



**Project Information Form**

Project Title	<b>Bringing Freight Components into Statewide and Regional Travel Demand Forecasting</b>
University	<b>Georgia Institute of Technology</b>
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Funding Source(s) and Amounts Provided (by each agency or organization)	<p><b>Awarded from UTC:                   \$150,000</b></p> <ul style="list-style-type: none"> <li>• <b>GaTech \$128,196</b></li> <li>• <b>UAB \$21,804</b></li> </ul> <p><b>Match:                                       \$150,000</b></p> <ul style="list-style-type: none"> <li>• <b>\$91,406 (GDOT)</b></li> <li>• <b>\$36,790 (CQGRD)</b></li> <li>• <b>\$21,804 (ALDOT)</b></li> </ul>
Total Project Cost	<b>Project Total:                               Finalized \$300,000</b>
Agency ID or Contract Number	DTRT12GUTC12  <b>Project #: 4906612</b>
Start and End Dates	<b>July/2012 ~ December/2013 (Extended to June/2014)</b>
Brief Description of Research Project	This study explores the possibility of a tour-based freight demand model at the state/regional level utilizing (1) recently available nationwide GPS-based truck movement data in conjunction with existing data sources, (2) detailed employment databases that provide NAICS sector breakdowns, and (3) regional transport networks, which can show all possible paths of freight movements. The study investigates the current state of the practice and constructs a transferrable framework for state/regional freight demand models, including two case studies (Atlanta, GA and Birmingham, AL).
Describe Implementation of Research Outcomes (or why not implemented)	Many DOTs and MPOs seek a standardized freight demand model to apply to their state or region. This study is intended to eventually lead to such a freight demand model utilizing GPS data, laying out long-term guidelines for how to develop a real-world commodity flow-based freight

(Attach Any Photos)	demand model (FDM).
Impacts/Benefits of Implementation (actual, not anticipated)	<p>The results inform and examine data sharing, modeling, and collaborative planning and integration of MPO freight activity in statewide freight planning. A survey was conducted to find out current MPO and State level freight modeling activities. A tour-based Atlanta regional truck model has been developed and documented and transferring the same model structure for Birmingham metropolitan area has been completed as well. The team also compared the outputs of the existing models with those of the newly developed models and showed some planning applications with some scenarios. We have presented our findings at 2015 TRB Annual meeting (Session: Developing Truck Origin-Destinations Flows from GPS Data) and had great attention. We are also invited to present at Atlanta Regional Commission (ARC) Modeling User Group meeting in February, 2015. ARC shows great interest the outputs for their regional freight modeling development.</p>
Web Links <ul style="list-style-type: none"> <li>• Reports</li> <li>• Project website</li> </ul>	The final deliverable was delivered to GDOT and it is under review.