



Wisconsin Department of Transportation

Policy and Safety First Research Programs

**Request for Proposals
FFY 2025**

Pilot Use of Telematics for Traffic Safety Analysis

Request for Proposals Timeline and Information

March 17, 2025	Issue Date of this Request for Proposal (RFP). This RFP has been posted at: http://wisdotresearch.wi.gov/rfps-and-proposals .
	Please read the Proposal Preparation Instructions as this document has been updated recently and contains important information, including tables and templates, necessary for writing a proposal for submission.
April 8, 2025 4:30 PM (CST)	Questions regarding this RFP are due by this date and time. Questions need to be submitted with the project name to research@dot.wi.gov . Questions submitted after this date and time will not be considered.
April 17, 2025 4:30 PM (CST)	Responses to Questions will be posted on the WisDOT Research and Library website at: http://wisdotresearch.wi.gov/rfps-and-proposals
May 4, 2025 4:30 PM (CST)	Proposals are due by this date and time. Proposals must be submitted in a PDF version to: research@dot.wi.gov . Proposals submitted after this date and time will not be considered. A confirmation email will be sent in response within 2 business days of the due date.
June, 2025	Award and Deny letters will be sent by email to all proposal submitters (only lead investigator will be notified)
	Project Budget and Schedule
\$150,000	Project Budget shall not exceed this amount. Matching funds will not be considered in the proposal evaluation process. Proposals which exceed this amount will be disqualified.
12 months	Period of Performance / Duration of Project
August 1, 2025	Anticipated Start Date of Project
April 30, 2026	Researcher's Final Report Anticipated due date
July 31, 2026	Anticipated End Date of Project
	For more information regarding this RFP contact the WisDOT Research Program at: research@dot.wi.gov .

NOTICE: Submission of a proposal does not guarantee an award. The Wisconsin Department of Transportation (WisDOT) reserves the right to reject any and all proposals received; however, in the event WisDOT does award a project, such award will be based on uniform evaluation criteria.

**Wisconsin Department of Transportation
Policy and Safety First Research Programs
Request for Proposals**

Pilot Use of Telematics for Traffic Safety Analysis

Definitions

The following definitions are used throughout the Request for Proposal:

- **WisDOT** – Wisconsin Department of Transportation
- **R&L** – WisDOT Research and Library unit
- **RFP** – Request for Proposal
- **PI** – Principal Investigator/lead researcher
- **POC** – Project Oversight Committee comprised of WisDOT and/or other representatives to supervise the research.
- **MMUCC** – Model Minimum Uniform Crash Criteria
- **GIS** – Geographic Information System
- **FHWA** – Federal Highway Administration
- **NHTSA** – National Highway Traffic Safety Administration
- **SMF** – Safety Mitigation Factors
- **CMF** – Cost Mitigation Factors
- **SOAR** – Strengths, Opportunities, Aspirations, and Results

I. Background and Problem Statement

The Wisconsin Department of Transportation (WisDOT) has invested in crash data bases and crash mitigation policy and procedures. Preventing crashes and designing a transportation network that reduces the severity of injury is a core function of WisDOT. Crash mitigation historically has been a reaction to crashes whether behavioral or engineering as a countermeasure. Wisconsin has a slowly declining fatal and serious crash outcome trend for the past five years. In order to continue planning for a safer system and reduce severity of crashes, WisDOT seeks to add additional information into our decision-making process.

The incorporation of driver telematic data would provide data and insight about driver high risk behaviors on the system in normal circumstances in or around crash hotspots. The researcher is to identify areas with excessive speeding, near misses, hard acceleration and braking, and improper phone handling by combining both historical and real-time telematic data by geographic location in Wisconsin.

This research would provide insights on what countermeasures to consider applying to the crash hotspot. Then provide the ability for WisDOT to assess the countermeasures used to

determine if the safety mitigation or cost factors have been met through analysis in real time versus crash data to population over an extended period of time.

II. Research Objectives

WisDOT is seeking research proposals to create a methodology using existing crash and telematic data to inform policy and impact traffic safety. The results should meet the following objectives:

- a. Develop definitions for driver high risk behaviors that align to the current Model Minimum Uniform Crash Criteria (MMUCC) guidelines.
- b. Develop a model process that utilizes driver telematic data that will be layered over the transportation network as a GIS layer to identify driver high risk behaviors.
 - i. Provide linkage to current FHWA or NHTSA countermeasures.
- c. Develop a uniform process to analyze crash hotspots and determine if safety mitigation factors (SMF) and/or cost mitigation factors (CMF) have been met.
- d. Provide data tools, information systems, and methods for use by WisDOT and others.
 - i. Must use data currently available to WisDOT and accessible on the current market.

III. Research Approach - Scope of Work/Work Plan

Task 1: Literature Review

Conduct a comprehensive literature review and assessment of current practices and processes that have been implemented for risk mitigation on transportation systems utilizing crash data and telematics for hotspot analysis. Include best practices for addressing privacy concerns with telematics.

The Literature Review and a 1-2 page executive summary will be submitted with a presentation to the Project Oversight Committee (POC).

Task 2: Definitions

Develop uniform definitions for internal and external use by WisDOT that align to MMUCC, WisDOT Crash definitions, in commonly used language for accessibility by policy and program groups.

The deliverable will be a table or list of definitions which will be submitted to the POC.

Task 3: Risk Mitigation Hotspots tool

Develop a process, table, and tool to identify hotspots visually utilizing WisDOT and telematic databases, with the intent of informing decision makers on rate, frequency, and severity of risks for mitigation in a geographically designated area by time and date.

The deliverables will include the process, table and tool, and a 1-2 page executive summary, which will be submitted with a presentation to the POC.

Task 4: Safety and Cost Mitigation Assessment tool

Utilizing WisDOT and telematic databases, develop a process and tool to determine if SMF and CMF have been met post countermeasure implementation in a geographically designated area by time and date.

The deliverables will include the process and tool, and a 1-2 page executive summary, which will be submitted with a presentation to the POC.

Task 5: Pilot Risk Mitigation tool

Utilizing developed tools and process select three urban and three rural locations to pilot processes for review by subject matter experts as to the feasibility of the results.

The deliverable will include a SOAR analysis of the outcomes, a summary of expectations vs. results, feedback of future use and suggested improvements. These will be submitted with a 1-2 page executive summary in a presentation to the POC.

Task 6: Pilot Safety and Cost Mitigation Assessment tool

Utilizing developed tools and process select ten Highway Safety Improvement Program projects to test the process in determining if both, one or none of the safety and/or cost mitigation factors were met.

The deliverable will include a SOAR analysis of the outcomes, a summary of expectations vs. results, feedback of future use and suggested improvements. These will be submitted with a 1-2 page executive summary in a presentation to the POC.

Task 7: Researcher Final Report

The research team will prepare and submit a Researcher Final Report three months before the project end date, including background, best practices, recommendations, and interpretation developed during the project.

Task 8: Close-Out Presentation

The research team will create and present a one-hour PowerPoint presentation that includes background, best practices, recommendations, and interpretations developed during the project.

Task 9: Approved Final Report

The researcher will address all questions and comments from the Researcher Final Report and COP and submit a publication-ready Approved Final Report due one month before the project's end date.

Please see the [Proposal Preparation Instructions](#) for more details regarding the Final Report and Close-Out Presentation.

IV. Required Testing/Equipment/Materials (if required)

N/A

V. Required Travel

a. Travel for Tasks and/or Field Work

- i. Travel by the researcher is not required for this project.

b. Meetings

- i. A kick-off meeting, periodic progress meetings, and a close-out presentation are required.
- ii. Meetings are anticipated to be virtual.
- iii. At the start of the project the POC Chair, lead PI and R&L will determine points in the project where discussions and decisions are needed. One-hour long meetings will be set for the full POC, the researchers, and R&L staff at those times.
- iv. If there are gaps of more than eight weeks between meetings, check-in meetings of 20-30 minutes will be scheduled for the POC Chair, lead PI and R&L staff.
- v. WisDOT welcomes a virtual Close-Out presentation; however, the researcher may present the results in person, paid by contract funds, if included in the project budget.

c. Conferences

- i. Conference attendance by the researcher is not required for this project.

Notice: **WisDOT will NOT fund travel expenses apart from what is included in the research project proposal budget.**

VI. WisDOT Contribution

WisDOT will provide the following support through the Project Oversight Committee (POC) to support the successful completion of the project.

- a. Work will be conducted with project oversight by WisDOT staff.
- b. The research team may assume that WisDOT staff/POC members can contribute a maximum of 40 hours over the project's duration.
- c. The research team will not assume the availability of WisDOT staff or equipment in the proposal. If WisDOT or another entity donates equipment or staff time, a commitment letter must be included in the proposal.
- d. The POC will coordinate access to WisDOT databases, if needed, as requested and approved.
- e. Please see the [Proposal Preparation Instructions](#) for more details.
- f. WisDOT will provide access to the Community Maps web portal, WisTrans Portal, and Crash databases.

VII. Traffic Control (if needed)

- a. n/a

VIII. Research Results and Implementation Plan

WisDOT seeks to fund research with high implementation potential. Implementation potential will be tracked throughout the lifecycle of this research project and may include changes to expected implementation. The research plan must include specific statements describing anticipated research results and an assessment of implementation potential.

a. Research Results

- i. Proposals should detail the research results in terms of a specific deliverable, (i.e. a design/analysis tool, test methods, or change in performance thresholds and specifications) and their impact on current WisDOT practice (including cost savings, cost-benefit analysis, etc.).

b. Implementation Plan

- i. This section must also include an implementation plan to address the planned implementation type(s) indicated below under Implementation Plan. While the plan may change as the research progresses, at a minimum the proposal should indicate:
1. The product expected from the research.
 2. The stakeholder or intended audience that will most likely be impacted by the research results.
 3. Potential impediments to implementation.
 4. Activities necessary for successful implementation.
 5. Implementation deliverables
 6. Measures of success
 7. Data collection requirements

Please see the [Proposal Preparation Instructions](#) for specific directions related to completing this table.

Implementation Plan

Successful implementation of this research will be achieved through the development, at a minimum, of the following items:

Implementation Type	Description (Manuals, Data Sources, etc.)
<input checked="" type="checkbox"/> Develop a Model:	Provide two tools for use by WisDOT: (1) Driver Risk Mitigation Hotspot tool and a (2) Safety and Cost Mitigation Assessment tool. Both of these tools will help to automate analysis process currently necessary in providing real time feedback based on informed decisions.
<input type="checkbox"/> New Design Method or Guidance:	

<input type="checkbox"/> New Product Implementation:	
<input checked="" type="checkbox"/> Recommend Future Studies:	Expand on the use of telematics through the connected vehicle network and system to provide real time feedback for dynamic speed limiting on the system, and use of data to improve decision making through further gap analysis.
<input type="checkbox"/> Revise a Specification:	
<input type="checkbox"/> Inform Policy:	
<input checked="" type="checkbox"/> Other:	Table or list of uniform definitions for internal and external use by WisDOT that align to MMUCC, WisDOT Crash definitions, in commonly used language for accessibility by policy and program groups.

IX. Deliverables

a. Quarterly Progress Reports (QPRs)

b. Invoices

c. Interim Reports

- i. Literature Review, Definitions, and summary (Tasks 1 and 2).
- ii. Risk Mitigation Hotspot and SMF/CMF Mitigation Assessment Tools (Tasks 3 and 4)
- iii. Pilot tools (Tasks 5 and 6)
- iv. Summary of Pilots
 1. Provide SOAR analysis of the outcomes
 2. Provide summary of expectations vs results.
 3. Provide feedback on future use and suggested improvements.
- v. Provide 1-2 page executive summaries of the deliverables for tasks 1-6.

d. Implementation Deliverables

- i. Identify areas for future study using telematics informed by the pilot.
- ii. Strategies for adoption of the Driver Risk Mitigation Hotspot and Safety and Cost Mitigation Assessment tools.

e. Researcher's Final Report

- i. Must be submitted three months before the contract end date to allow time to review and revise before the Close-Out Presentation.

f. Close Out Presentation (COP) for project

- i. The Principal Investigator presents to the POC a summary of the research project's results and recommendations two months before the contract end date.

g. Approved Final Report

- i. The Approved Final Report, addressing comments made on the Researcher's Final Report and during the COP, is due one month before the contract end date.

h. Research Data

- i. All research data will be identified and made available per the Data Management Plan.

X. Data Management Plan

The research team will include a Data Management Plan (DMP) documenting all field/laboratory data and analyses to ensure accessibility and transparency of research data as required by the USDOT per the Public Access Plan (<https://ntl.bts.gov/ntl/public-access/creating-data-management-plans-extramural-research>). See [Proposal Preparation Instructions](#) for details.

XI. Proprietary Information in Proposal

- a. Any restrictions on the use of data contained within a proposal must be clearly stated in the proposal itself. Proprietary information submitted in response to a request will be handled under applicable Wisconsin procurement regulations and the Wisconsin public records law. Proprietary restrictions usually are not accepted. However, when accepted, it is the proposer's responsibility to defend the determination in case of an appeal or litigation.
- b. Any material submitted in response to this request that the proposer considers confidential and proprietary information and which qualifies as a trade secret, as provided in s. 19.36(5), Wis. Stats., or material which can be kept confidential under the Wisconsin public records law, must be identified on a **Designation of Confidential and Proprietary Information form (DOA-3027)** (see attachment) Proposers may request the form if it is not part of the Request for Proposal package. Proposal prices cannot be held confidential.

XII. Public Records

- a. WisDOT intends to maintain an open and public process in the solicitation, submission, review, and approval of procurement activities. Notwithstanding the foregoing, records may not be available for public inspection before issuance of the award of the proposal.
- b. The proposer shall retain all records produced or collected under an awarded contract for five (5) years following final payment under the contract and allow access to such records in accordance with requirements established under 49 Code of Federal Regulations 18.42, subch. II of Chapter 19, Wis. Stats. and Chapter 16, Wis. Stats.

XIII. Evaluation Criteria (See [Proposal Preparation Instructions](#))

Attachment: **Designation of Confidential and Proprietary Information form (DOA-3027)**



DESIGNATION OF CONFIDENTIAL AND PROPRIETARY INFORMATION

The attached material submitted in response to Bid/Proposal # _____ includes proprietary and confidential information which qualifies as a trade secret, as provided in s. 19.36(5), Wis. Stats., or is otherwise material that can be kept confidential under the Wisconsin Open Records Law. As such, we ask that certain pages, as indicated below, of this bid/proposal response be treated as confidential material and not be released without our written approval.

Prices always become public information when bids/proposals are opened, and therefore cannot be kept confidential.

Other information cannot be kept confidential unless it is a trade secret. Trade secret is defined in s. 134.90(1)(c), Wis. Stats. as follows: "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique or process to which all of the following apply:

1. The information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.
2. The information is the subject of efforts to maintain its secrecy that are reasonable under the circumstances.

We request that the following pages not be released.

Section	Page #	Topic

In the event the designation of confidentiality of this information is challenged, the undersigned hereby agrees to provide legal counsel or other necessary assistance to defend the designation of confidentiality and agrees to hold the state harmless for any costs or damages arising out of the state's agreeing to withhold the materials.

Failure to include this form in the bid/proposal response may mean that all information provided as part of the bid/proposal response will be open to examination and copying. The state considers other markings of confidential in the bid/proposal document to be insufficient. The undersigned agrees to hold the state harmless for any damages arising out of the release of any materials unless they are specifically identified above.

Company Name	
Authorized Representative	
	Signature
Authorized Representative	
	Type or Print
Date	