Project Information Form

Project Title	Estimating the Monetary Benefits of Reducing Delays on Heavily Trafficked Truck Freight Corridors in Georgia
University	Georgia Institute of Technology
Principal Investigator	Dr. Frank Southworth
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Funding Source(s) and Amounts Provided (by each agency or organization)	Woodruff Foundation: $ 75,000 UTC (NCTSPM): $ 130,000
Total Project Cost	$205,000
Agency ID or Contract Number	DTRT12GUTC12 ; NCTSPM 2013-033
Start and End Dates	11/01/13 – 05/01/15
Brief Description of Research Project	This project will assess the state of the art in value of travel time savings for different classes of both truck and automobile travel, and develop a method that can be applied at the statewide, corridor level for the purposes of deriving the monetary benefits of limiting within-corridor travel delays. The method will be demonstrated using data for a strategically important trucking corridor in the state of Georgia. The modeling will be used to simulate different future year commodity and truck class allocations, based on future year industrial activity projections and corridor capacities, in order to estimate the future value of delay-reducing truck travel time savings (which may include, for example, adding truck only lanes to a highway). Corridor-specific truck movement volumes will be broken down by origin, destination, commodity and vehicle class, in sufficient detail that corridor travel costs can be derived on the basis of the mix of industries that rely on the corridor for goods deliveries. An origin-based user equilibrium traffic assignment routine will be used to route these multi-class truck movements over the highway corridor's links, using pre-determined automobile traffic volumes to capture mixed truck + auto traffic volume-to-capacity ratios for use in forecasting future year congestion-influenced corridor speeds. The process will also generate a total dollar value of the freight moved in the corridor on an average daily or annual basis, offering a possible freight

	performance measure for state DOT use.
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	
Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links • Reports • Project website	F. Southworth and D.A. Smith (2014) Estimating the Monetary Benefits of Reducing Delays on Heavily Trafficked Truck Freight Corridors: Thinking (About What's) Inside the Box. Presentation at the University Transportation Center Southeast Region Conference Atlanta, GA March 23-24, 2014 D. A. Smith (2014) Analyzing Truck Traffic on a Major Highway Corridor in Georgia. Map Day Poster Competition, School of City and Regional Planning, Georgia Institute of Technology, Atlanta, GA. (Awarded 2nd Place out of 17 posters).
Names of students who are financially supported by this grant	Denise Angela Smith (PhD Candidate, Civil & Environmental Engineering)
Names of students who are participating (but not financially supported) by this project	Edoardo Moauro (Undergraduate, Civil & Environmental Engineering)