(Title)

RFP #

(Principal Investigator, University)

(Co-PI, University), (etc.)

**Research Proposal**

Submitted to the Tennessee Department of Transportation

# Problem Description

Detail the extent of this problem in Tennessee, including an explanation of the fundamental parts of the issue. Demonstrate your insight into the problem.

# Objectives of the Research

Describe what the research seeks to accomplish. These are the technical objectives upon which the project staff is to focus attention and upon which research efforts are to converge.  The objectives should clearly and concisely identify the expected products of the research effort.

# Related Literature

Summarize the findings of a preliminary literature search and state the relationship of the proposed research study to prior and current research, particularly where gaps in research exist for Tennessee.

# **Scope of Work**

Describe the activities that are expected to be completed throughout the life of the project. Describe the tasks required to complete the research, noting any deliverables expected as a task is completed.

A deliverable is a good or service provided during or upon completion of a research project. Deliverables can include but are not limited to documents, computer source codes, computer software, methodologies, models, templates, processes, testing assessment tools and scenarios.  Progress reports and a final report are required deliverables from all projects under 23 USC Section 420. Components that are part of the final report (e.g., literature review) should **NOT** be listed as deliverables, deliverables should only include standalone products. All TDOT research projects require the delivery of a final presentation once the research has concluded.

# Methodology

Provide an explanation of the methods that will be incorporated in order to better understand the problem and potentially improve it. At a minimum, this section should describe how data will be collected, how data will be analyzed, what tools/materials will be used to accomplish the research, and the rationale for choosing those methods.

# Additional Benefits/Potential for TDOT’s Implementation

Provide an explanation of the benefits and opportunities for implementation TDOT will get through this applied research. This section should answer the question: How will these benefits be realized through implementation?

Some possible benefits include cost savings, efficiency gains, safety improvements, improved procedures and processes, customer service improvements, time savings, etc.

# Research Team

List all members of the research team, including their role, their estimated time commitment, project responsibilities, and each staff member’s qualifications. If students/graduate assistants will assist with the research, provide detailed information on their role in the project and note who will provide the appropriate oversight to ensure high-quality research deliverables.

List all subcontractors; all subcontractors must be approved by TDOT. If awarded, be prepared to document and notify TDOT of any conflicts of interest.

# Quality of Facility and Equipment

Describe what the entity offers that will make this research easier for TDOT to pursue and what existing resources can be employed to assist the researcher in this project. Describe any in-kind funding (if available) that can be used to dedicate to the project.

# Project Schedule

Briefly discuss the project schedule, noting the total anticipated timeline of the research. A detailed breakdown of the timeline of tasks and deliverables will be required in another portion of the application, no need to include it here.

As a reminder, the last three months should be set aside to allow TDOT to review and approve the final report. Ensure the proposed project schedule adequately accommodates the review and approval process.

# References

Provide a list of references cited in the research proposal.