
Project Delivery Directive

TO: District/Regional Directors

Number: PD-14

References:

Effective Date: 08/29/2013

Supersedes: Chief Engineer Memo dated 09/30/2002, *Guidelines for Use of A+B Bidding Provisions*

TITLE: Policy & Guidelines for use of *Cost + Time Bidding* Provisions

DIRECTIVE

The California Department of Transportation (Caltrans) encourages the optimization of capital construction cost and time of project completion by using Cost + Time Bidding.

Comply with the provisions of Appendix A “Guidelines for Use of Cost + Time Bidding Provisions” of this directive.

BACKGROUND

Cost + Time Bidding is a method of determining the lowest responsible bidder and the number of contract working days for a project by requiring contractors to bid competitively with respect to both construction cost and project duration. The method may reduce the estimated amount of the time and capital cost to complete a project. A trade-off exists between construction cost and the time to complete a project. Cost + Time Bidding often provides the contractor an opportunity to find the optimum of both the cost of a construction project and the time for completion. By competitively bidding both construction cost and time for completion, the contractor is encouraged to consider both variables as critical.

When schedule acceleration is justified, internal milestones, calendar day contract time provisions, and incentives/disincentives (I/D) can be used with Cost + Time Bidding provisions.

The concept of contractors bidding on both the construction cost and the project duration has been available in Caltrans for over twenty years. The original designation was “A+B bidding” reflecting two components. In September 2002, the range of projects on which the method could be applied was expanded.

DEFINITIONS

Cost + Time Bidding is an incentive based bidding system that monetizes construction time and capital costs where the contractor bids on both the cost to perform the work as well as the amount of time to complete the work.

Cost is the contractor's price bid for the advertised work.

Road Impact Costs (RICs) are the daily value for additional estimated costs to the state and/or public for late completion, such as delays on adjacent projects, socio-economic impacts, or business revenue losses.

Road User Costs (RUCs) are the daily value for road user delay costs that are calculated by the district traffic operations functional manager.

Cost of Time is the sum of LDs, RUCs, and RICs.

Time is the product of the *Cost of Time* and the number of working days bid.

Bid Amount is the sum of the Cost + Time bid. Each contractor's bid amount is compared to determine the lowest bid.

Contractor's Bid is the construction capital cost including the cost of any plant establishment work and the number of working days excluding plant establishment working days.

Project Duration is established by the contractor's bid. It must be less than or equal to the maximum allowed by the contract.

Contractor Payments are based only on the Cost component of the bid.

Liquidated Damages (LDs) are the daily value of the state's overhead and engineering costs for construction. They are specified by the *Standard Specifications*.

RESPONSIBILITIES

District Director:

- Authorizes the use of *Cost + Time Bidding*, delegate's authority, and establishes district guidelines in accordance with this directive.

Deputy District Director for Construction:

- Must approve *Cost of Time* when it deviates from the criteria established by this directive. This concurrence must never decrease the *Cost of Time* to an amount less than the *LDs*.
- Must approve the determination that a *Contractor's Bid* is responsive.
- Approves exclusion of the "delayed start" provision from contracts using *Cost + Time Bidding*, when use criteria of the provision are met.

Project Engineer:

- Considers the use of *Cost + Time Bidding* on all projects and documents reasons in the project files.
- Establishes a project's maximum number of working days using the critical path scheduling method by estimating contract time.
- Requests the district traffic operations functional manager calculate *RUCs* for contracts with *Cost + Time Bidding*.
- Determines the *Cost of Time* for contracts with *Cost + Time Bidding* using the criteria established by Appendix A of this directive.
- Establishes a project's minimum number of working days, if the district desires to have a minimum.

District Office Engineer:

- Conducts an independent time analysis to validate the bid as "responsive" prior to award when the low bid is less than 70 percent of the engineer's estimated contract time.
- Conducts a hearing when bids are less than 60 percent of the engineer's estimated contract time.
- May request a waiver to decrease the *Cost of Time* when it is considered excessive compared to bid risk, potential economic impacts, bid pool reduction, and traffic delays.
- May request exclusion of the "delayed start" provision from contracts with *Cost + Time Bidding* that meet "delayed start" provision use criteria.

District Traffic Operations Functional Manager:

- Calculates *RUCs* for projects using *Cost + Time Bidding*.



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8-28-13

Date Signed

Attachment: Appendix A—Guidelines for Use of *Cost + Time Bidding* Provisions