Project Information Form

Project Title	**Optimizing EMS Through The Use Of Intelligent Transportation Systems (ITS) Technologies**
University	University of Alabama at Birmingham
Principal Investigator	Andrew J. Sullivan
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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	
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, and

Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	Initial research results presented at the ALASIM Conference on computer simulation in May 2014. Presented overview of analysis of dispatch and travel times using real-time and historical travel time data. Also presented overview of simulation results related to advanced traffic signal control and EMS transport times.
Impacts/Benefits of Implementation (actual, not anticipated)	Analysis shows that improved EMS response times can be obtained not only through the use of real-time traffic data, but also through the use of historical averages obtained through the monitoring of travel speeds of fleet vehicles.
Web Links • Reports • Project website	See NTCSPM website.