

## Innovative Contracting Solutions: Alternative Contracting Methods

### Problem:

In today's highway construction environment, "When will the project be delivered?" and "How much delay will be experienced during construction?" are often as critical to the public as minimizing cost. "Get in, get out and stay out" is the public mantra. The standard design process followed by the low bid constructor award is not always the most effective means of project delivery.

*How can projects be made available to the public faster while maintaining quality and cost effectiveness?*

### Alternative Contracting can deliver!

#### Alternative Contracting Methods Available for Consideration:

- Cost Plus Time Bidding
- Design-Build
- Lane Rental
- Warranty Clauses

### Cost Plus Time Bidding:

Often referred to as A+B bidding, this contracting procedure selects the low bidder based on a monetary combination of the contract bid items (A) and the time (B) needed to complete the critical portion of the project.

#### BENEFITS OF COST PLUS TIME BIDDING:

A+B Bidding is used to motivate the contractor through contract incentives to minimize the delivery time for high priority and high volume roadways. Consider this method if there are significant impacts anticipated on a local community or economy during construction; if it is in the public interest to complete the project as soon as possible; if traffic restrictions and mobility impact carry a high road user cost; if traffic control phasing can be structured to maximize a contractor's ability to reduce the duration of construction; if the project is relatively free of third party conflict.

### Design-Build:

This procurement method is used when a single entity provides both the design and construction through a single contract between the owner and the Design-Build firm.

In design-build procurement, the contracting agency identifies the end result parameters and establishes the design criteria. The prospective bidders then develop design proposals that optimize their construction abilities. The submitted proposals may be rated by the contracting agency on factors such as design quality, timeliness, management capability, and cost. These factors may be used to adjust the bids for the purpose of awarding the contract.

#### BENEFITS OF DESIGN-BUILD:

The design-build concept allows the contractor maximum flexibility for innovation in the selection of design, materials and construction methods. By allowing the contractor to optimize its work force, equipment and scheduling, the design-build concept opens up a new degree of flexibility for innovation. However, along with the increased flexibility, the contractor must also assume greater responsibility. Extended liability insurance or warranty clauses may be used to ensure that the finished product will perform as required.

From the contracting agency's perspective, the potential time savings is a significant benefit. Since the design and construction are performed through one procurement, construction can begin before all of the design details are finalized.

### Lane Rental:

This is an innovative contracting technique by which a contractor is charged a fee for occupying lanes or shoulders to do the work. The fee based on road user cost motivates the contractor to minimize the time that a lane, a shoulder, or a combination of lanes and shoulders are

out of service, minimizing traffic delay to highway users. Charges per lane can vary depending on time of day, amount of traffic, and other road user costs and can be applied on a daily, hourly or smaller time increment time basis.

#### BENEFITS OF LANE RENTAL:

The intent of lane rental is to encourage contractors to schedule their work to keep traffic restrictions to a minimum, both in terms of duration and number of lane closures. The lane rental concept has merit for use on projects that significantly impact the traveling public. Projects on major urban commuter routes are prime candidates for this approach.

#### Warranty Clauses:

This method specifies a guarantee of the integrity of a product and of the contractor/producer responsibility for the replacement or repair of deficiencies. FHWA's current policy in Title 23 Code of Federal Regulations 635.413 permits warranties on National Highway System projects for specific construction products or features.

#### BENEFITS OF WARRANTY CLAUSES:

Warranties are intended to increase the quality of a product by giving the contractor responsibility for replacement or repair of deficiencies. Warranties have been successfully used to protect investments from early failure and to improve overall construction quality.

#### Alternative Contracting Community of Practice:

This website

<http://knowledge.fhwa.dot.gov/cops/hcx.nsf/home> provides FHWA, State and local agency staff with a forum for sharing alternative contracting methods, processes, experiences and other information that may aid in the delivery of highway construction projects nationwide.

#### BENEFITS OF WARRANTY CLAUSES:

On the site interested parties can participate in questions and answers discussions, obtain references with links to relevant documents or websites for additional information, review works in progress to allow discussion of draft documents, and have a directory listing of members formally registered with the Community of Practice.

#### For more information, contact:

**Jerry Blanding, FHWA Resource Center**

**Phone: (410) 962-2253**

**E-mail: [jerry.blanding@fhwa.dot.gov](mailto:jerry.blanding@fhwa.dot.gov)**