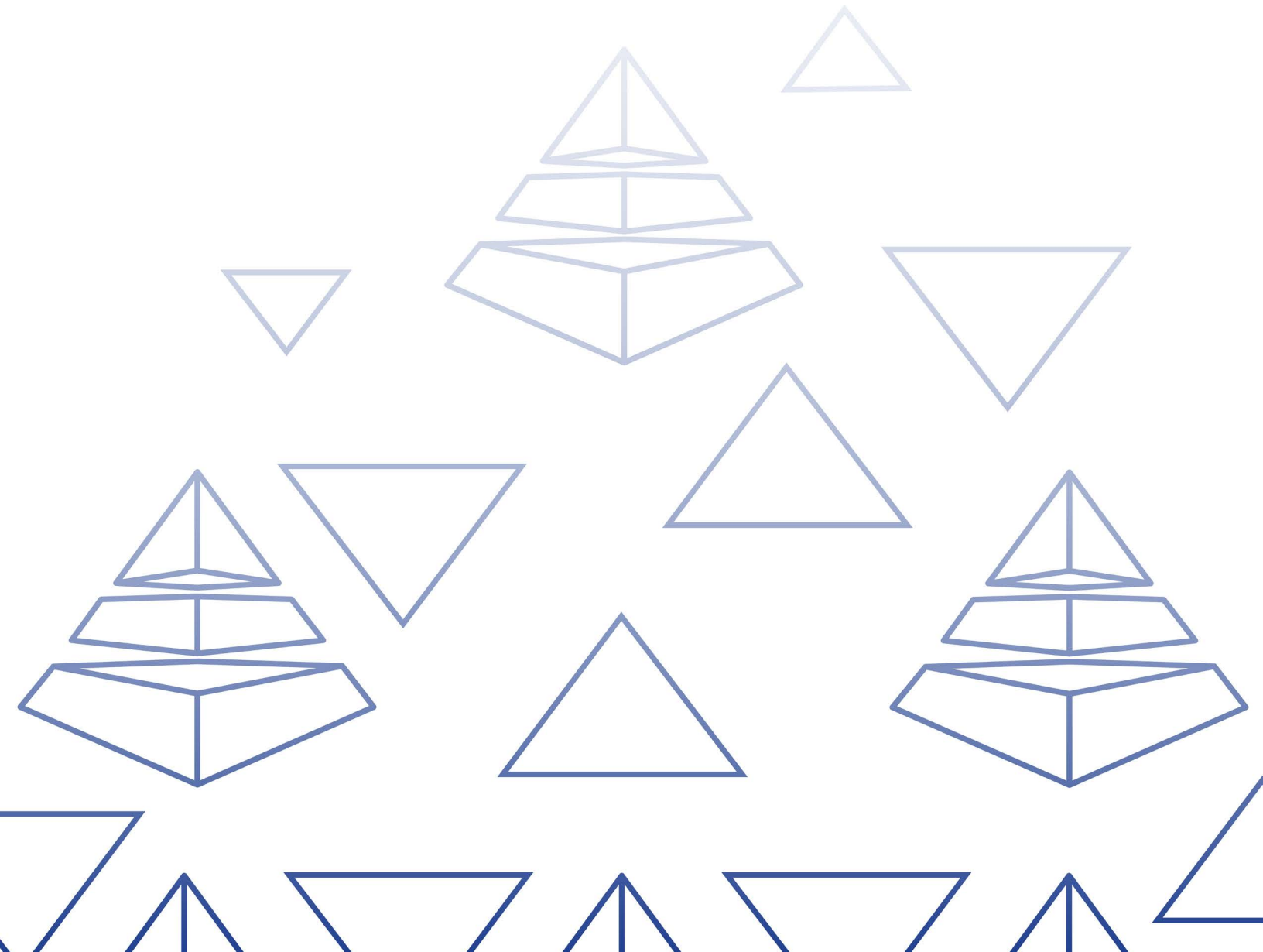
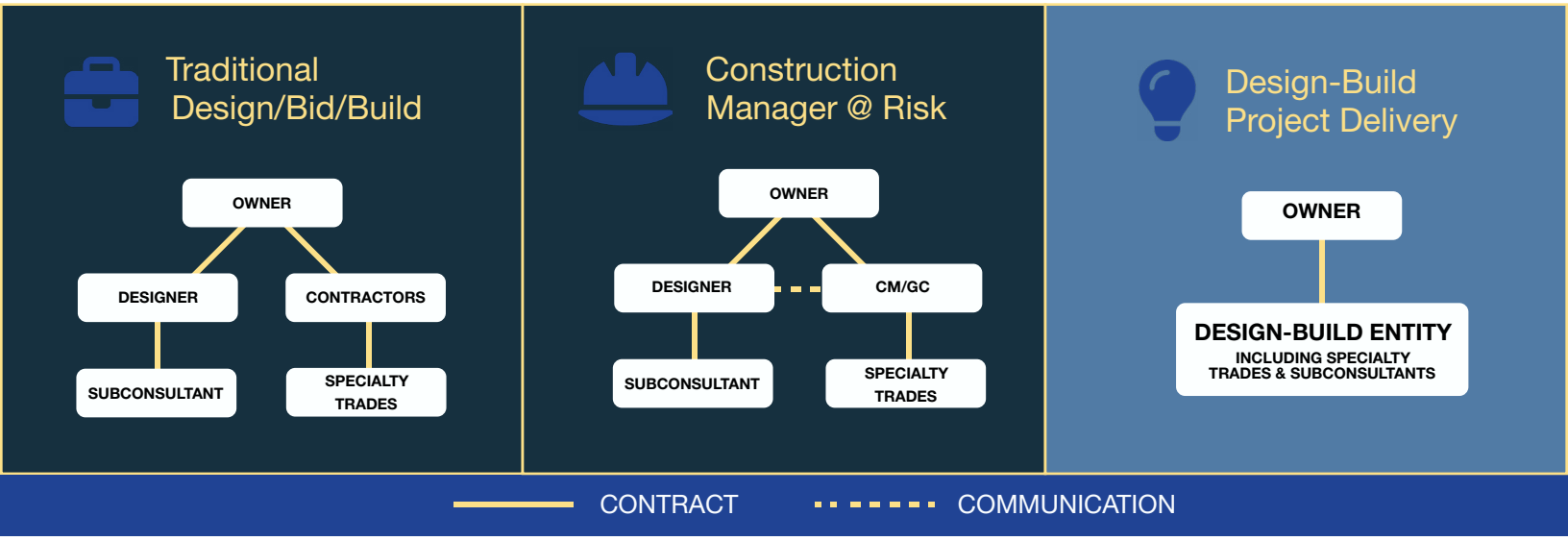
Design-Build
Data Sourcebook



Why Design-Build?

Once considered an “alternative” form of project delivery, Design-Build is now the fastest growing and most commonly used project delivery system. Nearly half of all design and construction projects in the U.S. are being delivered using some form of Design-Build. It is widely used for both private and public sector (federal, state and municipal) projects. It is used across all project types, including vertical (building) construction, transportation and water/wastewater markets.

Design-Build saves time and money by encouraging innovation and collaboration. This Design-Build Data Sourcebook highlights some of the advantages compared to other project delivery methods.



Traditional Project Delivery

The Owner must manage two separate contracts which all-too-often creates an adversarial relationship between the designer and the contractor. If something goes wrong or an unforeseen circumstance requires changes, the designer and contractor blame one another for the cost overruns or schedule changes, often leading to litigation and delays which add to the project cost.

Design-Build Project Delivery

The Owner executes one contract with a single point of responsibility. Everybody on the team works together from the beginning of the project. Any changes are addressed by the entire team, including the Owner, driven by collaborative problem-solving and innovation — not excuses or blame-shifting.

While single-source contracting is the fundamental difference between Design-Build and traditional project delivery, equally important is the culture of collaboration inherent in Design-Build.

Research over decades has consistently shown the innovation and collaboration inherent in Design-Build leads to faster project delivery, with more reliable performance and less cost and schedule growth.

Impressive Performance

102%
faster
than traditional
Design/Bid/Build

61%
faster
than construction manager
at risk (CMR)

3.8% **less cost growth**
than traditional Design/Bid/Build

Design-Build is anticipated to account for

1,900,000,000,000

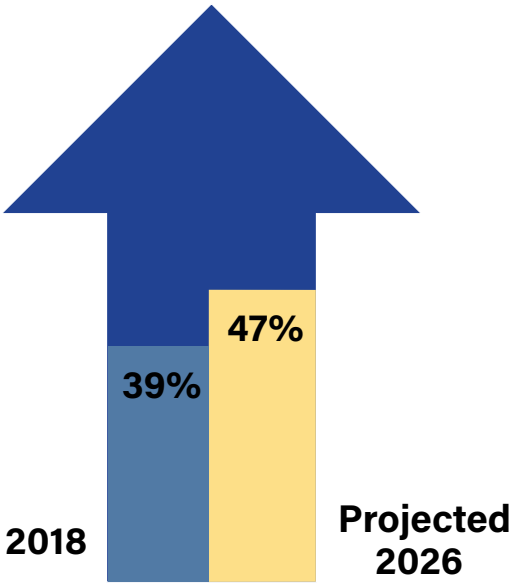
(that's $1.9 trillion)

of construction spending over the 2022-2026 forecast period.

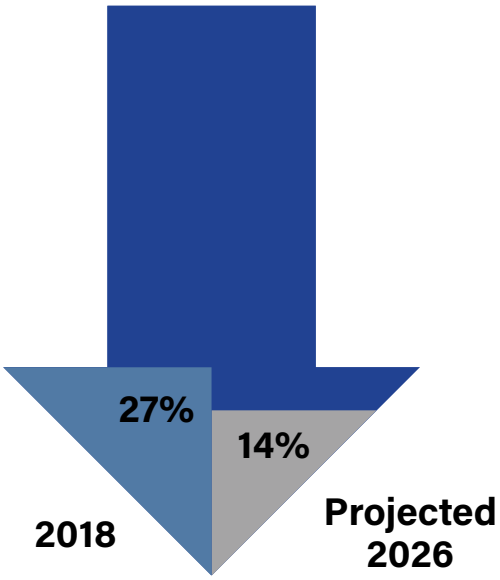
Impressive Growth

Design-Build is the fastest growing, most popular project delivery method in the nation and will account for nearly half of all construction spending by 2026.

Design-Build Growth



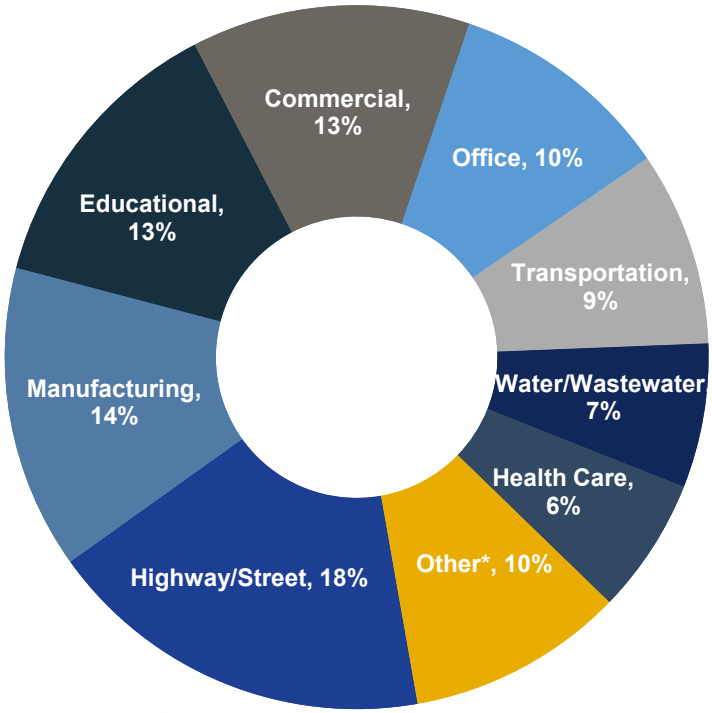
Design/Bid/Build Decline



DISTRIBUTION OF FORECAST SPENDING BY SEGMENT

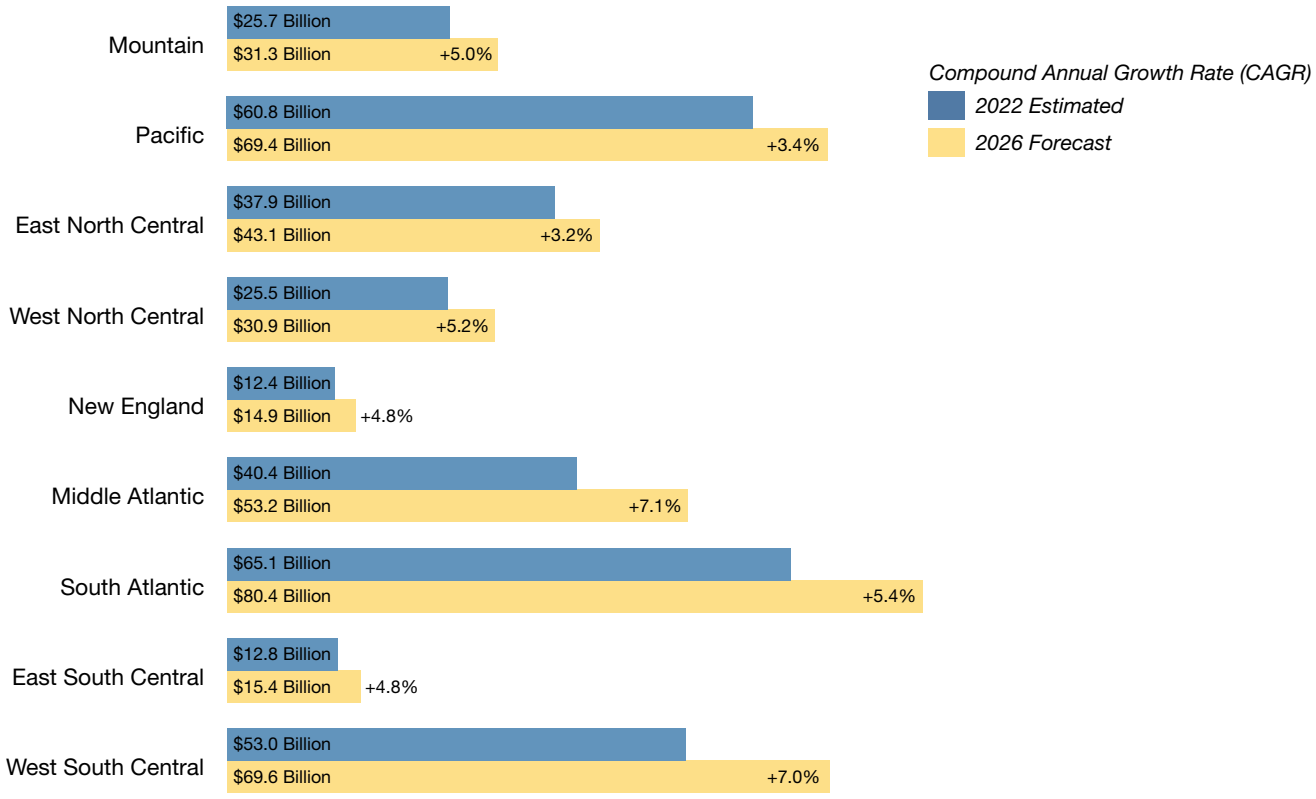
Combined CPiP spending, 2022–2026

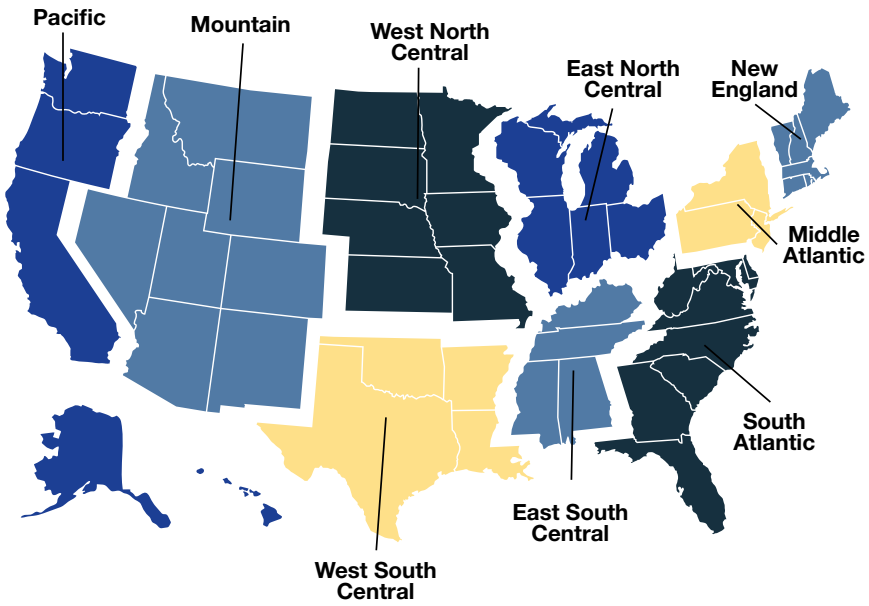
The largest Design-Build construction put in place (CPiP) spending will be seen in the highway/street, educational and manufacturing sectors.



*Other includes public safety, religious, A&R and lodging.

DESIGN-BUILD WILL CONTINUE TO GROW IN EVERY REGION





Census Regions

"Design-Build is no longer an alternative method. It is a main part of how we deliver our program."

—Public Owner

Digging Deeper

PROJECT COST

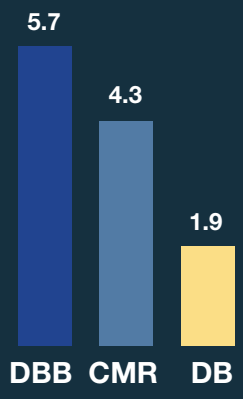
Projects using Design-Build (DB) **cost less** per square foot when compared to Construction Manager at Risk (CMR) and Design/Bid/Build (DBB). Design-Build projects also average **less cost growth** than a comparably scoped project using CMR and DBB.

PROJECT SCHEDULE

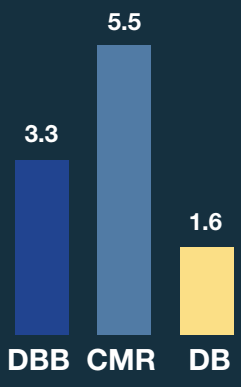
Design-Build was also the **best performing** project delivery system in terms of schedule growth, delivery speed and construction speed.

Performance Measure	DB vs. CMR	CMR vs. DBB	DB vs. DBB
Unit Cost	1.9% less	1.6% more	0.3% less
Cost Growth	2.4% less	1.4% less	3.8% less
Schedule Growth	3.9% less	2.2% more	1.7% less
Construction Speed	13% faster	20% faster	36% faster

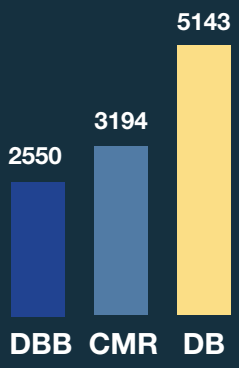
Cost Growth (%)



Schedule Growth (%)



Delivery Speed (ft²/mo.)



Behind the Numbers

These conditions are most influential in delivering both cost and schedule efficient projects.

LOWER UNIT COST

- Higher team chemistry among the Owner, designer and builder (GC, CM or design-builder)
- Open book contracting terms, such as a cost plus a fee with a guaranteed maximum price (GMP)
- Lower initial contracted unit cost

LESS COST GROWTH

- Use of a DB project delivery system
- Higher team chemistry among the Owner, designer and builder (GC, CM or design-builder)
- Earlier involvement of the builder

LESS SCHEDULE GROWTH

- Participation of the designer and builder (GC, CM or design-builder) in project goal-setting
- Earlier involvement of the builder
- Lower project complexity

FASTER CONSTRUCTION SPEED

- Use of a DB or CMR project delivery system
- Larger gross square footage of the project
- Higher initial contracted unit cost

FASTER DELIVERY SPEED

- Use of a DB or CMR project delivery system
- Larger gross square footage of the project
- Higher initial contracted unit cost

The Keys to Success

BEST PERFORMERS

Across the case studies of the most successful projects, there were two recurring themes:

- The Owner placed a high emphasis on creating a relational project culture
- Repeated use of the same designer and/or builder (GC, CM or Design-Builder)

WORST PERFORMERS

Across the case studies of the least successful projects, three themes emerged:

- Lack of experience with the project delivery system or project management in general
- Poor communication between the Owner and the builder
- Understaffing or turnover within the Owner, designer or builder's organization

THE LIKELIHOOD OF PROJECT DELIVERY SUCCESS CAN BE IMPROVED THROUGH PROCESSES WHICH ARE CENTRAL TO DESIGN-BUILD DONE RIGHT®.

1

Assembling the project team early

3

Communicating expectations

2

Developing a relational project culture

4

Engaging in succession planning

Ability to fast-track

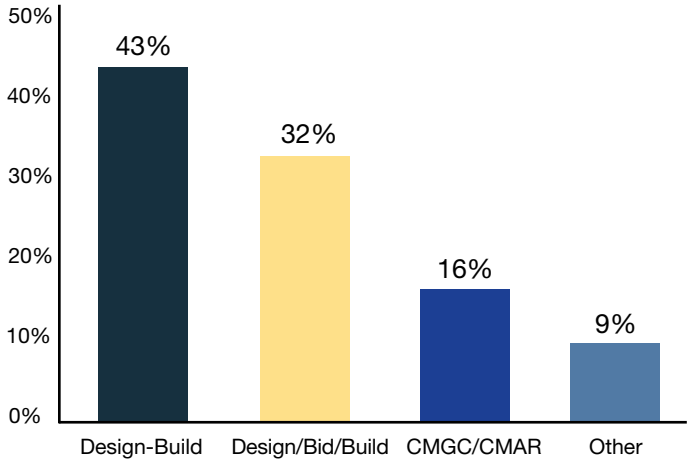
Opportunites to innovate

Increase collaboration

The ability to fast track, innovate and increase collaboration were listed as top benefits of Design-Build.

DESIGN-BUILD ENCOURAGES MWDBE PARTICIPATION

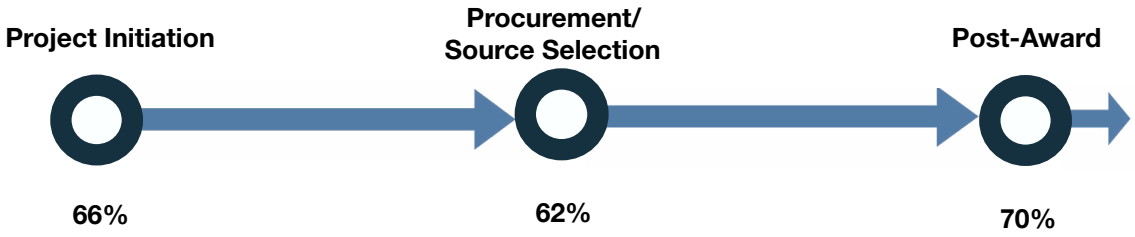
Across participant types, 64% of Owners, 52% of specialty trade contractors, 48% of Owner Advisors, 39% of general contractors/construction managers and 32% of architects selected Design-Build as the delivery method that most encourages participation from Minority, Women and Disadvantaged Business Enterprises (MWDBEs).



"I think because we utilize Design-Build to deliver our projects, we are fostering more true partnerships with MWDBE firms. "

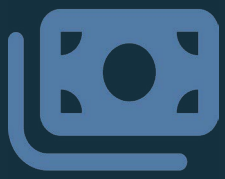
THE MAJORITY OF OWNERS USE OWNER ADVISORS

Owner Advisors are employed across various project phases.



Design-Build at a Glance

LOWER UNIT COSTS



0.3% VS DBB

1.9% VS CM@R

FASTER CONSTRUCTION

36% VS DBB

13% VS CM@R

LESS COST GROWTH

3.8% VS DBB

2.4% VS CM@R

LESS SCHEDULE GROWTH

1.7% VS DBB

3.9% VS CM@R

FASTER DELIVERY SPEED

102% VS DBB

61% VS CM@R

2018 Project Performance Review, CII/Pankow

Design-Build Resources

Design-Build Done Right® Best Practices

Design-Build Projects Database

Project Delivery Primer

Design-Build Contracts

DBIA Design-Build Done Right® Courses

DBIA Advocacy Resources

Design-Build Professional Certification

DBIA Conferences

Sources

Revisiting Project Delivery Performance, CII/Pankow, 2018.

Design-Build Utilization Combined Market Study, FMI 2021, and Mid-Cycle Update Report, FMI 2023

Design-Build Institute of America
1001 Pennsylvania Avenue NW, Suite 410
Washington, DC 20004
Telephone: (202) 682-0110
www.dbia.org