STRIDE | Southeastern Transportation Research, Innovation, Development and Education Center

Technology Transfer Final Report

STRIDE Project E2

Establishing A Dual Generational Modality Dataset: Comparing the ride-sharing adoption trends and perspectives of consumers from two generational cohorts, Millennials and Gen X'ers

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DISCLAIMER

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1. Project Overview

Traffic congestion is an unintended consequence of population growth and vibrancy in a city. The impacts of congestion are broad and affect traffic safety, air quality, productivity, fuel consumption, and the economy. In 2017, the United States lost $305 billion (including indirect losses) to traffic congestion. Widespread consensus among scholars and professionals is for interventions to mitigate traffic congestion, but there is not an agreement on what strategies to implement.

Ride-hailing services such as Uber or Lyft are the latest tool in sustainable transportation strategies to come under scrutiny. Originally thought to be a way to reduce congestion, these services have actually been shown to increase it in some cases. Although the number of individuals driving around urban centers to find parking appears to decrease with the adoption of ride-hailing, Uber or Lyft drivers are instead circling around waiting for riders. Additionally, ride-hailing services have not led to the abandonment of personal vehicles, but rather to the abandonment of public transit in some cases.

Millennials and Gen X-ers combined are 150 to 170 million consumers and any change in their travel behavior will have a major effect on the market. The research team collected and analyzed the data on travel behavior of these two cohorts in North Carolina and Florida.

2. Research Goals

The purpose of this study was to evaluate the use of ride-hailing services in the two largest age cohorts in the United States: Millennials and Generation X-ers, focusing on the Southeast. This study seeks to determine how each generation has adopted these methods to help planners learn how to incorporate these strategies in transportation planning.

Our main goal was to produce a mobility data sets for two separate generations, millennials and Gen X-ers, for the Southeastern region. This research employs a mixed method approach, using both qualitative and quantitative methods. A comprehensive literature review of the topic focuses on the usage of ride services by millennials and Gen X-ers. The team identified and documented the mechanism of reduction in congestion due to changes in demand for ride-hailing and -sharing services from the available literature.

3. Findings

The results of this study illustrate that both generations use ride-hailing services, but as seen in previous studies, millennials are more inclined to use them. Ride-hailing also serves as an important commute mode, particularly for millennials. In addition, and of importance to planners, the market has diversified, and more users are coming from the suburbs. Overall usage of ridesharing services will likely continue to increase over time and planning strategies should attempt to predict this change rather than respond to it.

4. Performance Metrics

Metric	# Completed
OUTPUTS	
Product(s): Number of new or improved tools, technologies, products, methods, practices, and processes created or improved	2
Technical Report: Number of client-based technical reports published	STRIDE Final Report

OUTCOMES	
Body of Knowledge: Number of trainings for transportation professionals	1
Professionals Trained: Number of professionals participating in trainings	7 (62 YouTube views)
IMPACTS	
Stakeholders: Number of stakeholders you met with to encourage adoption or implementation of product(s)	0
Adoption/Implementation: Number of incidences outputs of research have been implemented or adopted	0

5. Products

1) User questionnaire surveys

The product is a questionnaire survey that can be used to understand changes in transportation travel behavior of different population cohorts. The survey can be modified to use in different regions and for different population cohorts. The survey was implemented in North Carolina and Florida.

2) Dataset

The survey has produced a comprehensive mobility dataset for two separate but influential population cohorts. The dataset can be further be analyzed and recreated for different markets.

6. Who benefits/will benefit from your products?

- Regional transit authorities
- Transportation professionals
- Researchers
- Students

8. Body of Knowledge & Professionals Trained

1) STRIDE webinar – February 12, 2020: Allie Thomas, PhD, UNC Chapel Hill, presented "Do Southeastern Millennials Uber" (7 participants, 62 views on YouTube)

9. Stakeholder Engagement

none

10. Adoption/Implementation

The questionnaire can be used in other regions of the United States seamlessly. We anticipate that other researchers would use the survey to determine the changes in travel behaviors of different population cohorts. The final report also provides insights on how to analyze the data.

11. Broader Impacts

The project has produced a mobility data sets for two separate generations, millennials and Gen X-ers, for the Southeastern region. Millennials and Generations X influence on American mobility is significant. These two cohorts combined number between 155 million to 170 million people (depending which definition we use to define the cohorts). They have shown to be more adaptable to technology and to

use it in their daily lives than previous generations. Therefore, the understanding of travel behaviors of these two cohorts is extremely important for future policy making. The report is generating new knowledge and may give important insights to policymakers towards the changing travel preferences of millennials and Gen X-ers in the Southeast United States.