

EDC News

Keeping You Informed About the **Every Day Counts Initiative**

U.S. Department of Transportation
Federal Highway Administration

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Innovation of the Month: Geosynthetic Reinforced Soil-Integrated Bridge System

The Every Day Counts initiative is promoting [geosynthetic reinforced soil-integrated bridge system](#) technology to help the highway community build low-cost, strong and durable structures in less time.

GRS-IBS technology has been used on a diverse array of highway projects, including grade-separated railroad crossings. An example is a bridge on State Route 7A over the Housatonic Railway in Sheffield, Massachusetts, the first GRS-IBS project built in the state.

The 2014 project demonstrated that a GRS-IBS can be built with minimal disruption to train traffic and support road traffic across a railway once completed. Using GRS-IBS on the \$1.1 million project saved 49 percent of the estimated cost of the original design using conventional construction.

Due to its location, a 105-foot-wide bridge with a 30-degree skew was required to span the rail line. The Federal Highway Administration is collaborating with the Massachusetts Department of Transportation on a project to monitor the bridge and confirm that the performance of the GRS-IBS structure is as anticipated when designed with a skew angle. This information will be useful for the design and construction of future GRS-IBS projects.



The Massachusetts DOT used GRS-IBS to build a bridge over a rail line.