

Wisconsin Highway Research Program (WHRP) Overview

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December 2019



Meeting Overview

Overview of WisDOT research program

- Organization
- Budget and staff

Overview of WHRP

- Mission and focus
- Management and oversight
- Research cycle and proposals
- Effective research and deliverables
- Upcoming research ideas and topics

Research and Library Services Unit

Within Division of Budget and Strategic Initiatives

Annual budget of ~\$4 million

- ~90% federal funds
- ~10% state funds

Seven Staff

- Five research
- Two library

Research and Library Staff

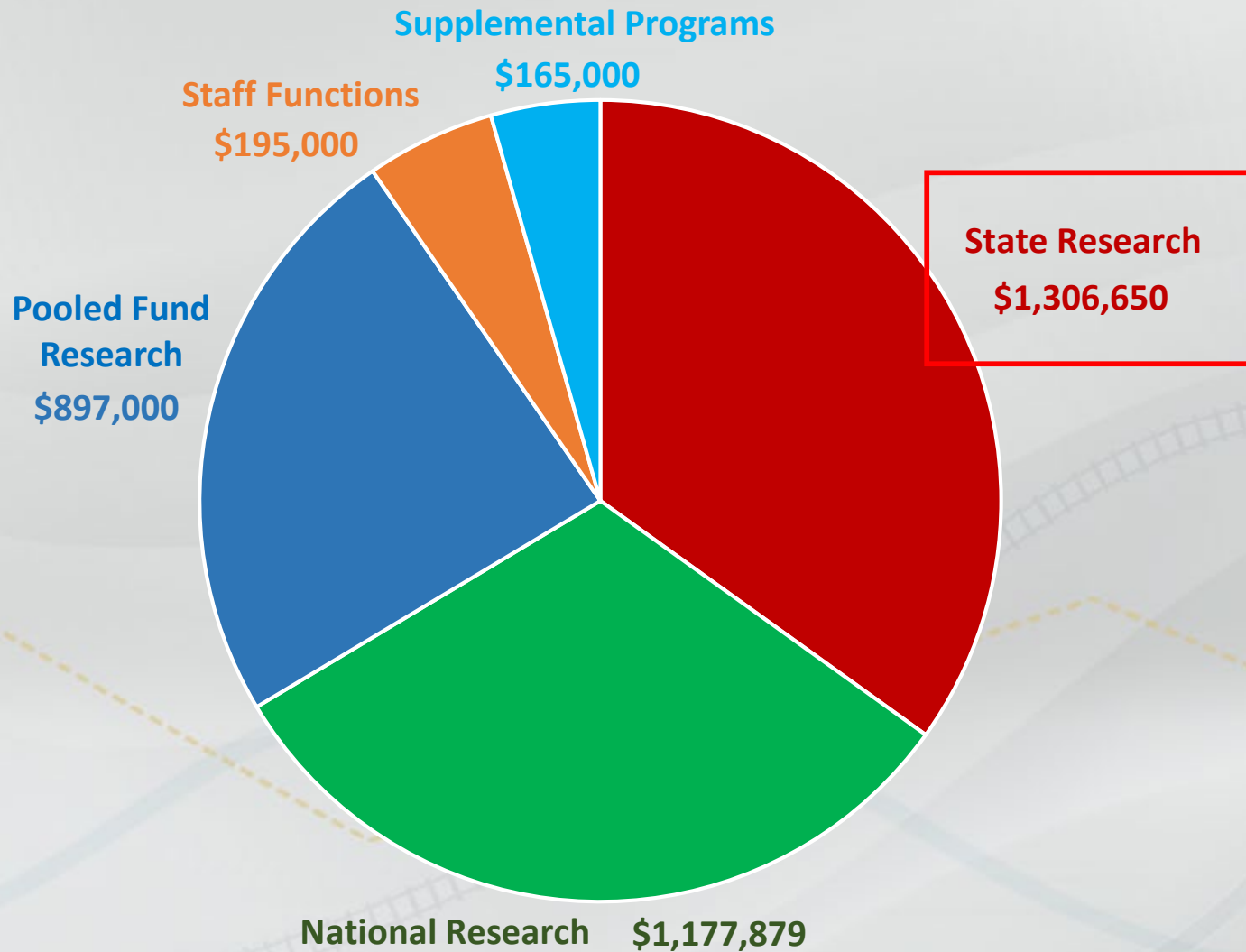
Research

- **Jacquelyn Irving** – WHRP Steering Committee chair
- **Diane Gurtner** – Research and Library supervisor
- **Jacqueline Kamin** – Budget and implementation coordinator
- **Andrew Eiter** – Research communications coordinator
- **Heidi Noble** – Contracts specialist senior
- **Ethan Severson** – National research coordinator

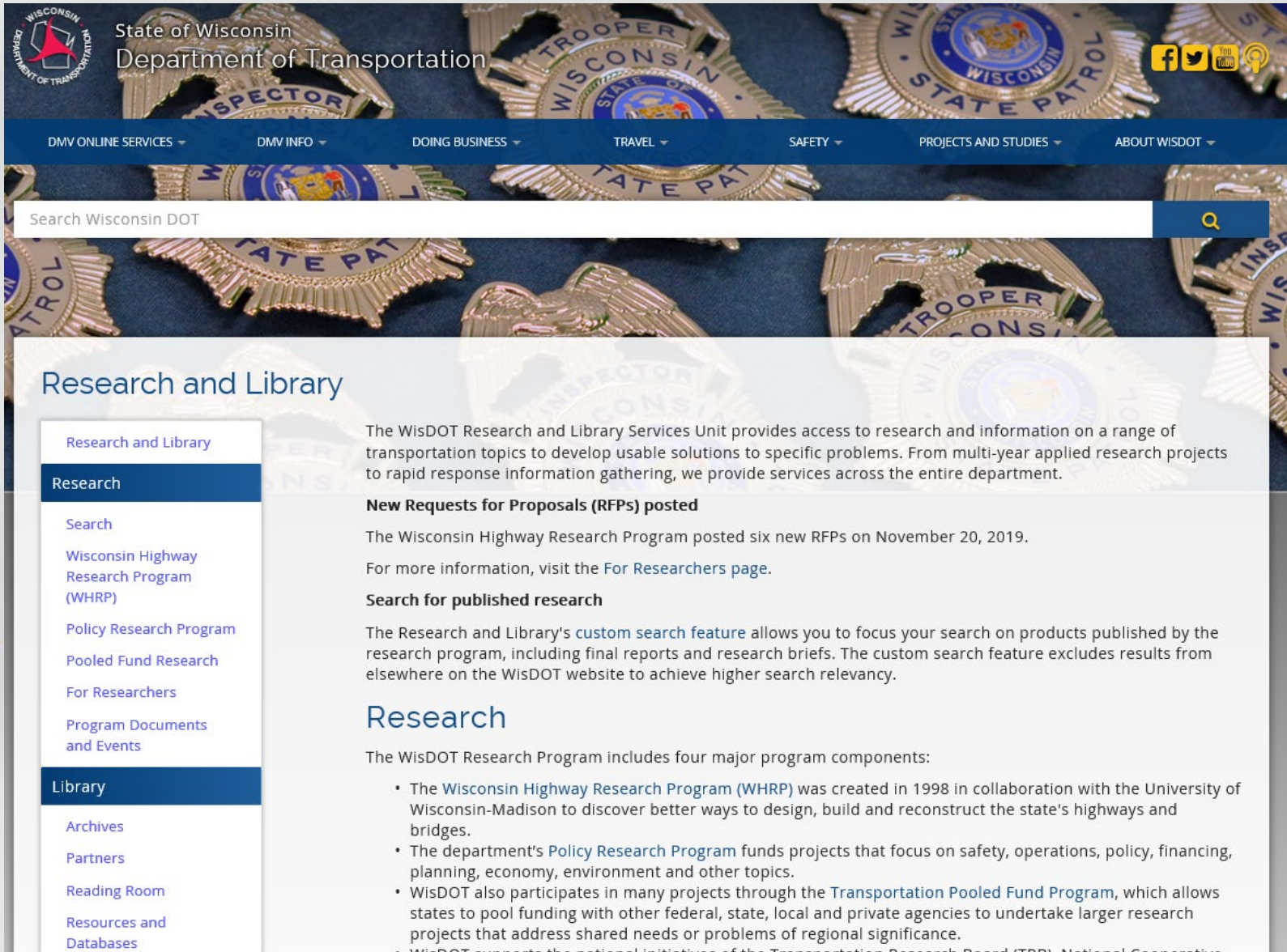
Library

- **John Cherney** – Librarian
- **Wendy Brand** – Librarian (half time)

Research and Library Budget (FFY 19)



WisDOT Research Home Page

A screenshot of the WisDOT Research Home Page. The page features a blue header with the WisDOT logo and navigation links. Below the header is a search bar. The main content area is titled "Research and Library" and includes a sidebar with navigation links and a main text area with a description of the research services and a list of recent requests for proposals.

State of Wisconsin
Department of Transportation

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Research and Library

The WisDOT Research and Library Services Unit provides access to research and information on a range of transportation topics to develop usable solutions to specific problems. From multi-year applied research projects to rapid response information gathering, we provide services across the entire department.

New Requests for Proposals (RFPs) posted

The Wisconsin Highway Research Program posted six new RFPs on November 20, 2019. For more information, visit the [For Researchers](#) page.

Search for published research

The Research and Library's [custom search](#) feature allows you to focus your search on products published by the research program, including final reports and research briefs. The custom search feature excludes results from elsewhere on the WisDOT website to achieve higher search relevancy.

Research

The WisDOT Research Program includes four major program components:

- The Wisconsin Highway Research Program (WHRP) was created in 1998 in collaboration with the University of Wisconsin-Madison to discover better ways to design, build and reconstruct the state's highways and bridges.
- The department's Policy Research Program funds projects that focus on safety, operations, policy, financing, planning, economy, environment and other topics.
- WisDOT also participates in many projects through the Transportation Pooled Fund Program, which allows states to pool funding with other federal, state, local and private agencies to undertake larger research projects that address shared needs or problems of regional significance.
- WisDOT supports the national initiative of the Transportation Research Board (TRB), National Cooperative

Research and Library

Research

- Search
- Wisconsin Highway Research Program (WHRP)
- Policy Research Program
- Pooled Fund Research
- For Researchers
- Program Documents and Events

Library

- Archives
- Partners
- Reading Room
- Resources and Databases

<https://wisconsindot.gov/Pages/about-wisdot/research/default.aspx>

Wisconsin Highway Research Program (WHRP)

Est. 1998 in collaboration with UW-Madison to perform research in four focus areas

- Flexible Pavements
- Rigid Pavements
- Geotechnics
- Structures

~\$1 million annual budget

- 80% federal funds
- 20% state funds

Program Management & Oversight

WisDOT Research and Library provides facilitation and funding

Steering Committee provides policy direction for the program

- WisDOT staff, industry professionals and academics

Technical Oversight Committees (TOC) design, select and oversee projects

- WisDOT staff, industry professionals and academics

UW-Madison Technical Support staff

- Dante Fratta, Sabrina Bradshaw and Jamie Valentine

Requests for Proposals

- Background
- Objectives
- Scope of work
- Final report requirements
- Budget template
- Length limit
- Deadlines
- Contact information
- Schedule for clarifying questions

Research Cycle

Timeframe	Activity
May – Aug	Generate research ideas
Sept – Nov	TOCs develop request for proposals (RFPs)
Nov – Jan	RFP solicitation
Jan 3, 2020	Question submission period ends
Jan 11, 2020	Answers to questions posted
Feb 3, 2020	Proposals are due
Feb – Mar	Proposal review / researcher selection
May – Aug	Work plan development
July – Sept	Contract / agreement negotiation
October	Anticipated project start dates

Requests for Proposals

State of Wisconsin
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For researchers

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 - Research
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To subscribe to Research Program updates and Requests for Proposals, please email research@dot.wi.gov.

Requests for Proposals (RFPs)

Wisconsin Highway Research Program (WHRP)

- Development of Design Procedures for Concrete Adhesive Anchors
- Optimizing Bridge Abutment Slope Protection at Stream Crossings
- Evaluating the Impact of Anti-Icing Solutions on Concrete Durability
- Material Specifications for Longitudinal Joint Construction, Remediation and Maintenance
- Interlayer Mixture Design
- Geotechnical Asset Management for Slopes

Timeline of events:

- November 20, 2019 - Requests for Proposals issued
- January 3, 2020 - Deadline for submission of clarifying questions (4:30 p.m. CT)
- January 11, 2020 - Responses to clarifying questions posted
- February 3, 2020 - Deadline for submissions of final proposals (4:30 p.m. CT)
- May 1, 2020 - Expected notification of proposal decisions

WisDOT accepts proposals from out of state.

Project guidance for the Wisconsin Highway Research Program

<https://wisconsindot.gov/Pages/about-wisdot/research/researchers.aspx>

Proposal Evaluation

Criteria	Points
Background: awareness of recent work	15
Work plan: understanding of the problem	15
Work plan: activities & techniques	30
Deliverables & implementation plan	15
Qualifications, experience & certifications	25
TOTAL	100

Project Oversight

Project Oversight Committees (POC) review and approve interim steps and findings

- **Project manager (POC chair)**
 - Main point of contact for the principle investigator (PI)
 - Liaison for test sites, data sources and the TOC
- **Other TOC members**
 - Provide support and expertise

Research and Library's contracts specialist is the main point of contact for administrative matters

Forms and Documents

Invoices

- Typically submitted by university research program

Quarterly Progress Report

- Activities performed to address project objectives
- Required prior to payment of the invoice

End Date Waiver Requests

- Must be requested in advance of justified need for extension
- Require review and approval from FHWA

Amendments

- Made for significant changes to project tasks or budgets

Project Deliverables

Presentation of findings

- In-person presentation of draft final report to POC

Final report

- TOC reviews draft final report
- PI addresses comments/corrections to finalize report

Implementation

- Researchers and WisDOT collaborate on applying research

Project brief

- WisDOT Research staff prepare two-page brief with TOC/PI input

PI Evaluation

Communication, interaction and responsiveness

- a. PI maintained regular and adequate communication with project staff throughout the project
- b. PI responded to project staff requests in a timely and professional manner
- c. PI submitted laboratory, field test, survey or other research parameters for advance review and approval
- d. PI conveyed technical issues or concerns or sought project staff guidance in a timely manner
- e. PI worked proactively to identify and resolve problems

Research performance and technical quality

- a. PI effectively addressed the research objectives as defined in the project work plan
- b. PI's research methods were technically valid
- c. PI's data / findings were technically valid
- d. The data / findings support the research recommendations
- e. PI identified potential opportunities for WisDOT implementation
- f. PI conducted research activities in a cooperative and timely manner

PI Evaluation cont.

Final Deliverables

- a. PI delivered a draft final report in a timely manner
- b. The draft final report was well written and easily understood
- c. The draft final report clearly documented the data, findings and recommendations of the research
- d. PI's presentation was of high quality
- e. PI was able to answer questions, address concerns and discuss findings in the presentation
- f. PI adequately responded to comments received on draft final report
- g. PI submitted final report in a timely manner after receiving comments on draft

Overall Performance

- a. Please assess the total performance of the PI on this research project

FFY 2021 Requests for Proposals

Flexible Pavements

- Material Specifications for Longitudinal Joint Construction, Remediation and Maintenance: 12 months - \$80,000
- Interlayer Mixture Design: 24 months - \$175,000

Rigid Pavements

- Evaluating the Impact of Anti-Icing Solutions on Concrete Durability: 24 months - \$150,000

FFY 2021 Requests for Proposals cont.

Geotechnics

- Geotechnical Asset Management for Slopes:
24 months - \$150,000

Structures

- Development of Design Procedures for Concrete Adhesive Anchors: 24 months - \$150,000
- Optimizing Bridge Abutment Slope Protection at Stream Crossings: 18 months - \$80,000

Questions

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Contact Information

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WHRP Site: <https://wisconsin.dot.gov/Pages/about-wisdot/research/whrp.aspx>