



Caltrans Division of Research,
Innovation and System Information

Research



Notes

Planning, Policy
and
Programming

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Project Title:
National Center for Sustainable
Transportation

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2021

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The North American Micromobility Panel

Understanding the implications of Micromobility Services

WHAT IS THE NEED?

The rise in bicycling and bike share services in North American cities may be a sign of latent demand for bicycling. The recent rise in dock-less bike and scooter shares (micromobility services) may indicate a latent demand for “micro” transportation options could be substantial. Given that substitution of bicycling, scootering, and other small vehicle travel for car travel may help cities reach numerous planning goals (e.g., accessibility, emissions, climate, health, equity, etc.), there is a clear need for understanding the implications of these mobility services. This is especially true in states like California where the rise in micromobility services also represents a growing workforce and capital investment.

While micromobility services have potential for decreasing car travel and; thus, many negative externalities associated with car travel, the extent to which these services decrease car travel is currently uncertain. Quantifying the magnitude of micromobility service effects on travel behavior is an important first step for cities and regions to understand the role these services should play as mobility options.

WHAT ARE WE DOING?

The research team proposes to create a longitudinal panel survey of micromobility service users along with a matched panel of non-users to understand the impact of micromobility services on travel behavior, attitudes, and other characteristics thought to play a role in addressing transportation goals such as mode shift, car ownership, access, and equity.



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California's transportation system

WHAT IS OUR GOAL?

The goal of this research is to quantify the magnitude of micromobility services effect on travel behavior.

WHAT IS THE BENEFIT?

The findings can provide guidance on how to effectively encourage users to use micromobility services to reduce Vehicle Miles Traveled (VMT) and incentivize the choice of active transportation over personal car use.

WHAT IS THE PROGRESS TO DATE?

1. Kick off meeting was held on February 21, 2021.
2. Four data sharing agreements were signed between micromobility operators and the University of California, Davis.
3. An update meeting was conducted with the Project Panel on 10/26/2020.
4. We conducted a model-based simulation of the study to improve recruitment efficiency.
5. We refined the survey instrument from all partners.
6. We continued to work with companies to plan the data collection.
7. We have been granted a time extension to December 2023, with plans to collect data in spring 2022.

IMAGE

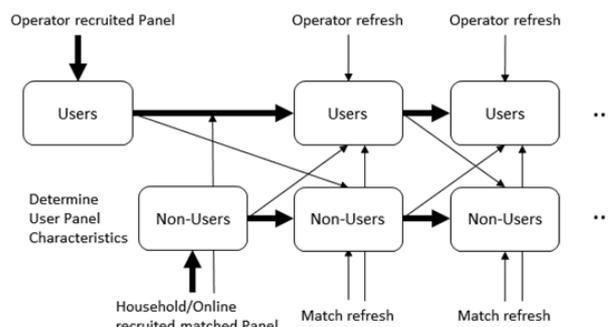


Image 1: Diagram of recruitment during the study including initial recruitment by operators, household mailers or online panel service, and added recruitment to refresh panels in each wave.