

# Wisconsin Department of Transportation Policy and Safety First Research Programs

Request for Proposals FFY 2025

Railroad Crossing Inventories - Safety Data Study

#### **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 <u>Proposal Preparation Instructions</u> 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 <a href="research@dot.wi.gov">research@dot.wi.gov</a> . 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: <a href="http://wisdotresearch.wi.gov/rfps-and-proposals">http://wisdotresearch.wi.gov/rfps-and-proposals</a>
<b>May 4, 2025</b> 4:30 PM (CST)	<b>Proposals are due by this date and time</b> . Proposals must be submitted in a PDF version to: <a href="mailto:research@dot.wi.gov">research@dot.wi.gov</a> . 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	<b>Project Budget shall not exceed this amount</b> . 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

#### Railroad Crossing Inventories – Safety Data Study

#### **Definitions**

The following definitions are used throughout the Request for Proposal

- WisDOT Wisconsin Department of Transportation
- **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
- AADT Annual Average Daily Traffic
- FRA Federal Railroad Administration
- USC United States Code
- CFR Code of Federal Regulations
- CFIRE National Center for Freight and Infrastructure Research and Education

#### I. Background and Problem Statement

Wisconsin has more than 3,800 open public at-grade railroad crossings where vehicle, pedestrian, and bicycle traffic have the potential to interact with trains. The Railroad Safety Improvement Act of 2008 (RSIA) was the first federal law that added provisional requirements for railroad and state entities to contribute towards the national railroad-highway crossing inventory. The law was later codified as part of 23 USC 130 and 49 CFR Part 234 (or RIN 2130-AC55), including the final rule requiring submission of updated data every three (3) years from the most recent submission of data.

WisDOT currently conducts an annual benefit-cost analysis scan that outputs a selection of high-benefit highway-rail crossing projects that can be input into WisDOT's rail safety programs. The scan uses both crossing inventory and crash data. The output from the annual scan can also result in changes in statewide standards or result in WisDOT applying for federal grant dollars to address a particular railroad corridor.

Currently, WisDOT region offices are responsible for collecting railroad crossing inventory information. WisDOT aspires to perform inventories of all public grade crossings on a 3-year cycle in accordance with FRA guidelines. Lack of complete warning device data compromises

WisDOT's ability to make the best data-driven decisions for operational and safety improvements to at-grade railroad crossings. The State of Wisconsin may also be held liable for civil penalties under 49 CFR § 234.403 for their responsibilities as outlined in the FRA Crossing Inventory Guide.

#### II. Research Objective

The department seeks to conduct a research project that analyzes data gathering activities for Wisconsin's at-grade rail crossings. The research will investigate how WisDOT could improve data collection and analyzation of railroad at-grade crossing data, utilizing technology improvements, to meet periodic at-grade crossing inventory requirements specified in United States Code and elaborated by Federal Railroad Administration's reporting requirements. Additionally, the research will include identifying impacts of an enhanced railroad crossing inventory on WisDOT's railroad crossing-related safety programs and to projects in the highway improvement programs that involve railroad crossings.

#### III. Research Approach - Scope of Work

### Task 1: Review of Federal Requirements, Best Practices, and Innovation Task 1.1: Literature Review of Federal Requirements and Best Practices

Document the current state of railroad at-grade crossing data-gathering processes in Wisconsin. Identify and document relevant federal requirements and compare them against WisDOT's current practices in gathering at-grade railroad crossing inventory information. Analyze and document the connection between at-grade railroad crossing inventory and crash reports to the prioritization of projects in WisDOT's rail safety programs, including AADT and daily train count data.

The literature review and a brief summary will be submitted with a presentation to the POC.

#### Task 1.2: Survey of Best Practices and Innovation Research

Identify and document if and how other states in the nation gather and process atgrade rail crossing data. Research current state of the art practices in inventorying and provide recommendations on how technology can efficiently be used to provide necessary inventory information.

Results of the survey and recommendations will be summarized in an interim report and presented to the POC.

#### **Task 2: Cost Analysis**

Analyze the estimated total labor costs and expenses to complete the at-grade rail crossing data gathering activities for a full cycle (performing inventories on all 3,800 public crossings), including identify any barriers or challenges to performing the inventory.

Results of the cost analysis and options will be summarized in an interim report and presented to the POC.

#### **Task 3: Conduct Crash Reporting Analysis**

Investigate WisDOT's role in improving rail crossing crash reporting, including research into the National Center for Freight and Infrastructure Research and Education (CFIRE) initiative, police reporting, and Federal Railroad Administration's database of crash reports.

Results of the crash reporting analysis will be summarized in an interim report and presented to the POC.

#### **Task 4: Researcher Final Report**

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 5: Close-Out Presentation

Create and present a one-hour PowerPoint presentation that includes background, best practices, recommendations, and interpretations developed during the project.

#### **Task 6: Approved Final Report**

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 <u>Proposal Preparation Instructions</u> for more details regarding the Final Reports 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 also coordinate access to WisDOT databases, if needed, as requested and approved.
- e. Please see the Proposal Preparation Instructions for more details.
- f. As needed to assist the research team, WisDOT will provide relevant information including information on current business practices, applications, forms, documents, etc.

#### VII. 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 <u>Proposal Preparation Instructions</u> 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.)
□ Develop a Model:	Based upon the research performed, propose a model or multiple options of models for effective gathering and management of railroad crossing inventory data.
☐ New Design Method or Guidance:	
<ul><li>New Product</li><li>Implementation:</li></ul>	
☐ Recommend Future Studies:	
☐ Revise a Specification:	
☑ Inform Policy:	Provide recommendations on how WisDOT could consider improving current practices and policies regarding railroad crossing inventories.
☐ Other:	

#### VIII. Deliverables

- a. Quarterly Progress Reports (QPRs)
- b. Invoices
- c. Interim Reports
  - i. Literature Review and brief summary (Task 1.1)
  - ii. Survey of best practices and recommendations (Task 1.2)
  - iii. Cost Analysis and options (Task 2)
  - iv. Crash Reporting Analysis (Task 3)
- d. Implementation Deliverables

- i. Recommendations on how WisDOT could consider improving current practices and policies regarding railroad crossing inventories.
- ii. Model for effective gathering and management of railroad crossing inventory data

#### 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

 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.

#### IX. 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 (<a href="https://ntl.bts.gov/ntl/public-access/creating-data-management-plans-extramural-research">https://ntl.bts.gov/ntl/public-access/creating-data-management-plans-extramural-research</a>). See <a href="https://ntl.bts.gov/ntl/public-access/creating-data-management-plans-extramural-research">https://ntl.bts.gov/ntl/public-access/creating-data-management-plans-extramural-research</a>).

#### X. 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.

#### XI. 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.
- XII. Evaluation Criteria (See Proposal Preparation Instructions)

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

STATE OF WISCONSIN DEPARTMENT OF ADMINISTRATION DIVISION OF ENTERPRISE OPERATIONS DOA-3027 (R07/2014) S. 19.36(5), WIS. STATS



RETURN FORM TO: STATE BUREAU OF PROCUREMENT 101 E. WILSON ST., 6TH FL P. O. BOX 7867 MADISON, WI 53707

#### 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 re	eleased 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	

This document can be made available in alternate formats to individuals with disabilities upon request.