

# Equity and exclusion issues in cashless fare payment systems for public transportation

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Researchers Aaron Golub, John MacArthur and Sangwan Lee of Portland State University, Anne Brown of the University of Oregon, and Candace Brakewood and Abubakr Ziedan of the University of

Tennessee, Knoxville have published a new journal article in the September 2022 volume of *Transportation Research: Interdisciplinary Perspectives*.

Rapidly-evolving [payment](#) technologies have motivated public [transit](#) agencies in the United States to adopt new fare payment systems, including mobile ticketing applications. The article, "[Equity and exclusion issues in cashless fare payment systems for public transportation](#)," explores the challenges facing transit riders in the U.S. who lack access to [bank accounts](#) or smartphones, and potential solutions to ensure that a transition to cashless transit fares does not exclude riders. Learn more about the project and read an [open-access version of the final report](#).

The study asks: who is most at risk of being excluded by the transition to new fare payment systems and how would riders pay transit fares if cash payment options were reduced or eliminated? Researchers answer these questions using intercept surveys of 2,303 transit riders in Portland-Gresham, OR, Eugene, OR, and Denver, CO.

The article's authors explore existing research on emerging fare payment systems, as well as research on disparities in access to the various pieces of the new payment ecosystem, including credit and banking, Internet and smartphones. They then present qualitative and quantitative analyses used to investigate this topic, and conclude with a discussion of results and implications for policy and planning. The [paper](#) is based on a pooled-fund study supported by the National Institute for Transportation and Communities (NITC).

**More information:** Aaron Golub et al, Equity and exclusion issues in cashless fare payment systems for public transportation, *Transportation Research Interdisciplinary Perspectives* (2022). [DOI: 10.1016/j.trip.2022.100628](#)

Applying an Equity Lens to Automated Payment Solutions for Public Transportation: [trec.pdx.edu/research/project/1268](https://trec.pdx.edu/research/project/1268)

Provided by Portland State University

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