Construction Delivery Methods Guide

Capital Project Toolkit - Construction Delivery Methods Guide

This guide introduces common construction delivery methods for public building projects, including pros, cons, and key considerations.

1. Design-Bid-Build (DBB)

- Traditional approach: design is completed first, then competitively bid
- Lowest responsible bidder awarded construction contract

Pros:

- Clear roles and responsibilities
- Competitive bidding = potentially lowest price

Cons:

- No contractor input during design
- Risk of change orders or delays if design is incomplete

2. Construction Manager at Risk (CMAR)

- CM is hired during design and provides preconstruction input
- CM guarantees a maximum price (GMP) before construction starts

Pros:

- Early cost and schedule input
- Better risk management and collaboration

Cons:

- Requires more sophisticated owner oversight
- May limit price competition on subcontractors

3. Design-Build (DB)

- One contract with a single entity responsible for both design and construction
- Often used for fast-track projects

Pros:

- Single point of accountability
- Potential for faster delivery

Cons:

- Less control over design details
- Need a strong, experienced owner or OPM

4. Public-Private Partnership (P3)

- Private sector finances, builds, and sometimes operates the facility
- More common in transportation, but growing in municipal use

Pros:

- Can reduce public capital costs
- Transfers risk to private sector

Cons:

- Complex contracts and legal work
- Long-term obligations

5. Choosing the Right Method

Factors to consider:

- Project size and complexity
- Timeline constraints
- In-house expertise and OPM support
- Risk tolerance
- Procurement laws in your state

Always consult legal counsel and your state's public construction regulations before deciding.

Additional Construction Delivery Methods

6. Job Order Contracting (JOC)

A procurement method used for small-to-mid-sized repetitive projects (e.g., repairs, renovations). Uses pre-priced unit cost books for issuing task orders.

Pros:

- Quick procurement for known scopes
- Ideal for ongoing maintenance or deferred repair backlog

Cons:

- Limited use for major new construction
- Scope creep or overuse without controls

7. Integrated Project Delivery (IPD)

A collaborative method involving owner, architect, and contractor under a shared contract with joint risk/reward. Most common in advanced healthcare or institutional sectors.

Pros:

- True team integration and shared goals
- Reduces adversarial conflicts

Cons:

- Requires high trust and maturity from all parties
- Not commonly used in public sector yet

8. Construction Manager-Agent (CMa)

Similar to CMAR but without holding trade contracts. Acts as an advisor, while the owner holds all trade contracts directly.

Pros:

- Owner retains full contracting control
- Helpful when multiple bid packages are used

Cons:

- Greater administrative burden on owner
- CMa has no contractual power over trades

5. General Contractor (GC)

The traditional design—bid—build method where the contractor is selected after full design is completed. The GC enters a lump-sum agreement and is responsible for delivering the project per plans and specifications.

Pros:

- Clear bidding process and cost upfront
- Familiar method with wide use

Cons:

- Limited contractor input during design
- May lead to adversarial relationships

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