

Modal

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Project Title: Ridership Modeling for Integrated Systems

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Accounting for Fare Evasion in Estimates of Transit Ridership

Assessing methods used to report ridership data and best practices for accounting for passengers not counted through traditional means.

WHAT IS THE NEED?

While transit agencies must report their transit ridership data to the National Transit Database in the form of Unlinked Passenger Trips (UPT) and Passenger Miles Traveled (PMT), no information is systematically available about how the data are collected. The main objective of this research is to assess and document methods used to determine UPT and PMT at transit agencies across California, including sources of potential error such as fare evasion. The predominant source of this data will be a statewide transit agency survey. To reduce respondent burden, the second objective of this research is to develop a new initiative across the state to coordinate research involving surveys or other large outreach efforts across multiple transit agencies in partnership with Caltrans, state agencies, advocacy organizations, and research organizations.

WHAT ARE WE DOING?

- Assess how fare evasion has evolved in California transit systems post-COVID.
- Examine the methodologies used by agencies to collect and adjust ridership data, focusing on the accuracy of fare evasion estimates.
- Evaluate the financial impact of fare evasion on transit agencies and propose strategies to mitigate its effects.
- Provide a framework for accurately estimating fare evasion rates and ensuring reliable ridership reporting.

WHAT IS OUR GOAL?

The goal is to assess and document methods used to determine UPT and PMT at transit agencies across California. For all methods of counting, sources of potential error will be



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explored. For agencies using fare collection data for counts, fare evasion as a source of error will be explored, including how fare evasion has changed in the past decade. The research will assess practices across the spectrum of transit agencies in the state, including practices at small agencies with just a few staff members across the entire agency, as well as at the largest agencies with complicated data systems and multiple staff members involved in practices such as service planning and data collection.

WHAT IS THE BENEFIT?

The research will assist Caltrans Division of Data and Digital Services in analyzing reported ridership figures and providing technical assistance to agencies who are not employing the best practices in error correction uncovered in the project.

WHAT IS THE PROGRESS TO DATE?

Kickoff meeting was held in June and the research team is preparing a literature review.

IMAGES



Image 1: Turnstile jumping in Moscow Metro (Wikimedia Commons, 2015)