

How Low-Income Riders Are Affected by Low-Cost Transit Fare Programs

Liu-Qin Yang, Ph.D., Liming Wang, Ph.D., Aaron Golub, Ph.D.

In recent years, there has been a nationwide push to move from using cars to using other modes of transportation. The benefits of active transportation (that is, walking, biking, and even using public transit) are widely known. Not only can these modes of transportation increase people's physical and mental well-being, but they also cut down on the negative effects of cars (like their contributing to greenhouse gas emissions and air pollution).

In an effort to encourage more people to use public transportation, and to reduce disparities among riders of varying incomes, Portland, Oregon's TriMet system developed a low-income fare option for its Honored Citizens Fare (HCF) program. The purpose of the paper—titled "Do Travel Costs Matter? Using Psychological and Social Equity Perspectives to Evaluate the Effects of a Low-Income Transit Fare Program on Low-Income Riders"—was to determine if the low-fare option works to increase access to transit and improve well-being among low-income riders in comparison to other riders. If it does, then it is an effective way to identify and meet the needs of this population and distribute the benefits of transportation investments more fairly.

The HCF program reduces the fare of the public transportation that TriMet provides, which includes buses and the MAX (light rail). Riders who qualify are seniors aged 65+, people on Medicare, people with disabilities, and lowincome riders (LIR), the latter of which researchers from Portland State University focused on in this study. To quantify the effectiveness of the program, researchers recruited TriMet riders in Portland either in person at highly trafficked TriMet stops or virtually via online ads, the HCF email listserv, and the TriMet HCF online application. Along with non-LIR, low-income riders who were new to HCF were targeted, but due to a low sample size, researchers expanded their sample pool to include LIR who were renewing their HCF status.

THE RESEARCH

There were three phases to this recruitment process: a 20-minute online survey, a follow-up 20-minute online survey two months after new riders' enrollment for HCF, and an interview. The first 20-minute survey asked participants questions regarding their:

- frequency of engagement with TriMet,
- reasons for using public transit,
- well-being,
- ability to access transit opportunities,
- perception of COVID-19's impacts on their lives,
- percieved sense of community,
- experiences with housing difficulties, and
- satisfaction with TriMet as a corporation.

The second 20-minute survey was sent out two months after the participant's completion of the first survey. The first survey was distributed between November 2021 and August 2022, making the total time period of survey data collection from November 2021 to October 2022. The surveys included the same questions to assess changes in experiences over time.

It was difficult for researchers to identify meaningful changes in rider experiences over time based on the surveys. Public transit was still returning to normal from COVID during the period of time that the surveys were disseminated. Approximately 55 percent of riders believed they were at least somewhat likely to catch COVID from public transit. COVID also impacted other areas of life that indirectly impact public transit use, such as health, sense of community, and work and housing stability. Still, the surveys revealed that LIR rely on public transit more than non-LIR. The interviews were conducted with twenty LIR who were randomly selected from the surveyee pool and invited to participate. This group was asked to provide more context regarding some of their survey answers. One interviewee expressed that they "like public transportation because it's more sustainable and more accessible for a lot of people, especially because cars are expensive." Others use public transport to get to the gym, natural areas, and a mental health group, all places to improve overall well-being. This anecdotal evidence toward the benefits of the HCF is interesting; check out the full paper for more quotes. They revealed that the HCF positively affects the physical, mental, and social lives of LIR.

The results can help transportation planners, policy makers, and public transportation agencies devise strategies that better serve all members of the community in a multimodal way. They respond to the Federal Highway Administration's and Federal Transit Administration's calls for cities to assess the transportation and employment patterns of their minority and low-income populations.

ABOUT THE AUTHORS

The research team consisted Katharine McMahon, Morgan Taylor, Liu-Qin Yang, Liming Wang, Aaron Golub and Greg Townley of Portland State University.

ABOUT THE FUNDERS

This research was funded by the National Institute for Transportation and Communities, with additional support from TriMet and Portland State University.

THE REPORT and RESOURCES

For more details about the study, download the full report "Do Travel Costs Matter For Persons With Lower Incomes? Using Psychological and Social Equity Perspectives to Evaluate the Effects of a Low-Income Transit Fare Program on Low-Income Riders" at nitc.trec.pdx.edu/ research/project/1360

Photo courtesy of TriMet



Portland State

The National Institute for Transportation and Communities (NITC) is one of seven U.S. Department of Transportation national university transportation centers. NITC is a program of the Transportation Research and Education Center (TREC) at Portland State University. This PSU-led research partnership also includes the Oregon Institute of Technology, University of Arizona, University of Oregon, University of Texas at Arlington and University of Utah.

UNIVERSITY



Oregon TECH

UNIVERSITY OF

OREGON



THE UNIVERSITY

OF ARIZONA.