

June 12, 2006

Mr. Steve Hendrix
Assistant City Manager
120 Gary Wade Blvd.
Sevierville, TN 37864

Mr. Hendrix:

You requested information on contract incentives. You indicated that the city has some delays with construction contract completion times. You asked if other cities use incentive contracts.

Attached are my notes on Incentive/Disincentive (I/D) contracts. This information gives definitions, explains where I/D provisions apply, discusses time/cost tradeoffs, outlines guidelines on determining I/D dollar amounts and provides an example.

I am not aware of TN cities that may use I/D contracts. However, the Tennessee Department of Transportation (TDOT) and DOTs in other states routinely use I/D contract provisions.

I hope this information is helpful as a first step in considering I/D contracts. As you get further along in considering this matter, please let me know how I may help. I would be happy to provide more information.

Sincerely,

Sharon L. Rollins, P.E.
MTAS Public Works and Engineering Consultant

Attachment

Incentive/Disincentive Contracts

Owners are often frustrated when construction contracts are not completed on time. For that reason, owners are interested in motivating contractors to complete work on time, or better yet, early. These motivators are often called incentives and/or disincentives (I/D). Incentives and disincentives should be used together.

The U.S. Federal Highway Administration defines incentive/disincentive for early completion as: *a contract provision which compensates the contractor a certain amount of money for each day identified critical work is completed ahead of schedule and assesses a deduction for each day the contractor overruns the I/D time.*

FWHA is primarily concerned with road construction, but I/D applies to other public works contracts as well.

Disincentives are not the same as liquidated damages, a standard element of construction contracts. FWHA defines liquidated damages as: *the daily amount set forth in the contract to be deducted from the contract price to cover additional costs incurred by the owner because of the contractor's failure to complete all contract work within the time specified in the contracts.* Liquidated damages apply to all projects. I/D provisions do not apply to all contracts.

I/D provisions include a bonus/penalty scheme to motivate the contractor to produce a project that meets or exceeds performance goals on or before a target date and within a target cost. A critical part of using I/D provisions is to accurately determine what the target date should be. For this reason, a critical path method (CPM) schedule is necessary to accurately determine how long it should take to complete a project. A second critical area is ensuring that meeting or beating the target date does not result in excessive costs. Costs and time are always trade-offs. Research shows that I/D contracts tend to receive slightly higher bids than similar non-I/D contracts.

For road construction, the FWHA recommends that I/D contracts apply only in situations where traffic inconveniences and delays must be minimized, such as:

- High-traffic volumes in urban areas
- Work that will complete a gap in the highway system
- Major reconstruction or rehabilitation on an existing roadway that will severely disrupt traffic
- Major bridges out of service, and
- Lengthy detours

Here are some guidelines on determining the amount of I/D.

- The dollar amount must be sufficient to benefit (or penalize) the contractor.
- The daily incentive rate should equal the daily disincentive rate.
- A cap of 5% of the total contract amount is an appropriate maximum for incentive pay.

Here's an example I/D contract provisions

Road construction on Route ____

Contract Amount \$1,000,000

Total Project Duration = 100 calendar days

Milestone	Milestone Duration (days)*	Max. Days Allowed for Early Completion	Daily Incentive Amount	Daily Disincentive Amount	Milestone Start Date	Milestone Completion Date
Milestone 1: describe work	25	5	\$5,000/day for 5 days. Maximum = \$25,000	\$5,000/day		
Milestone 2: describe work	50	10	\$2,000/day for 10 days. Maximum = \$20,000	\$2,000/day		
Milestone 3: describe work	25	5	\$1,000/day for 5 days. Maximum = \$5,000	\$1,000/day		
			\$50,000 cap			

* Does not include weather delays, time-suspensions, float-days or holidays