



PROGRESSIVE DESIGN-BUILD

PRACTICE, PERCEPTION, AND POTENTIAL

IN PARTNERSHIP WITH



MAY 2025

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Executive Summary

Progressive Design-Build (PDB) has emerged as an innovative project delivery method emphasizing collaboration, transparency, and balanced risk allocation. This white paper examines how PDB is adopted, perceived, and practiced. The perspectives are drawn from research literature and a survey of 581 practitioners from 439 organizations, including owners, owner advisors, design-builders, architects, engineers, and subcontractors across six key sectors: aviation, industrial, private buildings, public buildings, transportation, and water/wastewater.

The research reveals growth in PDB project volumes and construction values and widespread stakeholder satisfaction. The survey results also show that PDB outperforms other alternative delivery methods in balancing risk allocation. Despite this momentum, the results also show barriers to broader adoption, including regulatory constraints, owner hesitancy, and a lack of experience for some practitioners and owners. This paper outlines actionable future directions and invites industry stakeholders to participate in ongoing research through an analysis of completed PDB projects.

Introduction And Purpose

Why PDB Matters?

Nearly half of the U.S. design and construction market employs the Design-Build (DB) method of project delivery.¹ Yet, some forms of DB procurement and contracting methods can experience greater challenges with budgets, risk management, insurance, and disputes.² PDB can address these challenges by fostering early and sustained collaboration between owners and design-builders before both the contract risk profile and DB pricing are finalized to optimize project outcomes and provide effective means for dispute resolution.³

What is PDB?

PDB is a project delivery method in which design-builders are selected based on qualifications and work with the owner in an exclusive contractual arrangement to subsequently agree on guaranteed DB pricing after the team develops an adequate design. The process typically consists of two phases, as shown in Figure 1: a pre-construction phase, where the team collaboratively advances preliminary design and validates the project scope, costs, and schedule, and a construction phase that begins after a general agreement on the project technical aspects and final DB pricing. PDB emphasizes early and continuous collaboration between the owner and the design-builder, allowing for flexibility and informed decision-making as the design, scope, budget, and schedule evolve together.⁴

¹ FMI, "Design-Build Utilization Study Key Findings Report."

² ACEC Research Institute, "DESIGN-BUILD STATE OF PRACTICE."

³ Gad et al., "Lessons Learned from Progressive Design-Build Implementation on Airport Projects."

⁴ Gad et al.; Gransberg and Molenaar, "Critical Comparison of Progressive Design-Build and Construction Manager/General Contractor Project Delivery Methods."

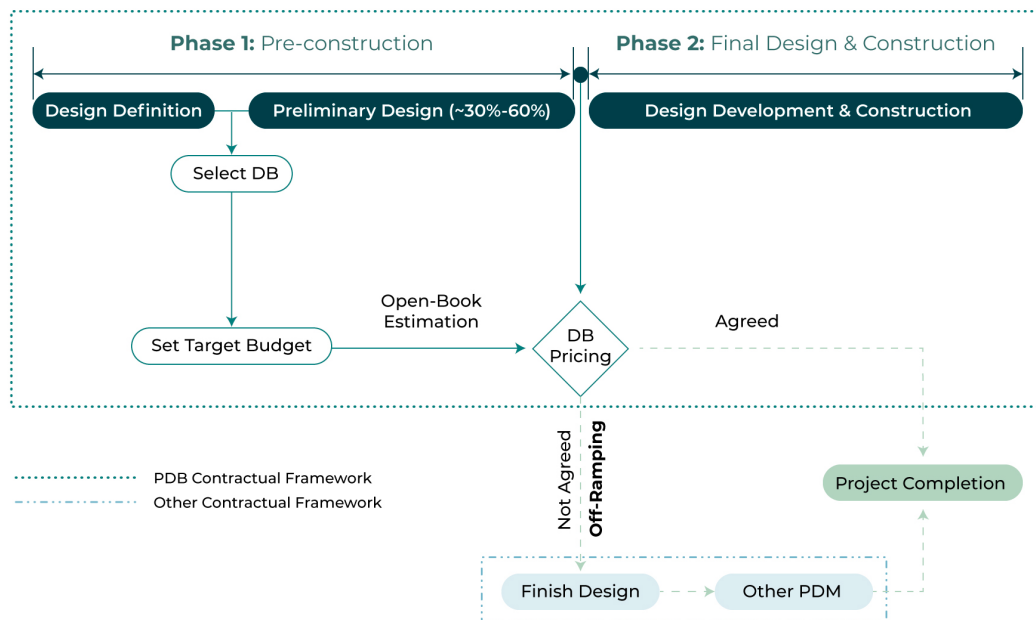


Figure 1: Progressive Design-Build Conceptual Process (Adapted from: Gransberg and Molenaar 2019b)

DB: Design-Build, **PDM:** Project Delivery Method

Qualification Over Price: PDB emphasizes qualifications and experience on the front end of the selection process, with a price negotiated based on a scope of work to follow.

Iterative Planning: Owners and builders collaborate early and often to refine design, cost, and schedule.

Validation Phase: Construction starts only after both parties agree on scope, cost, and timeline.

Balanced Risk, Better Results: Real-time feedback and joint decisions reduce disputes and strengthen trust.

Contextualization of the rise of PDB

The increasing interest in PDB stems from evolving needs within the design and construction sector. Owners seek delivery methods that provide greater flexibility, foster collaboration, and promote transparency. The American Council of Engineering Companies (ACEC) Research Institute's 2022 Design-Build State of the Practice study⁶ identified opportunities and challenges that firms may face when implementing DB. Risk allocation and obtaining necessary insurance were identified as challenges, while long-term partnerships and contracting and procurement methods, such as qualifications-based selection and target pricing, were identified as strategies to address these challenges. PDB responds directly to these needs by offering an integrated, phased approach that allows owners and design-builders to jointly define project expectations, reduce disputes, and enhance accountabilities for all parties.

⁵ Gransberg and Molenaar, "Critical Comparison of Progressive Design-Build and Construction Manager/General Contractor Project Delivery Methods."

⁶ ACEC Research Institute, "DESIGN-BUILD STATE OF PRACTICE."

Purpose of the White Paper

This white paper aims to provide an initial exploration into the current state of practice for PDB. These insights lay the foundation for achieving broader project objectives, which aim to:

Provide a data-driven assessment of industry trends and satisfaction with PDB.

Compare PDB with other project delivery methods regarding risk allocation.

Identify the common benefits and challenges associated with PDB implementation.

Highlight areas where practical guidance and tools are needed.

Data Collection and Analysis

To assess current PDB practices, the research team distributed a firm-based survey to a broad range of industry participants, including owners, owner advisors, design-builders, architects, engineers, and subcontractors. The survey collected 581 responses from 439 firms across six major sectors: aviation, industrial, private buildings, public buildings, transportation, and water/wastewater. Both quantitative ratings and qualitative open-ended responses were analyzed. Stakeholder quotes included throughout this paper are drawn directly from these survey responses to illustrate themes and industry perspectives.

Intended Audience

This white paper is intended for public and private owners, owner advisors, builders, engineers, architects, agency decision-makers, and policymakers interested in modernizing project delivery frameworks.

PDB Market Trends

The survey results confirm trends found by the Fails Management Institute (FMI).⁷ This research found a rise in the adoption of PDB over the last five years. Seventy-six percent of respondents participated in PDB projects. Of the respondents participating in PDB projects, 88 percent reported an increase in the number of PDB projects, and 81 percent observed growth in overall construction values, as shown in Figure 2. Respondents credit this success to enhanced collaboration, improved risk allocation, and greater transparency throughout the project lifecycle.

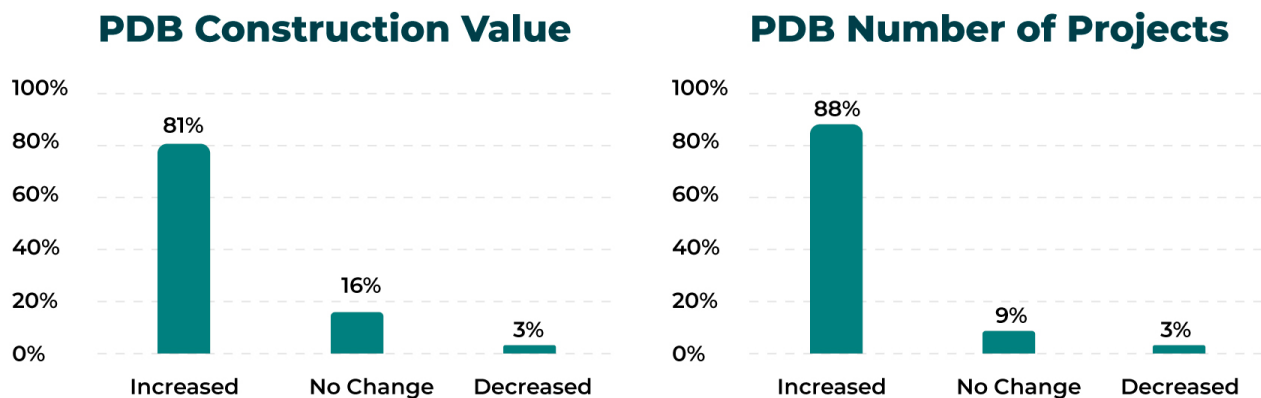


Figure 2: PDB Trends: Construction Values and Number of Projects

⁷ FMI, "Design-Build Utilization Study Key Findings Report."

Industry Satisfaction And Sentiment Toward PDB

The overall sentiment toward PDB is positive. Seventy-nine percent of industry stakeholders reported satisfaction with the PDB method, including “Satisfied” and “Very Satisfied” responses on a scale from 1 = Very Dissatisfied to 5 = Very Satisfied. This satisfaction rate reflects PDB’s effectiveness and success in aligning expectations, reducing conflict, and delivering project value. Additionally, 15 percent of respondents indicated a neutral experience, indicating neither satisfaction nor dissatisfaction.

Minimal dissatisfaction was recorded, with only six percent of respondents indicating negative experiences with the method. These findings reinforce PDB’s growing reputation as a preferred delivery method in sectors seeking transparency, trust, and shared accountability.

“

“Progressive design-build creates a framework that supports collaboration and delivery of best-value solutions to the client.”

— OWNER

“

“Given PDB is new to transportation markets, some clients are having a harder time understanding how to interact differently with the [DB] team from low-bid and value-based DB projects.”

— DESIGN/BUILDER

Driving Value Through PDB

The study respondents revealed key drivers behind the industry's positive perception of PDB. PDB's tangible value in fostering collaboration, enabling real-time decision-making, and strengthening owner engagement are core themes echoed across different sectors.

Collaboration and Team Dynamics

PDB enables collaboration and strong team dynamics through early contractor involvement, integrated team decision-making, and a culture of transparency.⁸ Contractors participate from the earliest planning and design stages, offering design development real-time feedback on costs, construction feasibility, and risk allocation.

Owner Involvement and Satisfaction

PDB enhances owners' experience and readiness by enabling frequent collaboration and cost-informed decision-making throughout the design process. This allows owners to make timely, well-informed choices that align with project goals.⁹

Transparency and Trust

Transparent cost estimation and design development in PDB can build mutual trust among stakeholders. Owners gain clarity over project progress and financial implications, while builders and design professionals collaboratively share responsibility for risk and scope development.¹⁰

“

“Progressive Design-Build fosters great collaboration in the team. It creates one point of accountability for owners. It provides great opportunities for clients to know the cost as the design progresses and collaborates on risk, early packages, schedules, etc.”

— OWNER'S REP

“

“A collaborative approach that builds trust among all the stakeholders involved.”

— OWNER'S REP

⁸ Gad et al., “Lessons Learned from Progressive Design-Build Implementation on Airport Projects.”

⁹ Adamtey and Onsarigo, “Effective Tools for Projects Delivered by Progressive Design-Build Method.”

¹⁰ DBIA, “Progressive Design-Build: A Design-Build Design-Build Procured with a Progressive Design & Price”; Gad et al., “Lessons Learned from Progressive Design-Build Implementation on Airport Projects.”

From Risk To Resilience: Smarter Risk Management

Among five common project delivery methods, PDB outperforms in managing and allocating risk appropriately, offering a proactive approach that is consistently recognized for its effectiveness across various sectors. PDB enables stakeholders to identify, evaluate, and mitigate risks early in the project lifecycle, creating a more stable and transparent delivery environment.

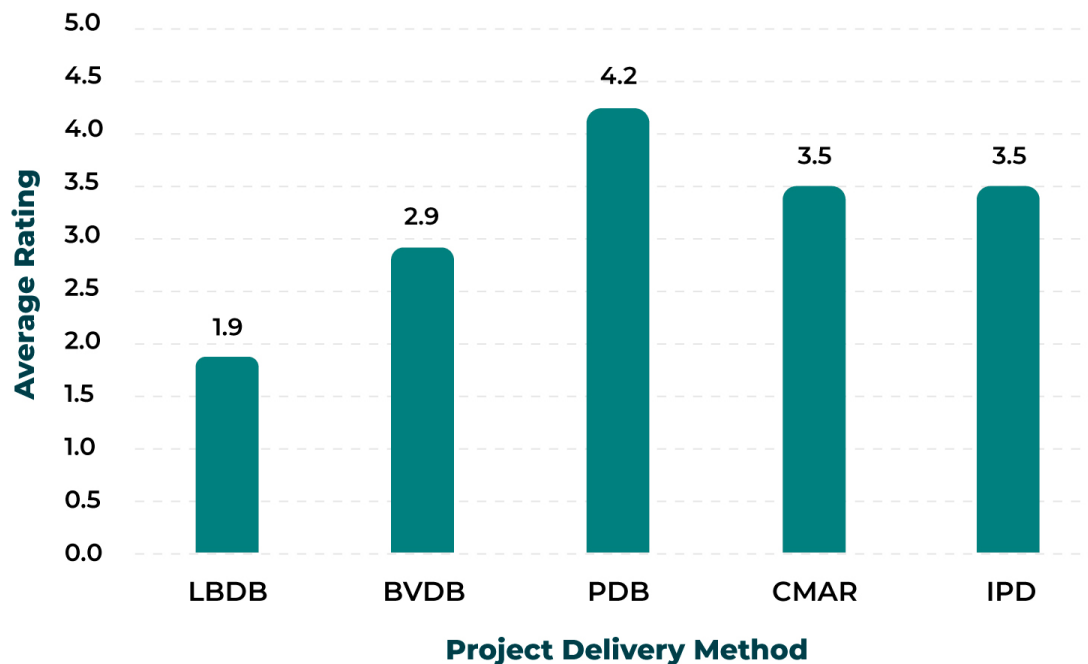


Figure 3: Ratings of Risk Allocation Effectiveness by Project Delivery Method

LBDB: Low-Bid Design-Build, **BVDB:** Best-Value Design-Build, **PDB:** Progressive Design-Build, **CMAR:** Construction Manager at Risk, **IPD:** Integrated Project Delivery

Figure 3 presents a comparative view of average risk allocation effectiveness ratings across five project delivery methods. PDB stands out with the highest rating of 4.2 out of 5, indicating strong industry confidence in its ability to effectively manage and distribute project risk. Construction Manager at Risk (CMAR) and Integrated Project Delivery (IPD) follow closely, each with a rating of 3.5, suggesting moderate effectiveness in risk allocation. Best-Value Design-Build (BVDB) receives a lower rating of 2.9, while Low-Bid Design-Build (LBDB) trails behind at 1.9, reflecting greater limitations in handling risk. These findings underscore PDB's advantage in promoting transparency and accountability through early collaboration and shared risk allocation.

Beyond the numbers, open-ended responses from survey respondents highlight key themes in how PDB supports risk allocation:

Shared Risk Philosophy: PDB promotes early discussions about risk, allowing teams to assign responsibilities transparently and collaboratively. This approach not only clarifies expectations but also mitigates conflict.

Design Risk Awareness: With early contractor involvement and iterative development, design-related risks are surfaced early and addressed before construction begins, reducing rework and change orders.

Project Clarity: The validation phase at the heart of PDB ensures that scope, cost, and timeline are clearly defined and agreed upon before construction, minimizing ambiguity and legal exposure.

“

“The risk-sharing approach of PDB is its biggest value. The risks of a project are also quantifiable as pricing information is readily available as the design emerges, providing the ability for a wider array of solutions to be investigated.”

— DESIGN/BUILDER

“

“PDB gives owners the confidence to move forward, knowing that project scope, cost, and schedule are clearly defined and mutually agreed upon before construction begins.”

— OWNER

Insurance Considerations in PDB

Industry stakeholders highlighted concerns about the availability of insurance coverage and the rising cost of acquiring sufficient policies under PDB contracts. These challenges can limit participation, particularly for small firms, and may deter owners from fully embracing the method.

Inability to Secure Adequate Insurance

Several respondents noted that securing required insurance coverage, especially for smaller consultants and subcontractors, can be a barrier to participation in PDB projects. As PDB involves earlier engagement and broader scopes of responsibility, insurance requirements can increase. In some cases, standard policies do not align with PDB's collaborative structure, making it difficult for firms to obtain adequate coverage.

Insurance Acquisition Cost

Another concern relates to the cost of acquiring insurance coverage under the PDB model. Respondents reported that high policy limits, often required to meet owner or agency standards, can be difficult or expensive to secure. In some cases, teams are only able to obtain partial "tower" coverage layered on top of base policies. Additionally, owner-controlled insurance programs (OCIPs) were described as increasingly costly and complex.

“

“The only challenge I’ve had in my career related to this is small business/minority sub-consultants and subcontractors not being able to meet the insurance requirements set forth by my company and/or the client.”

— DESIGN/BUILDER

“

“High policy coverage is expensive or we [are] unable to secure [the] full amount and can only secure tower coverage over house policies.”

— DESIGN/ENGINEER

PDB Barriers

Despite the growing momentum and high satisfaction associated with PDB, barriers to its broader adoption persist. In the survey, 24 percent of the respondents did not participate in PDB projects, and of those who previously participated in a PDB project, six percent were dissatisfied with PDB. A deeper analysis of qualitative feedback reveals that this hesitancy is shaped by regulatory constraints, market readiness, institutional inertia, and internal firm limitations.

Limited Market Opportunity and Adoption

Firms can struggle to gain experience or build operational capacity around the method. PDB is still perceived as an emerging delivery method lacking the maturity or familiarity needed for consistent use. Some firms remain unfamiliar with their collaborative structure and potential benefits without widespread implementation.

Regulatory and Legal Constraints

One of the most significant barriers industry professionals identified is legal and regulatory limitations for public sector delivery. The Federal Acquisition Regulations (FAR), which govern many federally funded projects, can restrict the use of PDB. The FAR constrains PDB because it can require more defined scopes, clearer price competitions, and firm contract terms than PDB might be able to offer. This can make the method inaccessible to firms working in defense, infrastructure, and other public sector domains.



“[PDB is] not legislatively authorized where our company is headquartered. We are not opposed to the method if the opportunity arises.”

— DESIGN/BUILDER

Owner Familiarity and Cultural Resistance

Many owners are either unaware of PDB or hesitant to adopt it due to uncertainty about roles, cost control, or procurement procedures. Additionally, some regions demonstrate a cultural resistance, a reluctance to change delivery methods when existing approaches, such as DBB or CMAR, are familiar, well-established, and perceived as effective. This status quo bias can make it difficult to embrace newer models like PDB, even when they offer potential process or performance benefits.

Internal Firm Strategy and Risk Aversion

Several respondents noted strategic and operational reasons for avoiding PDB. Some expressed concern about risk exposure, particularly around cost volatility, redesign requirements, or poorly defined risk-sharing agreements that may burden design teams excessively. Designers/Engineers refer to limited resources or a lack of internal experience as barriers to participation.

What Next?

PDB continues to gain traction. However, the industry needs more insight into how PDB works in practice to provide specific and data-driven guidance.

How Can You Contribute?

Case studies of completed PDB projects are key to improving understanding and implementation.

Areas for Further Exploration

Equitable Risk Allocation and Management: There is a strong interest in exploring how PDB supports fair and effective distribution of risk among project stakeholders, especially as project size and complexity increase.

Increasing Availability and Capacity of Insurance Coverage: Exploring how to reduce insurance challenges and secure coverage for PDB projects across both small and large projects.

Minimizing Disputes: Understanding how PDB's structured collaboration and transparent processes can contribute to fewer claims and conflicts.

Transparent DB Pricing: Providing both owners and design-builders with confidence that DB pricing is fully transparent and accurate, particularly in markets with high volatility.

Use of Off-Ramps: Exploring how to employ off-ramps effectively after the pre-construction phase in a manner that is equitable to all stakeholders.

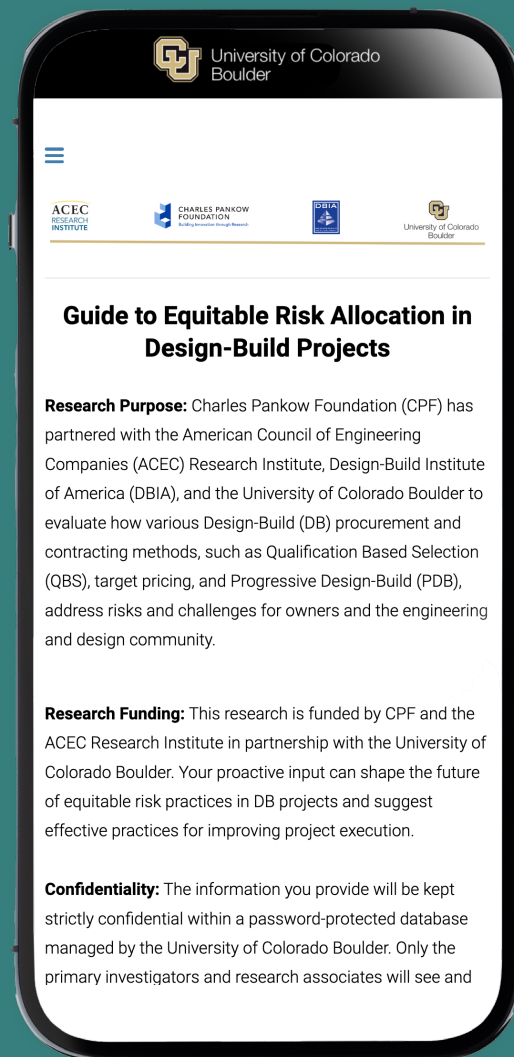
What This Will Achieve

- Clear recommendations for owners and project teams.
- Better insight into the benefits and limitations of PDB.
- Guidance for refining procurement and contracting practices.

How Can You Contribute?

If you've completed a PDB project, we invite you to support this research by sharing your experience. Sign up using the form linked below or by scanning the QR code.

[https://cuboulder.
qualtrics.com/jfe/form/
SV_8caNsEyv77wyCiO](https://cuboulder.qualtrics.com/jfe/form/SV_8caNsEyv77wyCiO)



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