

UTC Project Information	
Project Title	MPC-508 – Experimental Evaluation of a New Double Composite System for Steel Bridges
University	Colorado State University
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Funding Agencies	USDOT, Research and Innovative Technology Administration
Agency ID or Contract Number	DTRT13-G-UTC38
Project Cost	\$170,000
Start and End Dates	September 30, 2013 to September 30, 2018
Project Duration	September 30, 2013 to September 30, 2018
Brief Description of Research Project	The overarching primary objective of the proposed research is to experimentally develop and assess a new double composite steel bridge system that allows for the construction of long span bridges using hot rolled steel beams. Various sub-objectives are thought for the complete assessment of the proposed system including: 1) Evaluating the system characteristics including stiffness, strength, and ductility; 2) Assessing the demand in slabs and beams including moment, shear, and deflection under specified AASHTO loading; 3) Comparing the response between the proposed bridge system and conventional bridge superstructures; 4) Evaluating the use of rolled beam sections covering up to 44 inches in height.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The analysis results are new and aside from this study, there is no limited information on the behavior of the proposed system in the literature. We believe that state DOTs will start to consider such system once more studies are published.
Impacts/Benefits of Implementation (actual, not anticipated)	The implementation of the double composite steel bridge system using rolled beams can save substantial cost associated with inspection and maintenance that are typically associated with plate girder bridges.
Web Links <ul style="list-style-type: none"> • Reports • Project Website 	<ul style="list-style-type: none"> • MPC Final Report – Evaluation of a New Double-Composite Simply-Supported Steel Bridge System