

Over the last few decades, design-build has rapidly become popular in transportation infrastructure, celebrated for what the delivery method's supporters champion as its ability to complete projects much faster than a traditional design-bid-build approach. But the increasing adoption of the delivery

because of the financial impacts they have incurred under this approach.

The current environment, with fewer contractors interested in design-build projects, has created new challenges for owners. When projects are put out for procurement with limited interest, it causes delays. We've seen projects put on hold or programs that needed to be divided into smaller phases because of a lack of interest in large DB projects. If agencies prepare their whole procurement with one approach in mind and then discover at a late date that they need to change their procurement method, that's not a fast switch. The larger the project, the worse it is from a schedule standpoint. And then because of the delay in the schedule, everything can snowball. What used to be a \$1 billion project may quickly become a \$1.3 billion project. That can lead in turn to funding issues, and the challenges continue.

Q. Why is the industry paying much more attention to progressive design-build?

A. The progressive design-build method introduces a number of refinements. The biggest is the level of design completion before the design-build team submits their pricing. In a traditional design-build, the design-build team receives limited design information from the owner and, while still in the pursuit stage, is required to advance the design, at its cost and risk, to a level that is roughly to the 15-30% level of design. In a progressive design-build, the design-build team is selected on a qualifications or best value basis. The owner and the selected design-builder then begin "phase 1" of the agreement whereby the design is advanced, in collaboration with the owner, to the point that the design-builder is comfortable with negotiating a final scope, schedule, and price for the project. This is typically to at least the 60% level of design.

The significant differences from traditional or fixed-price design-build are that the owner is collaborating in the design development process and the design-builder is being compensated for the phase 1 services. The project moves to phase 2 final design and construction upon final agreement on scope, schedule, and price. As the design is collaboratively advanced during phase 1, the teams can work through a lot of the design issues, staging issues, third-party issues, and technical concerns with an owner. The owner has greater

involvement during this phase than a traditional design-build project. For instance, if there's a geotechnical concern, parties can perform more investigation upfront, so they have a better understanding of the design parameters that are needed to advance the preliminary design before pricing the whole project. This provides better certainty and less risk so design-builders can prepare more accurate estimates and carry less contingency.

Another advantage of the collaborative approach of progressive design-build is price negotiations. There are times when the owner thinks an element of the project should cost X, the contractor thinks it will cost Y, and there's a big discrepancy between the two. The progressive model allows the parties to work together to resolve the pricing discrepancy. This results in a better project understanding and more accurate and fair pricing. In many cases, that collaboration hasn't happened in traditional design-build.

Progressive design-build is catching on quickly in states that are using it, such as Florida, Utah, Kansas, and elsewhere. One major challenge is that many state departments of transportation are required to select contractors on a low-bid basis, rather than the qualifications-based process that progressive design-build employs. In these states, legislative approval is often necessary to authorize the new delivery method.

Some observers raise the concern that progressive design-build may cost more than design-build, but that observation often only compares the initial cost estimate, which does not reflect the final cost after change orders, claims, and such. So far, it appears that a progressive approach has fewer challenges that lead to cost escalations and delay during the project.

Q. How is the professional liability insurance market being affected?

A. As claims and litigation have increased on design-build projects, the cost of insurance for professional liability coverage has increased substantially. Particularly on large projects, the cost of project-specific professional liability (PSPL) policies has skyrocketed in recent years and availability has shrunk. Some insurers that formerly provided these PSPL policies now won't issue them at all for design-build projects

because of higher claims activity. In general, this increase in

contracting community and elected officials that isn't realistic everywhere.

The next few years will also likely see some increasing stability in the PSPL insurance market, as more progressive projects are completed and we see whether there's a major difference in the claims and litigation between progressive design-build and traditional design-build. If, as expected, there are fewer or smaller claims, hopefully it will be easier and less expensive to secure these important policies and therefore easier to attract more bidders for important megaprojects.

Finally, we should also expect more formalization and consistency in progressive design-build contracts. Right now, each agency is creating its own project delivery guidelines and they're all a little different. As more projects are completed, we'll begin to see agencies sharing their best practices and

