REPORT SUMMARY

FTA Report No. 0237 November 2022





MOBILITY ON DEMAND (MOD) SANDBOX DEMONSTRATION: PIERCE TRANSIT LIMITED ACCESS CONNECTIONS

EVALUATION REPORT

Background

The Pierce Transit Limited Access Connections (LAC) project is one of 11 Mobility on Demand (MOD) Sandbox Demonstrations funded by the Federal Transit Administration (FTA). Pierce County Public Transportation Benefit Area Corporation (Pierce Transit) partnered with Lyft and Sound Transit to develop and demonstrate an approach to first/last-mile access to public transit within the Tacoma, Washington, region.

The Pierce Transit LAC project sought to provide additional transportation options to local areas that had limited access to public transit services within Tacoma and surrounding areas in Pierce County. Implementation of these services was delivered through the Transportation Network Company (TNC) Lyft in coordination with Pierce Transit and Sound Transit. The project deployed zone-based first/last mile services, provision of a guaranteed ride home after transit operating hours and trips to and from park-and-ride lots. Collectively, the project aimed to deploy a more dynamic mobility system to complement existing fixed route and paratransit services.

Objectives

Through the MOD Sandbox Program, FTA enabled Pierce Transit to explore the integration of a TNC-based first/last mile partnership to deliver dynamic and cost-effective mobility in support of the broader public transit system. These goals were pursued through subsidized rides for a number of use cases including: 1) first/last mile travel to local fixed-route public transit routes, 2) guaranteed rides home for students from Pierce College Puyallup after public transit operating hours, and 3) trips to and from park-and-ride lots around the Tacoma and Puyallup Sounder Transit stations. An independent evaluation was conducted to assess the demonstration impacts and outcomes based on the project goals and objectives.

Findings and Conclusions

Project evaluation revealed that the program had positive impacts on use of public transit among users, wait and travel times, cost-effectiveness, VMT.

This report presents the results of an independent evaluation of the Pierce Transit LAC MOD Sandbox Demonstration, with lessons learned that potentially can help advance similar initiatives within other transit systems. Observations from surveys, travel activity, ridership and other agency data, as well as insights from experts (stakeholders/project partners) were used to evaluate the project. Key findings include the following:

• Users of the system reported using public transit more and had an improved perception of Pierce Transit as a result of the project. The project improved the perception of Pierce Transit quality among over 70% of survey respondents and reported that they used public transit more because of the rides provided by the system.



- The cost-effectiveness of the TNC-based system was better than previously-demonstrated fixed-route services. The analysis found that the project delivered mobility at costs per trip that were significantly lower than those of previously-demonstrated fixed-route services designed to achieve the same objectives during 2014 and 2015.
- The project facilitated a reduction in VMT. The reduction in VMT estimated as a result of personal vehicle shedding and personal vehicle suppression was found to be relatively large compared to the estimated system VMT.
- Wait and travel times were reported lower as a result of the project. Survey data were mixed but suggested that wait and travel times were reduced as a result of the project.

Benefits

The Pierce Transit LAC project was a learning experience related to project design, contractual negotiations, project operation, technology challenges, and other issues related to the continuation of the project. Ultimately, the pilot increased transit use, reduced travel and wait times, reduced VMT, and demonstrated cost-effectiveness over systems previously deployed to address the same mobility concerns. Lessons learned from the pilot project may allow future projects to build on this experience and advance common objectives with similar initiatives within other transit systems.

FTA Report No. 0237 Project Information

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