Exhibit D

Research Project Requirement Template

Analysis and Implications of the Vehicle Inventory and Use Survey (VIUS)

Recipient/Grant (Contract) Number: The University of Texas at Austin; Arizona State University / Grant # 69A3552344815 and 69A3552348320

Center Name: Center for Understanding Future Travel Behavior and Demand (TBD)

Research Priority: Improving Mobility of People and Goods

Principal Investigator(s): Steven Polzin; Irfan Batur

Project Partners: N/A

Research Project Funding: $150,000 (Federal + non-Federal funding)

Project Start and End Date: 7/1/2024 - 6/30/2025

Project Description: To better understand the future of travel behavior and demand this research effort will explore the National Vehicle Inventory and Use Survey (VIUS). There is a keen interest in this survey as a result of the fact that a growing share of all travel is non household based travel for freight commercially and service functions. These functions account for an estimated 40% of all vehicle miles of travel and, due to the fact that they are larger vehicles, their energy use and emissions are disproportionate to their VMT share and represent a majority of all energy use and emissions for transportation. In addition, these vehicles, many owned by businesses and commercial entities, are different than household owned vehicles in several respects including how decisions are made regarding their purchase and use. Many of these activities do not have travel alternatives such as bike and public transit that may be available for person trips. Thus, having a richer understanding of these vehicles and their utilization is important to modeling and understanding travel demand as well as influencing transportation policy strategies and investments.

Findings from exploration of this survey will be contrasted with other sources of information regarding travel by these classifications of vehicles. It is anticipated that a comprehensive descriptive understanding of the use of these vehicles will facilitate understanding their role in things like transportation safety, transportation electrification, and future travel demand.

This initiative will focus on descriptive analysis and interpretation. The extensive experience of the research team enables insightful interpretation of descriptive data in the context of critical transportation issues. Outcomes may include descriptive insights regarding travel behavior and trends as well as the identification of critical issues that may require additional analysis or modeling in subsequent follow-up research. Various venues will be used to communicate research results and findings to a spectrum of stakeholders.

US DOT Priorities: While this project will provide "Data-Driven Insight" spans technology transfer and research, its primary focus aligns most completely with technology transfer/deployment. More specifically, this effort will "Harness advanced data collection and data processing capabilities to create timely, accurate, credible, and accessible information to support transportation decision-making."

The project directly addresses the DOT T2 need to "ensure that … R&D results are made widely available to other scientists, to the public to facilitate understanding and decisions, and to innovators and entrepreneurs who can translate them into the businesses and products that will improve all of our lives." Through its aggressive dissemination of descriptive analysis and interpretive information it will support the

"the deployment of people-centered technology solutions that make our transportation system safer, more efficient, more equitable, and more sustainable."

Outputs: The effort is focused on producing public outputs that catalyze thinking and action around the future of travel behavior and demand. These will include:

- Web-based platforms
- Articles
- Blog posts
- Presentations
- On-campus engagement with students and researchers
- Support of media inquiries

The precise number and nature of outputs will depend on iterations in the approaches taken based on continuous feedback and improvement. Outputs will be aligned with key outcomes.

Outcomes/Impacts: Anticipated outcomes include:

- Elevated public awareness of emerging research and thinking around the future of travel behavior and demand.
- Enhanced awareness of the impact and behavior of freight and commercial vehicles.
- New and transformative thinking about how to better integrate this new knowledge into planning and modeling practices.
- New and transformative thinking and ideas amongst a broader audience of researchers and practicing transportation professionals.

Anticipated impacts include thought leadership and insightful guidance to support informed decision-making regarding transportation policy and investments as it related to this class of vehicles and insights to support additional research analysis and planning and analysis tool development. This extends to understanding the future of travel behavior and demand in ways that support evidence-based, socially responsive, and futures-focused decision making.

Final Research Report: A URL link to the final report will be provided upon completion of the project.