Deliverables and Reporting Requirements for UTC Grants Awarded in 2025 (June 2025)

**Intelligent Transportation Network Decision Support**

**with Real-time Routing and Data Analytics**

# Exhibit D

**Recipient/Grant (Contract) Number:** University of Nebraska-Lincoln: University of Iowa 69A3552348307

# Center Name: Mid-America Transportation Center

**Research Priority:** Promoting Safety

# Principal Investigator(s): Dr. John Smith (PI), Dr. Jane Doe (Co-PI)

**Project Partners:** Nebraska DOT

**Research Project Funding:** Federal: $90,000; non-Federal: $90,000

**Project Start and End Date:** 07/01/2025 – 06/30/2026

**Project Description:** This proposal outlines a strategic approach to improving transportation safety through engineering interventions aimed at reducing traffic-related injuries and fatalities. With the growing complexity of transportation systems and increasing vehicular volumes, the need for proactive safety measures has never been more critical. This initiative seeks to analyze existing roadway conditions, identify high-risk areas, and implement cost-effective engineering solutions that enhance safety for all users.

The primary objectives of this proposal are to identify safety deficiencies in the transportation network, evaluate contributing factors to crashes, and design targeted engineering improvements. The methodology involves a comprehensive review of crash data, site assessments, and traffic flow analysis. Using tools such as road safety audits, predictive modeling, and GIS mapping, the project will prioritize interventions based on risk severity and feasibility. Proposed measures may include geometric design modifications, signal timing optimization, signage upgrades, and the implementation of traffic calming techniques.

**US DOT Priorities:** The project is relevant to the following strategic goals: Safety, economic strength and global competitiveness, and Transformation.

**Outputs:** The research will focus on creation of a safety database that will include information on crashes reported in the Federal Region VII, detailed weather and snow event maintenance activities. Development of a comprehensive database includes integrating data for transportation networks, flood maps, and infrastructure data. The main output will be a robust safety database.

**Outcomes/Impacts**: By addressing key safety issues with data-driven engineering solutions, this proposal aims to reduce crash rates, improve traffic efficiency, and foster a safer environment for all road users. The anticipated outcomes include measurable reductions in collision frequency and severity, enhanced compliance with traffic regulations, and increased public confidence in transportation infrastructure. Long-term benefits also encompass reduced economic losses from crashes and improved quality of life through safer, more reliable travel.

**Final Research Report:** (Upon completion of the project, provide URL link to final report.)

U.S. Department of Transportation

**Office of the Secretary of Transportation**