

# Alternative Public Works Contracting

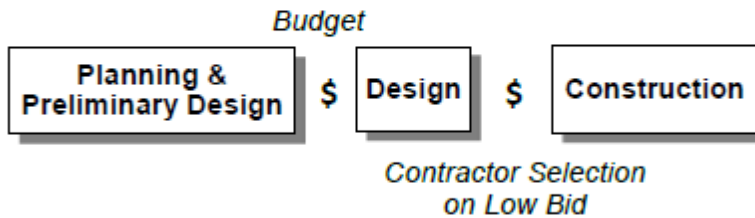
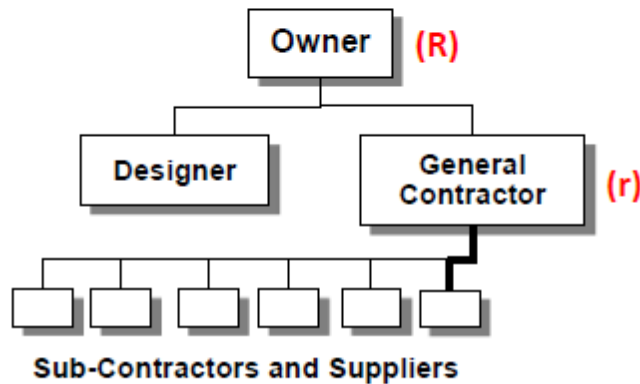
Ralph Graves



# PROJECT DELIVERY METHODS

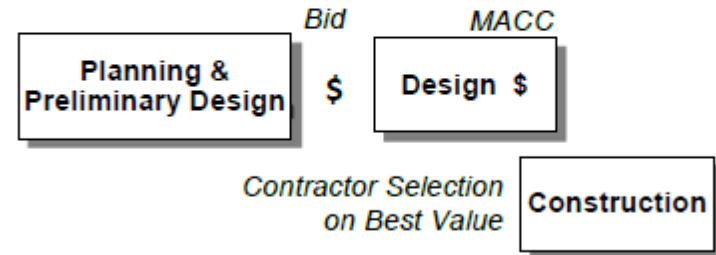
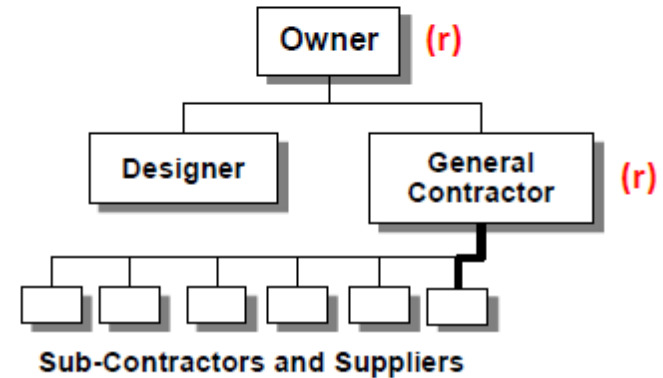
## COMPETITIVE BID (DESIGN/BID/BUILD)

### STRUCTURE and SCHEDULE



## GENERAL CONTRACTOR/CONSTRUCTION MANAGER (GC/CM)

### STRUCTURE and SCHEDULE

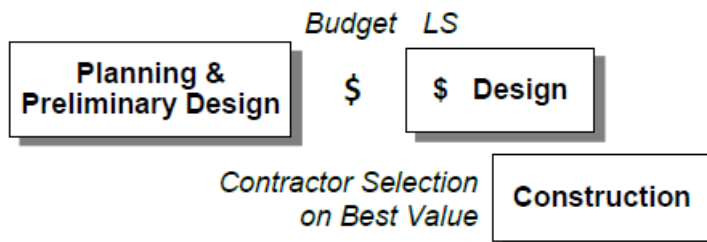
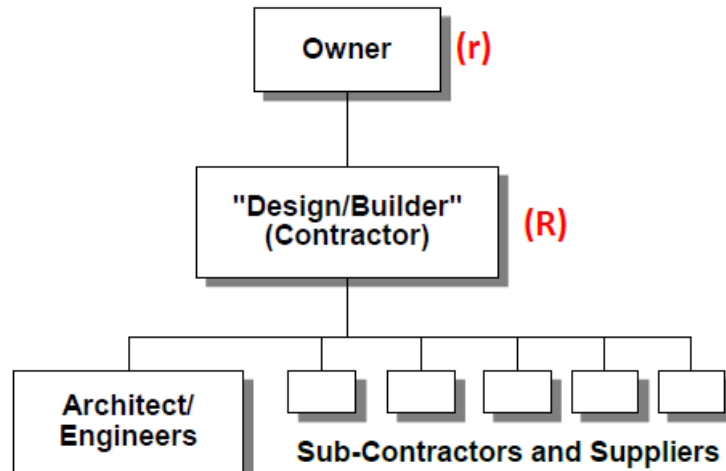


\* R = More Risk  
r = Less Risk

# PROJECT DELIVERY METHODS

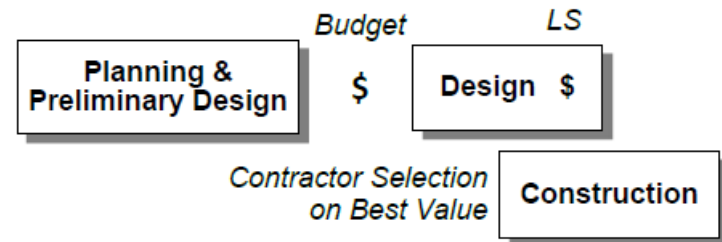
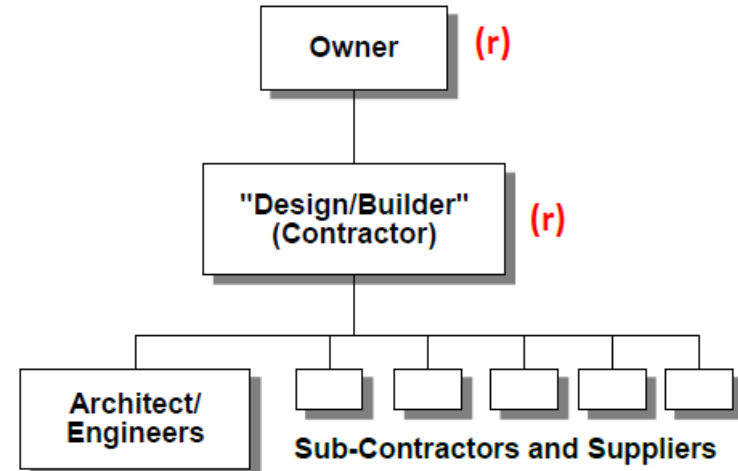
## Lump-Sum Design/Build

### STRUCTURE and SCHEDULE



## Price-Factors Design/Build

### STRUCTURE and SCHEDULE



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# Design-Bid-Build

- Historic public contracting method
- Owner supervises design by Architect-Engineer (A-E)
- Advertisement of contract, plans, specs
- Award to lowest price responsive bid submitted by a responsible bidder
- General contractor assembles subcontractors
- Multiple procurements: design then construction
- No constructor participation during design
- Owner bears most design error/omission risk

# General Contractor/Construction Manager

- Owner controls design by A-E
- Constructor selected as a consultant during design phase based on qualifications and price factors
- Early constructor involvement for constructability/value engineering - lowers design risk
- Maximum construction price negotiated late in design phase
- Sub-contracts bid competitively, except mechanical and electrical principals
- Constructor shares in the cost risk.

# Lump-Sum Design/Build

- One major procurement for design-construct team
- Potential to fast-track (overlap design and construction)
- Constructor incentive for optimizing design and construction.
- RFP containing preliminary design, performance specs, evaluation criteria
- Best-value selection with lump sum price
- Best if owner can define project in performance terms and relinquish control
- Scope changes may be more costly

# Price-Factors Design/Build

- Added to RCW 39.10 in 2013
- Similar to fixed-bid D/B except for selection method and price determination
  - D/B team selected by RFP based on qualifications and price factors (such as profit/overhead rates and general conditions work)
  - Fixed price established by negotiation late in design phase
- Potentially less price risk for builder, more design control for owner

# Port of Seattle Experience

- Terminal Escalator Modernization – D/B, 2009-2013
- Rental Car Facility – GC/CM, 2007-2012
- STIA C-1 Facility – GC/CM 2004-2009
- Shilshole Marina Upgrade – GC/CM, 2004-2009
- Parking Terminal Expansion – GC/CM, 1997-2001
- Parking Facilities Expansion, Contract 7 – D/B 1990-1993
- T-106 Former Hasbro Warehouse – D/B 1980s



# RCW 39.10

- Renewed in 2013
- Relatively prescriptive procedures
- Project Review Committee approval
- Also includes Job Order Contracting

# International Arrivals Facility Acquisition Options

- Analysis of four methods against five criteria:
  - Cost, Schedule, Quality/Aesthetics, Implementation/Risk, Stakeholder Involvement
- Price-Factors D/B has best schedule potential and overall score, provided we can control risks.
- Authorization request on July 23.