Analysis of Emerging Transportation Trends in California Using Panel Data: Individual Attitudes and Lifestyles, Residential Location, Vehicle Ownership, Travel Behavior and Adoption of Shared Mobility Among Millennials and Older Adults (PHASE TWO)

This panel study improves the understanding of emerging transportation trends in California through a longitudinal approach.

WHAT IS THE NEED?

The transportation sector is going through rapid changes, with transformations of social and built environments, as well as technological innovations happening constantly. To better accommodate people’s mobility needs, the research team is investigating changes in individual attitudes and lifestyles, and the relationships among residential location, vehicle ownership, travel behavior, the adoption of shared mobility and other transportation technologies (e.g., autonomous vehicles).

WHAT ARE WE DOING?

The research team is analyzing survey data collected in 2015 and 2018. Our aim is to improve the understanding of emerging transportation trends by exploring the factors affecting the adoption and usage of new mobility services and new vehicle technologies in California.

We are also examining changes in people’s lifestyle, attitudes, travel demand and other behavioral choices across different socio-demographic segments prior, during and after the COVID-19 pandemic.
WHAT IS OUR GOAL?

The goal of this project is to use the longitudinal data to better assess the impacts of lifecycle, point in time, and generational effects and well as social/economic disruptions (including the pandemic) on travel-related choices, analyze various components of travel behavior, such as the use of shared mobility services among various segments of the population, and evaluate their impacts on vehicle ownership and use over time, among other aspects.

WHAT IS THE BENEFIT?

This panel study improves the understanding of the impacts of emerging technologies and shared mobility services such as ridehailing (e.g., Uber and Lyft) and pooled ridehailing (e.g., UberPOOL and Lyft Line) on vehicle ownership and travel behavior, while controlling for other factors in California through the application of a unique longitudinal approach. Furthermore, it helps researchers evaluate causal relationships among variables; thus, supporting the development of better-informed policies to promote transportation sustainability.

WHAT IS THE PROGRESS TO DATE?

The research team has been working on data cleaning, geo-coding, weighting and integration with other sources of data. Multiple analyses have been so far carried out using the 2015 and 2018 survey data. The researchers provided detailed presentations on the main findings. In Spring 2020, 607 respondents from the 2018 California panel survey were re-sampled during a large data collection to investigate the temporary and longer-term effects of the COVID-19 pandemic. We prepared the final draft, updated new findings, incorporated feedback, and disseminated results through presentations and meetings with Caltrans, advisory panel, scientific colleagues, and other stakeholders.