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What Will a Transition to Digital Transit Payments Mean for Un- and Underbanked Transit Passengers?

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Issue

The more than 350 transit agencies in California currently offer a patchwork of payment options, including cash, contactless payments, and a multitude of agency-issued cards. This inconsistency across transit operators acts as a barrier to the use of public transit. The California Integrated Travel Project (Cal-ITP) was established in 2018 to create an integrated, statewide payment system to make travel simpler and more cost-effective.

Cal-ITP is pursuing *open-loop* payment systems, which offer a suite of digital payment options such as credit and debit cards, prepaid debit cards, app-based wallet systems, and peer- to-peer payment apps. Open-loop systems have both environmental

and economic advantages. They would replace wasteful magnetic stripe payment cards that cannot be recycled and would reduce vehicle idling stemming from long boarding times while passengers insert cash payments. They would also be more cost-effective for transit agencies, since cash is expensive to collect. Retail costs for cash collection range from 4.7%-15% of cash sales. These high costs, together with trends in consumer preferences, are contributing to a shift away from cash.

However, questions remain about whether open-loop payment systems would accommodate all travelers, particularly those who are *unbanked* (i.e., do not have a bank account) or *underbanked* (i.e., have only a savings or checking account, but not both) and

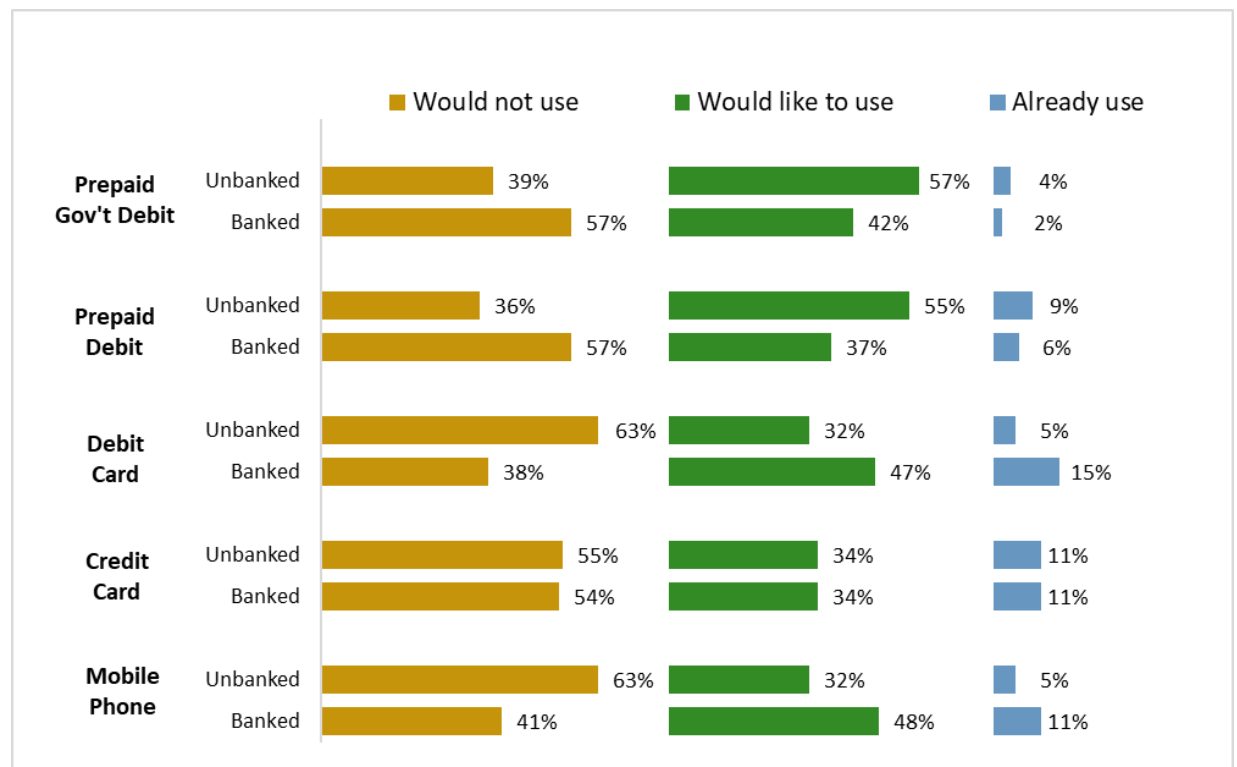


Figure 1. Preferences for various digital payment options among survey respondents with and without bank accounts

typically rely on cash. These travelers tend to have lower incomes and rely on public transit. Researchers at the University of California, Davis partnered with Cal-ITP to study how transit fare payments could be modernized while remaining accessible to unbanked and underbanked riders. The researchers surveyed more than 200 transit riders in the Sacramento region, more than 30% of whom did not have a bank account, to assess their preferences for digital payment tools such as contactless cards and smartphone-based apps.

Key Research Findings

Unbanked and banked respondents differed on some key demographic traits. Of those surveyed, 59% of banked (n = 115) and 78% of unbanked (n = 55) had an income at or below \$25,000. Further, approximately 55% of the banked respondents have an associate degree or higher level of education, whereas only about 22% of the unbanked do. However, the researchers did not observe statistically significant differences in gender or employment, despite 76% of the unbanked and only 53% of the banked in the sample reporting they are unemployed.

More than half of unbanked respondents would like to use a prepaid, government-issued debit card for transit payments. When unbanked respondents were asked which alternative to cash they would like to use, 57% selected a government-issued, prepaid debit card similar to electronic benefits transfer cards already in use for food stamps (Figure 1). The second-most popular option was a prepaid debit card that could be used like a standard credit or debit card (55%), and the remaining choices (credit card, debit card, and mobile phone) garnered less support.

Most survey respondents, even those who are unbanked and already use cash, are open to using alternatives to cash for transit payments. A majority, or 78%, of unbanked transit rider respondents are interested in using alternatives to cash payment. And only 20 out of the 100 respondents who reported they use cash selected “would not use” for all of the cashless options presented.

The payment alternatives presented in the survey may not be sufficient to address the needs of all transit riders. A total of 29 respondents, 13 of whom are unbanked, “would not use” any of the digital payment alternatives presented in the survey. Thus, 22% of the unbanked respondents surveyed would not use any of the options presented. More research is needed to understand these riders’ preferences and determine whether there are other cashless payment options that they would be willing to and/or interested in using.

Policy Implications

These results suggest that banked and unbanked travelers both want to pay for transit with the same means of payment they already use for other goods and services. Further, unbanked travelers are not opposed to using electronic payments for transit for the most part. As electronic payment becomes more prevalent and the use of cash declines, both transit agencies and passengers are likely to benefit from moving away from agency-specific payment systems and costly cash-collection, and toward open-loop payment systems that allow passengers, including the unbanked, to pay with the various cashless options they already use.

More Information

This policy brief is drawn from “Un- and Underbanked Transit Passengers and the California Integrated Travel Project,” a report from the National Center for Sustainable Transportation, authored by Susan C. Pike, Mollie C. D’Agostino, and Kailey Flynn of the University of California, Davis. The full report can be found on the NCST website at <https://ncst.ucdavis.edu/project/payment-integration-californias-transit-and-mobility-services>.

For more information about the findings presented in this brief, please contact Mollie D’Agostino at mdagostino@ucdavis.edu.

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.

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