Title: Innovative, Accelerated and Cost-Effective Options for Short Span Bridges
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Abstract:
The aging bridge infrastructure is requiring states and counties to replace significant numbers of bridges in their inventories. Many of these bridges are simple span. Standardized short span steel bridge designs and practical details significantly reduce design time and fabrication costs, provide cost-effective solutions, and increase construction efficiencies in the nation's effort to repair and upgrade the bridge infrastructure.

For simple girder bridges, eSPAN140 is a free online design tool (supported by the Short Span Steel Bridge Alliance) that creates real-time standardized simple-span steel bridge designs, details and plans. The interactive web-based eSPAN140 design tool allows bridge designers and owners to quickly consider alternative steel solutions to meet customized bridge project needs. eSPAN140 also includes supporting information on constructing steel bridges, coating systems, technical design resources, project case studies, and manufacturer solutions. More information and the design tool are accessible at www.eSPAN140.com.

In addition, new standardized Press-Brake Tub Girder systems are available for modular designs and accelerated bridge construction needs. County bridge owners have successfully used eSPAN140 and the Press-Brake Tub Girder system for design-build projects to replace deficient county bridges.

This presentation will demonstrate eSPAN140 and the standard short span steel bridge designs, discuss the web-based interactive support center of industry stakeholders, present case studies on the economy of short span steel bridges, and discuss county design-build eSPAN140 bridges and Press-Brake Tub Girder projects.