



Wisconsin Department of Transportation

Policy and Safety First Research Programs

Request for Proposals
FFY 2025

Work Zone Inspection Review

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
\$75,000	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.
10 Months	Period of Performance / Duration of Project
August 1, 2025	Anticipated Start Date of Project
March 31, 2026	Researcher's Final Report due
June 30, 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

Work Zone Inspection Review

Definitions

The following definitions are used throughout the Request for Proposal

- **AI** – Artificial Intelligence
- **ATSSA** – American Traffic Safety Services Association
- **POC** – Project Oversight Committee comprised of subject matter experts who are the main point of contact with the PI
- **PI** – Principal Investigator, lead researcher
- **R&L** – WisDOT Research and Library – research administration staff
- **RFP** – Request for Proposal
- **WisDOT** – Wisconsin Department of Transportation

I. Background and Problem Statement

The Wisconsin Department of Transportation (WisDOT) is looking to improve the quality and timeliness of work zone inspections and expand coverage to all state highways. The current WisDOT temporary traffic control inspection is completed by WisDOT staff driving to the work zone, recording the work zone with a GoPro camera, reviewing the video footage of that work zone and filling out a Microsoft Access database form with ratings of Acceptable, Marginal, or Unacceptable for each work zone traffic control device/attribute. The staff then contacts the Regional Work Zone Engineer with any deficiencies to be addressed. Inspection forms entered into Access are pulled by queries to help identify issues that need to be addressed by updating standards, policies and specifications. This data is also used to develop training. This process can be labor intensive, which limits the number of inspections staff can complete on an annual basis. When multiple people enter data into the database they can give different quality/ratings for the same device/attribute. WisDOT seeks to explore innovative ways, such as the use of new technologies, crowdsourcing, and AI technologies, to complete work zone inspections and to improve the work zone inspection process. This project should provide a comparison of different options of completing work zone inspections.

II. Research Objectives

- a. Determine what other states are doing for their work zone inspection process.
- b. Determine technologies that collect work zone video footage through crowdsourcing.

- c. Determine programs/technologies to determine deficiencies in work zones utilizing video footage.

III. Research Approach - Scope of Work

Task 1: Literature Review and Survey

The department seeks to conduct a literature review and survey of state DOTs as part of the research project to gain insight on other states' work zone inspection processes.

Create and execute a survey of other state DOTs to identify their work zone inspection processes. Summarize the findings from the survey.

The deliverables include the Literature Review and Survey results, which may be submitted with a presentation to the POC.

Task 2: Work Zone Inspection Video Review

Currently, WisDOT's work zone inspections include work zone traffic control device attributes which include but are not limited to the following: sign condition, sign mounting height, sign spacing, use of proper signage, channelizing device condition, device spacing, personal protective equipment, arrow board placement, taper length, temporary pavement marking width, temporary pavement marking condition, etc. WisDOT utilizes the Standard Specifications, Wisconsin Work Zone Field Manual, ATSSA Quality Guidelines to determine the acceptability of the devices/attributes within the work zone.

Task 2.1: Review Video Collection Technologies

Review technologies that collect high-resolution video through crowdsourcing to maximize coverage of work zone inspections. Identify what the technology can do including limitations, costs, licensing, storage, storage retention time, ability to review footage, etc.

Task 2.2: Review Programs and/or Technologies to Determine Deficiencies in Work Zone Traffic Control Utilizing Video Footage

Review programs and/or technologies that can create a report using GoPro and Crowdsourcing video to identify deficiencies in work zone traffic control. Identify what the technology can do including limitations, costs, licensing, storage, etc. Determine what reports can be created and if there are any summaries.

The deliverables include a summary of best practices based on an overview of video collection technologies, and an overview of video review programs and/or technologies. Provide WisDOT with a matrix of video collection technologies and a matrix of video review program and/or technologies. These deliverables may be submitted with a presentation to the POC. These deliverables should be used to provide recommendations to WisDOT in the Final Report.

Task 3: 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 4: 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 5: 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.

- d. 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 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. Will provide access to all work zone inspection related files and documents.

VII. Traffic Control (if needed)

- a. **Traffic Control Will Not Be Required for Project**
- b. Notice: **WisDOT will NOT fund traffic control expenses apart from what is included in the research project proposal budget.**

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 in the RFP. 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 type="checkbox"/> Develop a Model:	
<input checked="" type="checkbox"/> New Design Method or Guidance:	Recommended Work Zone Inspection Review best practices based on a summary of other states' processes, an overview of video collection technologies, and an overview of video review programs and/or technologies
<input type="checkbox"/> New Product Implementation:	
<input type="checkbox"/> Recommend Future Studies:	
<input type="checkbox"/> Revise a Specification:	
<input type="checkbox"/> Inform Policy:	
<input checked="" type="checkbox"/> Other:	Summary on what other states are doing for their inspection process. Matrix of video collection technologies. Matrix of video review program/technologies

IX. Deliverables

a. Quarterly Progress Reports (QPRs)

b. Invoices

c. Interim Reports

- i. Literature review
- ii. Survey results
- iii. Summary of best practices
- iv. Overview of video collection technologies, and an overview of video review programs/technologies
- v. Submit interim reports and presentations at the completion of the task.

d. Implementation Deliverables

- i. Survey summarization on what other states are doing for their inspection process.
- ii. Matrix of video collection technologies.
- iii. Matrix of video review program/technologies.

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	