Panel Study of Emerging Transportation Technologies and Trends in California, Phase Two

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

WHAT IS THE NEED?

The purpose of this task is to analyze the data collected in Phase Two of the research project “Panel Study of Emerging Transportation Technologies and Trends in California,” (Task Number 3144).

In this study, the research team is analyzing data collected in 2018 during Phase Two of the data collection, and data collected in 2015 as part of a previous stage of this project. This will allow researchers to investigate the evolution over time of 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 innovative transportation technologies (e.g., autonomous vehicles).

WHAT ARE WE DOING?

This panel study improves the understanding of emerging transportation trends through the application of a unique longitudinal approach. In this project, we analyze the data collected in the 2015 and 2018 waves of the California Mobility Panel, and we develop a longitudinal study of emerging transportation trends with a rotating panel structure.
WHAT IS OUR GOAL?

The use of longitudinal data allows researchers to better assess the impacts of lifecycle, periods and generational effects on travel-related choices, analyze components of travel behavior, such as the use of shared mobility services among various segments of the population, and its impact on vehicle ownership over time. Further, it helps researchers evaluate causal relationships between variables; thus, supporting the development of better-informed policies to promote transportation sustainability.

WHAT IS THE BENEFIT?

This panel study will improve 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.

WHAT IS THE PROGRESS TO DATE?

In total, more than 4,000 participants took part in the 2018 data collection. The research team has now geocoded the residential location of all participants in the sample, and is working on data cleaning, data integration (through merging data obtained from other sources) and preliminary data analyses. These analyses have already been summarized in many presentations for Caltrans, the National Center for Sustainable Transportation and in several papers accepted for presentation at the Transportation Research Board, Annual Meeting in January 2020.