

Innovation Exchange

Conversations Launching Change

Presented by the Federal Highway Administration Local Aid Support

Composite Bridge Technology

Thursday, August 19, 2021 | 2:00 - 3:30 p.m. ET

Bridge construction and replacement in rural areas can be expensive for county transportation agencies. Morgan County, Tennessee, installed a new, high-tech bridge equipped with a fiber-reinforced polymer (FRP) composite material bridge deck embedded with fiber optic sensors. The recently completed lightweight bridge deck system required less time to install than a traditional concrete bridge, and reduced energy and on-site construction costs. The new bridge has a 100-year lifespan, and the county will save money on repairs in the long term.

In this Innovation Exchange webinar, those who were involved in the bridge replacement will present highlights from the design, installation, and operation of the FRP bridge in Morgan County. The presenters will discuss the benefits associated with the use of FRP composites in infrastructure and detail the ongoing process of collecting and interpreting the performance data generated by this structure.

The speakers will be:

- John F. Unser, Technology Impact Manager, The Institute for Advanced Composites Manufacturing Innovation (IACMI—The Composites Institute), and Vice President of Program/Project Management, Composite Applications Group
- Dr. Dayakar Penumadu, Fred N. Peebles Professor and Joint Institute of Advanced Materials Chair of Excellence, Department of Civil and Environmental Engineering, Tickle College of Engineering, The University of Tennessee, Knoxville
- Joe Miller, Road Superintendent, Morgan County Highway Department, Wartburg, TN

For questions, contact Morgan Malley or Andrea Kirk, Program Managers with FHWA's Local Aid Support at Morgan.Malley@dot.gov or Andrea.Kirk@dot.gov.



Photo of completed bridge, provided by John Unser, IACMI.

No registration required.

To access the webinar:

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+1 509-931-1572

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