

Southeastern Transportation Research, Innovation, Development and Education Center

UTC Project Information	
Project Title	Simulating a Shift to E-delivery: Impacts on VMT (Project F6)
University	Team: University of North Carolina at Chapel Hill and North Carolina State University
Principal Investigator	Matthew Bhagat-Conway, Ph.D., UNC Chapel Hill
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Funding Source(s) and Amounts Provided (by each agency or organization)	STRIDE: \$64,595
Total Project Cost	\$64,595
Agency ID or Contract Number	69A3551747104
Start and End Dates	August 1, 2022 to May 5, 2023
Brief Description of Research Project	STRIDE project K5 is creating better estimates of shopping vehicle miles traveled (VMT) in the US, using detailed travel survey data. These estimates provide a valuable baseline against which to compare estimates of the transport impacts of e-shopping and delivery services. The proposed project represents a logical extension, using the information gathered in Project K5 to provide estimates of the effect of a shift to e-shopping on travel outcomes. The project has three components. First, a regression model will be estimated using the data from Project K5 to predict the marginal VMT of a shopping trip, based on attributes of the destination and the trip maker. Second, a predicting online and in-person shopping and the tradeoffs or complementarity between them will be constructed based on COVID Future survey data. Third, the lessons learned from these models will be integrated into a regional travel demand model to improve forecasting of shopping travel, especially as e-shopping becomes more prevalent. I anticipate that this project will result in more thorough consideration of shopping travel and e-shopping in infrastructure planning.
Describe Implementation of Research Outcomes (or	Not available yet.
why not implemented)	
Place Any Photos Here	



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Impacts/Benefits of Implementation (actual, not	Not available yet.
anticipated) Web Links	https://stride.ce.ufl.edu/project-f6/
Reports	inteps.// striue.ce.um.eud/project ro/
 Project website 	