



Wisconsin Department of Transportation Policy Research Program

Request for Proposal Countermeasures to Improve Pedestrian Visibility to Tall Vehicles

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:

- 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

II. Overview

This research request will help WisDOT understand engineering or policy solutions (countermeasures) that better allow vehicles, especially those with large blind spots, vehicle mass, and heightened hoods to have improved visibility of pedestrian crossings. This insight will support WisDOT to decrease crashes, injuries, and fatalities associated with pedestrian visibility and crossings.

The department is seeking research proposals to conduct an analysis on proven engineering or policy related countermeasures that increase pedestrian safety or visibility in interactions with vehicles in general, and vehicles with reduced fields of vision that are typically thought to be more dangerous for pedestrians.

As a result of data collection and analysis, the researcher is expected to include optimal road and environment parameters (ex. road width, number of lanes, high vehicle count corridors/intersections, high pedestrian/bike traffic, etc.) that would be relevant to Wisconsin characteristics. These parameters will then be organized into guidance materials for inclusion of pedestrian safety countermeasures and prioritization of key project features for vulnerable road user safety. Analysis is open to national or comparative international case studies and solutions that have proven safety or visibility improving results.

III. Objectives

The department is looking to receive proposals to research engineering or policy solutions (countermeasures) to improve the relationship between vehicles and pedestrian visibility. The researcher will conduct an initial literature review of the existing research, reports and studies to recommend engineering or policy solutions to improve the visibility between vehicles and pedestrians. The researcher will then collect crash data, fatality, and serious injury data to be used in conjunction with the identified countermeasures to develop guidance materials for the best suited roadway and environmental characteristics for deploying the countermeasures.

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

In this task, the researcher will review state, regional and national level, as well as international, literature (e.g., reports, research findings, etc.) to examine the relationship of visibility between vulnerable road users (e.g. pedestrians) and taller vehicles, especially those with large blind spots, vehicle mass, and heightened hoods at pedestrian crossings. The literature review should include identifying engineering or policy solutions (countermeasures) to address any negative relationship impacts identified through the review.

Task 2 – Collect Data

The department is seeking research proposals to conduct an analysis on proven engineering or policy related countermeasures that increase pedestrian safety or visibility in interactions with vehicles in general, and vehicles with reduced fields of vision that are typically thought to be more dangerous for pedestrians. The researcher may suggest other data sources for this project as well. Under this task the researcher is expected to collect crash, fatalities, injury, etc. data from the state, region and national level to be used in Task 3.

Task 3 – Conduct Analysis and Development of Guidance Materials

The researcher is expected to conduct an analysis using the collected data and the identified engineering and policy solutions with the goal to develop guidance materials for recommending the roadway and environment characteristics (e.g., roadway width; number of lanes; vehicle count; estimated pedestrian/bicycle traffic volumes; roadway location: urban freeway, local city street and rural highway; etc.) for utilizing the suggested safety countermeasures.

These parameters are to then be organized into guidance materials for inclusion of pedestrian safety countermeasures and prioritization of key project features for vulnerable road user safety. Analysis is open to national or comparative international case studies and solutions that have proven safety or visibility improving results.

Task 4 – Report Findings and Wisconsin Policy Recommendations

The researcher should develop a final report to document the research findings, the analysis methods used and the development of guidance materials that increase pedestrian safety or visibility in interactions with vehicles in general, and vehicles with reduced fields of vision that are typically thought to be more dangerous for pedestrians with the goal of achieving better safety outcomes.

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.