



Bridge Sustainability, Part Three: Economic Considerations

John S. Dick, *Executive Editor*

Photo: Ted Lacey Photography

In this issue of *ASPIRE*[™], we continue our year-long effort to define sustainable issues in bridge design and construction. On page 14, Jay Holombo, Vinh Trinh, and Maher Tadros of PBS&J discuss the “economic” aspects of sustainable concrete bridges, particularly as these concepts apply to conditions in California.

This issue’s featured design consultant, Parsons, comments that concrete is Parsons’ choice whether in Texas, Colorado, California, or the United Arab Emirates. Durability and long-term costs are primary considerations. They say the owners are demanding designs that ensure long-term performance—100 years in many cases.

Our featured state, Washington, has been recognized as progressive in its work with the concrete industry and implementation of economical systems and solutions. Consider that the state’s first precast concrete girder bridge was a post-tensioned, spliced-girder solution built 54 years ago. They haven’t stopped innovating since.

Segmental concrete bridges are establishing a significant niche. This issue’s project reports include two such solutions, one in California and another between Ohio and West Virginia. Once again, these bridges are designed for longevity.

The oldest segmental bridges in the United States are now some 35 years old. A study

discussed in our “Safety and Serviceability” feature (page 45) by Brett H. Pielstick of Eisman & Russo Consulting Engineers, reports on the performance of the entire inventory of segmental bridges. You’ll also find a link there to the full, detailed report.

Finally, we want to remind you to return the mail back postcard bound into this issue if you have not yet done so. That helps validate our subscriber list with the post office. Your assistance is appreciated. Soon, we’ll need to remove those who do not respond.

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