

Project Information Form

Project Title	Eco-Friendly Intelligent Transportation System Freight Strategies
University	University of California, Riverside
Principal Investigator	PI: Matthew Barth Co-PIs: Kanok Boriboonsomsin (UCR), Petros Ioannou (USC)
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Funding Source(s) and Amounts Provided (by each agency or organization)	South Coast Air Quality Management District (SCAQMD): \$543,000 In-kind Cost Share: \$1,647,000
Total Project Cost	\$2,190,000
Agency ID or Contract Number	UCR-SCAQMD-418 SCAQMD Contract Number: 17276
Start and End Dates	August 3, 2017 – August 2, 2020
Brief Description of Research Project	<p>The Ports of Los Angeles and Long Beach, two of the busiest ports in the nation, provide significant contribution toward economic growth and vitality for the South Coast Air Basin. However, port-related goods movement operations and traffic are also responsible for a large portion of criteria pollutants and greenhouse gasses in the region, with disproportionate impacts on communities adjacent to the ports and along goods movement corridors. Eco-friendly Intelligent Transportation Systems (ECO-ITS) including Freight Advanced Traveler Information and Eco-Approach and Departure provide optimized scheduling and eco-friendly speed guidance for freight trucks.</p> <p>The proposed research will analyze existing ECO-ITS programs and utilize integrated GPS data loggers to log real-time vehicle and engine/after treatment data to accurately establish truck baseline fuel consumption and emissions and quantify fuel and emission savings. Based on the results, researchers will provide a set of recommendations on effective approaches for deploying ECO-ITS freight strategies.</p>
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	



National Center for Sustainable Transportation

Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project website	https://ncst.ucdavis.edu/project/eco-friendly-intelligent-transportation-system-freight-strategies/