

Project Information Form

Project Title	Fuel and Emissions Calculator
University	Georgia Institute of Technology
Principal Investigator	Yanzhi Xu (Co-PI) Randall Guensler (PI of Record)
PI Contact Information	yanzhi.xu@ce.gatech.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	US DOT - \$137,958.52
Total Project Cost	\$137,958.52
Agency ID or Contract Number	DTRT13-G-UTC29
Start and End Dates	November 1, 2013 - November 30, 2015
Brief Description of Research Project	The Fuel and Emissions Calculator (FEC) was originally developed to help public transit agencies choose between alternative transit vehicles, including a variety of existing and anticipated electric vehicle options. This project will discuss the updated and expanded FEC (Version 2.0) that now supports four calculators, including the: transit bus calculator, shuttle bus calculator, heavy-duty truck calculator, and rail transit calculator. The calculators will make it easier to assess and compare the performance of alternative vehicle technologies on the basis of purchasing, operating and maintenance costs, including energy/fuel efficiency, and the ability to reduce greenhouse gas emissions.
Describe Implementation of Research Outcomes (or why not implemented) (Attach Any Photos)	The FEC has been applied to analysis of transit vehicles in three peer-reviewed conference papers and one journal manuscript. Additional papers are being developed.
Impacts/Benefits of Implementation (actual, not anticipated)	Impacts will become evident as the model becomes used on a more widespread basis for technical and policy analysis.
Web Links <ul style="list-style-type: none"> • Reports • Project website 	http://ncst.ucdavis.edu/project/gt-dot-012