U.S. Department of Transportation
Federal Transit Administration

Mobility Payment Integration: State-of-the-Practice Scan

Background

Mobility Payment Integration (MPI) in the transit industry is gaining momentum in the U.S. As of January 2018, 34 locations around the country had deployed some variant of Automated Fare Collection (AFC); more have joined those ranks since then, and more than half are in the process of advancing to MPI. All have incorporated some combination of common (shared) payment media, created common or linked payment accounts for their customers, and used co-marketing and/or incentives, and all offer a mobile app linked or integrated with mobility providers. Some MPI systems are proceeding as members of a group of 16 highly innovative demonstration projects in urban and rural settings that have been funded by the Federal Transit Administration (FTA) Mobility-on-Demand (MOD) Sandbox Program. This report summarizes findings collected through a review of published literature, an inventory of deployments, and discussions with stakeholder professionals in the private and non-profit sectors and government agencies that are currently engaged in MPI.

Objectives

The objectives of the research were to explore emerging technologies and operational approaches for integrated payment solutions, demonstrate and evaluate integrated payment solutions through investment and strategic partnerships, and prepare the transportation industry to use multimodal integrated services that will enhance efficiency, improve customer convenience, and increase access to mobility services.

Findings and Conclusions

Efforts and activities with the payment industry and transportation operators revealed several MPI research needs in the areas of data (exchange, standardization, protection, and ownership), customer service, payment security, and equity.

Transit operators are increasingly collaborating with shared-use mobility providers (carsharing, bikesharing, and ride-hailing TNCs) to provide first/last mile service, complement fixed-route rail or bus transit service, and improve accessibility services for persons with disabilities and older adults in the community. The success of negotiating Mobility Payment Integration (MPI) with these largely private-sector providers will be increased if public transit agencies understand other provider business models.

This report documents the current state of the practice, potential benefits, challenges, and risks associated with MPI. Based on an extensive literature search, an Internet inventory of deployments, and ongoing group and individual discussions with professionals from the public, private, and non-profit sectors that are currently engaged in MPI, the FTA MPI Program team is developing an MPI demonstration and deployment planning framework. Several issues have emerged, including those related to access to application program interfaces (APIs) and the need for standardization, data rights and the need for sharing, customer service, privacy, and providing equitable service to all travelers. This report reveals opportunities for productive action by the FTA MPI Program in the interest of advancing MPI.

The FTA MPI Program team drafted an MPI Framework to serve as the focal point for continued discussion of issues and refinement of the collective understanding of their underlying causes. The goal is a Framework that ultimately can be shared by FTA as a public resource.

Benefits

This information will prove useful to the traveling public, financial institutions, credit card issuers, payment integrators, payment suppliers, technology companies, public transportation organizations, private mobility service providers, and transportation research organizations. As FTA, through the FTA MPI Program, identifies research, demonstration, and strategic partnership activities in future years that will move the industry forward in achieving integrated mobility systems, this information will help it and other government agencies in making policy decisions or determining further research needs.

Project Information

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