



Caltrans Division of Research,
Innovation and System Information

Research



Results



Planning, Policy
&
Programming

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Project Title:

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)

Task Number: 3395

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Analysis of Emerging Transportation Trends in California Using Panel Data, (Phase Two)

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

WHAT WAS THE NEED?

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

The transportation sector is going through rapid changes, with transformations of social and built environments, as well as technological innovations happening constantly. To better understand people's mobility needs, we investigated 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 WAS OUR GOAL?

The goal of this project was to use the longitudinal data to better assess the impacts of lifecycle, points in time, and generational effects and social/economic disruptions (including the pandemic) on travel-related choices.

WHAT DID WE DO?

The research team analyzed survey data collected in 2015 and 2018. Our aim was 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.



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WHAT WAS THE OUTCOME?

Key findings include:

1. Millennials have different attitudinal and behavioral profiles than members of Generation X;
2. People who are more pro-environment tech-savvy and car utilitarian are more like to choose an alternative fuel vehicle currently and in the future;
3. High-income, predominately white individuals are more likely to be frequent users of regular ridehailing, while better educated, younger individuals who currently work or work and study are more likely to use ridehailing services; and
4. In terms of ridehailing mode replacement, individuals in vibrant and walkable neighborhoods tend to replace other travel modes, including active modes, with ridehailing.

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.

LEARN MORE

For more information, see the final report:
<https://escholarship.org/uc/item/2j33z72p>