Project Information Form

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

Project Title	**Optimizing EMS Through The Use Of Intelligent Transportation Systems (ITS) Technologies**
University	University of Alabama at Birmingham
Principal Investigator	Andrew J. Sullivan
PI Contact Information	Andrew J. Sullivan, MSCE, PE Civil, Construction, and Environmental Engineering University of Alabama at Birmingham (UAB) 1075 13th Street South, Hoehn 311 Birmingham, AL 35294-4440 Phone: 205-934-8414; FAX: 205-934-9855 E-mail: asullivan@uab.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	$120,000 NCTSPM UTC-Federal $80,000 ALDOT-State, $40,000 FDOT-State
Total Project Cost	$240,000
Agency ID or Contract Number	DTRT12GUTC12 NCTSPM 2012-064
Start and End Dates	10/4/2012-12/30/2014
Brief Description of Research Project	This project is investigating needs and opportunities associated with the use of ITS as a tool for improving emergency response and outcomes. More specifically, the study is examining ITS technologies and transportation management strategies to: a. Optimize deployment of EMS resources through positioning of first responders within the transportation grid and implementation of algorithms to facilitate Computer-Aided Dispatching (CAD) of emergency vehicles b. Mitigate non-recurrent incident induced congestion and its impacts on EMS responders and the general public. Use of active traffic management strategies (such as temporary shoulder lanes) and traffic signal preemption to allow quick access of first responders to the emergency site and/or the treatment facility will be also considered.

Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	Draft report will be submitted to NCTSPM by March 30, 2016. Inconsistencies and weaknesses in some of the analysis were identified and have required additional work. We believe the analysis related to EMS dispatch, location, and optimum travel routes has been addressed. Preparation of the final report is underway and should be completed in the next few weeks.
Impacts/Benefits of Implementation (actual, not anticipated)	Nothing to report at this time.
Web Links • Reports • Project website	N/A
Names of students who are financially supported by this grant	Ossama O. Ramadan (UAB) Yan Xiao (FIU)
Names of students who are participating (but not financially supported) by this project	N/A