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# **Exploring Bicycle and Public Transit Use by Low-Income Latino Immigrants: A Mixed-Methods Study** in the San Francisco Bay Area Jesus M. Barajas, MURP, Daniel G. Chatman, PhD, and Asha Weinstein Agrawal, PhD

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There are approximately 40 million immigrants living in the US, making up about 13% of the population. The U.S. Census Bureau predicts that

Low-income immigrants face significant barriers to public transit use, including safety, affordability, and understanding transit systems.

both numbers will rise in coming decades, with a large fraction coming from Latin America. Many immigrants will arrive in the U.S. with few resources, relying on public transit, bicycling, and walking to travel. It is critical for transportation planners and policy makers to understand the unique needs and constraints that immigrants face, in order to provide appropriate Congressman Peter DeFazio transportation services.

> This study relied on interviews with low-income, primarily Latino immigrants and a survey of San Francisco Bay Area residents to better understand how low-income immigrants' travel behavior differs from other immigrants and people born in the U.S. Specifically, the investigators asked:

- How frequently do low-income immigrants drive, take public transit, walk, and bicycle, and how does this compare to other groups?
- What preferences do low-income immigrants hold, and what barriers and constraints do they face, in bicycling, taking transit, and accessing transit via bicycle?

# Study Methods

The research team designed a mixed-methods study, conducting interviews with 14 lowincome immigrants and fielding a paper-based intercept survey of 2,078 adults. Interviewees were recruited with the help of social service agencies. Surveys were administered primarily in neighborhoods with high numbers of Latino immigrants. The survey, available in English and Spanish, was distributed at public transit stops, businesses that cater to immigrants, public plazas, and day-labor sites.

# **Findings**

The investigators analyzed interview responses and compared survey data between immigrants and non-immigrants and low- and high-income groups ("low income" was defined as households earning less than \$25,000.)

Access to transportation resources differs by immigrant status: Consistent with prior research, results revealed that low-income immigrants were less likely than higher-income

immigrants or higher-income US-born respondents to have access to a motor vehicle. Low-income immigrants were also less likely to have bus passes or bicycles than higher-income immigrants, or US-born respondents regardless of income.

Immigrants face multiple barriers to transit: Low-income immigrants talked about five major barriers that made public transit use difficult for them: safety, cost, discrimination, system legibility, and reliability. Crime was the most prominent barrier among interviewees. Almost every interviewee reported experiencing verbal or physical violence when accessing or riding public transit. Among survey respondents, in contrast, transit affordability was the most commonly identified barrier for low-income immigrants.

A few barriers to public transit use varied by immigrant status: Low-income immigrants were much less willing to use public transit when they had the option to drive, suggesting they obtain car access for particular purposes that transit does not serve, or that their experiences on transit have been unpleasant. They were also less likely to ride their bicycles, a finding counter to other published research based on nationally representative data. Respondents surveyed at day labor sites rode bicycles more frequently than those surveyed at other locations, suggesting that occupation partially explains this difference.

A note on interpreting the results: Intercept surveys do not provide a random population sample, so the findings are most applicable to people who frequent the survey study area, rather than all immigrants living in the Bay Area. Further, the findings do not necessarily reflect the experiences of immigrants with low English proficiency from non-Spanish-speaking countries.

# **Policy Recommendations**

Concerns about transit affordability, crime, and reliability were prevalent among low-income immigrants, suggesting transit agencies should consider income-based fare reductions, coordinated crime prevention with local law enforcement, and improved scheduling and arrival information. A significant share of transit riders values bicycle access to transit, suggesting that judicious investment in bike-transit integration is warranted.

The findings also suggest that transit agencies who conduct rider surveys should begin to collect data on nativity, allowing them to target appropriate policies and investments in immigrant neighborhoods.

### About the Authors

Jesus M. Barajas is a PhD candidate in City and Regional Planning at the University of California, Berkeley. Daniel G. Chatman, PhD, is an associate professor in the same department. Asha Weinstein Agrawal, PhD, is professor of Urban and Regional Planning at San José State University.

### To Learn More

For more details about the study, download the full report at transweb.sjsu.edu/project/1202.html