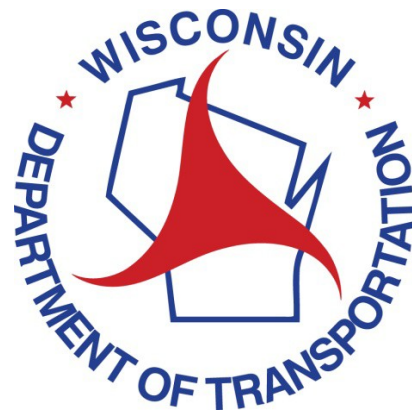


# Wisconsin Highway Research Program Proposal Preparation Instructions



# WHIRP



# Wisconsin Highway Research Program

## 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 Wisconsin Highway Research Program (WHRP) research.

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

### Requirements

- Follow the provided templates.
- Be clear, concise and complete.
- The Research Plan (section 4 below) cannot exceed eight pages.
- Use an 11 point Courier or Arial font.
- Use .5” margins or greater.
- Use single space or greater horizontal spacing.
- The entire proposal cannot exceed 18 pages.
- Include page numbers.

**Items to Include** (in the order listed below)

#### 1. Cover Page

Contains the title of the project and **Limited Use Disclaimer** and identifies the submitting agency. Use the cover page template provided in [Figure 1](#).

#### 2. Summary Page

Use the summary page template shown in [Figure 2](#).

#### 3. Table of Contents

#### 4. Research Plan

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.

- **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.

- **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.

- **Research Approach**

**Work Plan/Experimental Design**

Present a logical, innovative plan that addresses the scope of work provided in the RFP. Include:

- A detailed description of each task related to completion of the overall research.
- A discussion of Wisconsin conditions, materials, and practices.
- An experimental design plan identifying the key materials' properties and the test methods used to evaluate them (as appropriate).
- 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. Include any required commitment letters or documentation (see below).

**Expected Contribution from WisDOT**

**WisDOT/TOC Staff Time**

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.*

**Equipment**

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.

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.

**Non-WisDOT Equipment and Materials**

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.

**Equipment**

Donation or purchase of any equipment used in the laboratory or field to be used solely for the research project.

**Materials**

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

## 5. Anticipated Research Results and Implementation Plan

The research plan will include specific statements describing anticipated research results and an assessment of implementation potential. 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.). This section should also include an implementation plan. While the plan may change as the research progresses, at a minimum the proposal should indicate:

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

## 6. Project Schedule

- The duration of the research project is provided in the RFP. Schedules should be based on the assumed contract start date.
- The project schedule must include a **Gantt chart** showing:
  - Each task and its start and end dates
  - Dates of project milestones
  - Deadlines for submitting each deliverable
- Specify in the Gantt chart that the draft report will be submitted three months before the project end date. (Submission of the draft report begins the project review period which includes report reviews and a project close-out presentation.)
- Complete the Excel **Summary of Hours** template [Figure 3](#) by indicating the hours by task for each member of the research team. 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).

## 7. Budget

### Budget Worksheet

- *Completely* fill-in the Excel **Budget Worksheet** template in [Figure 4](#)
- 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).
- Any budget that exceeds the amount posted in the RFP will not be accepted.
- The year one budget includes the funds required for the first 12 months of the contract.
- The researcher is responsible for providing a budget consistent with the scope of work in the proposal.

- 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.

### **Budget Justification**

- Provide a *detailed description* of costs related to travel, materials and supplies and other direct costs.
- Justify the research need for costs related to participation at conferences.

### **Matching Funds**

Matching funds will not be considered in the proposal evaluation process.

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

- 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).
- Describe any past WHRP efforts.
- Indicate experience conducting any tests required by the RFP that are not certified by WisDOT.

Note: The above requirement does not extend to graduate students.

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

Complete the Summary of **Other Commitments** template in [Figure 5](#). 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. List funded research efforts and other commitments separately.

## **10. Facilities and Information Services**

- **Certifications**  
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 the proposal.
- **Information Services**  
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.