

In-Service Performance Evaluation and Monitoring of the Hybrid Composite Beam Bridge System

Description

Meta Fields

Project Completion Year : 2013

Project Starting Year : 2012

Primary Sponsor Contact Info : Virginia Center for Transportation Innovation and Research 530 Edgemont Road Charlottesville, VA 22903 USA Michael Brown

Project Length : 24

Budget : 102000.00

Key Words :

Bridge construction; Bridges; Composite structures; Fabrication; Inspection; Live loads; Performance evaluations

Abstract :

This study will conduct an in-service evaluation of a hybrid composite-beam bridge system that will be constructed beginning in early 2013. The new bridge will replace an existing structure on Route 205 over Tide Mill Stream in Westmoreland County in the Virginia Department of Transportation's Fredericksburg District. The hybrid composite-beam was developed as a lightweight sustainable solution with the potential to provide more rapid construction for short- to medium-span bridges. The primary objectives of this project are to characterize the in-service behavior of the structure and develop recommendations for routine inspection and long-term performance evaluation. Specific activities to accomplish this objective will include installing instrumentation during fabrication and construction of the bridge and conducting a live-load field test of the structure once it is built.

Subject : Composites

Group : Superstructure

Category : Completed Projects