

UC Davis

Policy Briefs

Title

Ridehailing Demand Is Resilient Among Low-Income Travelers During the COVID-19 Pandemic

Permalink

<https://escholarship.org/uc/item/05z1x7m6>

Authors

Matson, Grant
McElroy, Sean
Circella, Giovanni
et al.

Publication Date

2021-06-01

DOI

10.7922/G2542KWP

Ridehailing Demand Is Resilient Among Low-Income Travelers During the COVID-19 Pandemic

Grant Matson, Sean McElroy, and Giovanni Circella | *University of California, Davis*
Yongsung Lee | *University of Hong Kong*

June 2021

POLICY BRIEF

Issue

The COVID-19 pandemic has caused major shifts in the use of various means of travel, including ridehailing services (e.g., Uber or Lyft). Downward trends in ridehailing unsurprisingly emerged as lockdown orders reduced overall travel. The shock to the ridehailing industry came as the industry was experiencing considerable growth and facing increased regulatory control. Policymakers have found ridehailing to come with a unique set of tradeoffs. On one hand, ridehailing has improved dependability and reliability of for-hire transportation, changing the way some consumers think about their own personal transportation. Access to on-demand transportation may influence a small set of mostly urban-dwelling consumers to decide that they do not need to own a car, which can reduce emissions and traffic. On the other hand, ridehailing draws some passengers away from public transit and active modes of travel. It can also increase vehicle travel: by causing some consumers to take additional trips and by causing drivers to drive without passengers, after a drop-off and until the pick-up of the next passenger. These effects can increase congestion and, therefore, emissions in some areas, especially during peak times of the day.

Researchers at the University of California, Davis examined how the COVID-19 pandemic has impacted the use of ridehailing and other travel behaviors among various sociodemographic groups. They conducted surveys prior to and during the early stages of the 2020 COVID-19 pandemic to measure changes in household activities, personal preferences, and travel patterns. The findings discussed in this policy brief are based on the analysis of the information provided by 1,274 respondents who participated in the survey both before the pandemic (2018-2019) and during the early stage of the pandemic (spring 2020). Respondents were recruited among residents from urban, suburban, and rural areas in

California, as well as from the metropolitan areas of Boston, Seattle, Salt Lake City, Kansas City, and Washington DC.

Key Research Findings

Among respondents who use ridehailing services, fewer reported recent ridehailing use during spring 2020 than reported use before the pandemic. Before the pandemic, 18.7% of respondents reported that they had used a ridehailing service in the month before completing the survey. Only 7% of the same respondents re-surveyed during the early stages of the pandemic, between May and July 2020, reported that they had used ridehailing in the previous month. This represents a 62.6% drop in monthly demand for ride-hailing services among the study participants.

The difference in ridehailing use before and after the onset of the pandemic is greatest among the highest-income respondents and smallest among low-income respondents (Figure 1). The proportion of high-income respondents (i.e., with an annual household income above \$100,000) who used ridehailing services in the month before completing the survey dropped from 27.0% to 5.2% once the pandemic began. However, the corresponding percentages among low-income users (i.e., with an annual household income below \$50,000) declined only from 13.9% to 11.5%. Similarly, the proportion of white-collar workers that used the service in the preceding month dropped from 30.5% to 7.8%, while blue-collar workers saw virtually no change, going from 15.8% to 14.9%. This consistent use suggests that ridehailing is an important mode of transportation for the low-income and blue-collar demographics, who are more likely to be physically needed in the workplace, as well as for all those that have access to fewer mobility options.

Differences in ridehailing use across demographics are not due to different perceptions of the health risks of the pandemic.

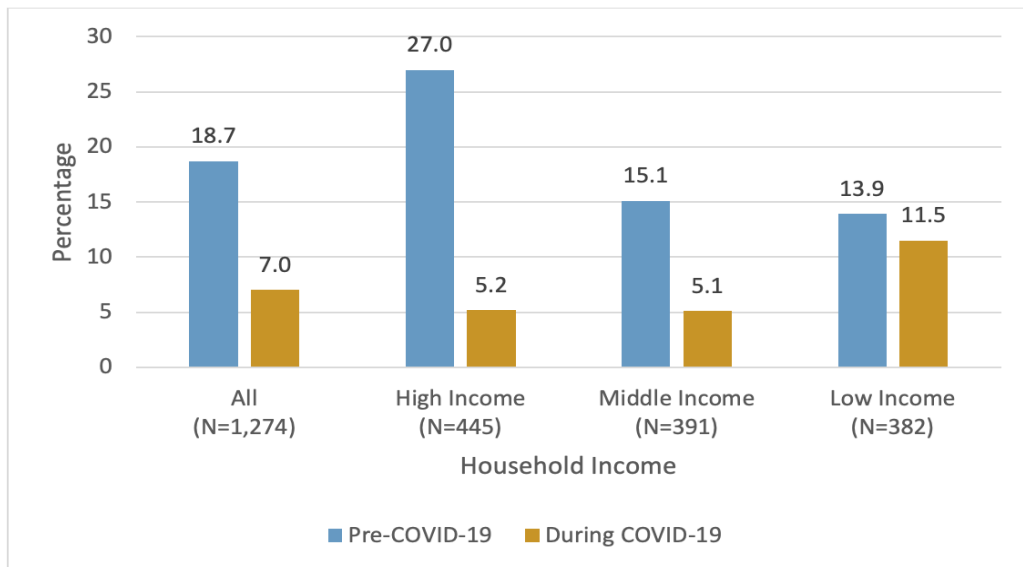


Figure 1. Respondents who reported using ridehailing in the last 30 days before and during the COVID-19 pandemic

Both high-income and low-income respondents reported similar levels of concern about the exposure to the virus when using ridehailing as a transportation option during the pandemic. Rather, the inability to telework or the need to be present in person at work, and limited access to other transportation options all contribute to explaining the persistence of ridehailing use among certain groups.

Policy Implications

These findings point to the importance that new mobility services, and ridehailing in particular, have had in providing mobility to essential workers and others with limited access to other transportation options during the pandemic. The resilience of demand among a subset of the population during a shock like COVID-19 suggests that ridehailing has become an established transportation mode that users can rely on when other transportation options are not available. Planners and policymakers should recognize it as such.

Still, concerns about the environmental sustainability of ridehailing remain. State and local governments should

consider policies to introduce zero-emission vehicle technology into ridehailing fleets and, when the pandemic subsides, encourage pooling and connections to transit as more sustainable transportation options compared to single-user ridehailing. Such policies can be implemented while acknowledging the importance of ridehailing services for those with reduced access to other transportation options.

More Information

This policy brief is drawn from “Longitudinal Analysis of COVID-19 Impacts on Mobility: An Early Snapshot of the Emerging Changes in Travel Behavior,” a research paper from the 3 Revolutions Future Mobility Program, authored by Grant Matson, Sean McElroy, Yongsung Lee, and Giovanni Circella of the University of California, Davis. The paper can be found at <https://ncst.ucdavis.edu/project/impact-shared-mobility-use-other-transportation-modes-and-auto-ownership-among-millennials>.

For more information about the findings presented in this brief, contact Giovanni Circella at gcircella@ucdavis.edu.

The authors acknowledge the contributions of Anson Justi, Mollie Cohen D’Agostino, Keita Makino, and James Giller to this policy brief. Research presented in this policy brief was made possible through funding received by the University of California Institute of Transportation Studies (UC ITS) from the State of California through the Public Transportation Account and the Road Repair and Accountability Act of 2017 (Senate Bill 1). The UC ITS is a network of faculty, research and administrative staff, and students dedicated to advancing the state of the art in transportation engineering, planning, and policy for the people of California. Established by the Legislature in 1947, the UC ITS has branches at UC Berkeley, UC Davis, UC Irvine, and UCLA.

The National Center for Sustainable Transportation is a consortium of leading universities committed to advancing an environmentally sustainable transportation system through cutting-edge research, direct policy engagement, and education of our future leaders. Consortium members: University of California, Davis; University of California, Riverside; University of Southern California; California State University, Long Beach; Georgia Institute of Technology; and the University of Vermont.

Visit us at
ncst.ucdavis.edu

Follow us:

