Project Information Form

Project Title	Cooperative Vehicle-Highway Automation (CVMA) Technology: Simulation of Benefits and Operational Issues
University	Georgia Institute of Technology and Florida International University
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Funding Source(s) and Amounts Provided (by each agency or organization)	Georgia Tech: NCTSPM $80,000 and GDOT $80,000 Florida International University: NCTSPM $50,000, FIU $50,000
Total Project Cost	$260,000
Agency ID or Contract Number	DTRT12GUTC12 NCTSPM 2013-029
Start and End Dates	November 1, 2013 to June 1, 2015
Brief Description of Research Project	Congestion related costs have an adverse impact on the economic competitiveness of localities, states, and the nation as a whole; as a result reducing congestion is a primary strategic goal of transportation agencies at all levels. Increases in congestion have created a market for assistive technologies to help manage driving in congested freeway environments. Major automobile manufacturers including Ford, BMW, Audi, GM, and others are developing systems to control acceleration/deceleration and steering. Some of these systems will be commercially available on new vehicles as soon as 2013. While these systems go by many names (e.g. Traffic Jam Assist, Traffic Jam Assistant, Advanced Cruise Control, etc.), these semi-autonomous Cooperative Vehicle-Highway Automation (CVHA) systems utilize radar and machine vision technology to keep pace with other vehicles and provide automated steering control to maintain lane position. While these systems are being developed and deployed with the intent of reducing driver stress and potentially improving vehicle flow, it is not clear how they will be operated on existing transportation infrastructure, how they will be regulated by State DOTs, and how much, if any, congestion mitigation they will produce. This study focuses on developing the information necessary for State DOTs to make data-driven decisions regarding management of their current and next-generation infrastructure given the imminent introduction of CVHA technology. The research will evaluate the impacts of CVHA to their highway systems by providing transparent analysis based on studies on 1) human factors associated with the interaction of vehicles using CVHA with other users of

	the roadway and 2) microscopic traffic simulation.
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	Nothing to report at this time
Impacts/Benefits of Implementation (actual, not anticipated)	Nothing to report at this time
Web Links • Reports • Project website	Nothing yet available