Project Information Form #3 (January 2014)

Project Title	Evidence-Based Design Applications in Transportation Asset Management
University	Georgia Institute of Technology
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Funding Source(s) and Amounts Provided (by each agency or organization)	NCTSPM - $37,689 | GDOT - $89,676
Total Project Cost	$127,365
Agency ID or Contract Number	DTRT12GUTC12 | NCTSPM 2013-004 | RP 12-18
Start and End Dates	Start: Jan 1, 2012 (Official); August 13, 2012 (Actual) End: December 31, 2013
Brief Description of Research Project	The purpose of this research is to develop an evidence-based planning tool and database that will help agencies to strategically plan the development of their asset management programs using accumulated experience to achieve higher-performance output. Specifically, the research will: (1) Conduct a literature review to determine best practices in evidence-based design, planning and programming that can be applied to Transportation. It will also draw from existing key literature on performance management; (2) Work with AASHTO, TRB and other relevant professional organizations to determine and refine key performance indicators for tracking asset management program performance; (3) Design and conduct multiple case studies to collect best practices and lessons learned in asset management program development (both network-level and project-level asset management); (4) Develop procedures to evaluate program maturity levels against performance as indicated by key performance indicators; and (5) Develop prototype evidence-based database and planning tool for performance –based planning of asset management program development
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	A documentation framework: PICMO (Problem, Intervention, Context, Mechanism, Outcome) has been developed for organizing information to extract evidence, and a prototype evidence-based database and planning tool have been implemented in Excel. Poster: "Evidence-based Decision Making for Transportation Asset Management" presented at the 2013 GDOT Poster Session on September 24, 2013.

Impacts/Benefits of Implementation (actual, not anticipated)	Research paper on evidence-based transportation asset management selected for presentation at the 2014 Annual Transportation Research Board Conference and publication in the Transportation Research Record. Reference: Smith-Colin, J., Fischer, J. M., Akofio-Sowah, M., and A. A. Amekudzi. Evidence-Based Decision Making for Transportation Asset Management: Enhancing the Practice with Quality Evidence and Systematic Documentation.
Web Links • Reports • Project website	Project information at www.irg.ce.gatech.edu
Names of students who are financially supported by this grant	Janille Smith-Collins Jamie Fischer Margaret Akofio-Sowah Richard Boadi Stephanie Brodie
Names of students who are participating (but not financially supported) by this project	--