

# Local MDOT Bridge Bundling Concerns for Prime Contractors and Engineers

The Michigan Local Agency Bridge Builders Association is concerned that MDOT bridge bundling is preventing local contractors and workers from opportunities to work on Michigan projects. Asking firms to handle every aspect of a proposal, instead of the traditional design-bid-build method, means that MDOT is only going to attract the largest contractors and/or force joint-venture or teaming relationships. This effectively eliminates competition and puts obstacles in place for small-to-medium sized contractors, **who are already MDOT prequalified and otherwise fully capable of performing the work**. Some of the identified problems associated with bridge bundling, include, but are not limited to:

## 1. Limited Competition

- a. "In general, as contract size increases, the number of eligible contractors to bid is reduced. If bundled bridge contracts become too large, then cost savings gained through efficiency in design and construction can be lost due to the lack of competition" (FHWA, 2019).
- b. "The effect of bundling on competition: bundling policy (vis-à-vis standalone policy) generally leads to less intense competition for bridge, road, small-structures, miscellaneous, and utility projects. The maximum number of bidders generally decreases as the contract cost increases. This indicates that larger contracts generally lead to lower market competition" (Qiao et al., 2018). "One of the associated risks to project bundling is the limitation of the bidding competition due to the inability of small contractors to participate in large bundles" (Shrestha et al., 2022; Qiao et al., 2021).

## 2. Inequitable Risk Allocation

- a. "The compressed process that design-build procurement entails results in price, schedule, quantities and other key decisions being made earlier and with more unknowns. Rather than submitting a bid based on a complete set of design documents, the design-build contractor collaborates with a designer to submit a proposal - generally a firm fixed price - with the benefit of only thirty percent design drawings and frequently under a tight deadline. Design-builders are being asked to bear the risk of issues that are out of their control and extremely difficult to quantify prior to submitting a proposal" (Peterson, 2019).

## 3. Bond Capacity and Insurance

- a. "The ability of bidders to obtain performance and payment bonds should be considered. Large bridge bundling projects that take more than several years to complete, and particularly those with maintenance periods, will limit the pool of bidders because of concerns over future bonding capacity" (FHWA, 2019).
- b. "Issues relating to insurance and bonding affect the relationship between the design-build parties. Design professionals' errors and omissions insurance ordinarily excludes construction services, and contractors' general liability policies exclude professional services" (Friedlander, n.d.)

## 4. Industry Capacity and Local Resources

- a. "The capacity of industry in the area is an integral part of determining the correct size of the bridge bundle. This includes the ability of the local contractors to bid the work, the capacity of the fabricators to produce bridge elements, the capacity of consulting engineers to complete design, and the ability of third parties involved to keep up with the pace of the project. Bundles that are too large can decrease competition and lead to increased prices. Additionally, the capacity of review agencies to process large numbers of permits and the ability of utility companies to relocate utilities can be bottlenecks for a bridge bundle" (FHWA, 2019).
- b. "The construction process depends not only on the natural conditions of the site but also on the local resources such as the local labor force, local subcontractors, local materials suppliers, local regulations, etc." (Pheng et al, 2019).

## 5. Geographical Proximity

- a. Every bridge has unique needs and in situations where bridges in the same bundle are physically far apart from each other, logistical problems emerge, including increased mobilization costs, strained equipment and manpower allocation, subcontractor and DBE availability / capacity / participation. "Restricting the geographic distribution of the projects in a bundle reduces the complexity of construction management and allows close coordination of activities" (FWHA 2019).

## 6. Large Bridge Bundles are Not Necessarily Faster and may be More Expensive

- a. "Overly aggressive schedules can unnecessarily drive-up costs. Contractors do not have unlimited resources... the capacity/capability of materials suppliers to meet the projected schedule need to be considered. Allowing enough time to construct bundled projects in series instead of multiple projects at one time can increase competition from smaller contractors with a limited workforce" (FHWA, 2019).

## 7. Fallacy of Economies of Scale

- a. Most materials like aggregates and ready-mix concrete are locally sourced in relation to the actual bridge being worked on, regardless of the bridge being part of a bundle. Local supplies of aggregates and concrete are required due to transportation costs and the maximum concrete travel time. Local bridge-specific purchases of these items negate the premise that bundling allows contractors to purchase quantities in bulk for cost savings to the taxpayer.

## 8. Relationships Among Parties

- a. "In Design-Build, the design professional is not the owner's consultant, and is instead the contractor's teammate. Design professionals have contractual incentives to perform their services so as to further the design-build team's goals, which ordinarily are not fully congruent with those of the owner. This realignment of interests is a disincentive to owners' use of design-build" (Friedlander, n.d.).
- b. Large bridge bundles effectively force companies to enter into joint-venture or similar teaming agreements in order to be able to compete, balance/mitigate risk, and have the resources necessary to complete the work. This so-called value-creating alliance strategy ultimately creates a situation that small-to-medium sized competitors cannot duplicate, further solidifying their inability to compete on a fair playing field.

Reference:

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