

FHWA Quarterly Report for STSFA, January – March 2020

Minnesota Distance Based Fee (DBF) Demonstration Phase II

Introduction

The Minnesota Department of Transportation (MnDOT) is demonstrating a distance-based fee mechanism with fleets operated by Shared Mobility (SM) service providers. MnDOT believes the future of personal travel will be captured in the new and evolving SM business model. SM includes a range of new travel forms that promise greater efficiency, safety, and enhanced mobility. It provides a platform to explore a practical and implementable path toward wider deployment of distance based user fees as a replacement for the motor fuel tax on appropriately equipped vehicles. By leveraging the advanced technology that has become a standard of SM service providers, MnDOT will look to develop a user-based fee using existing embedded vehicle technology. This project will prepare Minnesota for the convergence of shared mobility with broad adoption of vehicle electrification as well as coming vehicle automation.

Accomplishment in the Last Quarter

Minnesota continues to explore DBFs as identified in the Phase I grant project (FY 2016 award) including planning and high-level design for a future demonstration, and the Phase II grant project (FY 2018 award) to deploy, administer, communicate and evaluate a 12-month DBF demonstration on SM vehicle fleets. Accomplishments completed during the first quarter of FY 2020 include:

Project Management

- Conducted biweekly status meetings with core team to discuss status, plans, and demonstration risks
- Continued recruiting members for the DBUF Technical Advisory Committee with anticipated first meeting to be held mid-May 2020
- Supported a meeting with FHWA's Independent Evaluation Team to discuss demonstration status and plans
- Attended STSFA project discussion in conjunction with the Transportation Research Board's Annual Meeting
- Compiled and submitted 2019 Annual STSFA Report

Technical Design and Demonstration Deployment

- Finalized technical and business requirements for SM providers for Stage 1 of the demonstration (**Attachment 1**)
- Developed unit, integration, and acceptance test plans for the SM providers (**Attachment 2**)

- Deployed DBF data repository for housing sanitized demonstration data from SM providers. Established access controls for each entity accessing the portal to prevent unauthorized data access across partners.
- Conducted successful unit, integration, and acceptance testing for each of the three participating SM providers (Test results memorandum provided as **Attachment 3**)
- Identified potential AV Test Cases for VSI to perform over demonstration (i.e. Lane determination, In-State/Out-of-State Mileage Reporting, Occupancy Detection)
- Held a Go-No Go meeting with core team members to review test results, finalize demonstration plans, and determine whether to launch the demonstration on April 1, 2020
- Identified plans and processes for creating financial revenue reports during demonstration
- Discussed plans for conducting mock audit with SM providers during latter part of demonstration

Policy Considerations

- Developed draft policy issue papers on privacy, social equity, rural/urban equity, and modal equity (still under review, but available upon request)

Communications and Outreach

- Developed and reviewed the Communications Strategy for determining the best ways to communicate demonstration status, risks, and plans for the demonstration and any potential future plans for DBF in Minnesota (**Attachments 4-6**)
- Identified “Challenging Questions” and associated responses for addressing public inquiries on DBF (**Attachment 7**)
- Held multiple communications strategy sessions with core team to shape overall communications strategy, messaging, and potential issues
- Established methods for reviewing, vetting, and administering DBF-related communications between MnDOT and shared mobility providers
- Reviewed current DBF demonstration website and began identifying updates based on new information.
- Began planning to assemble Technical Advisory Committee (TAC) and hold first meeting
- Presented Minnesota’s Distance Based Fee Project at the International Road User Charging Conference in Brussels, Belgium, March 4-5, 2020 (**Attachment 8**)

Evaluation

- Developed and refined Draft Evaluation Plan (still under review, but available upon request)
- Developed instruments for data collection including interview questionnaires and event evaluation forms

- Identified methods to approach demonstration partners including SM provider employees and state agencies employees

Next Steps

The 12-month demonstration is set to launch on April 1, 2020. During this time, MnDOT and its partners will evaluate the data collected by the SM providers, prepare and evaluate financial reports on the calculated DBUF, work with the Minnesota Department of Revenue to perform mock audits, deploy specific AV tests with VSI, and conduct our independent evaluation of the demonstration. We will also deploy our Technical Advisory Committee to focus on considerations for a potential future statewide DBUF deployment and conduct public communications and outreach to our motorists, legislators, and other agency officials. We will also start collecting baseline information from SM providers and state agencies. Finally, we will resume planning for the next outreach roundtable, which will likely include active involvement of these TAC members.

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January-March 2020 Quarterly Report, Minnesota Distance Based User Fee Demonstration: Phase II Attachments

Attachment 1: Business and System Requirements
Attachment 2: Developed unit, integration, and acceptance test plans for the SM providers
Attachment 3: Test results memorandum
Attachment 4: Car Share Users Communications Plan
Attachment 5: National Stakeholder Communications Plan
Attachment 6: Policymaker Communications Plan
Attachment 7: Challenging Questions
Attachment 8: Next Generation Funding for Minnesota's Roads and Bridges: Distance-Based Fee Demonstration Project, Road User Charging Conference, Brussels Belgium, March 4-5, 2020