

Wisconsin Department of Transportation Policy Research Program

Request for Proposal Engineering Countermeasures to Mitigate Reckless Driving Behavior

Project Duration: 12 months, starting August 2024 Project Budget Limit: \$120,000

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 <u>research@dot.wi.gov</u>.

I. Definitions

The following definitions are used throughout the RFP:

- WisDOT Wisconsin Department of Transportation
- POC Project Oversight Committee
- RFP Request for Proposal
- Proposer A company or individual submitting a proposal in response to this RFP
- Researcher The party (from the field of proposers) who is awarded the contract
- NHTSA National Highway Traffic Safety Administration
- FHWA Federal Highway Administration

II. Overview

The Wisconsin Department of Transportation's (WisDOT) mission is to provide leadership in the development and operation of a safe and efficient transportation system. WisDOT is committed to reducing the number of traffic-related fatalities, injuries and crashes experienced on Wisconsin's roadways.

In May 2022, the National Highway Traffic Safety Administration (NHTSA) estimated a 10.5% increase in traffic-related fatalities nationwide occurred in 2021 when compared to 2020. NTHSA recently estimated that a 0.3% decrease occurred in 2022 in comparison to 2021. While in Wisconsin, the data for traffic fatalities, serious injuries and crashes is trending in a favorable direction for both 2022 and 2023, the department recognizes the need to mitigate reckless driving behaviors with effective engineering countermeasures.

The department is seeking research proposals that analyze safety-related engineering countermeasures and that determine their effectiveness in mitigating reckless driving behaviors (speeding, impaired driving, distracted driving). If found, countermeasures identified by the researcher that reduce reckless driving behaviors and the dangerous safety outcomes that accompany them are to be organized into specific environmental, street, motorist, and non-motorist parameters that are well or ill-fitted to implement each countermeasure. Parameters should be heavily influenced by Wisconsin-specific characteristics to better reflect suitability in our state. The researcher will then develop recommendations for appropriate and effective countermeasures based on roadway design and human behavior factors. The researcher will also develop or leverage an existing public health index to prioritize corridors and roadways that could benefit the most from recommended interventions.

III. Objectives

The department is seeking research proposals to develop a roadway network screening criteria tool to be used when considering the deployment of engineering-related safety countermeasures, specifically the Federal Highway Administration's Proven Safety Countermeasures, that can be used in mitigating reckless driving behaviors. WisDOT defines reckless driving (e.g., speeding, impaired driving, distracted driving) as operating a vehicle in a way that endangers or is likely to endanger people or property. The roadway network screening criteria tool will consider the complexities of rural and urban settings and roadway classification (e.g., traffic volume; roadway location: urban freeway, local city street and rural highway; physical roadway characteristics; etc.) and human behavior when deploying engineeringrelated countermeasures to mitigate reckless driving. The researcher will also develop or leverage an existing public health index to prioritize corridors and roadways that could benefit the most from recommended interventions.

Additionally, the researcher is expected to conduct a literature review to assist in determining which countermeasures should be used to develop the roadway screening network criteria and prepare a final report.

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 – Review Literature

Conduct a comprehensive literature review on engineering-related countermeasures, specifically the Federal Highway Administration's (FHWA) Proven Safety Countermeasures, pertaining to the countermeasures' effectiveness in mitigating reckless driving behavior.

Task 2 – Identify the engineering-related countermeasures

Propose and select the engineering-related countermeasures, in addition to the FHWA Proven Safety Countermeasures, to be used for Task 3 in coordination with the Project Oversight Committee. This should include information pertaining to those engineering-related countermeasures effectiveness at mitigating reckless driving.

Task 3 – Develop roadway network screening criteria tool and public health index

Develop a roadway network screening criteria tool for the department to use when evaluating engineering-related countermeasures, specifically FHWA's Proven Safety Countermeasures, that are best suited to address reckless driving behavior.

The criteria and tool will take into account the complexities of rural and urban settings and roadway classification (e.g., traffic volume; roadway location: urban freeway, local city street and rural highway; physical roadway characteristics; etc.) and human behavior (e.g., speeding, impaired driving, distracted driving) when deploying engineering-related countermeasures to mitigate reckless driving.

The researcher will also develop or leverage an existing public health index into the tool to prioritize corridors and roadways that could benefit the most from recommended interventions.

Task 4 – Final report

Prepare a final report documenting the research project's tasks above, including recommendations for distributing the roadway network screening criteria tool and public health index for use by WisDOT.

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 **\$120,000.** 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 <u>research@dot.wi.gov</u> by 4:30 PM Central time on April 11, 2024. WisDOT will collectively post all questions and answers to <u>http://wisconsindot.gov/Pages/about-wisdot/research/researchers.aspx</u> 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 <u>https://wisconsindot.gov/Pages/about-wisdot/research/researchers.aspx</u> For more information regarding this RFP, contact the WisDOT Research & Library Services Unit at <u>research@dot.wi.gov</u>.

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 <u>research@dot.wi.gov</u>. Proposals submitted after the deadline will not be accepted for evaluation. Proposers will be notified no later than June 28, 2024.