
Project Delivery Options

Fredrick A. Davis, II, AIA, Chief Operating Officer
Patrick Florence, Director of Construction/Capital Planning
Steve Hess, Principal, Project Management Consultants NC

May 28, 2025



ENGAGE. CHALLENGE. INSPIRE.

Project Delivery Options

Design-Build-Bid (DBB) (15%)

- Traditional competitive bid
- Final costs at bid day

Construction Management at Risk (CMaR) (80%)

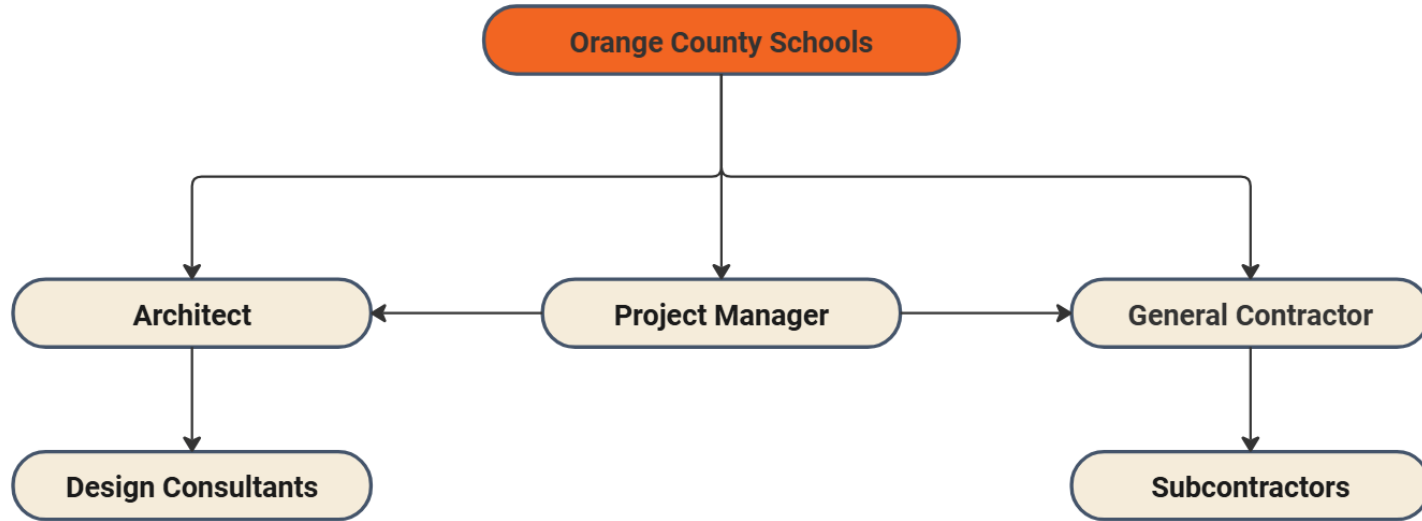
- Construction Manager & subcontractors chosen by qualification
- Cost Forecasting included in preconstruction services

Design-Build (DB) (5%)

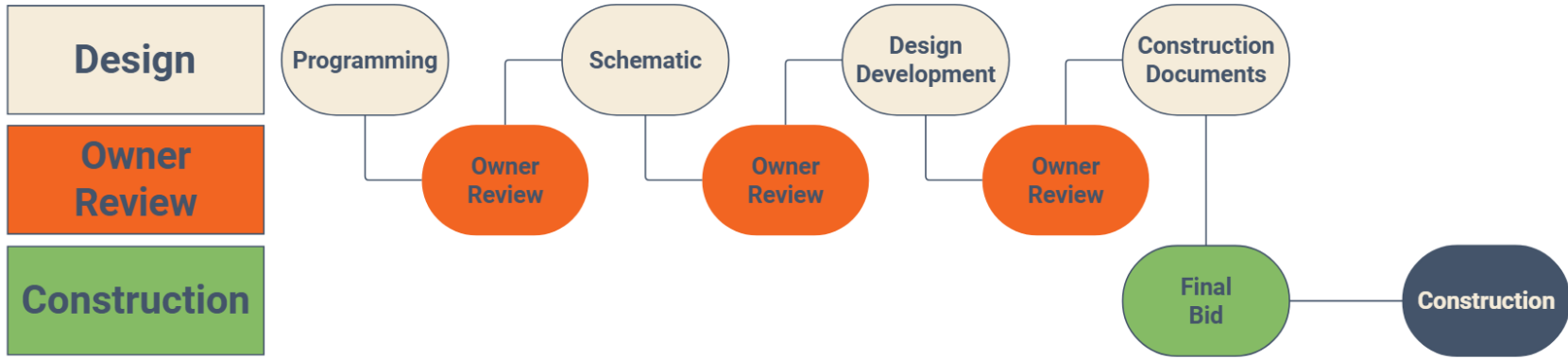
- Contractor led design, competitively bid
- State Construction Office requires proof of need to select over CMaR & DBB



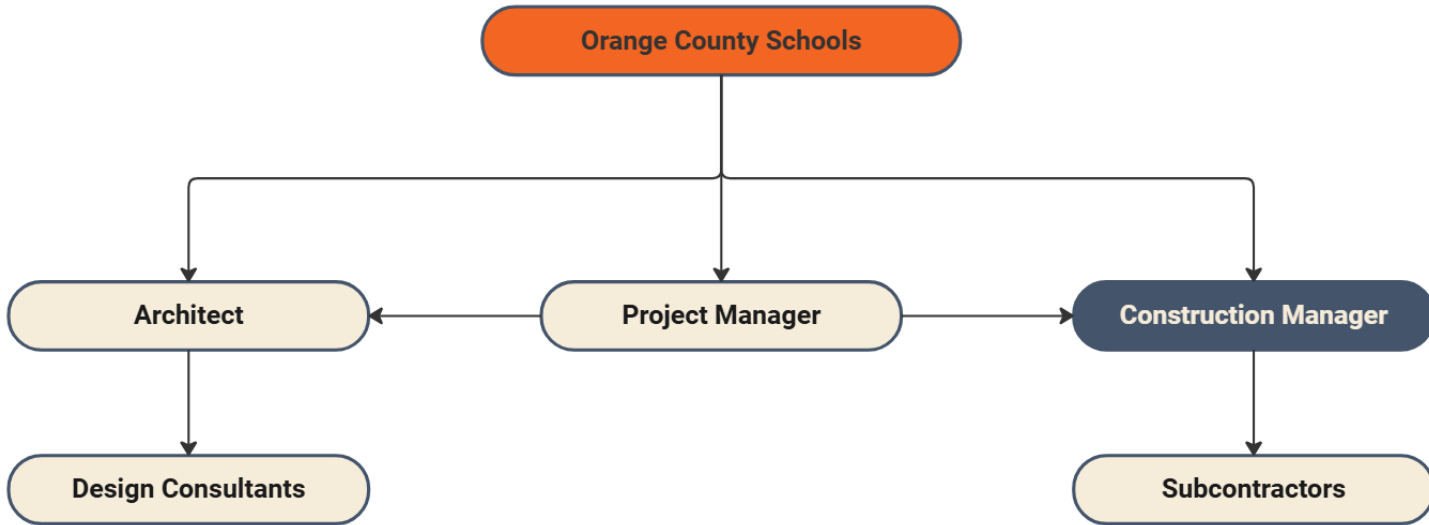
Design-Bid-Build (Hard-Bid)



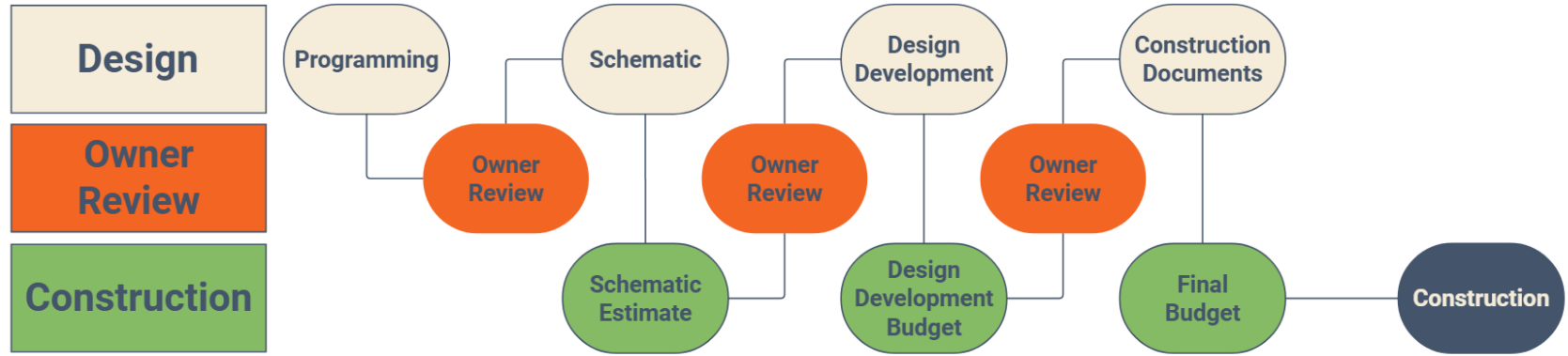
Design-Bid-Build (Hard-Bid)



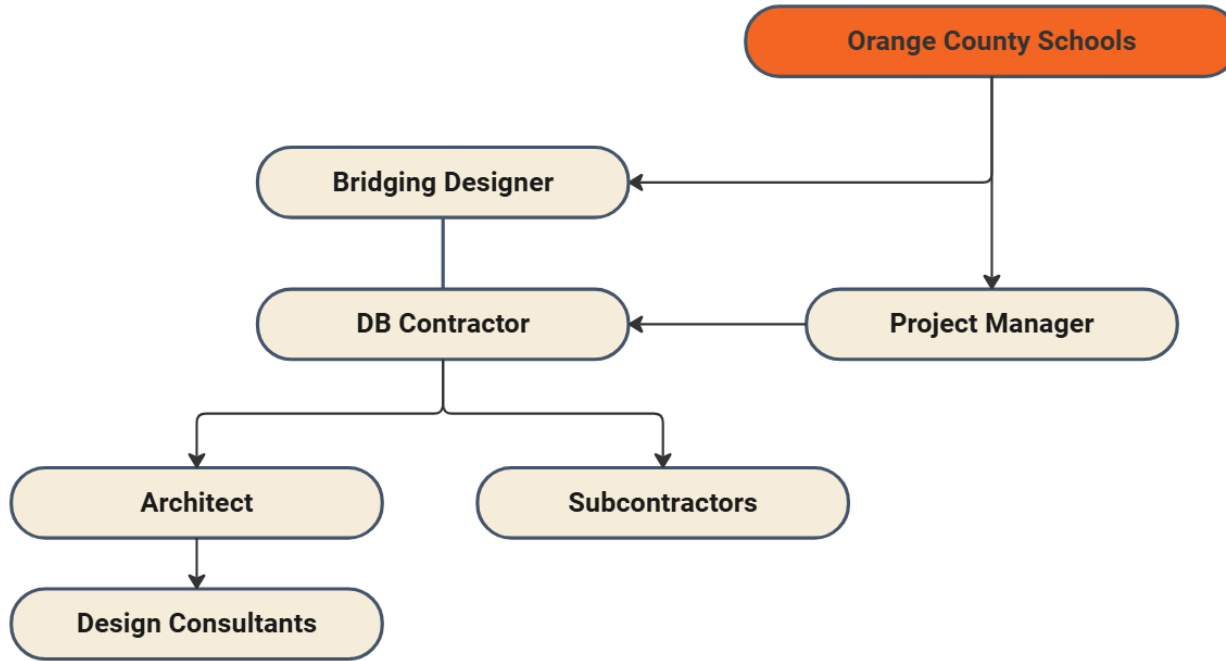
Construction Manager at Risk (CMaR)



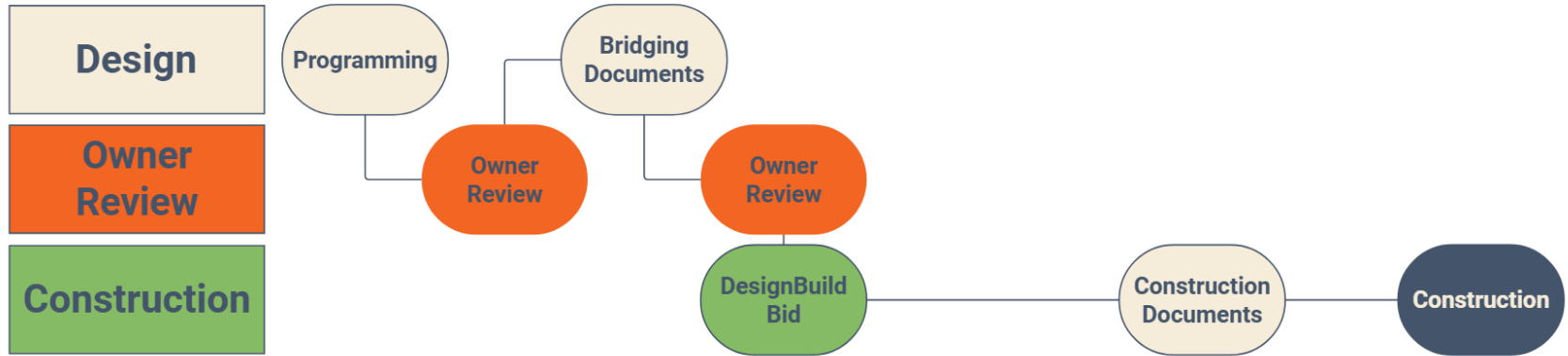
Construction Manager at Risk (CMaR)



Design Build (Contractor Led)



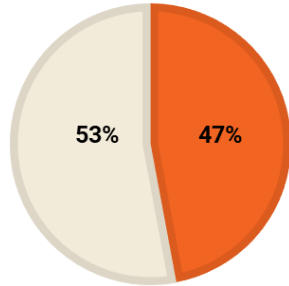
Design Build (Contractor Led)



Survey Participants

SURVEY PARTICIPANTS

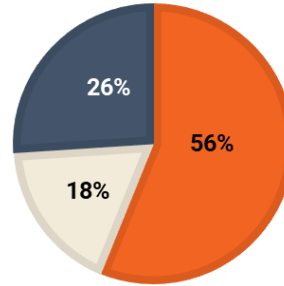
Architects Builders



**NC Projects
(17) Firms**

SCHOOL TYPES

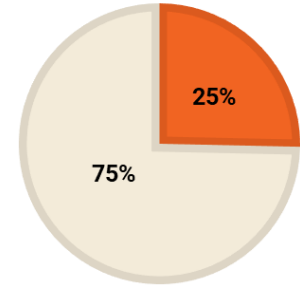
Elementary Middle High



**(292) Schools
2014-2025**

CONSTRUCTION

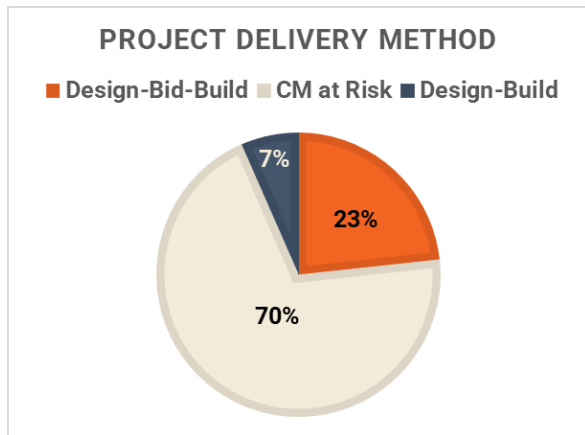
New Construction Renovation



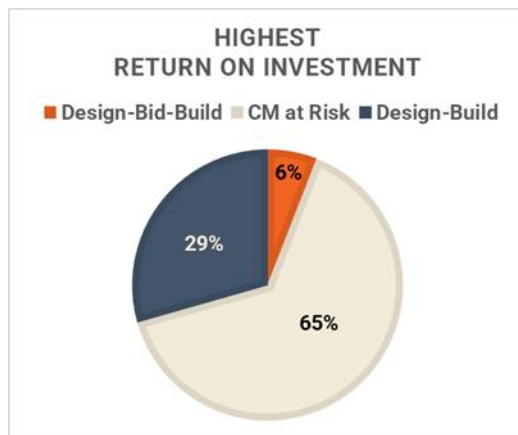
Renovations
ES: 67%
MS: 85%
HS: 84%



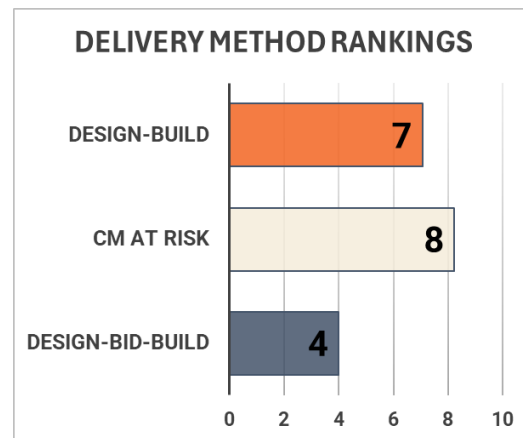
Survey Results



**Hard-Bid
trending to
CMaR**



**Adjust scope
to budget
during design**



**Growing
interest in
Design-Build**



Design-Bid-Build Survey Comments

“Out of this project selection, neither design-bid-build contractor experience was top-notch and one **contractor was increasingly adversarial**. We've had plenty of good design-bid-build experiences across many project types, **but it is always at the risk of who bids low**, and with schools that have a very critical open date, design-bid-build can be too risky.” (Architect)

“It's an **adversarial situation** from beginning to end. Cost goes up from bid day on.” (Contractor)

“**Incentives are not aligned in this delivery method**, if you happen to have the right GC team, this can be a good delivery, **you miss a lot of cost saving opportunity in design**.” (Contractor)

“This delivery is **not collaborative, contractor late involvement for cost and schedule input**, typically results in cost and schedule over runs, not flexible (early packages), higher change order rate, closed book accounting so the **owner doesn't have the opportunity to capture savings**. The only possible benefit to DBB is the initial thought of competitive bid and preconstruction services fee, but typically does not result in savings at the end of the day. If the project is relatively simple it is easier for the owner to administer.” (Contractor)



CM at Risk Survey Comments

“The **CMs were more involved in pre-construction when we first started using this project [delivery]**. These days, **they are not as interested in document review and constructability support for the design team**. More effort is put into pricing the projects high and create change orders.” (Architect)

Smooth process with qualified construction and design partners. CM is the Owner's fiduciary as they are responsible to act in the Owner's best interests. **Early collaboration and coordination with the Owner, Designers, & CM make this a valuable process.** (Contractor)

“A good CM process leads to successful projects everytime. **Leaving the Architect under the purview of the owner while also engaging a CM early** to begin pricing and working through complex construction issues is the most effective and efficient way to get high quality value based design... I also find it **advantageous to owners in most cases to procure their A/Es and GCs separately to get the best qualified firms** in both areas.” (Architect)

The CMAR delivery has proven to be very successful in both the public and private sectors. We have seen there are **significant advantages of CMAR over DBB**, and very similar success stories between CMAR and DB deliveries. (Contractor)



Design Build Survey Comments

“DB [design-build] is most cost effective with fewest change orders but it also has **potential for reduced quality as there are fewer checks on the contractor.**” (Architect)

“Design build on schools will **limit the pool availability of school builders vs. designers teaming up** mid size GC will get locked out.” (Contractor)

“**We are not convinced that the contractor lead project benefits the owner.**” (Architect)

“**Incentives are aligned on design build team, designers and GCs still figuring out this delivery method and the added risk / how to price.**” (Contractor)

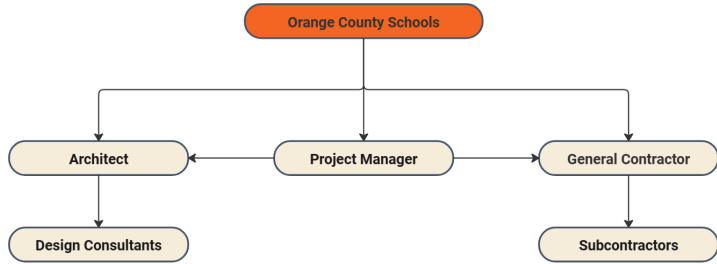
“I've seen Design-Build go bad when the GC does not allow direct communication between the owner and A/E. However, **when the lines of communication are open, DB can be a highly effective delivery method.**” (Architect)

“Great process. **Owner has to deal with one entity contractually.** Does not play referee with contractor and designers. Designers work for the builder. Helps with coordination because they both have shared stake in the game. A more risky endeavor for the builder though.” (Contractor)

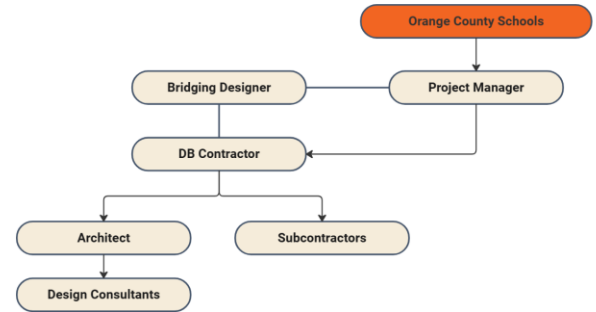


Organizational Chart Comparison

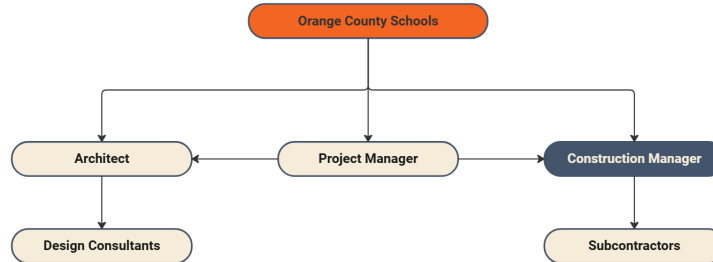
Hard-Bid



Design-Build

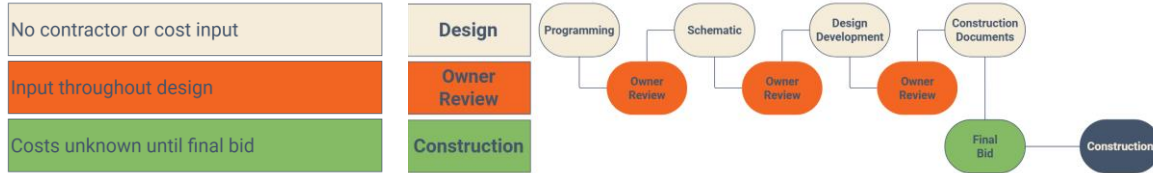


CM at Risk

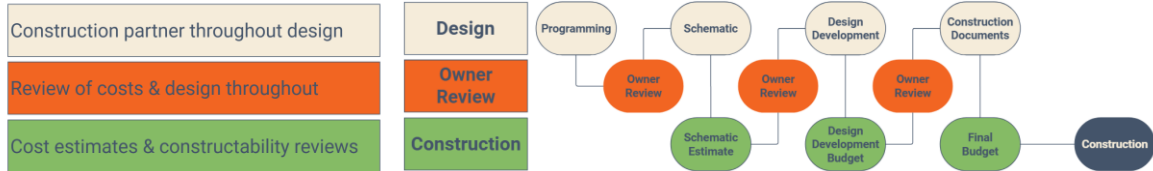


Delivery System Comparison

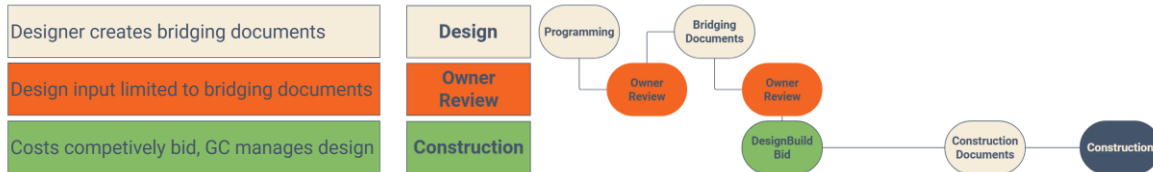
Design-Bid-Build



Construction Management at Risk



Design-Build



Delivery System Comparison

	Design-Bid-Build	CM at Risk	Design-Build
Owner Design Participation	Work with architect throughout the process	Work with architect along with GC Input	Limited to conceptual design
Architect Selection	Owner selects architect	Owner selects architect	Owner selects GC-architect team Limited pool
Contractor Selection	Owner prequalify bidders Lowest bid must be accepted.	Owner interview GC team Owner review of subcontractors	Owner interviews GC GC selects subcontractors
Collaboration	Owner - architect collaborate GC follows plans & specifications	Owner-architect-GC collaborate GC engages subcontractor input Estimating & constructability reviews	Owner-architect collaborate early GC-architect collaborate Limited owner involvement
Schedule	Least flexible scheduling option Construction starts after bid	Early bid packages allow construction to overlap with design	Additional step of hiring bridging designer Early bid packages allow construction to overlap with design
Costs	Costs determined at design completion Competitive, binding bid of GC	Costs estimate reviews during design Able to adjust scope to budget	Costs locked in at conceptual design Competitive, binding bid of DB team
Costs Transparency	Closed book Owner has no right to review	Open book Owner has right to review Potential for shared savings	Closed book Owner has no right to review
Zoning & Permitting	Owner manages zoning & permitting team	Owner manages zoning & permitting team	Owner manages zoning team GC manages permitting team



Questions?

Resources



ENGAGE. CHALLENGE. INSPIRE.