Stimulus Act and the Benefits of Concrete Bridges

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As ASPIRE™ goes to press, the American Recovery and Reinvestment Act of 2009 (also known as the Stimulus Act) has been signed into law. Whether it will accomplish its intended purpose remains to be seen. However, one thing is certain: A great many highway and bridge projects will get underway very soon. Many of these bridges will be constructed with concrete components, for a range of good reasons.

An early assessment indicates some $26.6 billion will be apportioned to the states for “highways and bridges.” These funds are in addition to contract authority provided in FY 2009 and FY 2010. The rules are specific concerning percentages of funds that need to be obligated by the agencies within a specified period of time, time frames for start-up and completion of projects, and so forth. But that is beyond the scope of our concern here.

What is important to understand is that the concrete industry is poised to respond to this potential flood of demand. Responsiveness always has been a hallmark of the industry, and it was especially important during recent natural disasters and over the past several years when the supply of construction materials was erratic at best.

The owner agencies have increasingly turned to concrete solutions. In 2008, the Federal Highway Administration (FHWA) reported statistics taken from the 2005 National Bridge Inventory (NBI), the most recent year for which complete data are available. For all new and replaced bridges constructed that year, concrete constituted a 65.5% share based on the area of decks. Based on the numbers of bridges, concrete accounted for 76.2% of bridges built in 2005. This percentage has continued to increase through the years.

There are many reasons for the growth of concrete bridges in the United States. Some of these include:

- Wide-spread use of high performance concrete, which provides increased confidence in exceptional long-term performance.
- Freedom from routine maintenance and its interference with traffic.
- Improved efficiencies in construction methods and in the production of materials, and products—resulting in lower unit costs.
- Confidence concerning supply and relative price stability.
- Exciting solutions that expand the range of applications for concrete.
- Sensitivity to creating sustainable solutions.
- Capability for a wider range of aesthetic expressions.
- The ability to meet ever-increasing demand to construct quickly, with improved quality, to reduce the duration of work-zone interference.

ASPIRE is dedicated to bringing to its readers, a broad spectrum of real solutions that illustrate the benefits achieved with concrete bridges across a wide range of challenges, geographies, and stakeholders. This issue features examples of how concrete can be used for long-span bridges or short-span bridges; highway bridges or pedestrian overpasses; and interstate bridges, urban bridges, or rural bridges.

We hope the stimulus program helps you to produce more bridges in the coming year, and we hope our efforts at ASPIRE give you new ideas for how to meet those needs quickly, cost effectively, and in aesthetically pleasing ways.

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