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Changing Transit Ridership and Service During the COVID-19 Pandemic

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Issue

During the 2010s, public transit ridership declined significantly across the U.S., including in California. Over the same period, though, transit funding steadily increased each year. These two trends created challenging conditions for transit operators, which were losing riders despite expanding service. Then, the COVID-19 pandemic pushed transit ridership to historic lows. Though some riders have returned, transit's ridership recovery has been highly uneven.

UCLA researchers examined where, how, and why transit ridership and operations have changed during the pandemic by analyzing National Transit Database data, reviewing relevant academic literature, and conducting interviews with transit managers. While both the demand for and supply of transit have changed throughout the pandemic, long-established strategies for better service and increasing ridership still stand: improving reliability, frequency, and safety for users.

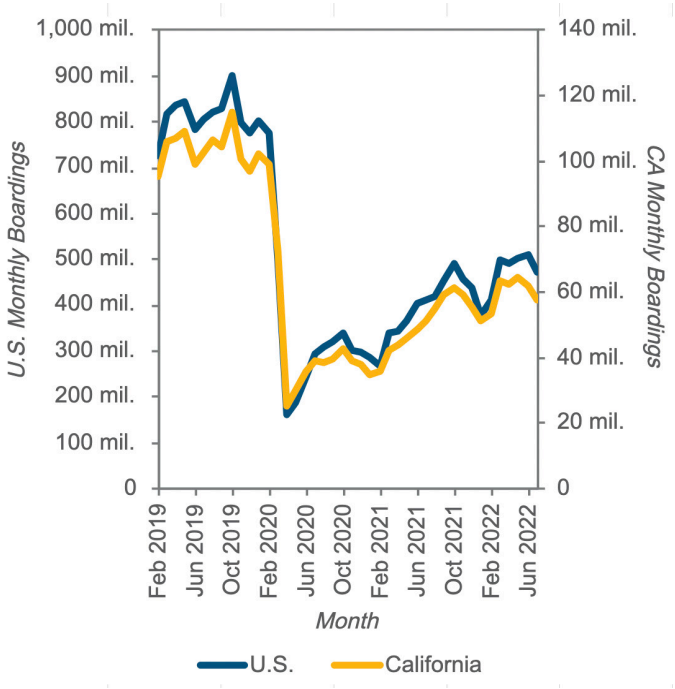

Figure 1. Close Tracking between U.S. and California Monthly Transit Ridership

Research Findings

- California's transit ridership has generally tracked with national trends. Similar to the U.S. overall, California dropped to its lowest ridership in April 2020, when bus boardings fell 73% and rail boardings plunged 84%, compared to the previous year (Figure 1).
- Ridership has recovered slowly: As of July 2022, boardings nationally were 61% of their pre-pandemic baseline, and 56% in California. Since April 2021, ridership has grown at a much slower rate than it initially fell.
- Ridership in California decreased more dramatically than service hours did, and service has been restored faster than riders have returned.
- Hours of bus service have fallen more than rail service, even though bus ridership is closer to pre-pandemic

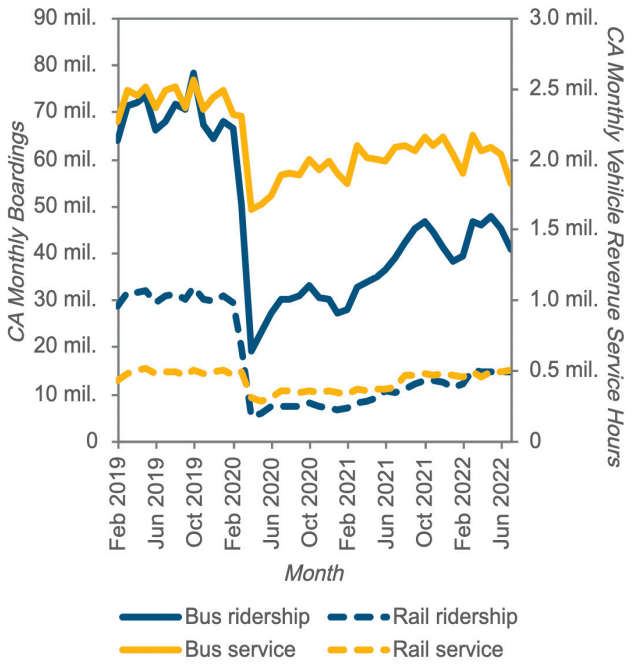

Figure 2. California Transit Service Has Returned Closer to Pre-pandemic Levels than Has Ridership, and Buses Have Recovered Faster than Rail

levels. Rail vehicle hours of service were 2% higher in July 2022 than they were in July 2019, but boardings were roughly half (48%) of their pre-pandemic level. Buses were at 73% of pre-pandemic service hours, and ridership was at 60% of its former level (Figure 2).

- Transit ridership in the Los Angeles region has rebounded slightly more than in the San Francisco Bay Area, although the regions have followed similar trajectories.
- Ridership among small operators declined less sharply but has recovered more slowly than ridership on large operators.
- The pandemic has reorganized where transit is most in-demand. As both travel data and academic research show, people living in more urban, lower-income, and less white areas, as well as neighborhoods primarily served by bus lines, have been more likely to continue using transit.
- Many essential workers continued using transit to commute, and lower-income residents with less access to cars used it to obtain provisions and services. Meanwhile, wealthier, whiter communities and those better served by train lines significantly changed their travel behavior, with more remote work and an increase in errands and work commutes done by car.
- Transit service and operations changed during the pandemic in response to new patterns of travel demand (specifically, less of a need for peak service) and struggles to hire enough drivers.
- Several transit managers we interviewed linked staff retention and ridership restoration problems to an increase in crime and "incivility" aboard vehicles and on transit properties; studies show a safe riding environment is an especially important factor in rider satisfaction.

Conclusion

Despite the pandemic's upheaval of the transit industry, many established strategies for increasing ridership remain relevant during the recovery. Research has shown that some of the most important actions that transit agencies can take are:

- Improving rider safety and emergency response (especially at night) through strategies such as employing transit ambassadors and partnering with local social service agencies and organizations.
- Providing frequent service to minimize wait times.
- Providing reliable service with vehicle arrival information coming from accurate General Transit Feed Specification (GTFS) Realtime systems.
- Structuring service so that most trips require no more than one transfer.
- Focusing on service and real-time service information first and amenities (e.g., benches, shelters, restrooms) second.

State agencies and legislators could also provide more operational funding opportunities that support the above actions and offer greater flexibility in state funding streams to invest in operations. Together, these steps could spur a positive feedback loop to increase ridership and make transit systems more solvent.

More Information

This policy brief is drawn from the "Evolving Operations and Policy" research project by the UCLA and UC Berkeley Institutes of Transportation Studies. The research project can be found at https://www.its.ucla.edu/project/the-evolving-operations-of-public-transit/.

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Figure Data Source: FTA (2022). The National Transit Database (NTD). *Federal Transit Administration*. https://www.transit.dot.gov/ntd.

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