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A New Model for Transit: Transit / TNC Partnerships

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Research Topic

Transit ridership across the country has been falling since 2014. With fewer riders, agencies receive less fare revenue and are forced to find ways to maintain service levels with fewer operating resources. Rather than resorting to cutting service, agencies are beginning to explore creative approaches to operate service more cost-effectively. As ridehailing has transformed the way people move around cities over the past decade, transit agencies have begun to partner with companies such as Uber and Lyft to provide trips in areas that are difficult to serve with traditional fixed-route transit.

Through such partnerships, agencies agree to subsidize ridehail trips rather than operate service themselves, a more cost-effective way to pay for trips only when there is demand for service while reducing fleet maintenance costs. Riders benefit from the flexibility of on-demand, door-to-door service. Using lessons learned from existing pilot programs around the country, a graduate capstone study at the UCLA Luskin School of Public Affairs focused on how the Riverside Transit Agency (RTA) of Riverside County, California, could establish such partnerships within its service area to maintain service coverage at a lower cost.

Research Findings

- By targeting specific geographic areas with high subsidies per passenger boarding, ridehail partnerships in western Riverside County could reduce fixed-route and paratransit costs by 50 to 75 percent while providing premium service for riders. Although fares may be slightly higher, riders would benefit from reduced wait times and the ability to track their trip in real time. Passengers with disabilities are likely to prefer ridehailing to previous paratransit services, since they can request a trip in 10 minutes rather than scheduling 24 hours in advance.

- In order to comply with regulations, transit-ridehail partnerships must provide ways for riders to pay in cash, reserve trips over the phone, and access wheelchair-accessible vehicles with a similar response time to a typical ridehail trip. Since ridehail companies do not yet satisfy these criteria, partnerships often require transit agencies to use a second provider, such as a taxi company.

- Minimum fares ($6.80 in Riverside at the time of the study) reduce ridehailing's effectiveness as a short-distance, first/last mile mobility option unless agencies better integrate them into the overall transit experience. Partnerships that reduce fares make it more likely that riders will use ridehailing as part of rather than their entire trip.

- Transit agencies do not have control over ridehail operating practices and cannot ensure that fares will not increase or guarantee that drivers undergo thorough background checks, limiting the feasibility of partnerships in some service areas.

KEY TAKEAWAYS

- Transit/TNC partnerships can simultaneously replace fixed-route and complementary ADA paratransit service and can be a more effective way to serve lower demand areas.

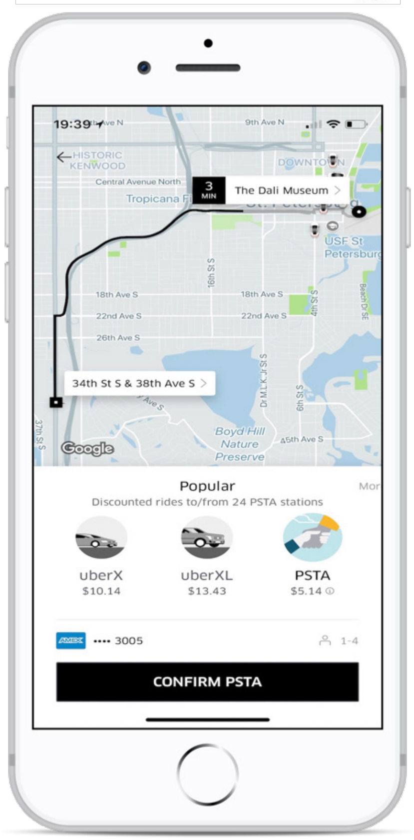
- Unlike traditional transit service, TNC capacity expands and contracts based on demand, reducing costs by only providing service when a rider takes a trip.

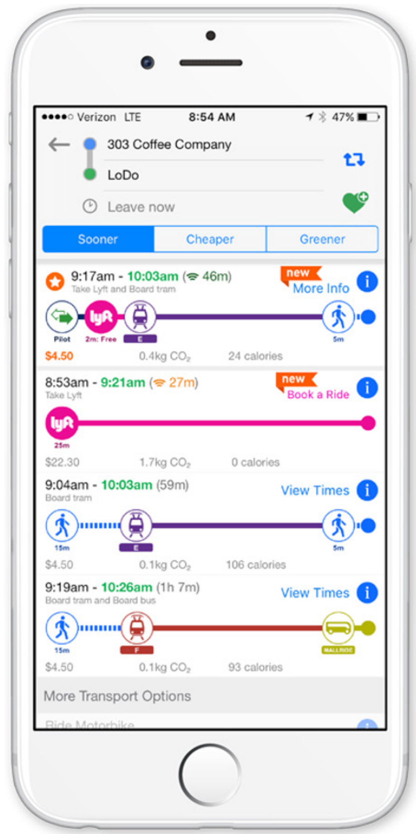
- Resource savings from these partnerships can be reinvested back into the network to higher-performing areas to generate additional ridership and fare revenue.

"Partnerships that reduce fares make it more likely that riders will use ridehailing as part of rather than their entire trip."

Study

The researcher evaluated five case study zones in the RTA service area. For each zone, the study compared RTA's current operating subsidy for fixed-route and paratransit service with an estimated subsidy for providing trips through a ridehail partnership. To estimate the cost of a ridehail partnership, the researcher developed estimates for ridership, trip costs, and fare revenue, and estimated ridehail trip costs using trip lengths and durations based on data provided by RTA and published ridehail rates. The researcher estimated fare revenue using four fare structures. In the end, the study compared the RTA and TNC subsidy numbers to conclude an overall estimated cost savings.





Conclusion / Recommendations

- Transit agencies should target ridehail partnerships in areas where fixed-route transit necessitates high subsidies, such as low-density areas with non-linear street patterns. While there may be ridership demand in these areas, it is not high enough to justify the cost of paying an operator to drive a mostly-empty bus.

- Transit-ridehail partnership zones should have limited geographic extents to minimize overall trip costs. Since ridehail fares accrue based on time and distance, long trips can quickly increase costs for the rider or agency. For long trips, riders should be encouraged to transfer from the ridehail into the fixed-route transit network.

- Riders should be required to register with the transit agency to participate in the program. Since ridehail companies do not yet share rider data, registration will enable agencies to gather demographic and travel pattern information and increase the likelihood that riders will integrate ridehail trips with their use of the greater transit network.

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