Ridesharing, Ride-Hailing and Transit Ridership: A National Study Using the 2017 National Household Travel Survey

A National Study using the 2017 National Household Travel Study (NHTS).

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 is little research on how ridesharing impact 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 available during the ride-hailing era. Its national coverage and its 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 between 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.
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 5: Compliance with Data Management Plan: Organize data for compliance with data management plan.


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. This study will help city planners and transportation planners gain insight on how ride-hailing is changing travel choices.
2. With this information, these parties may make better long-range decisions about transportation infrastructure.
3. By examining the question of whether ride-hailing substitutes for or complements rail transit, transit agencies can better plan for both routes and potentially gain insights into how best to promote complements and synergies between ride-hailing and transit.

WHAT IS THE PROGRESS TO DATE?

1. We have completed a literature review.
2. We have analyzed the NHTS data.
3. We explored additional State add-on samples, obtained additional state add on-data; access to other state add-ons has not been possible. We are pursuing access to a statewide California ride hail survey which we believe will provide additional data.
4. The next step is to present a briefing to the Project Panel in early November 2020 for feedback.