



Questionnaire Provides Insights into Users' Attitudes, Preferences, & Choices toward Transportation Network Services

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

PROJECT OVERVIEW

Over the last decade, the popularity of Transportation Network Companies (TNCs) such as Uber and Lyft has been increasing at a steady pace, even in medium-sized cities. However, it is not clear how travelers respond to these smartphone-based services and how these services may influence their mode-choice or travel behavior. Data on TNC use and details on conditions that make TNC use attractive to transportation system users are still very limited due to privacy concerns, as well as technical and financial feasibility issues.

RESEARCH GOALS

The study sought to understand current travel preferences and practices of transportation users in the Birmingham, Alabama metropolitan area and document their attitudes, preferences, and choices toward TNC use as a travel mode of choice.

Researchers developed a comprehensive questionnaire to survey a TNC-aware population sample in the Birmingham Metro Area. The survey requested participants to report detailed trip information for a typical day (i.e., 24-hr travel diary) including origin and destination of each trip, travel time, trip purpose and travel mode used. Demographic data were also obtained and used in the analysis and interpretation of survey findings.

FINDINGS

The questionnaire, completed by over 450 transportation users in the Birmingham metro area, focused on travel preferences, practices and attitudes toward TNCs as a travel mode of choice.

Examination of over 1,100 reported trips indicated that approximately 6.3% of those trips were performed using TNCs, with Uber having 80% of the TNC market share in the Birmingham region. The small market share of TNC trips is consistent with expectations, given that Uber and Lyft were recently introduced in the region and that transportation users in the Birmingham

IMPACTS

The user questionnaire responses can help mid-sized cities to understand the behaviors of users when transportation network services are available. Such information can help transit agencies and TNC companies to identify needs and opportunities in the local market and facilitate collaboration and coordination among those services. Integrated system operations have a great potential to attract new customers and benefit both types of transportation services in the future.

WHO BENEFITS?

Transportation researchers, analysts, and planners.

RESEARCH TEAM

Virginia P. Sisiopiku, Ph.D. University of Alabama at Birmingham
vsisiopi@uab.edu

Ossama Ramadan, Ph.D. (formerly at University of Alabama at Birmingham)

Sahila Sarjana, University of Alabama at Birmingham

metro area largely embrace the automobile-dependent commuting culture as confirmed by previous studies. Still, 45% of survey participants reportedly have used TNC in the past year, an indication of awareness of TNC service availability.

Examination of respondents' demographics and cross tabulation analyses provided evidence that TNC users cover a wide range of age groups, with younger users being overrepresented compared to elderly. Lack of vehicle availability was associated with only a quarter of all reported TNCs, thus indicating that the majority of TNC users select TNC services as a mode of choice for certain trips.

The most important determinants that made TNCs a preferable mode to Birmingham travelers included convenience of use and reduction of concerns for traffic safety (especially for late night trips to bars and eating establishments). Lack of parking availability at the destination and lack of vehicle availability were also listed as reasons for selecting TNCs as a mode of travel.

The findings of the survey also helped define the profile of the typical TNC user in the Birmingham region as a 25-34 year old that is using the service for commuting trips or for entertainment purposes for short to medium range distances (or average of 5 miles).

Overall, the findings on the influence of transportation network services can help officials configure better mobility plans for their mid-sized cities where car/ridesharing platforms are active.

PRODUCTS

User questionnaire on transportation user behaviors – A questionnaire was developed to understand transportation users' travel behaviors in markets where ride-hailing services have taken off in terms of use and coverage in the recent years. The questionnaire can be used by other researchers and analysts who are interested in documenting users' preferences, attitudes, and mode choices in markets where Transportation Network Services (TNS) are available. Moreover, it can be used by transportation researchers that are seeking to understand determinants that drive people towards the use of TNCs services. The questionnaire was implemented in Birmingham, Alabama. A copy of the survey is available in the Final Report.

For more information on Project B (Technology Influence on Travel Demand and Behaviors), visit <https://stride.ce.ufl.edu/project-b/>

About STRIDE

The Southeastern Transportation Research, Innovation, Development & Education Center (STRIDE) is the 2016 Region 4 (Southeast) U.S. Department of Transportation University Transportation Center headquartered at the University of Florida Transportation Institute (UFTI).

