-Build and Design-Bid-Build

Comparison of Overall Cost and Time

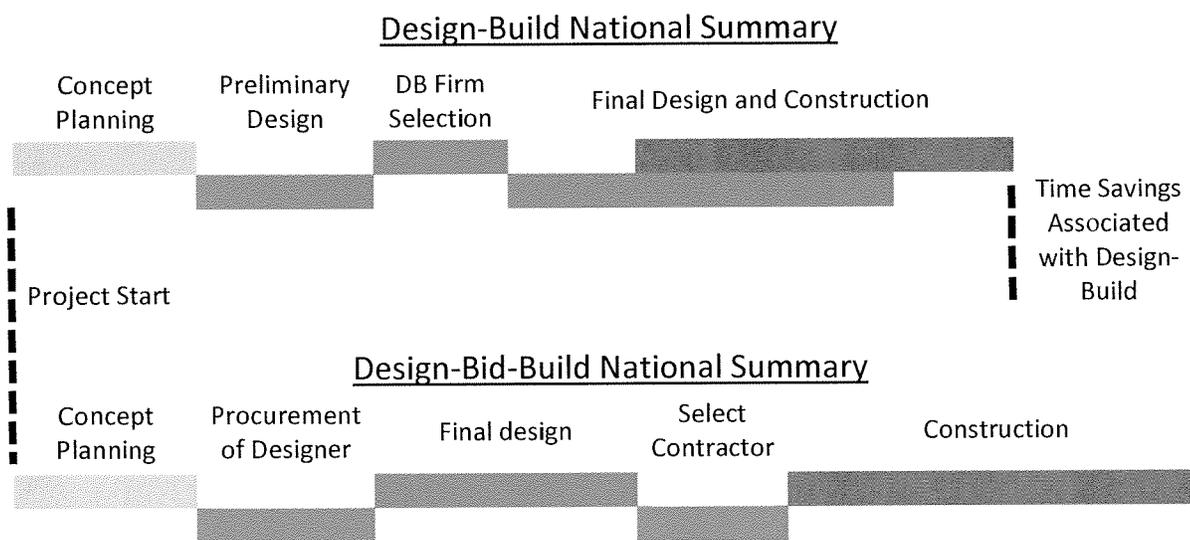
Question: How does the total cost and time to deliver a \$55,000,000 and 814 day design-build project compare to using design-bid-build if both projects start at the same time?

Answer: Using design-build results in a total cost savings of \$6,457,345 and total time savings of 656 days.

Project Delivery Activity (see graphic below)		Design-Build		Design-Bid-Build	
		Cost	Time	Cost	Time
A	Preliminary Design • Cost is assumed to be 25% of DBB Final Design (Activity H). • Time is assumed to be 25% of DBB Final Design (Activity H).	\$1,488,404	183 days		
B	DB Firm Selection • Cost is two stipends at 0.15% of Final Design and Construction cost (Activity C). • Time is ad thru notice to proceed. (1)	\$165,000	304 days		
C	Final Design and Construction • Cost is average of winning bids of 11 projects procured using the adjusted score DB process since January 2012 where the winning bid was not the lowest bid. • Time is average of time on these 11 DB projects.	\$55,000,000	814 days		
D	Construction Engineering Inspection • Cost is 7.2% of Final Design and Construction (Activity C). (2)	\$3,960,000	0 days		
E	Cost and Time Overrun (3) • Cost is 1.98% of Final Design and Construction (Activity C). • Time is 20.3% of Final Design and Construction (Activity C).	\$1,089,000	165 days		
F	Construction Engineering Inspection • Cost is CEI cost per day (Activity D/ Activity C time) times overrun of contract time (Activity E time).	\$802,703	0 days		
Total		\$62,505,107	1466 days		
G	Procurement of Designer • Time is average of past ten years from the Procurement Office.			\$0	169 days
H	Final Design • Cost is 11% of DBB Construction cost (Activity J). • Time is assumed to be 2 years.			\$5,953,617	730 days
I	Select Contractor • Time is ad thru notice to proceed. (4)			\$0	152 days
J	Construction (5) • Cost is 94% of DB Final Design and Construction (Activity C) increased by 3% annual inflation. • Time is 110% of DB Final Design and Construction (Activity C).			\$54,123,795	895 days
K	Construction Engineering Inspection • Cost is 10.1% of Construction cost (Activity J). (6)			\$5,466,503	0 days
L	Cost and Time Overrun (7) • Cost is 4.33% of Construction (Activity J). • Time is 19.7% of Construction (Activity J).			\$2,343,560	176 days
M	Construction Engineering Inspection • Cost is CEI cost per day (Activity K/ Activity J time) times overrun of contract time (Activity L time).			\$1,074,977	
Total				\$68,962,452	2122 days

- (1) **DB Firm Selection:** Cost is stipends paid to top two non-winning responsive firms. Time is eight months from advertisement to letting plus two months from letting to notice to proceed.
- (2) **Construction Engineering and Inspection:** 7.2% is the average CEI cost on DB contracts between \$30-\$70M from 2008- 2012. The database for this date range consists of 11 DB contracts and 47 DBB contracts.
- (3) **Cost and Time Overrun:** The percentages are the averages of DB contracts between \$30- \$70M from 2008- 2012. The database for this date range consists of 11 DB contracts and 47 DBB contracts.
- (4) **Select Contractor:** Time is 3 months from plans to Tallahassee to letting plus 2 months from letting to notice to proceed.
- (5) **Construction:** 94% assumes a design cost of 6% for DB contracts. The 3% annual inflation is applied to the time difference between lettings. 110% is average of ratio of time on DBB contracts to DB contracts between \$30-\$70M from 2008- 2012. The database for this date range consists of 11 DB contracts and 47 DBB contracts.
- (6) **Construction Engineering and Inspection:** 10.1% is the average CEI cost on DBB contracts between \$30-\$70M from 2008- 2012. The database for this date range consists of 11 DB contracts and 47 DBB contracts.
- (7) **Cost and Time Overrun:** The percentages are the averages of DBB contracts between \$30- \$70M from 2008- 2012. The database for this date range consists of 11 DB contracts and 47 DBB contracts.

Comparison of Project Delivery Activities



Source: From Dr. Keith Molenaar, University of Colorado at Boulder in the Design-Build Effectiveness Study Final Report dated January 2006 prepared for USDOT- FHWA. Some terms in the graphic have been modified to be consistent with FDOT terms. Link below is to referenced FHWA report: <https://www.fhwa.dot.gov/reports/designbuild/designbuild4.htm>