

**October 2019 ABC-UTC Monthly Webinar Featured Presentation: FHWA Bridge Bundling Guidebook (BBG)**

#	Questions	Responses
	<b>Process</b>	
1	Wouldn't the bundling of bridges fall under the control of the owners, not the engineers?	Yes, the owner is typically the decision maker! Bridge Bundling is a multi-disciplinary activity and starts at the planning and programming phase of project development. Many owners, particularly in the US state Department's of Transportation have engineers on staff that provide input. Other owners often seek the advice and recommendations from engineering consultants.
2	How does bundling affect pre-construction, construction, and post-construction?	Bundling can result in savings of time and cost in all phases of project development. Cradle to grave. There are examples where pre-construction was bundled, such as for environmental approvals, than debundled or smaller bundles created for construction contracts.
3	Which is more important, bundling by geographical location or by type?	It depends. There are many factors to consider; in many situations both are important and the optimum may be to have both - close proximity and similarity in bridge type & size.
4	Distance wise, how far apart can the bridges be in order to bundle them and still get a cost savings?	The distance apart, or proximity will often depend on size of bundle - in general, for smaller bundles close proximity is beneficial. For large bundles - further apart may not be an issue, particularly if the contract duration is multi-year.
5	What are the limiting factors on the number of bridges and distance between bridges that can be bundled together?	It really depends; there are many factors to consider, starting with the agency or owners goals and objectives, bridge types, contract duration or period of performance, funding available, and so on.
6	Do you have the same firm as the prime contractor for all structures within a bundle?	Generally yes! But could be a joint venture where contractors join together. Many agencies have self-perform requirements where the prime contractor must perform a certain percentage of work.

7	Is the contracting method on bundling projects commonly design-build?	Any project delivery method can be utilized, most common methods we have seen or design-bid-build and design-build; there are examples of construction manager/general contractor (sometimes called CM at Risk), public-private partnerships, and use of indefinite delivery/indefinite quantity. The decision on which delivery method to use comes down to how an owner wants to allocate risks among the different parties.
8	Is there a right size to the number or complexity of bridge projects to bundle together that doesn't prevent competitive bidding?	It depends on local conditions, such as contractor capacity and contract requirements. Communication with industry is important to understand their concerns.
9	What are the variables to decide which projects to bundle? Should projects bundled in design continue as a bundle to construction?	a. Chapter 2 "Why Bundle Bridges? Goals and Objectives" includes a list of variables to consider. Chapter 6 "Bridge Selection" goes into detail on factors to consider when selecting bridges for bundling - these include location and proximity, traffic, bridge size, bridge types, work types, environmental issues, hydraulics, third party issues, right-of-way, and railroads. b. In general, the majority of case studies we have analyzed the bundle is consistent throughout all phases of project delivery, but there are examples where they are different.
10	What about bundling pedestrian bridges?	Yes; particularly if the bridges use similar details.
11	Could you describe cases where a structure was in a bundled project that would have been better off being a single project?	The bridge selection criteria mentioned previously in Chapter 6 was developed from from experiences agencies had with their bundling efforts, for example the inclusion of a bridge over a railroad can result in lengthy coordination and agreement process delaying the project. Another example, is a bridge in a sensitive environmental area requiring additional lengthy study could delay the bundle.
12	Is there availability of standard ABC details for bundling projects?	Although bridge bundling is considered an ABC method, there are other ABC methods that can be incorporated into a bridge bundling contract, for which there are details available.
13	How do you bundle and still be in compliance with Florida Statute 287.055?	We are not familiar with the referenced Florida state requirements.

14	Would overlapping the bridge bundling projects with Surface Treatment projects work effectively and with minimal effort? Could you do this using a push-button process?	Yes! But best to stay with similar type work.
15	Which of all the selection criteria for bundling projects is the most important to ensure the durability of a bridge?	It depends on the project goals and objectives, need clear specifications on what is expected.
<b>Cost</b>		
16	Do you have any cost data trends (increasing/decreasing) from current bundling projects?	See Indiana Study included in the Guide and the FHWA study on cost and schedule difference by delivery methods,
17	What is the cost savings for bundling projects? Is it tangible?	See Indiana Study and PA local agency example.
18	How do you quantify cost savings associated with bundling? Where is the most savings realized?	See Indiana Study and PA local agency example.
19	What are the things to watch out for in bundling of bridge projects, that could be detrimental to staying on budget?	Lessons learned - see page 8 Chapter 1 Sec. 1.3 and Chapter 6.
20	How do you predict the mark-up in cost on bundling smaller projects?	Stay with similar details. There is no mark up---consider risk.
21	Is federal funding available for bundling projects?	Federal funds can be used for bundling projects. However, there is currently no specific source of funding tied to bundling of bridge projects.
<b>Miscellaneous</b>		
22	How can drones be used for bundling projects?	To monitor project process, to inspect cranes, to verify work completed are a few examples.
23	Does anyone know the early American definition of "bundling"?	Yes; suggest those that want to know Google it!

	<b>Questions during Webinar</b>	
24	What is the difference between bridge bundling and the other state practice of "On-Call" funds?	Typically, on-call type projects, also known as job-order contracting, indefinite delivery/indefinite quantity, term agreements, and emergency contract, do not have specific locations identified. Bridge Bundling does - each bridge's location is known.
25	Who typically performs construction inspection and quality control on the design-build projects?	It depends on the project delivery method used. Contractor typically does QC . State does does acceptance testing.
26	Is there benefit to bundling across assets?	Absolutely; bundling principles apply equally to other assets - can and should be used for bundling all types of assets.