

Project Information Form

Project Title	Eco-Friendly Intelligent Transportation System Technology for Freight Vehicles
University	UC Riverside and USC
Principal Investigator	Matthew Barth Petros Ioannou
PI Contact Information	Email: barth@ece.ucr.edu phone: (951) 781-5782 ioannou : ph. 1 (213) 740-4452; email: ioannou@usc.edu
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Agency ID or Contract Number	DTRT13-G-UTC29
Start and End Dates	June 30, 2014 – September 30, 2016
Brief Description of Research Project	<p>Among several strategies to reduce fuel consumption and greenhouse gas emissions from motor vehicles, a variety of Intelligent Transportation System (ITS) technologies are emerging that can be very cost effective. These ECO-ITS technologies are focused on fuel-efficient operation of vehicle and traffic management systems to achieve better fuel economy and lower tailpipe emissions without compromising the safety of the driver or other road users. Most of the research to date has been applied to light-duty vehicles. This project will develop and apply new ECO-ITS technologies that can be specifically designed for heavy-duty vehicles and freight traffic associated with goods movement to improve energy efficiency and reduce emissions designed.</p> <p>In this project, the researchers will utilize port/roadway network microscopic models (specifically for the Ports of Long Beach and Los Angeles) to evaluate different scenarios that utilize different forms of ECO-ITS technology. These truck-based ECO-ITS technologies will take</p>

	<p>advantage of real-time traffic sensing and telematics, allowing for a traffic management systems to better monitor truck traffic speed, density, and flow and then communicate information in real-time back to the vehicles. Based on the evaluation of the different ECO-ITS technologies, recommendations will be made for policies and practices that will reduce the use of fuel and reduce both greenhouse gas and pollutant emissions. These results will then be communicated to policy makers.</p>
<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>(Attach Any Photos)</p>	
<p>Impacts/Benefits of Implementation (actual, not anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project website 	<p>http://ncst.ucdavis.edu/project/ucr-cec-to-2-3</p>