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Micromobility Equity in Los Angeles: Increasing E-Scooter Deployment in Underserved Communities



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Issue

After private companies like Bird, Lime, and Spin deployed dockless e-scooters in Los Angeles without the city's permission, the L.A. Department of Transportation created a micromobility program to regulate the operation of these services. One of LADOT's program priorities is equity, including ensuring access to e-scooters for residents in underserved neighborhoods. As such, a pilot program from 2019 to 2020 required operators to double the maximum deployment of e-scooters in equity zones — which were defined by environmental hazards through the CalEnviroScreen 4.0 Tool — compared to non-equity zones, and mandated low-income discount programs. In its current program iteration, LADOT changed the equity zones to reflect infrastructure, mobility, and socioeconomic factors. The department also required that operators pay zonal fees per ride in non-equity zones, which operators collected from riders. Lastly, LADOT mandated operators to deploy 20% of their fleets in equity zones.

Despite these efforts, the program did not yield an equitable distribution of e-scooters. During the pilot, deployment peaked in October 2019 with approximately 550 total vehicles in disadvantaged communities in the San Fernando Valley versus 6,200 total vehicles in non-disadvantaged Valley communities. In the current

program, operators deploy on average 87 vehicles per month in equity zones compared to 898 vehicles in Special Operation Zones such as Venice Beach and Downtown Los Angeles. Because e-scooter deployment has remained uneven, the researchers sought to answer the following policy question: What actions can LADOT take within its micromobility program to improve the equitable deployment of e-scooters?

Methods

Through a mixed-methods approach, including structured interviews, case studies, descriptive statistics, and economic analysis, the researchers identified three policy recommendations that would improve equitable e-scooter deployment. Interviews with e-scooter companies and community-based organizations illuminated stakeholder perspectives about the micromobility program. Case studies of other cities with micromobility programs were examined to potentially apply the strengths of their equity policies to LADOT's program.

The researchers scraped point-level Bird and Wheels data from their open API to observe real-time deployment patterns. LADOT provided origin-destination trip counts, deployment averages, and MyLA311 service requests at the neighborhood council level. The researchers also gathered average e-scooter trip distance and speed from Ride

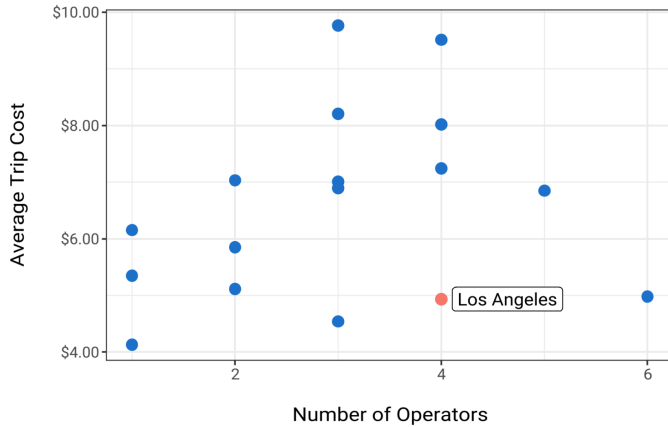


Figure 1. Average trip cost in relation to number of operators per city

Report’s Global Micromobility Dashboard and average trip prices based on the listed price on each of the providers’ phone apps. Lastly, they applied economic models and research to determine the impact of fee changes on deployment and the impact of gas prices on e-scooter demand.

Recommendations

E-scooter distribution can become more equitable by improving competitive market conditions for operators and strengthening LADOT oversight. The researchers recommend three options, implemented together to enhance the benefits of each:

- **Limit the number of operators to no more than three.** With fewer operators, monitoring equity requirements would be easier for LADOT than the current open-market system with six operators. Reducing operators would not significantly increase prices because e-scooter trips are highly competitive with driving, rideshare, walking, and transit. Across U.S. cities, there is no relationship between trip cost and the number of operators (Figure 1).

- **Strengthen LADOT enforcement of operator outreach programs and discount program uptake.** Community-based organizations noted weak operator engagement in promoting micromobility, rider education, and discount programs. With fewer operators, LADOT could encourage coordination between operators and community organizations, and monitor the operator’s discount programs.
- **Soften the penalties in the San Fernando Valley to account for its unique urban form.** Operators avoid deploying in the San Fernando Valley because of the difficulty of repairing and maintaining vehicles that are spread farther apart. Their failure to address these issues yields increased penalties and fines. Alleviating the penalties in the Valley would reduce operating costs and incentivize increased supply.

Conclusions

Improving equity in LADOT’s micromobility program requires bridging the divide between the private and public sectors. The challenge is to yield equitable outcomes without subsidies while maintaining benefits for operators or else risking operator exit. As such, the researchers’ recommendations weigh the consequences for LADOT and the operators as well as the public interest.



Cheung, A., Murillo, A., Chang, C.Y., Ishikura, M., & Perloff-Giles, N. (2023). *Micromobility Equity* (Master’s capstone, UCLA). Retrieved from: <https://escholarship.org/uc/item/18t247ft>

LADOT. (2020). *Year one snapshot: A review of the 2019-2020 dockless vehicle pilot program (Report No. 3)* [PDF]. Retrieved from: <https://www.lacity.org/ladot-dockless-year-one-report.pdf>