NCTSPM

Project Information Form

Reporting Period: 07/01/2015 – 12/31/2015

Project Title	Extending HYRISK to Predict Scour Risk as a Function of Soil Erodibility Characteristics
University	Georgia Institute of Technology
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Funding Source(s) and Amounts Provided (by each agency or organization)	Georgia Department of Transportation
Total Project Cost	$135,000
Agency ID or Contract Number	DTRT12GUTC12
Start and End Dates	5/15/14-11/15/15
Brief Description of Research Project	HYRISK is a risk-assessment tool that calculates the probability of bridge failures due to scour. This project will extend HYRISK to include risk adjustment factors that account for soil erodibility.
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	GDOT is planning to use HYRISK to identify a subset of bridges for which it will perform scour screenings and/or scour evaluations. Given the limited resources to conduct these screenings, it is critical that the bridges selected are the ones that exhibit the highest risk of scour failures.
Impacts/Benefits of Implementation (actual, not anticipated)	Implementation of soil adjustment factors in HYRISK showed significant changes in the ranking of bridges (among a set of bridges most vulnerable to scour). Among the 15 bridges where detailed soil property was available, five (or 33%) experiencing a change in rank of 36-50%.
Web Links • Reports • Project website	http://garrowlab.ce.gatech.edu/research/1910