



**Wisconsin Department of Transportation
Policy Research Program**

**Request for Proposal
Artificial Intelligence in Transportation**

Project Duration: 12 months, starting August 2024
Project Budget Limit: \$95,000

Questions submitted to research@dot.wi.gov regarding the content of this Request for Proposal are due no later than 04:30 PM (CST) on April 11, 2024

Responses to questions will be posted to the WisDOT Research and Library website <https://wisconsindot.gov/Pages/about-wisdot/research/researchers.aspx> by 04:30 PM (CST) on April 25, 2024

Proposal Deadline

Proposers must submit a PDF version of their proposal no later than 4:30 PM (CST) on May 9, 2024, to research@dot.wi.gov.

I. Definitions

The following definitions are used throughout the RFP:

- AI - Artificial Intelligence
- POC - Project Oversight Committee, comprised of WisDOT and/or other representatives to oversee the research
- Proposer - a company or individual submitting a proposal in response to this RFP
- Researcher - proposer awarded the contract
- WisDOT - Wisconsin Department of Transportation

II. Overview

The Wisconsin Department of Transportation (WisDOT) is invested in exploring and implementing emerging technologies to best deliver a safe and reliable transportation system. The department is currently examining whether and how Artificial Intelligence (AI) could be leveraged to further WisDOT's strategic goals. The project will identify a current 'state of practice' for AI use in peer state departments of transportation. To determine how AI can best support WisDOT in achieving the mission of delivering a safe and reliable transportation system, WisDOT is seeking to gain an understanding of AI as it impacts the maintenance and use of the transportation system. The project should describe potential benefits and possible risks to data maintenance and security.

III. Objectives

The department is seeking research proposals to review data and existing research that will deepen the understanding of the impact AI will have on the transportation industry. The results should meet these objectives:

1. Understand how state transportation agencies are currently leveraging and interacting with AI
2. Analyze and project future impacts and benefits of AI at state transportation agencies
3. WisDOT has a particular interest in the following potential use cases for AI at state departments of transportation:
 - a. State-owned transportation asset management
 - b. Crash modelling
 - c. Transportation safety (both engineering and behavioral approaches)
 - d. Traffic management and forecasting
 - e. [Other areas as defined by Research and WisDOT teams.]

IV. Scope of work

While the full research approach will be negotiated with the selected researcher, the WisDOT project managers, the Project Oversight Committee (POC) and the Policy Research Program, proposers should base their submissions on the following general tasks:

Task 1 – Literature Review of AI use in other state transportation agencies

In this task, the researcher will collect and review relevant AI efforts by other states focusing primarily on usage at other state transportation agencies.

The researcher will provide broad definitions and applications of AI in transportation, including impacts to users of the system and impacts to daily and cyclical management practices within the transportation field.

Task 2 – Collect data on AI's impact to the transportation industry.

To determine how AI can best support WisDOT in achieving the mission of delivering a safe and reliable transportation system, the researcher will collect and review data per the parameters identified in the researcher's proposal and discussion with the project managers and the POC.

Task 3 – Data review and analysis

In Task 3, the researcher will work with the WisDOT project managers and the POC to review the information collected and organize it into relevant and needed analyses.

Task 4 – Development of future recommendations

The researcher will work with the WisDOT project managers and the POC to analyze the results of the research and analysis and then develop recommendations for the department related to AI inclusion and best practices. The project should describe potential benefits and possible risks to data maintenance and security.

Task 5 – Preparation of final report and presentation

The researcher will compile a final report summarizing all tasks and results from the project and present the finding to the POC.

V. Proposal requirements

The proposer should list any relevant experience and qualifications for the principal investigator(s) and all other key project team members, including subcontractors, with a focus on how the experience and qualifications relate to the project.

VI. Deliverables and review points

Although final details will be negotiated between the department and the selected contractor, any proposals should at a minimum account for these deliverables and points of review. Proposals should identify likely methods (meetings, conference calls) needed for these steps.

VII. Schedule and budget

Project duration – The contract shall be effective on the date indicated and shall continue for twelve (12) months from that date. Proposers should include a detailed schedule showing the placement of the tasks, meetings and expected review periods. Based on the date of this request for proposal, WisDOT expects that the start date of this contract to be effective on or after August 2, 2024.

Project budget – Proposals cannot exceed **\$95,000**. Any proposal that exceeds this amount will be considered non-responsive to the RFP requirements and will not be accepted. All proposed budgets should detail the activities of research personnel as well as other direct cost factors (e.g., survey mailing costs).

VIII. Proposal submission deadlines and guidelines

The issue date for this RFP is March 27, 2024. Proposers may direct any questions, noted errors, discrepancies, ambiguities or deficiencies concerning this proposal via e-mail to research@dot.wi.gov by 4:30 PM Central time on April 11, 2024. WisDOT will collectively post all questions and answers to <http://wisconsindot.gov/Pages/about-wisdot/research/researchers.aspx> by 4:30 PM Central time on April 25, 2024. Proposers must direct questions, etc. about this RFP only to this designated e-mail and not to any other staff or agent of WisDOT.

Proposal Preparation Guidelines can be found at the Proposal Preparation Guidelines at <https://wisconsindot.gov/Pages/about-wisdot/research/researchers.aspx> For more information regarding this RFP, contact the WisDOT Research & Library Services Unit at research@dot.wi.gov.

Proposers must submit an electronic version of a proposal (Adobe PDF preferred) by 4:30 PM Central time on May 9, 2024 via e-mail to research@dot.wi.gov. Proposals submitted after the deadline will not be accepted for evaluation. Proposers will be notified no later than June 28, 2024.