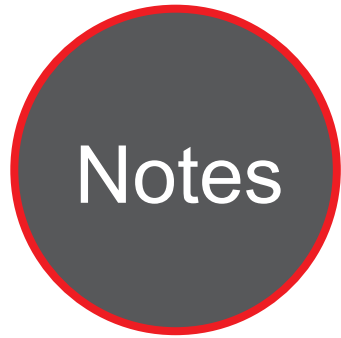




Caltrans Division of Research,
Innovation and System Information

Research



Notes

Planning, Policy &
Programming

Ridesharing, Ride-Hailing and Transit Ridership

A National Study Using the 2017 National Household
Travel Study (NHTS)

MAY 2020

Project Title:
Pacific Southwest Region 9
University Transportation Center
(PSR-FAST Act) DOTP

Task Number: 3425

Start Date: January 1, 2020

Completion Date: December 31,
2020

Task Manager:
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WHAT IS THE NEED?

With data on the effects of ride-hailing on travel behavior lacking and ride-hailing companies protective of their trip data, there has been little research so far on how ridesharing impacts transit and travel behavior. However, by using the 2017 National Household Travel Survey (NHTS), this study examines the relationship between ride-hailing and individual transit travel, particularly rail transit.

The 2017 NHTS is the first travel survey that is available during the ride-hailing era, and the national coverage and ability to focus on individual travel behavior are advantages. We will use the NHTS to examine the link between individual ride-hailing and individual transit use.

Given the structure of the NHTS survey, the study will focus on the link from ride-hailing travel to train travel. Broader links between ride-hailing and other transit travel will be examined using the daily travel diary portion of the NHTS.

WHAT ARE WE DOING?

The research will involve six tasks:

Task 1: Literature Review: Review the literature on ride-hailing and transit use, with attention to include working papers and the grey literature.

Task 2: Analysis of NHTS Data: Organize and conduct analysis of NHTS data, obtain access to California Household Travel Survey, and repeat national analysis with greater detail in California.



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knowledge that improves
California's transportation system

Task 3: Explore Additional State Add-On Samples:

Obtain additional state add on-data as available, and as data access allows, examine how the results obtained from the national and California analyses apply to other states.

Task 4: Draft Report: Write draft report.

Task 5: Compliance with Data Management

Plan: Organize data for compliance with data management plan.

Task 6: Final Report and Research Brief: Write final report and research brief.

WHAT IS OUR GOAL?

The goal of this research is to provide more behavioral insights than have previously been possible from aggregate data, and to expand our understanding of whether and in what circumstances ride-hailing substitutes for or complements transit.

WHAT IS THE BENEFIT?

The study has the following benefits:

1. Help city and transportation planners make better long-range decisions about the future and transportation infrastructure by gaining insight on how ride-hailing is changing travel behavior.
2. Help transit agencies better plan their routes and how to best promote synergies between ride-hailing and transit.

WHAT IS THE PROGRESS TO DATE?

1. We have completed a literature review.
2. The next step will be to analyze the NHTS data.