

INTRODUCTION AND SUMMARY OF THE DISTANCE-BASED FEES POLICY WHITE PAPERS

The current funding system for surface transportation may no longer be sustainable. Historically, the motor fuel tax has provided much of the revenue required to maintain and operate highways and roads in the country. However, the growth of vehicle fuel-efficiency, the use of alternative energy sources, and inflation have jeopardized the ability of the motor fuel tax to reliably generate enough revenue to fund the transportation system in the future. The continued erosion of the motor fuel tax base and its loss of purchasing power have pushed the federal and state governments to examine alternative funding sources.

Many States are pursuing distance-based fee (DBF) systems to supplement and/or replace the motor fuel tax. Despite this broad interest, the widespread deployment of DBF has yet to materialize. Scaling DBF systems to broader markets and applications has been challenging mainly due to low public acceptability and high administrative costs. In particular, invasion of privacy and system security concerns, have gained particular attention from the public, weakening public approval even more. Additionally, DBF systems raise equity concerns along social, rural and urban, and modal lines. These issues result in public opposition that could potentially diminish political willingness to reform the transportation funding system.

The Minnesota Department of Transportation has studied alternative transportation finance methods since the 1990's. As part of these efforts, MnDOT conducted a Minnesota Distance-Based Fee demonstration in 2020, showcasing a feasible and potentially cost-effective DBF system with no direct interface to the individual customer. For this demonstration, MnDOT partnered with Shared Mobility (SM) service providers who already collected mileage data to bill their customers for vehicle use. The SM fleet has vehicles with built-in technology that keeps track and report mileage, which can be used for the purpose of collecting a fee to fund the transportation system.

As part of this Minnesota Distance-Based Fee demonstration, the Minnesota Department of Transportation and the University of Minnesota's Humphrey School of Public Affairs prepared five policy papers to better understand some of the critical issues relevant for a DBF program. The objective of these policy papers is to inform transportation policy though discussion of policy considerations and implications on privacy, social equity, rural and urban equity, modal equity, and collection and administration costs.

- **Privacy Considerations** Discusses the current legal landscape regarding ownership, collection, and sharing of Personally Identifiable Information (PII).
- **Social Equity Considerations** Explores social equity of transportation funding sources in terms of the benefit received and the ability to pay.
- **Rural and Urban Equity Considerations** Explores the impacts of a DBF system on urban and rural drivers under different scenarios.
- **Modal Equity Considerations** Discusses the transportation costs imposed by different transportation modes and how they contribute to cover the infrastructure costs they imposed.
- Collection and administration costs Discusses how the Minnesota demonstration simplifies
 the collection and administration of DBFs and explore the fees and regulations that apply to
 shared mobility providers.

