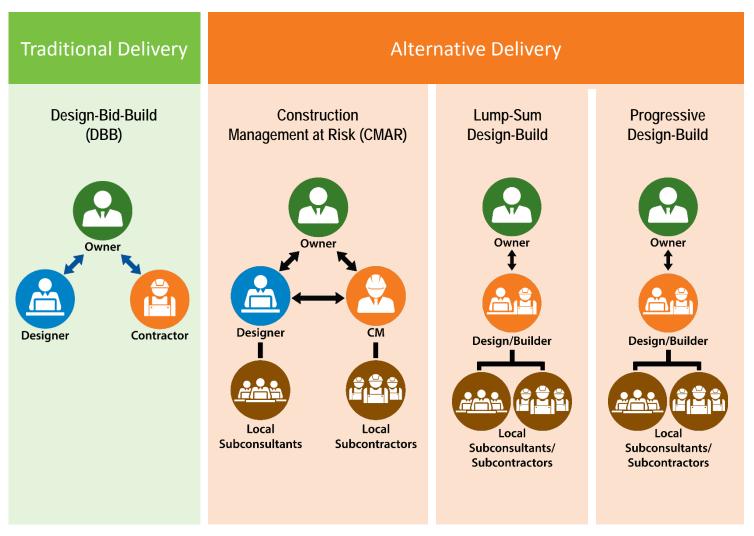


Alternative Delivery >>>> Building Better Designs

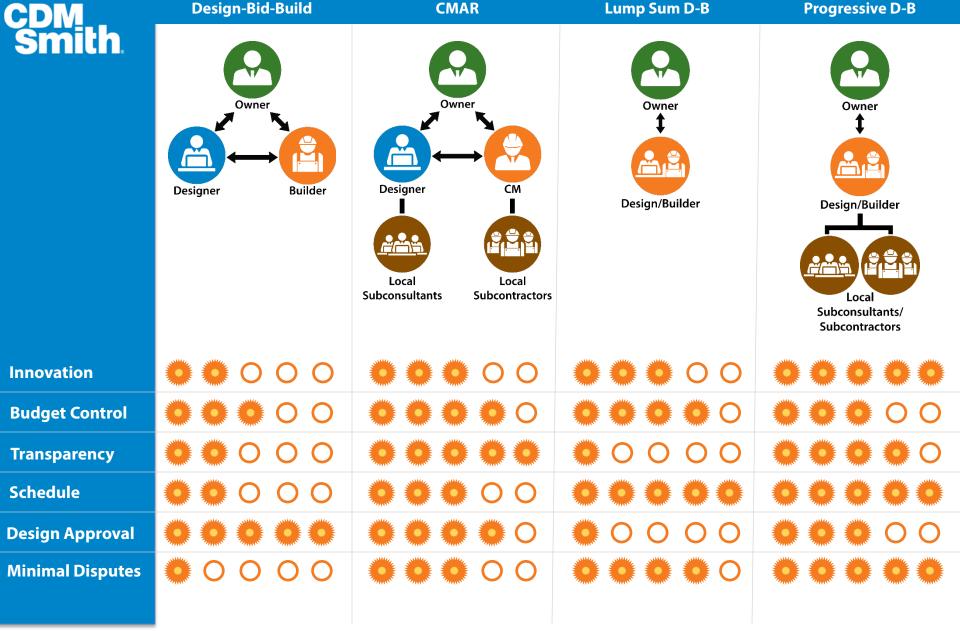
Optimizing Your Delivery Method: *Let Your Project Goals Be Your Guide*



Your options for delivery







Every delivery method has relative strengths and weaknesses.

CDM Smith

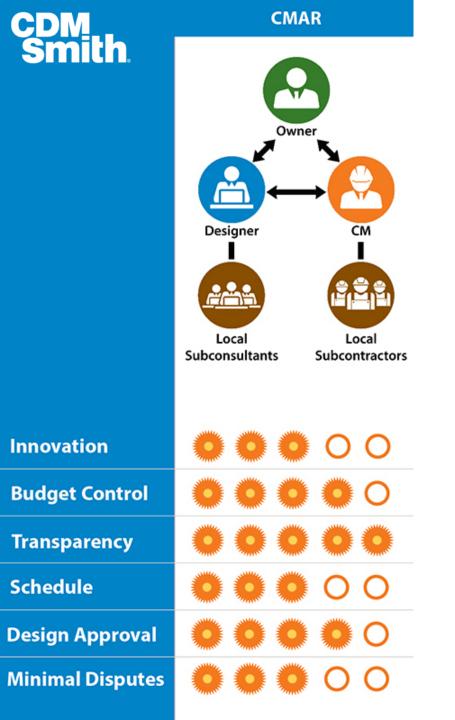
Owner Owner Designer

Design-Bid-Build

Innovation	
Budget Control	
Transparency	
Schedule	
Design Approval	
Minimal Disputes	$\bigcirc \bigcirc $

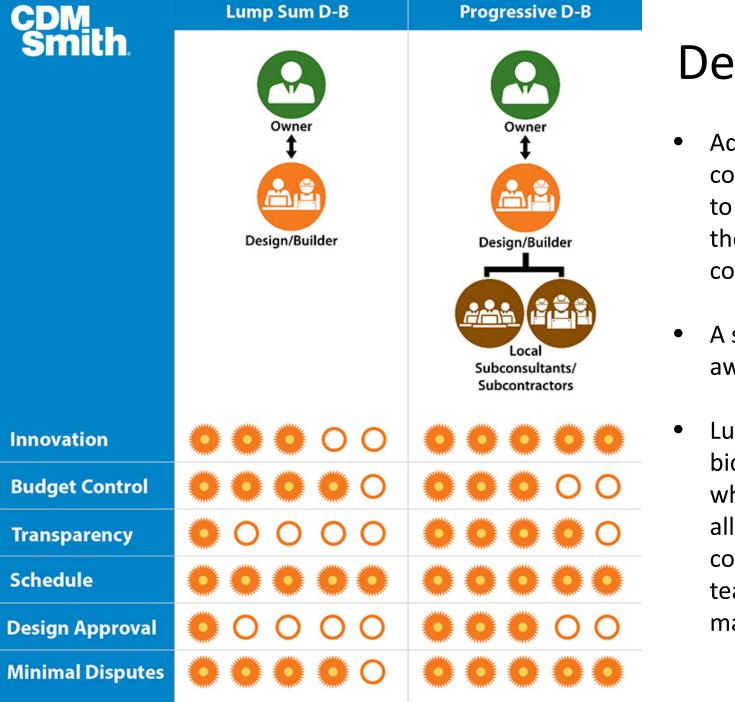
Design-Bid-Build

- Most common and familiar approach
- Design, procurement and construction in separate phases
- PROS: Clear requirements; familiarity to all parties; pre-bid design approval; contractors compete on price
- CONS: Little opportunity to optimize cost/schedule; limited transparency and innovation; increased potential for change orders, claims & disputes; limited owner input into equipment and subcontractors



Construction Management at Risk (CMAR)

- Separate contracts with engineer/designer and construction manager
- PROS: Good for schedule, equipment choice, budget control; constructability insight during design from CM; transparent subcontract bidding
- CONS: Cultural change/challenge; labor-intensive bidding process



Design-Build

- Advisor or bridging consultant does up to 30% of the design, then design/builders compete
- A single contract is awarded
- Lump sum is a lowbid competition, while progressive is all about collaboration and teamwork to unlock maximum value

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	Progressive D-B
Smith	Owner Owner Design/Builder Local
	Subcontractors
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Progressive **Design-Build**

- **PROS:** Maximum collaboration and innovation; efficient scheduling and coordination; construction can start early; owner's staff can be deeply involved; a single point of responsibility
- **CONS:** Requires extensive owner buy-in and involvement; state regulations can be onerous; requires careful risk balancing and contracting

The clarity of the owner's vision is the key to a successful project.

If your priority is...innovation:





- Maximum collaboration between designers and builders
- Operators can gain knowledge and take advantage of innovation
- Find a team that's done it together



If your priority is...budget control:



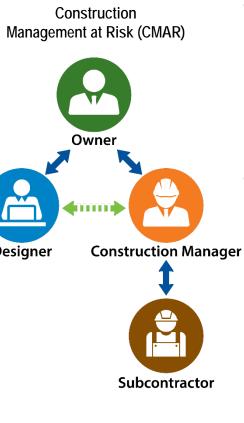


- D-B-B seems best, but fails if you hit roadblocks
 - CMAR is open book: the owner gets to see everything!
- Progressive
 D-B can also
 be good for
 budget
 control



If your priority is...transparency:





- CMAR offers open book access to everything as it proceeds
- Progressive
 D-B is much
 more
 transparent
 than lump sum D-B.
 Owner
 involvement
 is key.



If your priority is...schedule:

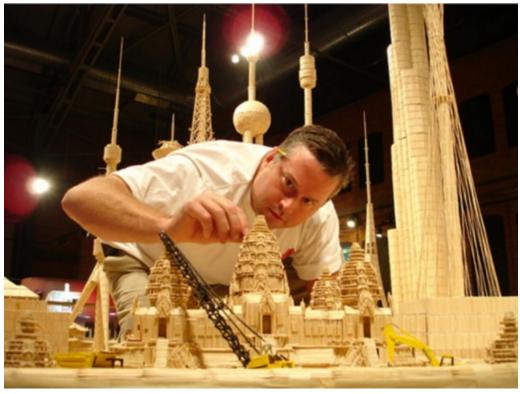


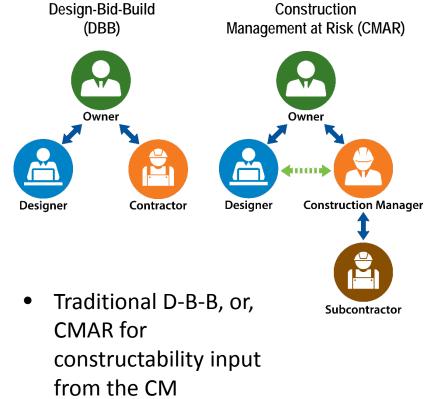


- D-B lets you begin construction tasks and procurement during design development
- Maximum schedule savings result from total coordination



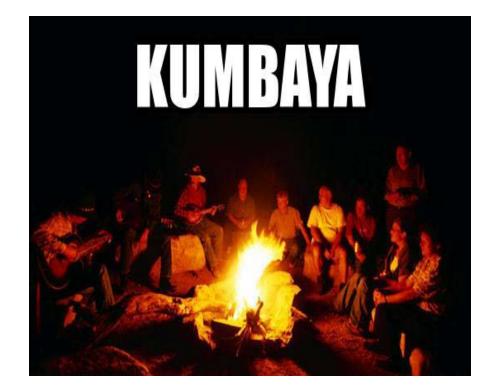
If your priority is...design approval:







If your priority is...minimal disputes:





- Designers,
 builders and
 owner's staff
 are in one
 room
 throughout
 the entire
 process
- Do your homework; With advisor, get a handle on costs and don't try to shift all the risks



How can owners optimize their alternative delivery project?

BETTER ->>>

<F GOOD

Doug's keys to optimizing AD

• Get buy-in from legal

 D-B: Don't make cost-impacting decisions too early

• CMAR: Plan for Value Engineering



Chitra's keys to optimizing AD

• Identify an executive sponsor

• Get O&M involved

• Ensure your scoring system is sound



For more information, please contact our speakers:



Doug Varner, PE (817) 916-2926 varnerdl@cdmsmith.com Chitra Foster, PE, DBIA (214) 346-2804 fostercp@cdmsmith.com

To learn more about CDM Smith's Alternative Delivery Capabilities, go to: <u>http://cdmsmith.com/alternativedelivery</u>

