

UTC Project Information	
Project Title	Estimation of Stochastic Network Vehicular Origin-Destination Demands Using Multi-Sensor Information Fusion Approaches – Phase II
University	Purdue University
Principal Investigator	Dr. Srinivas Peeta
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Funding Source(s) and Amounts Provided (by each agency or organization)	\$100,000: NEXTRANS Center/USDOT \$80,000: National Science Council, National Cheng Kung University, Tainan, Taiwan. \$20,000: Purdue University
Total Project Cost	\$200,000
Agency ID or Contract Number	DTRT12-G-UTC05
Start and End Dates	01/01/2015 - 5/31/2017
Brief Description of Research Project	The main objective of this Phase II study is to estimate a set of stochastic network O-D demands using a multi-sensor information fusion method. Taking advantage of multi-sensor information, the information fusion model to be developed will formulate the O-D demand estimation problem as a stochastic mathematical program using the concept of fuzzy logic to track network uncertainties. The study will comprehensively explore the issues of network uncertainties and multi-sensor information on the estimation of network O-D demands. The corresponding solution algorithms will be developed and tested using a real road network in Taiwan to generate insights and policy implications for the developed model framework. Finally, sensitivity analysis on the budget constraint and network topology issues will be systematically evaluated for a cost-effective implementation in the field.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	

Impacts/Benefits of Implementation (actual, not anticipated)	
Web Links <ul style="list-style-type: none">• Reports• Project website	