Construction Manager-General Contractor Delivery Method

California Department of Transportation
Design-Bid-Build (DBB)

Traditional delivery method where design and construction are performed by two separate entities. Design can be performed “in-house” or can be contracted.

- Design must be complete
- Awarded to the lowest responsible bidder
A delivery method that allows an owner to engage a construction manager to provide input during the design process. At an agreed upon point, the owner and construction manager negotiate a price for construction of the project and the construction manager becomes the general contractor.
What is CMGC?

Two-Phase Contract

PRE-CONSTRUCTION
Construction Manager

Pre-Construction Services

• Cost Estimating
• Subcontracting Plan
• Scheduling
• Material Procurement
• Utility Coordination
• Construction Phasing
• Constructability Review
• Risk Analysis
• Quantity Verification
• Third Party Negotiation

CONSTRUCTION
General Contractor

Construction Services

Price Agreement
CMGC Authority

Assembly Bill 2498 (Gordon)

- Signed September 2012
- Added Section 6700 et seq. to Public Contract Code
- Authorized 6 project pilot program

Senate Bill 1262 (Beall)

- Signed September 2018
- Granted unlimited authority
- Projects must be greater than $10 million
Why Use CMGC?

- Faster Delivery
- Cost Certainty
- Constructability
- Risk Mitigation
- Innovation
CMGC Process

1. <30% Design
2. Request for Qualifications
3. Award (Preconstruction Services)
4. Design
5. Price Agreement
6. Award (Construction Services)
7. Construct
CMGC Process (Packages)

< 30% Design

Request for Qualifications

Award (Preconstruction Services)

Design

Price Agreement (Package 1)

Award (Construction Services)

Construct (Package 1)

Price Agreement (Package 2)

Award (Construction Services)

Construct (Package 2)

Price Agreement (Package 3)

Award (Construction Services)

Construct (Package 3)
Benefits Over Time

Key Benefits

Cost
Risk
Innovation

Design
0-30%
30-60%
60-90%
>90%

Cost
Risk
Innovation

Most Owner Benefits Least
Request for Qualifications

Proposers are evaluated based on:

- Past Performance
- Key Personnel Requirements
- Project Understanding and Approach
Risk Management

![Risk Management Diagram](image)

- **DBB**
  - Contractor Risk: 20%
  - Owner Risk: 80%

- **DB**
  - Contractor Risk: 40%
  - Owner Risk: 60%

- **CMGC**
  - Contractor Risk: 10%
  - Owner Risk: 90%
Independent Cost Estimator (ICE)

Qualifications of ICE
- Experienced contractor estimator
- No conflict of interest
- Qualifications based selection

Role of ICE
- Participate during the design
- Provide project cost estimates
- Assist in negotiations
- Validate fair price
CMGC “Bid” Process

When design of project or portion (package) is complete:

Three Estimates:
1. Engineer’s Estimate
2. Construction Manager’s Cost Estimate
3. Independent Cost Estimate (ICE)

Two Possible Outcomes:
1. Caltrans gets fair price – Proceed with build
2. Caltrans doesn’t get fair price – Proceed to bid
**Benefits/Challenges of CMGC**

**Benefits**
- Improved constructability
- Innovation
- Caltrans maintains control over design
- Project can be delivered in packages
- Contractor selected based on qualifications
- Earlier cost certainty
- Less cost growth during construction
- Improved risk allocation/mitigation
- Assist with permits/3rd party approvals

**Challenges**
- Higher support costs (contractor and ICE)
- Redesign to implement contractor suggestions
- Estimate reconciliation (bid-based vs. cost-based estimates)
- Keeping bid option open
- Delivering project under procedures developed for design-bid-build
Questions?