DRISI

Caltrans Division of Research, Innovation and System Information

Research Notes

Local Policy for Better Micromobility

Examines which policies are the most effective for micromobility vehicles, how policies affect broader transportation systems, and the strategies that ensures consistency across jurisdictional boundaries.

Planning, Policy & Programming

DECEMBER 2020

Project Title:
Pacific Southwest Region 9 University Transportation Center (PSR-FAST Act) DOTP

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WHAT IS THE NEED?

Micromobility services (e-bikes and e-scooters) in urban areas have expanded rapidly over the past several years. This expansion has been too fast for local governments and infrastructure to keep up, creating many problems. In cities where micromobility is loosely regulated and where there is little supporting infrastructure, improperly parked micromobility vehicles have become a public nuisance.

Given the rapid growth of micromobility seems poised to continue, there is a need to understand which policies are most effective in maximizing benefits and minimizing effects of micromobility vehicles.

WHAT ARE WE DOING?

The research team will begin by reviewing existing research on the behavior of micromobility users, especially with regards to how users interact with the Caltrans Active Transportation Program (biking and walking) and transit (bus, rail, ferry). They will then survey policy approaches various cities have pursued with respect to micromobility.

The researchers will then investigate how policies correlate with city characteristics such as size, geographic region, climate, topography, density, demographics and transit quality. The relative merits and drawbacks of different policy approaches will also be assessed. Based on findings, the research team will identify guiding principles and best practices for governing micromobility services.

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WHAT IS OUR GOAL?

The goal of this study to help cities effectively manage micromobility services through policy and infrastructure to support them.

WHAT IS THE BENEFIT?

The findings can provide guidance to the state and cities on how to effectively encourage users to use micromobility services to reduce vehicle miles traveled and incentivize the choice of Active Transportation over personal car use. Findings would also help determine effective modes for parking and infrastructure to increase positive interaction with micromobility users, including parking spaces and vehicle lanes. Furthermore, it would provide valuable insights into how to use these new technologies to help provide mobility to historically marginalized and disadvantaged populations who have traditionally had less access to public and private transportation.

This research can also help meet transportation system performance metrics required by the Fixing America's Surface Transportation Act (FAST Act), 2015, and Senate Bill 1, Road Repair and Accountability Act of 2017. In addition, this research can provide information about costs and benefits of various infrastructure projects for bicycling and pedestrian safety across the country, and how that infrastructure impacts the use of micromobility technologies. Understanding how to encourage safety and infrastructure for biking and walking could incentivize more people to use Active Transportation.

WHAT IS THE PROGRESS TO DATE?

1. Held kick off meeting with Project Panel.
2. Wrote and submitted literature review on bikeshares and scooter share impacts on the transportation system.
3. Identified cities with abundant micromobility options.
4. Wrote and conducted questionnaire over phone and emailed city planners and officials about current regulations for micromobility service companies, what alternatives they considered, and what interests played a role in their decisions
5. Contacted as many city officials as possible to conduct questionnaire over the phone and emailed city planners.
6. Characterized the cities based on available data on access to transit, bicycling infrastructure, bicycling and walking commute mode share, jobs/housing balance, land use mix, etc.
7. Conducted six interviews, still attempting to reach out to other nine cities through various means.
8. Surveyed previous literature on micromobility policy/regulation, finding important key gaps that this project can fill.
9. Prepared detailed slides in preparation for an update to the Project Panel in early November 2020.
10. With the literature review complete, we have started distilling our interviews down into general trends and findings building the basis for the comprehensive report.
11. The next step is to attempt to complete as many additional interviews as possible while drafting the report on our current, initial findings.