Exhibit D

Research Project Requirement Template

> **Consumer Preferences for Restaurant and Grocery Delivery Services in Seattle: Impacts on Travel Behavior**

Recipient/Grant (Contract) Number: The University of Texas at Austin; University of Washington /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): Amelia Regan

Project Partners: N/A

Research Project Funding: $98,110 (Federal + non-Federal funding)

Project Start and End Date: 10/1/2023 - 12/31/2024

Project Description: The use of restaurant and grocery delivery services, coupled with the growth of e-commerce and related parcel delivery raises concern for the safety of drivers and pedestrians in urban areas. Traditional restaurants, ghost restaurants which operate out of storefront kitchens, grocery delivery services which similarly operate out of traditional stores or urban warehouses or micro-fulfilment centers rely on third-party food-delivery platforms through which consumers can order and receive food products. These third-party intermediary platforms can operate as gig economy services (GES) or professional service companies. In the case of online food delivery, in the US GES has spread through many companies such as uber-eats, grubhub, doordash, postmates and instacart. Traditional grocery stores also provide deliveries and might rely on their own delivery services, though increasingly they also employ or the third party services. This project follows closely behind a mixed methods study of restaurant and grocery delivery services in Seattle Washington. That project which was launched in Fall, 2023 involves a both a survey and in-depth interviews with delivery drivers, is focused primarily on driver satisfaction and safety of both drivers and pedestrians in urban areas. Preliminary results should be available in January 2024. That study is a replication study of sorts as it draws on the results of a 2017 study of delivery drivers in London, UK. The London study was led by the PIs close collaborator at the University College London, Professor Nicola Christie. The proposed project is focused on consumers in Seattle who use restaurant and grocery delivery services and the related impacts on the safety of delivery drivers (in automobiles, motorcycles, bicycles, e-bikes, e-scooters and on foot) and pedestrians in dense urban areas. Of particular interest is users' willingness to pay for these services, their reported typically frequency of use of such services, their use of traditional restaurants, and their perceptions and interest in the working conditions of workers drivers who make the deliveries.

Design/Methodology/Approach: A web based survey and subsequent structural equation modeling will be employed on a sample of more than 300 Seattle based self-completion surveyed consumers. When possible a physical examination of the intersections/neighborhoods where respondents live will be performed to match consumer behavior with neighborhoods. The web based survey will be available to anyone who chooses to take it, so we should be able to do some comparisons between Seattle consumers and those from other locations in the US, though our focus is on a Seattle.

Contributions: While many researchers have examined the propensity to use restaurant and grocery delivery services before, during and now post COVID, we believe that ours will be the first to link delivery drivers'

perceptions about their jobs, consumer attitudes and understanding of congestion, safety and risks to drivers and pedestrians, with physical examinations of problematic intersections and neighborhoods.

US DOT Priorities: The proposed research addresses the following US DOT Research, Development, and Technology (RD&T) Strategic Plan goals:

Equity and Accessibility Assessment: Develop data, tools, and research to evaluate and advance the equity and accessibility of transportation systems, projects, jobs, and policies (page 33).

Mobility Innovation: Assess the impact of new mobility services on job quality and workplace equity in transportation services. (page 34).

The proposed research addresses the following priorities of the U.S. DOT T2 program:

Ensure research investments are fully leveraged through the demonstration and deployment of the resulting products and technologies (page 67).

Research Planning: Require that T2 performance measures be incorporated into the research project lifecycle planning at an early stage (page 67).

Early-Stage Identification: In partnership with the modes, identify potential research and lab efforts ripe for demonstration (page 67).

Outputs: The research is expected to yield important insights into consumer behavior regarding restaurant and food delivery services and the impact of that behavior on congestion, safety and security for delivery drivers and pedestrians in urban areas. The output will include at a minimum:

A project report that describes the research, summarizes the findings, and provides recommendations for policymakers and practitioners.

One or more peer-reviewed journal articles that disseminates the research findings to the academic community.

Conference presentations/webinars that share the research findings with a broader audience.

Outcomes/Impacts:
The research outputs can be used to inform new transportation planning processes that consider the impacts of urban delivery operations on accessibility and equity.

Developing new demand management strategies and urban congestion management strategies

Improve the transportation system for all users and create a more equitable society.

Increasing economic productivity by reducing traffic congestion and improving the accessibility of transportation.

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