PRESENTERS

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CONSTRUCTION DELIVERY METHOD COMPARISON

TRADITIONAL (DESIGN-BID-BUILD)

Description
This is the traditional way facilities have been delivered throughout the 20th century. The owner hires an architect to design a facility in response to the owner’s program requirements. The architect prepares construction drawings and specifications, which exactly define the scope of work. The drawings and specifications are used to select a general contractor, typically on the basis of low bid.

Diagram:
- Owner
- Architect
- General Contractor
- Subcontractors

Program | Design | Bid Price | Construction

DBB Examples:
- SCORE Jail Project
- Smaller Seattle Public Schools Projects
CONSTRUCTION DELIVERY METHOD COMPARISON

DESCRIPTION
With design-build, one company provides both design and construction services. There is a single point of accountability for all project-related issues. The design-builder may provide design and construction services using in-house resources or may subcontract for these services through third-party providers.

DB Examples:
- WSDOT Projects
- Projects with simple program/design
CONSTRUCTION DELIVERY METHOD COMPARISON

Description
The Owner develops a Project Program. They then enter a 30 year contract with a Non-profit corporation who will manage the design and construction of the project. The Owner then leases the property back from the Non-profit over the course of that 30 year contract.

63 - 20 Examples:
• King Street Center / King County Metro Project
CONSTRUCTION DELIVERY METHOD COMPARISON

GENERAL CONTRACTOR / CONSTRUCTION MANAGER (RECOMMENDED)

OWNER

GENERAL CONTRACTOR/CONSTRUCTION MANAGER

ARCHITECT ENGINEER

SUBCONTRACTORS

Program Design Bld/GMP Construction

*Guaranteed Maximum Price

Description
A construction manager is hired early in the process as a collaborative team member. Because the project isn't fully designed when construction begins, the construction manager typically provides construction services on a cost plus fee basis. To ensure the project will be completed within the owner's budget, the construction manager also provides a guaranteed maximum price (GMP). The construction manager is responsible for costs in excess of the GMP that are not due to changes in the original scope of work.

GC/CM Examples:
- Sound Transit Projects
- King Street Station
- University of Washington Projects
- Larger Seattle Public Schools Projects
- Burien City Hall/Library
- Kent/Redmond Center
- Seattle Fire Station 10
General Contractor / Construction Manager (GC/CM)

BACKGROUND

RCW 39.10.340-410 provides the GC/CM approach to public works.
» Procured through a multi-part selection process
» Selected early in the design and generally assist the Owner in evaluation the project during the design phase and then provides construction management services.
» Sometimes called Construction Management at Risk.

Capital Projects Advisory Review Board (CPARB)
» An oversight board for Alternate Public Works through RCW 39.10.
» Reviews alternative public works procedures and projects and provides guidance to state policymakers to enhance public works contracting methods.
» Project Review Committee (PRC), under CPARB, is responsible to review and approve applications for delivery methods of construction.
General Contractor / Construction Manager (GC/CM)

BENEFITS

» Better budget control
» Constructability review
» Value engineering to optimize cost and performance of project
» Team approach
» Fewer change orders
» Time savings
» Balances and mitigates risk between Owner, Designer and Contractor
» Can increase WMBE opportunities
» Can potentially save money by allowing a change to change design and scope to meet project budget before maximum allowable construction cost is negotiated.
» Early involvement of contractor allows for greater understanding of the costs and gives the City time to allocate costs before they are incurred.
General Contractor / Construction Manager (GC/CM)

RISKS

» GC/CM can be difficult for anyone without specific GC/CM experience who have only used the design-bid-build contracting method

» Negotiation of a maximum allowable construction cost (MACC) requires experienced staff

» An Owner may see increased costs for the work that is self-performed by the GC/CM because there may be less competition.
CPARB Approval

ASSESSMENT

An agency starts by reviewing the contracting method that best serves the project. This should be done no later than schematic design.

RCW MINIMUM REQUIREMENTS

By law, GC/CM may be used for public works projects with a total contract value over $10M where the project has at least one of the following:

» 1. Complex scheduling, phasing or coordination.
» 2. Construction in an occupied facility
» 3. Involvement of GC/CM in design stage is critical to success of the project.
» 4. Complex or technical work environment
» 5. Specialized work on a historic building
CPARB Approval

OTHER PROJECT ELEMENTS

» Project Team has experience in standard delivery methods and GC/CM
» Site/existing facility conditions are difficult to define
» Risk of unforeseen conditions are difficult to characterize or quantify
» Project will attract qualified and experienced GC/CM firms
» Early enough in the project to take advantage of GC/CM benefits such as value engineering, constructability analysis, sequencing and sustainable construction methods

PROJECT TEAM REQUIREMENTS

» At least one member has delivered a standard design-bid-build project of similar size and scope
» One team member has delivered at least one GC/CM project of similar size and/or scope
» One team member is in construction management
Dispute Resolution Board (DRB) - (Optional)

» Panel of three members agreed upon by contractor and Owner
» Organized before construction begins and meets throughout project during construction
» DRB process encourages resolutions at the job level and helps head off problems before they escalate into disputes.
» In case of dispute DRB recommendation is non-binding.