



Integrated

PROJECT DELIVERY
SEMINAR SERIES

09

IPD-*“ish”*

A look at other popular
delivery models relative to IPD

Produced by:



HansonBridgett

McGraw Hill
CONSTRUCTION



AIA California Council



AGC
CALIFORNIA



Alternatives

Does “Full IPD”
Seem Like A
Big Leap
For You
Right Now?



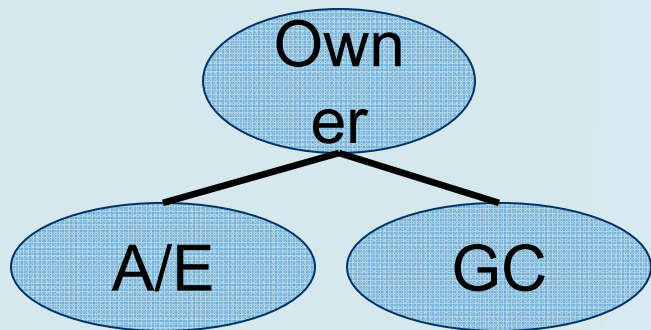


Try IPD-“ish”

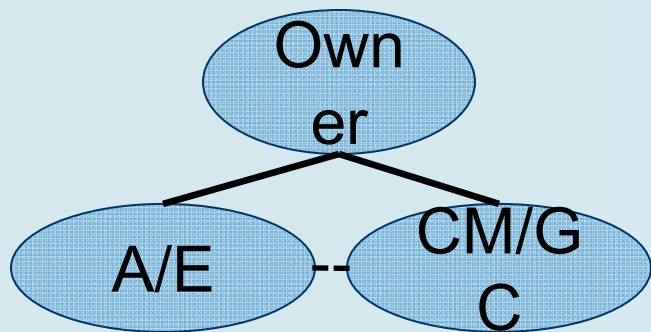
- Definition of “*ish*”
 - having a character of
 - similar to
- How do these delivery models match up?
 - Design-Bid-Build
 - Multiple Prime
 - CM at Risk
 - Design-Build



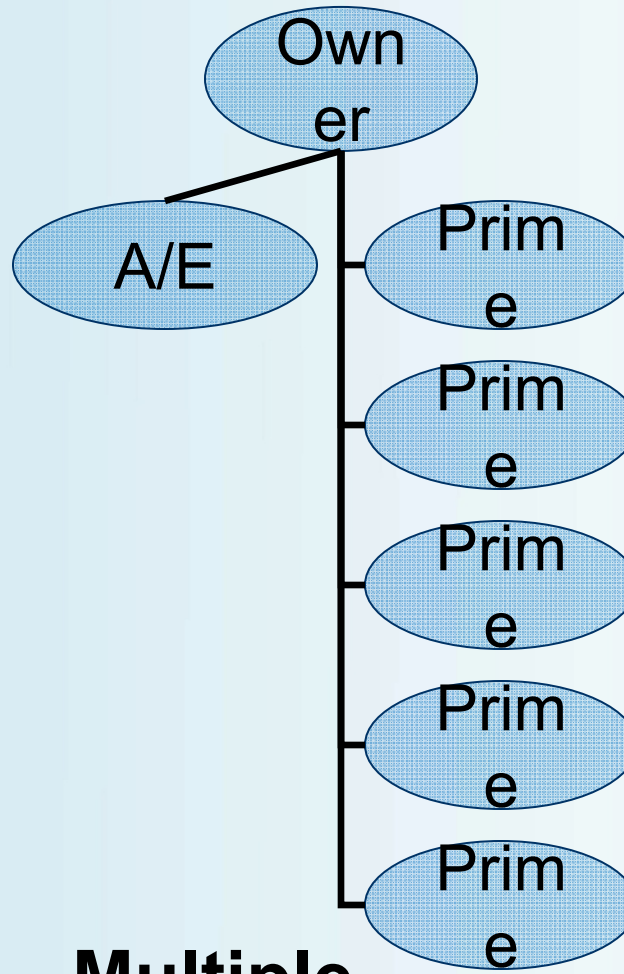
Contractual Relationships



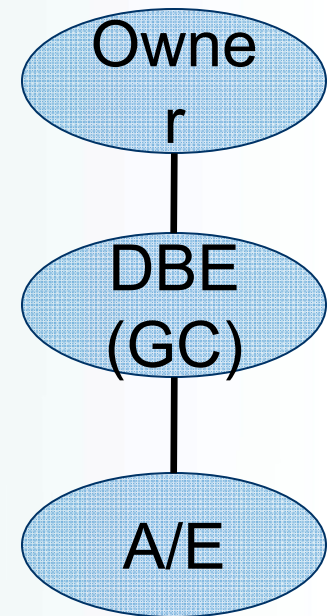
Design-Bid-Build



CM at Risk



Multiple Prime



Design-Build



IPD Principles - Review

1. Mutual Respect and Trust
2. **Shared Risk and Reward**
3. **Collaborative Innovation and Decision Making**
4. **Early Involvement of Key Participants**
5. Early Goal Definition
6. Intensified Planning
7. **Open and Enhanced Communication**
8. Appropriate Technology
9. **Virtual Organization and Leadership**



IPD Key Principles – The Test

- Shared Risk and Reward
 - For key participants (savings sharing, bonuses, Alliance model)
- Collaborative Innovation and Decision Making
 - Focusing on project, not protecting self interest
- Early Involvement of Key Participants
 - Contractor who will build the project collaborating during design, owner involvement with designers and contractor
- Open and Enhanced Communication
 - BIM transparency, web-based information sharing
- Virtual Organization and Leadership
 - Joint decision-making ability by key participants



Design-Bid-Build Comparison

- D-B-B can never utilize the Key Principles of IPD
 - No Key Principle of IPD applies to D-B-B
- D-B-B can however, use some of the techniques of IPD, for example:
 - Design Assist (but not from a potential bidder)
 - Pre-qualify bidding pool
 - Enhanced Technologies such as BIM may be utilized to a degree
 - Web-based information sharing may be utilized
 - Cost Plus - GMP contract with shared savings may be used



Multiple Prime Comparison

- Private Work
 - Collaboration possible
 - Sub Trades may be involved in the design process
 - BIM may be used
 - MP allows for accelerated scheduling and time savings
- Public Work
 - MP is Permitted in Public contracting but, because of low bid and conflict-of-interest laws, does not allow use of many of the Key Principals of IPD
 - Sub Trades may not be involved in the design process
 - BIM not as effective
 - Does not align very well w/IPD principles



CM at Risk Comparison

- **Private Work**
 - CM at Risk allows many of the advantages of IPD, including the integration of the contractor into the design.
 - In CM at Risk the designer maintains a direct contractual relationship with the owner
- **Public Work**
 - California has no authorizing legislation for CM at Risk
 - Used in some public sectors via “permissive” legislation
 - Agency CM has authorizing legislation but is not the same as CM at Risk
 - Agency CM may be applied to any delivery model



How Does D-B Compare With IPD?

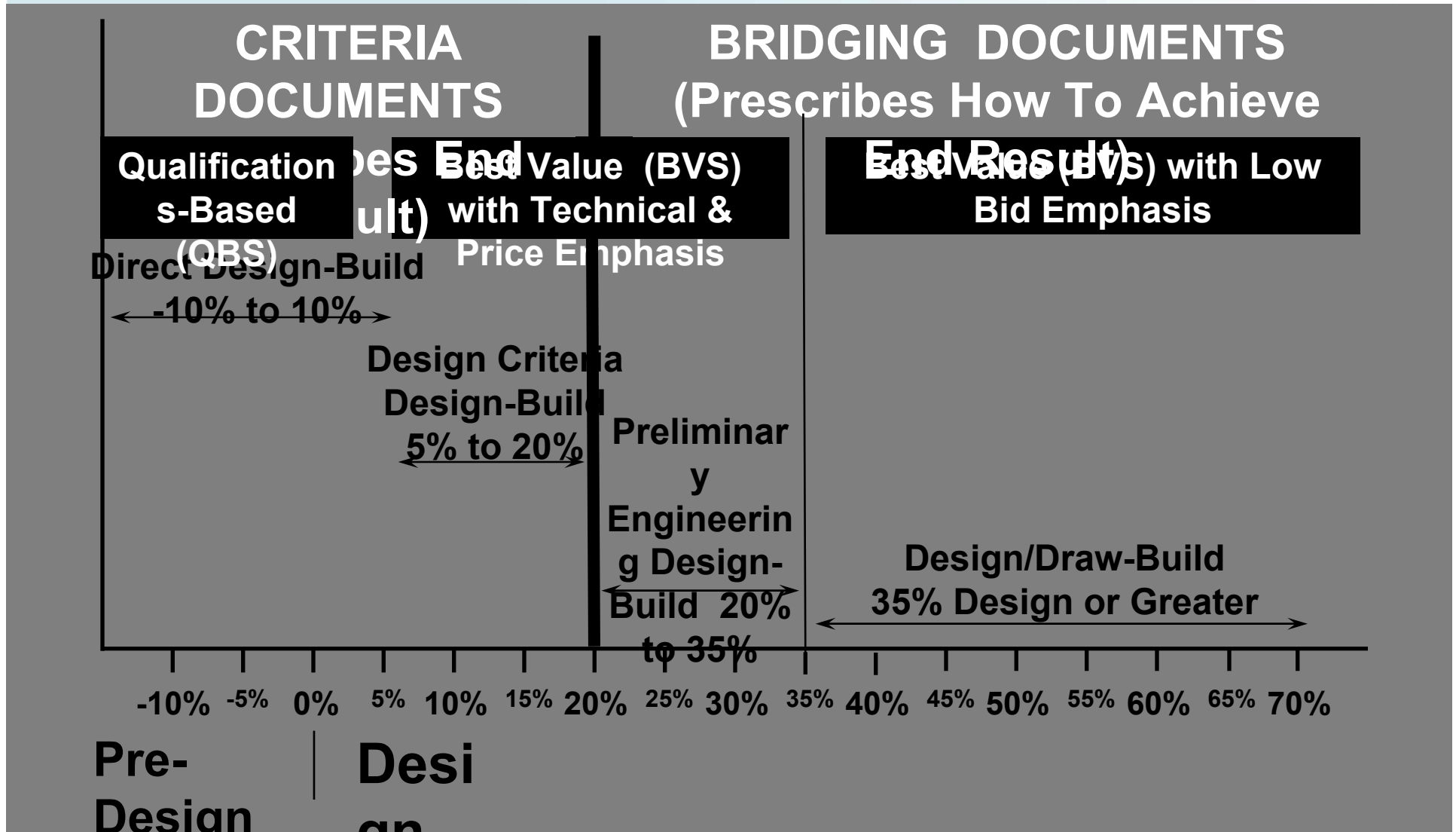
Depends on Design Build Procurement Model:

- Qualifications Based Selection (QBS)
- Best Value Selection (BVS) with “Criteria” Documents
 - RFQ/RFP - Technical & Price Submittal – Evaluation based on Qualifications, Design, Price
- Best Value Selection (BVS) with “Bridging” Documents
 - RFQ/RFP (sometimes combined) - Evaluation based more on Price than Qualifications and Design

Question – What is the difference between “Criteria” and “Bridging” procurement documents?



Percentage of Design in RFP





IPD vs. D-B: Owner Involvement in the Process

IPD

- Owner is a part of the project team and is contractually included in the entire design and construction process, sharing in good and bad outcomes

D-B

- Owner may be involved to whatever degree it desires.
 - Must be cautious to not exercise too much “control” over design and construction, to avoid assuming unwanted risk



IPD vs. D-B: Contractual Differences

IPD

- Multi-Party Agreement
- Single Purpose Entity
- Integrated Form Of Agreement (Sutter)
- Alliance Contract (shared risk and reward)

D-B

- Lump Sum
- Cost Plus (GMP)
 - Savings Clause possible
- Shared Risk/Reward (Alliance Contract model)



IPD vs. D-B: Risk Allocation (Re: Project Costs & Schedule)

Risk	IPD	D-B
Design Risk	Collective	Design-Build Entity
Construction Risk	Collective	Design-Build Entity
Unforeseen/Differing Site Conditions	Owner	Owner
Force Majeure	Owner	Owner
Scope Changes	Owner	Owner
Notes:	In IPD, the Owner guarantees project costs, including increasing the “target cost” due to changes that are not the fault of the designers or builders	In D-B, the Design-Build Entity warrants the sufficiency of the plans and assumes construction risk. The Owner assumes risks that are not the fault of the Design-Build Entity



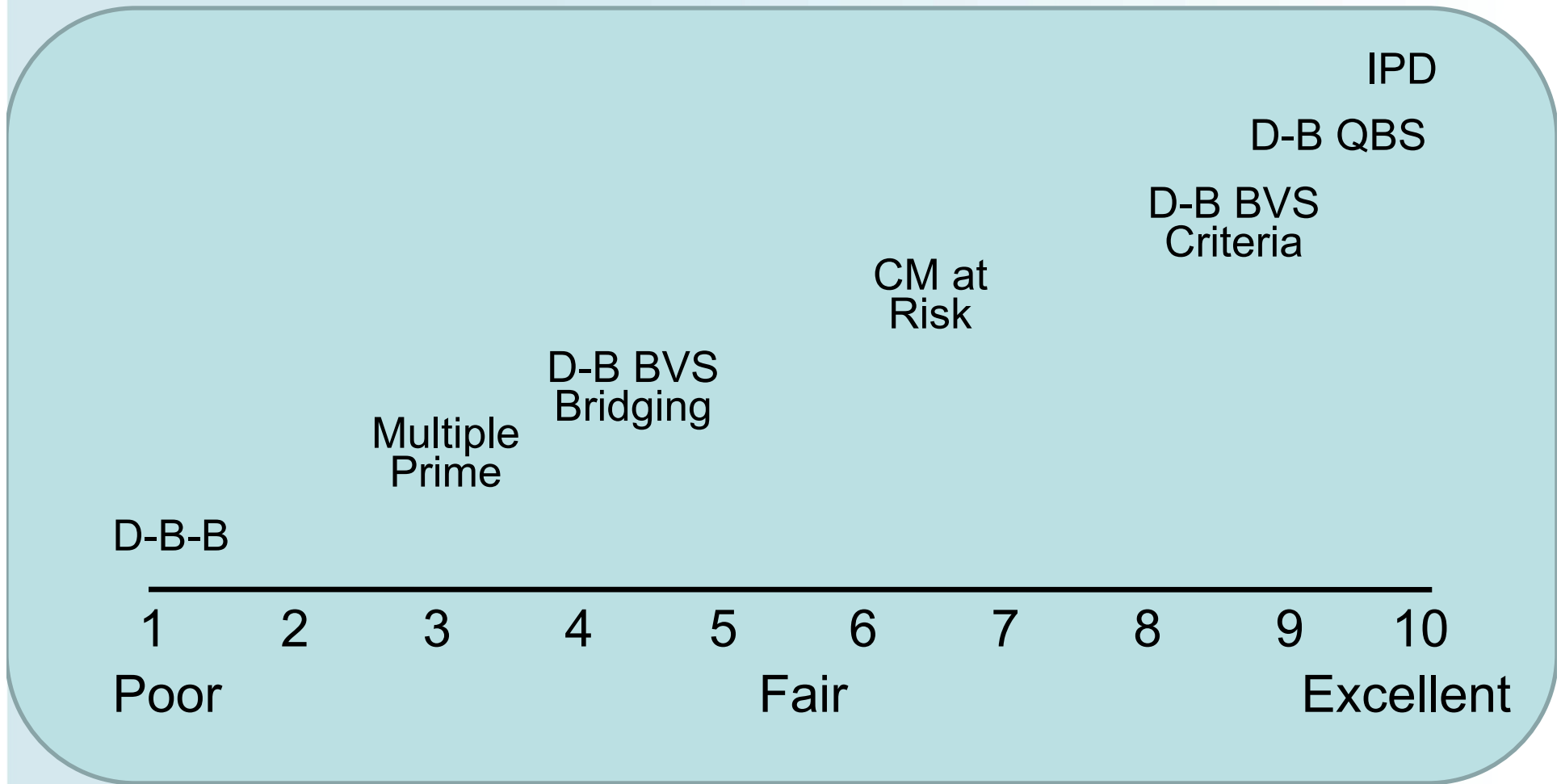
D-B Conclusion

- Design-Build aligns nicely with IPD
 - Can utilize every Key Principle of IPD
 - IPD advantages, including the integration of the contractor into the design, diminish when using a “Bridging” method
- Design-Build is permitted for some public work in California (more authority added each year)
- Design-Build is the only project delivery model that has the ability to remove the owner from the risk associated with project design



IPD Rating Scale

How Do Popular Delivery Methods Compare With IPD Principles?





Owner's Considerations When Choosing an IPD Delivery Method

- **Legal limitations** (public vs private, governing board requirements)
- **Owner personality** (decision makers are innovative vs traditional, prompt decision-making ability, ability to TRUST)
- **Owner objectives** (fixed budget, earlier completion, collaborative process, amount of design “control” wanted/needed)
- **Project requirements** (complexity of project, speculative vs own account, large or small)



Owner's Considerations When Choosing an IPD Delivery Method

- **Financial considerations** (funding in place, prepared to spend more up front (less later on), amount of contingency required)
- **Stakeholders and political climate** (official chain of command, efficient design review process, in-house expertise (or ability to hire third party expertise), sensibility of end users, local community/labor accord with IPD model)
- **The market** (availability of qualified/experienced designers and constructors, ability to manage effects of material and labor escalation)



If You Are Not Already Swimming - Take The Plunge !

IPD-*“ish”*
Could Be
Your First
Step

