

# **Wisconsin Department of Transportation**



## **Proposal Preparation Instructions** for the **Wisconsin Highway Research Program (WHRP)** and the **Policy and Safety-First Research Programs**



## Proposal Preparation Instructions

An individual or group of colleges, universities, industry professionals, research institutions, foundations, or engineering consultants that has demonstrated capability and extensive proven experience in the project area is welcome to submit proposals to conduct research for the Wisconsin Department of Transportation (WisDOT) under the Wisconsin Highway Research Program (WHRP) and the Policy and Safety-First Research Programs.

Each submitted proposal will be forwarded to the appropriate WisDOT or WHRP Technical Oversight Committee (TOC) for review and evaluation. Follow the instructions below carefully. Proposals that are not complete may be rejected without consideration. Any questions regarding information required for the proposal should be emailed to: [research@dot.wi.gov](mailto:research@dot.wi.gov).

### Requirements

- WisDOT templates must be used when provided.
- The entire proposal cannot exceed 25 pages
- The Research Plan cannot exceed 9 pages.
- Use single space or greater horizontal spacing.
- Include page numbers.
- Be clear, concise, and complete.
- Use an 11-point font.
- Use .5" margins or greater.

### **Proposal Contents Overview** - Items to Include (in the order listed below)

- **Cover Page & Summary Page**
  - Contains the project title, Limited Use Disclaimer and identifies the submitting agency, principal investigator and proposal amount.
  - WHRP proposals - Use the template provided in [WHRP Cover Pages](#).
  - Policy & Safety First proposals - Use the template in [Policy & Safety 1st Cover Pages](#).
- **Designation of Confidential and Proprietary Information Form**
  - See Proprietary Information and Wisconsin Public Records under Additional Information.
  - Use the form provided at [DOA-3027](#) or see attachment
- **Table of Contents**
- **Research Plan (9 pages)**
  - **This includes Sections I through VII in Proposal Content Details below**
  - Detail the specific steps that will be taken to address the problem statement.
  - Carefully consider the scope of the project outlined in the Request for Proposal (RFP) when developing these steps.
- **Research Results and Implementation Plan (Section VIII)**
- **Project Schedule and Deliverables (Section IX)**
  - Summary of Hours in [Summary of Hours](#)
  - Gantt Chart, including all Deliverables
- **Budget (Section X)**
  - Budget Worksheet in [Budget Worksheet](#)
  - Budget Justification
- **Qualifications of Research Team (Section XI)**
- **Summary of Other Commitments (Section XII)**

- Complete the Summary in the template in [Commitments of Research Team](#).
- **Facilities and Information Services (Section XIII)**
  - Facilities
  - Certifications
  - Information Services
- **Data Management Plan (Section XIV)**
- **References (Section XV)**

## **Proposal Content Details**

### ***Research Plan (Sections I-VII)***

#### **I. Background**

Demonstrate a clear understanding of the problem and how it relates to Wisconsin Department of Transportation (WisDOT) practices. Describe recent research and engineering studies in a discussion of the technological and/or practical barriers and that must be addressed in solving the problem.

#### **II. Research Objectives**

Provide a brief overview of the approach the research will take to address the objectives defined in the RFP and the anticipated outcomes as well as the resulting products that will improve current practice.

#### **III. Research Approach – Scope of Work/Work Plan/Experimental Design**

##### **a. Task 1: Literature Review**

- i. The first task is typically a Literature Review which will be presented as an interim report.
- b. Present a logical, innovative plan that addresses the scope of work, broken down into Tasks, provided in the RFP. Include:
  - i. A detailed description of each task related to completion of the overall research.
  - ii. A discussion of Wisconsin conditions, materials, and practices.
  - iii. An experimental design plan identifying the key materials' properties and the test methods used to evaluate them (as appropriate).
- c. The final three Tasks must include these Tasks listed here:

##### **d. Task : Researcher Final Report**

- i. A Researcher's Final Report summarizing the project's development and results must be submitted three months before the contract end date to allow time to review and revise before the Close-Out Presentation.
- ii. See more information under Deliverables (pages 6-7)

##### **e. Task : Close-Out Presentation (COP)**

- i. The Close-Out Presentation will occur two months before the project end date.
- ii. This is typically a 1 hour meeting with a PowerPoint presentation.
- iii. See more information under Deliverables (pages 6-7)

**f. Task : Approved Final Report**

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

**IV. Required Testing/Equipment/Materials**

**a. Required Testing**

- i. Include a list of required testing.
- ii. The research team is responsible for providing necessary personal protective equipment (PPE) if needed for testing or fieldwork.

**b. Equipment**

- i. Include a list of the equipment, lab equipment, materials and services that are required to complete the project with an explanation of the source(s) of these resources.
- ii. The availability of WisDOT equipment for research purposes cannot be assumed unless it is specified in the RFP. Examples could include: Falling Weight Deflectometer, data collection, Ground Penetrating Radar surveys, Lidar data collection, Traffic Control, and use of other testing equipment.
- iii. If the RFP does not explicitly indicate that WisDOT equipment/services will be donated to the project then the cost should be specified in the budget and budget justification.
- iv. Donation or purchase of any equipment used in the laboratory or field to be used solely for the research project.

**c. Non-WisDOT Equipment and Materials**

- i. If the proposal assumes the purchase or donation of equipment or materials from industry or other sources, the proposal must include commitment letters or other formal documentation.

**d. Materials**

- i. Donation or purchase of materials used for testing or test specimen preparation that exceed a value of \$1,000.

**V. Required Travel**

**a. Travel for Tasks and/or Field Work**

- i. If required by the research project.

**b. Meetings**

- i. In-person meetings to deliver reports and presentations are not required.
- ii. WHRP welcomes a virtual COP; however, the researcher may present the results in person, paid by contract funds, if included in the project budget.

**c. Conferences**

- i. Justify the research need for costs related to participation at conferences.
- ii. Participation at conferences may be allowable, on a case-by-case basis, only if attendance at the conference contributes to achieving research tasks and goals, and those tasks and goals cannot be met by other means.
- iii. Participation in conferences to promote the research are not covered.

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

## **VI. WisDOT/TOC 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 and WHRP (Flexible, Rigid, Structures or Geotech) Technical Oversight Committee (TOC). The TOC members will appoint a POC to support the successful completion of the project.
- 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. Identify research activities in which WisDOT involvement is required or expected. Examples could include: technical review, coordination, data access, training, and materials/data collection. Any deviation from the WisDOT staff participation described in the RFP should be clearly indicated and justified.
- e. The TOC and POC will coordinate access to WisDOT aggregates used in laboratory test programs, if needed. The TOC and POC will also coordinate access to WisDOT databases, if needed, as requested and approved.
- f. The POC will work with the research team on shipping materials if needed. The research team must arrange and cover the transport of aggregates and materials to their laboratory test facilities as needed. The researcher will budget to cover shipment costs, if needed, in the proposal budget.

## **VII. Traffic Control (if needed)**

### **a. Traffic Control May Be Required for a Project**

- i. If fieldwork on or around in-service facilities is anticipated to conduct this research the researcher shall specify in the proposal the nature and extent of traffic control that will be required for this project including traffic flagging, signage, barricades, etc., the type of roadway, as well as the duration needed (hours/days).
- ii. Contract traffic control costs may range from \$85 per hour for a flagger to \$950-\$2000 per day, depending on factors such as lane and/or ramp closures. The researcher should know that traffic control availability and costs can vary across the state.

### **b. Traffic Control Sources**

- i. Many county maintenance departments will work with researchers and/or WisDOT POC members to coordinate and provide traffic control.
- ii. Before submitting a proposal, the researcher is encouraged to contact county maintenance departments or traffic control businesses to determine traffic control needs and costs.

### **c. Traffic Control Budget**

- i. The researcher will make accommodations in their proposal budget for traffic control if it is needed.

- ii. **WisDOT will NOT fund traffic control expenses apart from what is included in the research project proposal budget.**
- d. **Traffic Control Coordination Requested from WisDOT**
  - i. **County Traffic Control**
    - 1. Assistance may be requested from the WisDOT POC for the scheduling and coordination of traffic control at the location of the project fieldwork if it involves WisDOT personnel and/or county maintenance personnel. Requests for such support should be included in the proposal.
  - ii. **Private Traffic Control Businesses**
    - 1. Coordination and scheduling of traffic support through a private business is the responsibility of the researcher.

***End of Research Plan (Sections I-VII)***

**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

**c. Implementation Plan Format for Proposal**

- i. Include (copy/paste) Implementation Type and Description from the RFP into the table below. Use the table below in the proposal.
- ii. In addition, the proposal will need to include the researchers plan for Implementation based on the Description, including an explanation of what the deliverables will be, the actions taken and the timeline of implementation
- iii. Timelines to consider: interim report, end of project, post-project.

Implementation Plan			
Successful implementation of this research will be achieved through the development of the following items:			
Implementation Type	Description	Researcher's Deliverables/ Products/ Activities	Timeline
<input type="checkbox"/> Develop a Model:			
<input type="checkbox"/> New Design Method or Guidance:			
<input type="checkbox"/> New Product Implementation:			
<input type="checkbox"/> Recommend Future Studies:			
<input type="checkbox"/> Revise a Specification:			
<input type="checkbox"/> Inform Policy:			
<input type="checkbox"/> Other:			

## IX. Project Schedule

- a. The duration of the research project is provided in the RFP.
- b. Schedules should be based on the assumed contract start date.
- c. **Summary of Hours**– The proposal must include template [Summary of Hours](#)
  - i. Indicate the hours by task for each member of the research team.
  - ii. If a subcontractor(s) is contributing over \$25,000 in services then a separate Summary of Hours chart will also need to be completed by/for the subcontractor(s).
- d. **Gantt Chart** - The project schedule must include a Gantt chart showing:
  - i. Each task and its start and end dates
  - ii. Dates of project milestones
  - iii. Deadlines for submitting each Deliverable
  - iv. Specify in the Gantt chart that the Researcher Final Report will be submitted three months before the project end date. (Submission of the Researcher Final Report begins the project review period which includes report reviews and a project close-out presentation.)
- e. **Deliverables**
  - i. **Quarterly Progress Reports (QPRs)**
    1. WHRP contracts require quarterly technical progress reports for technical and administrative functions.
    2. Detailed information regarding the content of the progress report can be found in [Quarterly Progress Reports Guidelines](#)
  - ii. **Invoices**
    1. Invoices shall be submitted quarterly for payments on the project for authorized services completed to date. Four invoices per year are expected, one invoice for each specified quarter.

2. Detailed information regarding invoicing can be found in the [Invoicing Requirements](#)

**iii. Interim Reports**

1. Literature Review.
2. Other as designated.

**iv. Implementation Deliverables**

**v. Researcher's Final Report**

1. A Researcher's Final Report summarizing the project's development and results must be submitted three months before the contract end date to allow time to review and revise before the Close-Out Presentation.
2. The Researcher's Final Report is expected to be approximately 50 pages long, excluding appendix(es).
3. Reports are expected to have quality technical writing and proper grammar. Dedicating funds in the project budget for the services of a technical editor to ensure these requirements are met is acceptable.
4. The required elements of the Final Report can be found in the [Final Reports and Close-Out Presentation Requirements](#).

**vi. Close Out Presentation (COP) for project**

1. The Principal Investigator on the research team must present to WisDOT a summary of the research project's results and recommendations.
2. This one-hour presentation will occur two months before the two months before the contract end date..
3. The COP may be in-person, hybrid, or virtual at the researcher's prerogative.
4. If the researcher chooses to deliver the presentation in person, travel expenses may be included in the proposal budget.
5. The research team will create and present a PowerPoint presentation that includes background, best practices, recommendations, and interpretations developed during the project.
6. Implementation plans will be included in the COP.
7. Attendees may include POC/TOC members, WHRP Steering Committee or Research and Library Advisory Committee members, and WisDOT management.
8. Presentation and formatting requirements can be found in the [Final Reports and Close-Out Presentation Requirements](#).

**vii. Approved Final Report**

1. 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 for final review and approval.
2. This report details the research project's results. The Approved Final Report should be as concise as possible (e.g., a maximum of 50 pages plus supporting appendices) and follow the report guidelines and submission requirements from the [Final Reports and Close-Out Presentation Requirements](#).
3. After completing revision(s) and getting the TOC chair's approval, an electronic copy of the publication-ready Approved Final Report must be delivered to WisDOT one month before the contract end date.

**viii. Research Data**



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

## **X. Budget**

### **a. Budget Worksheet**

- i. Completely fill-in the Excel **Budget Worksheet** template in [Budget Worksheet](#)
- ii. If a subcontractor(s) is contributing services totaling over \$25,000 then a separate Budget Worksheet will also need to be completed by/for the subcontractor(s).
- iii. Any budget that exceeds the amount posted in the RFP will not be accepted.
- iv. The year one budget includes the funds required for the first 12 months of the contract.
- v. The researcher is responsible for providing a budget consistent with the scope of work in the proposal.
- vi. It is acceptable for the budget to include the services of a technical editor to ensure that the Publication Ready (PR) report meets the level of quality for technical writing and proper grammar required by WHRP.

### **b. Budget Justification**

- i. Provide a detailed description of costs related to travel, materials and supplies and other direct costs.
- ii. The researcher is responsible for all charges unique to the needs of a project such as shipping charges for large, bulky or heavy materials or items
- iii. Notice: WisDOT will NOT fund expenses apart from what is included in the research project proposal budget.
- iv. Matching Funds
- v. Matching funds will not be considered in the proposal evaluation process.

## **XI. Qualifications of the Research Team**

- a. Provide the academic, industrial and/or research experience as it relates to the project for the principal investigator (PI), key research team members, and key subcontractors (contributing over 50% of the services).
- b. Describe any past WHRP efforts.
- c. Indicate experience conducting any tests required by the RFP that are not certified by WisDOT.
- d. Note: The above requirements do not extend to graduate students.

## **XII. Other Commitments of the Research Team**

- a. Complete the **Summary of Commitments** template in [Commitments of Research Staff](#).
- b. Include a list of the research team's current and anticipated work commitments and personal commitments that will occur over the duration of the project.
- c. List funded research efforts and other commitments separately.

## **XIII. Facilities and Information Services**

### **a. Certifications**

- i. Requirements for national and state laboratory and technical certifications for project related activities may be indicated in the RFP. If indicated, and the proposer does not have the proper certification(s), then a plan indicating how and when certification(s) or committee approval will be obtained must be included in the proposal.

**b. Information Services**

- i. Describe how the availability of the library and information services (that will be used by the research team) will allow for a thorough literature review and understanding of current practices and research activities

#### **XIV. 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> ).

The DMP will include the following items:

- a. The final research data produced during the project.
- b. The standards to be used for data and metadata format and content.
- c. Policies for accessing and sharing the final research data, including provisions for appropriate privacy protection, confidentiality, security, intellectual property, and other rights or requirements.
- d. Policies and provisions for re-use, re-distribution, and the production of derivatives.
- e. Plans for archiving final research data and other research products and preserving access to them.

#### **XV. References**

#### **End of Proposal Contents**

#### **Additional Information**

##### **I. 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.

## **II. 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.

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

### **WisDOT Research Proposal Evaluation Criteria and Scoring Matrix**

#### **Definition of Evaluation Criteria**

##### **Background – Awareness of Recent Work (up to 15 points):**

The proposal demonstrates an awareness of current practice and recent research efforts through identification of the technical and practical barriers that must be addressed to fulfill the scope of the research project in the background section of the proposal.

##### **Work Plan – Understanding of the Problem (up to 15 points):**

In the proposal the researcher has demonstrated a clear understanding of the problem and how it relates to WisDOT practices. The proposal addresses the objectives defined in the RFP and the anticipated products of the research that will improve current WisDOT practice.

##### **Work Plan – Activities & Techniques (up to 30 points):**

The proposal presents a sound research approach that fully addresses the scope outlined in the request for proposal and includes evaluation of material properties, conditions and practices consistent with Wisconsin experiences. The proposal should document reasonable support from WisDOT for project activities. When defining “reasonable” the reviewer should compare the TOC defined contribution of WisDOT staff outlined in the RFP to the expectations of the researcher. If researcher requests more than what is listed in the RFP, the proposal may be penalized at the discretion of the reviewer. When applicable, the researcher should provide a letter of commitment from industry or other parties for field investigations or to supply equipment or materials. Should Traffic Control be anticipated as necessary to conduct fieldwork the inclusion of traffic control measures and budget will be considered in evaluating the Work Plan – Activities & Techniques.

##### **Deliverables & Implementation Plan (up to 15 points):**

The proposal includes specific statements describing anticipated research results and how they can be integrated into practice. The deliverables specified by the researcher are adequate in terms of

providing testing and data analysis to produce sufficient conclusions to change practice. The implementation plan in the proposal properly addresses the following sections:

- The product expected from the research.
- The stakeholder or intended audience that the results of the research will most likely impact.
- Potential impediments to implementation.
- Activities necessary for successful implementation.

**Qualifications Certifications, and Experience of the Research Team and Facilities** (up to 25 points):

The key members of the research team have academic, research and practical expertise relevant to the project and will contribute to its success. Past involvement with WHRP funded research and past experience in conducting tests specified in the RFP that are not certified by WisDOT should also be considered. The Summary of Commitments table in the proposal indicates that the PI and key members of the research team are not over committed and have the appropriate time available to fulfill the scope presented in the research plan. The distribution of the hours for the research team is consistent with the technical needs outlined in the proposal. Proposals should be penalized if it is felt that an inadequate amount of time or qualified staff is being dedicated to a specific task.

Also consider:

**Facilities:** The researcher has the laboratory facilities and equipment necessary to complete the research plan outlined in the proposal. If they do not have a required piece of equipment, proper arrangements have been made through subcontracting or rentals to obtain the equipment. Arrangements should be verified through letters of commitment.

**Information Services:** The proposer has adequate library and information services to support the work specified in the proposal. This includes access to required literature and technology suitable for data analysis.

**Certifications:** The researcher has the appropriate laboratory and technician certifications as required in the RFP. If the proposer does not have the required certifications, the proposal includes a plan to obtain certifications or TOC approval to conduct testing in their facilities.

**Scoring Matrix**

<b>Background – Awareness of Recent Work</b>	<b>(up to 15 points)</b>
<b>Work Plan – Understanding of the Problem</b>	<b>(up to 15 points)</b>
<b>Work Plan – Activities &amp; Techniques</b>	<b>(up to 30 points)</b>
<b>Deliverables &amp; Implementation Plan</b>	<b>(up to 15 points)</b>
<b>Qualifications of the Research Team and Facilities</b>	<b><u>(up to 25 points)</u></b>
<b>Total Points</b>	<b>(up to 100 points)</b>

**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.



## 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	