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?

This task order analyzes the data collected in the Phase 2 of the research project “Panel Study of Emerging Transportation Technologies and Trends in California.”

In this study, the research team is analyzing data collected in 2015 and 2018. This analysis allows researchers to investigate changes over time in individual attitudes and lifestyles, and the relationships among residential location, vehicle ownership, travel behavior and the adoption of shared mobility and attitudes towards the adoption of other transportation technologies (e.g., autonomous vehicles).

WHAT ARE WE DOING?

The research team is analyzing survey data collected in 2015 and 2018. By doing so, 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 COVID-19) 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 services (e.g., UberPOOL and Lyft Line) on vehicle ownership and travel behavior (e.g., the use of other modes), while controlling for other changes in transportation trends in California through the application of a unique longitudinal approach. Further, it helps researchers evaluate causal relationships between 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, geocoding, weighting and integration with other sources of data. Multiple analyses have been so far carried out using the 2015 and 2018 survey data. We 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. Two papers investigating the adoption of pooled ridehailing services and the factors affecting the interest in adopting alternative-fuel vehicles were accepted for presentation at the 2021 Transportation Research Board, annual meeting.

The next step is to prepare the final draft, update new findings, incorporate feedback and disseminate results through presentations and meetings with Caltrans, advisory panel, scientific colleagues, and stakeholders in state and planning agencies.