

Construction Delivery Methods

Government Finance Officers Association

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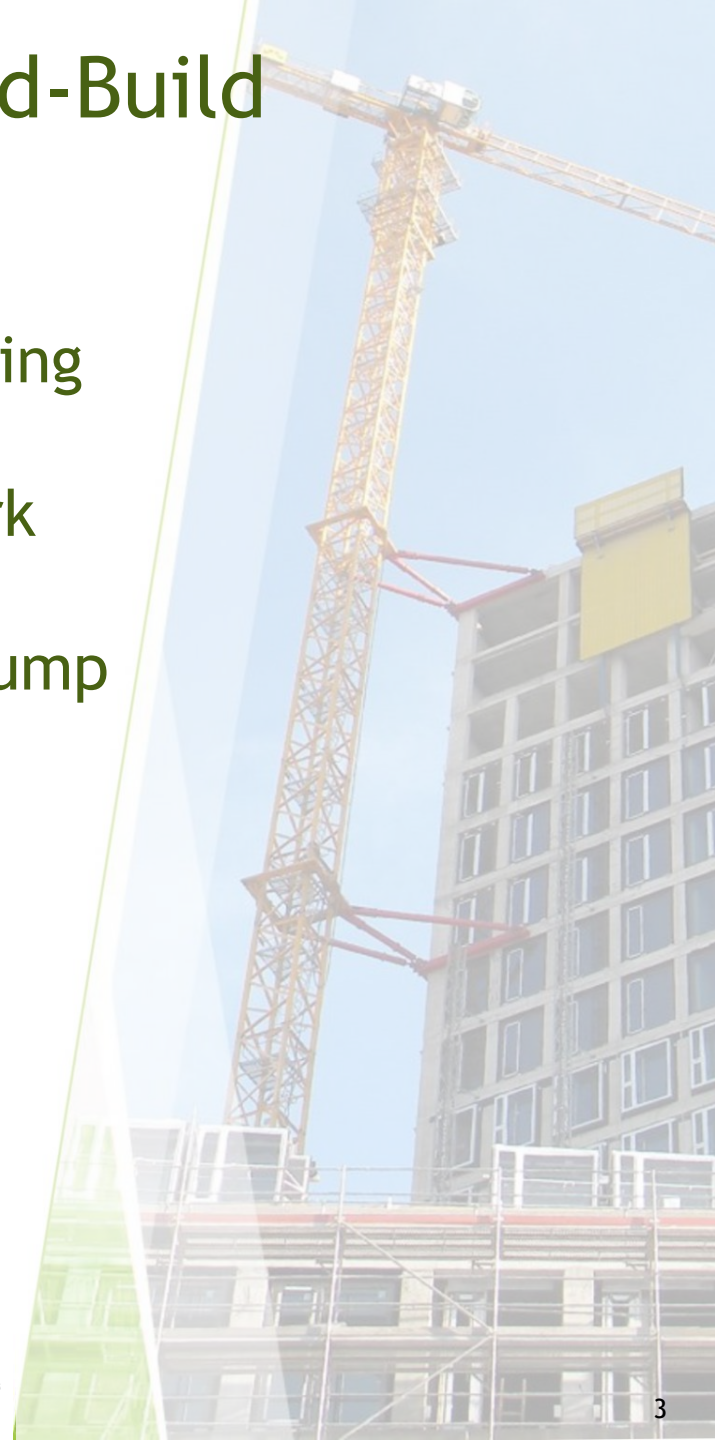
Three Methods for Construction Delivery

1. Design - Bid - Build
2. Design Build
3. Construction Management
 - a. Construction Manager at Risk
 - b. Construction Management Advisor



General contracting/Design-Bid-Build

ORC 153.50 (A) (5) defines general contracting as “constructing and managing an entire public improvement project, including the branches or classes of work specified in division (B) of this section, under the award of a single aggregate lump sum contract.”



1. Design - Bid - Build (DBB)

- 3 Parties: Owner
 (2 Contracts) Architect
 General Contractor (G.C.)
- Architect prepares plans/specs
 - Cost estimates by Architect
 - Architect liability to re-design if bids too high
 - Project is publicly bid
- One contract Between Owner and G.C.
 - G.C. holds contracts with subs
 - Architect provides Construction Administration Services as the Owner's Representative

1. Design - Bid - Build (DBB)

- Architect provides Design, Construction Documents, Bidding Assistance, and Construction Administration
- Success depends upon quality of General Contractor and Project Manager
- Good process for:
 - Projects under \$10 M
 - Minimal owner relocation
 - Any level of complexity
 - Local sub-contractor involvement



1. Design - Bid - Build (DBB)

- General Contractor “Marks Up” sub-contractor bids
- Architect must enforce contract rules and provisions
- Owner should provide in-house Project Manager
- General Contractor assumes construction and financial risk
- DBB more liability prone
 - Low bid rules
 - Qualifications marginally considered



1. Design - Bid - Build (DBB)

- Advantages
 - Contractors bid competitively based on complete documents
 - Owner selects Architect on basis of qualifications or ability
 - Architect is active in Construction Administration
 - Design and Construction roles are clearly defined
 - Owner is an active participant in design process
- Disadvantages
 - Phases are sequential and may require more time
 - Owner is at risk for final construction cost



2. Design Build (DB)

- Owner Hires Criteria Architect (CA) to:
 - Develop Building Program
 - Provide Site Analysis
 - Develop preliminary Cost Data
 - Develop Financial Plan
 - Prepare DB procurement package
- Owner issues RFQ for Design Buildings
 - Shortlist to three DB's
 - Issue Design-Build Procurement Package
- Owner receives DB proposals
 - Owner and CA review proposals
 - Owner and CA short list and interview
 - Owner selects DB based upon “Best Value”



2. Design Build (DB)

- Architect of Record (AOR) is hired by DB
- AOR prepares detailed plans and specifications for:
 - Permitting
 - Final Costing
 - Final Price
 - Final Contract
 - Construction
- CA provides Construction Administration
- DB assumes construction and financial risk



2. Design Build (DB)

- Owner takes on “Negotiation Risk”
- A good process for:
 - Simple Public Buildings
 - Less stringent Quality Control
 - Limited Construction Market Place
- Owner has less control during construction
- DB works well when D B is lessor
 - University Housing
 - Utility Companies



Design Build (DB) Model

ORC 153.65 (G) Defines design-build services as “services that form an integrated delivery system for which a person is responsible to a public authority for both the design and construction, demolition, alteration, repair, or reconstruction of a public improvement”



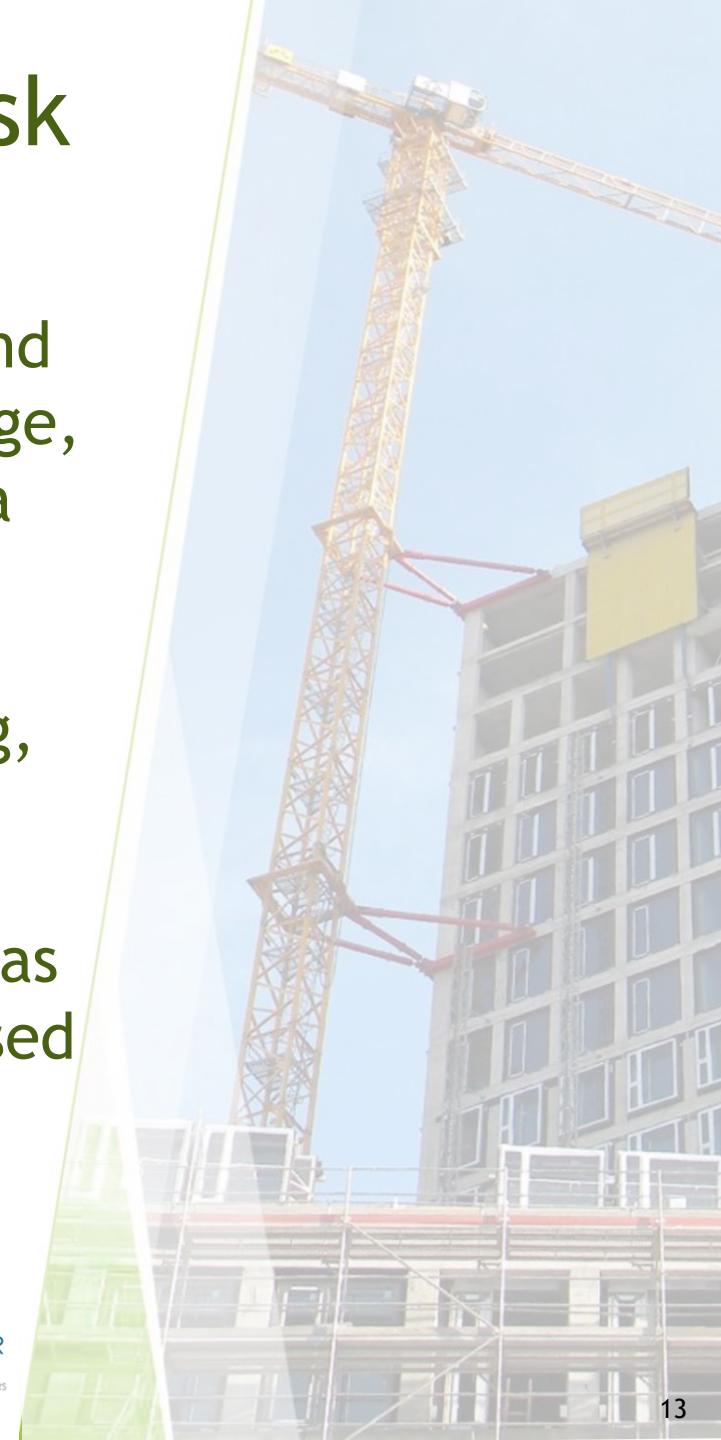
2. Design - Build

- Advantages
 - Perceived to be fastest project delivery system
 - Single source responsibility
 - Early cost and scheduling
 - Conflicts occur internally, and may not involve Owner
- Disadvantages
 - Construction costs may not be competitive
 - Owner has little involvement
 - Reductions in quality are possible
 - Documents generally not complete when GMP is executed
 - Conflict of interest in role as designer and contractor
 - No objective agent to represent Owner's interests
 - Construction process generally not monitored



Construction Manager at Risk

ORC 9.33 (B) (2) defines CMAR as “a person with substantial discretion and authority to plan, coordinate, manage, direct, and construct all phases of a project for the construction, demolition, alteration, repair, or reconstruction of any public building, structure or other improvement and who provides the public authority with a guaranteed maximum price as defined in section 9.334 of the Revised Code.” (emphasis added)



3. Construction Manager at Risk (CMAR)

- 3 parties: Owner
(2 Contracts) Architect
Construction Manager (CMAR)
- CM provides pre-construction services
 - Cost estimating
 - Project sequencing
 - Constructability
 - Owner relocations
- Architect provides Design and Construction Document preparation
- CMAR monitors Cost and Design
- CMAR agrees to a Guaranteed Maximum Price (GMP) - at an agreed-upon percentage of document completion
- Architect completes plans and specifications



3. Construction Manager at Risk (CMAR)

- CMAR: Seeks bids from sub-contractors (15-16)
 - Reviews bids with Owner and Architect
 - Contracts between CMAR and subcontractor
- CMAR does not “Mark up” bids; fees are from (4-8%, plus expenses)
- CMAR provides on site management
- Architect provides Construction Administration Services



3. Construction Manager at Risk (CMAR)

- CMAR works well on: Larger complex projects with:
 - Demolition
 - Renovation
 - Relocation
 - New construction
- Procurement of CMAR is Qualifications Based
- CMAR provides project management for Owner
- CMAR assumes construction and financial risk



3. Construction Manager - At Risk

- Advantages
 - Architect still acts as agent for Owner
 - Early cost commitment gives Owner project cost security
 - Reduce Owner's burden in management of project
 - Construction Manager is responsible for managing process and has more control of subcontractors
 - Fast tracking and multiple prime contracts may speed construction
- Disadvantages
 - Added Cost
 - Bidding may not be as wide-spread
 - GMP can vary



3. Construction Manager - Advisor

- Primary Differences
 - Contractors are between subcontractors and Owner
 - Construction Manager establishes schedule, but does not control it
 - Serves as mediator between parties



3. Construction Manager - Advisor

- Advantages
 - Provides additional expertise to Owner
 - May fast-track to speed process
 - Initial cost estimating will help control construction costs
- Disadvantages
 - Added cost
 - Multiple prime contracts add burden to Owner
 - Less control, serves only as mediator

