

Chapter Five: Alternative Capital Project Delivery Methods; Criteria and Selection Process

As noted in the November 2008 memorandum by the County Auditor to the County Council, the availability of alternative capital project delivery methods provides valuable flexibility. The purpose of this section is to provide a primer on alternative capital project delivery methods, to describe the criteria Facility Management Division staff uses to recommend the capital project delivery method, and finally, to describe the timing and process for the selection of the capital project delivery method for the selected scenario.

Alternative Capital Project Delivery Methods

The rules governing the construction of capital projects by or for the benefit of public agencies in the State of Washington are established by statute. Prior to 1991, public agencies in this state were required to use the traditional Design-Bid-Build public works contracting method. Beginning in 1991, the legislature authorized additional alternative project delivery methods, including General Contractor/Construction Manager (GC/CM) and Design-Build methods, which were expanded to include all public agencies in 2007. The rules for use of these alternative methods are codified in RCW 39.10. In addition, King County utilizes the Municipal Leasing Act (RCW 35.42) in conjunction with tax-exempt financing to construct capital projects, using a Lease-Leaseback contracting method, where the project is to be built on property King County intends to acquire or already owns.

Chapter 39.10 RCW specifies a process that must be followed in order for agencies to use the GC/CM and Design-Build methods. In general, Chapter 39.10 RCW requires that a public body must be approved by the Project Review Committee of the state Capital Projects Advisory Review Board for permission to use the Design-Build or GC/CM methods.

Chapter 39.10 also specifies the types of projects that are eligible for approval for use of the Design-Build and GC/CM methods. For Design-Build, the types of projects listed include projects that cost over \$10 million and where the design and construction activities, technologies and schedule are highly specialized, or the project design is repetitive in nature, or for parking garages, pre-engineered or prefabricated buildings, regardless of cost. GC/CM may be used when implementation of the project involves complex scheduling, phasing or coordination; when construction involves an occupied facility which must continue to operate during construction; when the involvement of the general contractor/construction manager during the design phase is critical to the success of the project; when the project involves a complex or technical work environment; or when the project requires specialized work on a building of historical significance.

Design-Bid-Build

In a design-bid-build project, the public agency follows a sequential process that involves procuring an architect/engineering (A/E) firm to design the project through a competitive request for proposal/qualifications process and once the design specifications are completed by the A/E firm, soliciting competitive bids for the construction of the project, selecting the construction contractor based on the responsive bid with the lowest price.

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Advantages:

- Familiarity,
- The separate design phase offers the public agency significant input into the project design,
- There is a defined project scope,
- Responsibilities are relatively clear, and
- The competitive bidding process is transparent.

Disadvantages:

- The sequence can be time-consuming, because each step must be completed before the project can move to the next step,
- Contractor selection is primarily based on price, though legislation was enacted in 2007 that established minimum contractor qualifications criteria,
- Project price is not established until completion of bidding,
- Bids may be artificially low, which results in change orders and delay claims,
- Bids may be artificially high because the contractor increases contingencies to minimize its risk as the contractor was not involved in the project's design,
- The two-step process may create an adversarial relationship among the designer, contractor and public agency,
- Virtually all construction risk is borne by the public agency,
- There is little flexibility for change, and
- Since the contractor was not involved in the design, frequent disputes arise between the designers and the contractor, which generally result in increased costs to the public agency, as well as delay.

General Contractor/ Construction Management

The GC/CM method attempts to address some of the main disadvantages of Design-Bid-Build by involving the contractor in the design phase and providing an increased measure of flexibility in the procurement of the contractor and the process for establishment of the project's price. Under the GC/CM method, the public agency contracts with an A/E firm for design, as is the case under the traditional method. During the design process, the owner also retains the services of a GC/CM through a preconstruction services contract. The GC/CM also acts as the general contractor for the project, and the early procurement during the design phase allows for the GC/CM to provide value engineering, scheduling and constructability reviews, and cost estimating services as the project is being designed. The GC/CM is selected based on best value, including qualifications, experience, approach, and fees, but not based on a bid for constructing the project. After the design has sufficiently progressed, the owner negotiates a Maximum Allowable Construction Cost (MACC) and Total Contract Cost (TCC) with the GC/CM. Subcontracts are competitively bid.

State statutes define when public bodies may utilize the GC/CM delivery method for public works projects. According to RCW 39.10.340 projects where one or more of the following criteria are met are suitable for GC/CM:

- (1) Implementation of the project involves complex scheduling, phasing, or coordination,

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- (2) The project involves construction at an occupied facility which must continue to operate during construction,
- (3) The involvement of the general contractor/construction manager during the design stage is critical to the success of the project,
- (4) The project encompasses a complex or technical work environment, or
- (5) The project requires specialized work on a building that has historic significance.

Advantages:

- Selection of GC/CM is based on qualifications, as well as cost,
- There is a single point of responsibility for construction,
- Early involvement of contractor in design should reduce disputes and aid in efficiency of construction, and
- Completion may be accelerated as there is the possibility of a reduced overall schedule.

Disadvantages:

- The process is complicated,
- The relationships during design are not as clear and have the potential to produce an adversarial dynamic,
- There is generally a premium to be paid for the additional services of the GC/CM, which can be substantial,
- The project price is not established until late in the process, and
- The reliability of the project price is difficult to evaluate, in part because the subcontracts must be competitively bid, although 2007 legislation partly addresses this issue by allowing the parties to bid major bid packages before reaching agreement on the MACC. RCW 39.10.370(2).

Design-Build

Under the Design-Build method, the public agency selects a single firm (usually a team led by either a contractor or design firm) both to design and construct the project. In advance of the procurement process, the public agency defines a project scope and determines the project budget. The public agency then negotiates a fixed-price contract. The firm designs the project, based on project requirements identified by the owner.

State statutes define when public bodies may utilize the design-building delivery method for public works projects. According to RCW 39.10.300 projects where one or more of the following criteria are met are suitable for Design-Build:

- (1) For public works projects in which the total project cost is over ten million dollars and where:
- (2) The design and construction activities, technologies, or schedule to be used are highly specialized and a design-build approach is critical in developing the construction methodology or implementing the proposed technology, or
- (3) The project design is repetitive in nature and is an incidental part of the installation or construction, or

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- (4) Regular interaction with and feedback from facilities users and operators during design is not critical to an effective facility design.
- (5) Subject to the process in RCW [39.10.270](#) or [39.10.280](#), public bodies may use the design-build procedure for parking garages, regardless of cost.
- (6) The design-build procedure also may be used for the construction or erection of pre-engineered metal buildings or prefabricated modular buildings, regardless of cost and is not subject to approval by the committee.
- (7) Except for utility projects, the design-build procedure may not be used to procure operations and maintenance services for a period longer than three years.

Advantages:

- Project requirements are established by the public agency,
- There is early certainty about cost and schedule,
- Integration of design and construction reduces construction risk,
- Design and construction to a specified budget has the potential to reduce overall costs, and
- Completion may be accelerated, because construction can commence before design is complete.

Disadvantages:

- Agency has little control over design,
- Development of project specifications in advance of procurement requires a significant expenditure of time and money by the public agency, before it knows if it actually can build the project for the available budget,
- The required expenditure of time and resources by the proposers may limit competition and potentially increase overall project cost, and
- Statutory requirements and restrictions may limit the availability of this method for projects that are neither repetitive, like parking garages nor highly specialized with a limited number of contractors experienced in the particular type of project, like wastewater treatment facilities.

Lease-Based Delivery Methods

In a lease-leaseback transaction, pursuant to the Municipal Leasing Act, R.C.W. Chapter 35.42, a public agency may lease a site it owns to a private developer to build a building to the public agency's specifications, which the developer will lease back to the public agency upon completion of the construction. Chapter 35.42 requires the public agency to select the developer through a competitive process, upon terms most favorable to the public agency. Such a project is not a "public work" as defined in RCW 39.04.010(4), but prevailing wages must be paid during construction of the building, no rental payments may be made by the public tenant until construction is complete, and no part of the cost of construction of the building shall ever become an obligation of the lessee. The rent payments by the public agency must "not exceed prevailing rates for comparable space."

In a "lease-to-own" transaction, a developer may contract with a public agency to deliver a project, built to the public agency's specifications, at a fixed cost on property owned or controlled by the developer. The public agency may negotiate the terms of such an acquisition without a traditional public bidding process. The Municipal Leasing Act requires the public agency to select a developer through a competitive process, "pursuant to a call for bids upon terms most favorable to the county, as opposed to the traditional

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public bidding process that awards a contract to the lowest responsible bidder. This gives the public agency some flexibility in the RFP process and in negotiating terms of the lease. As in a lease-leaseback transaction, prevailing wages must be paid during construction of the building. No rental payments may be made by the public tenant until construction is complete, and no part of the cost of construction of the building shall ever become an obligation of the lessee.

In practice, King County combines one or the other of the lease-based delivery methods with tax-exempt financing, using Certificates of Participation or, more frequently, through the issuance of private, tax-exempt debt by a non-profit corporation, which acts as the lessor and owner and executes a development agreement with the developer for a fixed price. At the end of the lease, title to the building or the building and the land, as appropriate, is conveyed, without restriction, to the County.

Advantages:

- Procurement of Developer and non-profit simplified and not tied to project cost, which is negotiated after all necessary parties are on-board,
- Construction is not subject to public works restrictions, except prevailing wages,
- Structure encourages construction cost savings,
- Construction risk is transferred to the developer,
- Completion can be expedited, because construction can commence before design is complete, and
- Necessary resources for project development are provided by private partners, reducing the need for the public agency to allocate resources to the project, but retaining review function.

Disadvantages:

- Depending on the financing method to some extent, costs associated with the tax-exempt financing in leased-based delivery methods are higher, because of bond issuance costs, fees and somewhat higher interest rates, than where the County directly issues debt to pay for the project,
- Like Design-Build, the County has less control over design and construction, and
- The process lacks the transparency associated with traditional public works delivery methods.

Capital Project Delivery Method Selection Process

Facilities Management Division has extensive successful experience using alternative project delivery methods. The division goal is to select a method that is most cost-effective given the project circumstances. The criteria used include:

- Project risk,
- Project complexity,
- Project economics, and,
- Construction type (new construction vs. renovation).

Once the final scenario is selected by the King County Council, the Facilities Management Division will complete their assessment of the preferred project delivery method.