2017 Project Abstract

Project Title: Technology Influence on Travel Demand & Behaviors (Project B)

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ABSTRACT: Advanced technologies influence travel behaviors; however, there is currently no consensus on what this influence will be for recently available and upcoming technologies and devices. For example, it is still not clear how travelers respond to smartphone-based traveler information services and how such information may influence their mode-choice or travel behavior. Understanding these attitudes will be even more important when traveler information can be utilized to plan, design, and manage transportation as a service, offering sustainable and automobile-independent travel modes. While much research posits that technological advances have reduced the demand for driving licensure, auto ownership, and driving among younger and middle-aged adults, there is little empirical verification of these hypotheses. This project will use a mixed methods approach (i.e., combining qualitative, quantitative, and modeling methods) to assess the substitution effects of technology on driving among younger and middle-aged populations in the southeastern region. Researchers will conduct focus groups and interviews with young and middle-aged adults to assess how driving behavior may evolve due to changes in transportation options and services. The study will have a particular focus on the uptake of car/ridesharing platforms (e.g., Uber and Lyft) in the region and the impact of applications of shared-use economy on local and regional congestion. The objective of the project will be to inform transportation stakeholders on the links between technology and driving choices among young and middle-aged adults in the Southeast where the auto-dependent built environment likely influences these links. Additionally, the study will result in a model that will quantify influences of these technologies on urban and regional congestion. The study is significant for providing transportation agencies the means to better-plan transportation as a service with sustainable and automobile-independent modes.