

Giving contractors some flexibility in project timing

Contractors benefit from flexible-start/fixed-duration contracts, which provide less-rigid project start dates. What about the owner-agencies? What risks, benefits, and/or drawbacks, if any, do they experience with these contracts?

To answer that question, civil engineering professors Kelly Strong, Amr Kandil, and Tom Maze at ISU recently reviewed common practices and experiences with flexible-start/fixed-duration contracts, from the owner-agencies' point of view. They surveyed the DOTs in Washington, Minnesota, and Missouri, all states with a fair amount of experience with flexible-start/fixed-duration contracting. Although only state agencies were surveyed, findings may be useful for city and county agencies.

Innovative contracting

To reduce construction costs and traffic disruptions for transportation projects without sacrificing quality, several agencies are trying innovative bidding and contracting methods.

One such method is flexible-start/fixed-duration contracting. In general, such contracts allow the contractor flexibility in when to start the project, as long as the project is completed within a contracted period of time.

The researchers found that agencies have used various features in flexible-start/fixed-duration contracts to retain a necessary level of control over project timing. For example,

- Combine a flexible start-date window with a latest-allowable project completion date.
- Require a minimum lead-time for the contractor to notify the agency before starting work.
- Include an incentive/disincentive clause (see sidebar).

Potential benefits

In general, flexible-start/fixed-duration contracts ultimately benefit the owner-agency and the public by potentially reducing construction costs and, often, the duration of traffic closures.

When contractors have some latitude in starting specific projects, they can allocate resources like labor and material supplies more efficiently among various projects. As a result, they can submit lower bids.

Briefer traffic closures not only expose construction workers to work zone hazards for shorter periods of time, but make travelers happier.

Good candidates

Flexible-start/fixed-duration contracting could be considered for almost any job, but

it is probably best suited for projects that require

- Closing roads or sections of roads, causing major traffic disruption.
- Substantial off-site pre-construction preparation work.

Poor candidates

Flexible-start/fixed-duration contracting is probably less suited for projects if

- Delaying the start date would cause major inconvenience to local businesses or the public. For example, banks, emergency service providers, and hospitals may need more lead time than required by the contract if traffic will have to be rerouted in their locale during construction.
- A major trip-generating event, like a state fair or major athletic event, will occur during the potential construction period.
- Emergency or fast-track work is involved.

Other considerations

Giving the contractor some flexibility means that staff at the local agency will have to be flexible, too. This can be a challenge, especially for onsite project inspectors.

In general, flexible-start/fixed-duration contracting hasn't compromised project safety. Still, the agency should pay close attention to critical-path activities, especially if the contract offers an early-completion bonus.

Some contracts include early-completion incentives for only the portion of a project that involves closing the roadway. Such contracts should clearly state the effect on any earned incentive if the overall project is not completed within the contracted time.

For more information

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Other innovative bidding methods

A+B bidding can lower project costs by reducing project duration. The A parameter represents the estimated cost of the project; the B parameter represents the length of time the contractor estimates for conducting the project. In general, the lowest A + B bid is awarded the contract.

Incentive/disincentive contracts

motivate contractors to complete projects quickly by offering a bonus for completing work ahead of schedule. If work is completed late, pay is reduced by a monetary penalty—often a value per unit of time the project extends beyond contracted end date.

Resources for more information

- Utah LTAP summary of best practices in innovative contracting: www.ic.usu.edu/
- FHWA's Contracting website: www.fhwa.dot.gov/programadmin/contracts/price.cfm
- FHWA's innovative contracting Fact Sheets: www.fhwa.dot.gov/construction/fs01026.cfm
- Joe Jurasic at Iowa's FHWA division office, 515-233-7300, joe.jurasic@fhwa.dog.gov; Gerald Yakowenko in Washington, D.C., 202-366-1562, gerald.yakowenko@fhwa.dot.gov