

UTC Project Information	
Project Title	MPC-448 – Reducing Flood Vulnerability of Communities with Limited Road Access by Optimizing Bridge Elevation
University	Colorado State University
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Funding Agencies	USDOT, Research and Innovative Technology Administration
Agency ID or Contract Number	DTRT12-G-UTC08, Modification No. 1
Project Cost	\$116,850
Start and End Dates	April 1, 2014 – July 31, 2017
Project Duration	3 Year
Brief Description of Research Project	This research project will provide a prototype tool for the determination of the appropriate elevation of bridges in a road network serving a community with access compromised by a flood event. A holistic and systematic determination of safe elevations will help decision makers to prioritize resources for road bridge retrofitting, as well as designers in the engineering of these structures. This will be a reliability-based approach that accounts for the consequences of bridge failure rather than just the structural reliability.
Describe Implementation of Research Outcomes (or why not implemented)	Method is applicable but cost prohibitive currently.
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	The methodology provides a DOT the ability to optimize a road segment and all bridges on the roadway for height above a river or creek to ensure a consistent level of risk and provide egress.
Web Links	https://www.ugpti.org/resources/reports/details.php?id=1008
<ul style="list-style-type: none"> • Reports • Project Website 	