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August 31, 2022 | 1:00-2:30 PM | MDT Commission Room and Teams

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## RRC Members

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Mack Long, MDT Director  
Julie Brown, MDT Deputy Director  
Dwane Kailey, Chief Operations Officer  
Mike Bousliman, Information Services Division Administrator  
Dustin Rouse, Highways and Engineering Division Administrator  
Larry Flynn, Administration Division Administrator  
Brad Marten, Motor Carrier Services Division, Administrator

Shane Mintz, Glendive District Administrator  
Rob Stapley, Rail, Transit, and Planning Division Administrator  
Jon Swartz, Maintenance Division Administrator  
Bob Seliskar, FHWA  
Matt Strizich, FHWA  
David Kack, WTI Director

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**RRC Members Present:** Mack Long, Julie Brown, Dwane Kailey, Mike Bousliman, Dustin Rouse, Brad Marten, Shane Mintz, Rob Stapley, Jon Swartz, Matt Strizich, and David Kack

**Others Present:** Rebecca Ridenour, Aaron Anderson, Vaneza Callejas, Chad De Austin, Lisa Durbin, Ed Ereth, Doug McBroom, Oak Metcalf, and Kaia Rosen

Action items are in red.

## Research Spotlight – Transportation Pooled Funds

### Clear Roads Winter Highway Operations Phase III TPF-5(479)

Doug McBroom, as the pooled fund technical representative for MDT, attended this meeting to present an overview of the pooled fund progress.

MDT has leveraged over \$500,000 worth of research for the \$25,000/year buy-in. MDT has implemented the Clear Roads Snowplow Training, a defensive driving training for plow operators and supervisors. The group recently finished a study and decision support tool that lets state DOTs compare the efficiencies and life cycle costs of using different snowplow types on specific plow routes.

MDT has been a partner in this study for the last five years. Minnesota DOT leads the study.

### Western Maintenance Partnership – Phase 3 TPF-5(394)

Doug McBroom, as the pooled fund technical representative for MDT, attended this meeting to present an overview of the pooled fund progress.

This pooled fund provides a focused look at maintenance among Western Association of State Highway and Transportation Officials (WASHTO) states to share experiences, innovations, expertise, and solutions. The group recently had a peer exchange in Deadwood, South Dakota. One of the highlights was a flexible plow design.

MDT has been a partner in this study for the last four years. Utah DOT leads the study.

## **Pooled Funds Requests**

### **TPF-5(466): National Road Research Alliance (NRRRA)**

Oak Metcalf attended this meeting to request the RRC consider joining the pooled fund.

The main benefit to participating in this pooled fund is access to and utilization of the pavement test track at MNROAD. As part of this pooled fund, we should be able to submit specific pavement sections to be constructed and evaluated under actual primary level traffic. MnDOT is also a champion of chip seals, like MDT and we have often "compared notes" on chip seals so this effort has the potential to replace the Aging Conditions for Hot Mix Asphalt project we had to abandon with Washington State and give MDT the opportunity to look at chip seal benefits synergistically with MnDOT. The alliance then assists in implementing findings as well as updating specifications and practices. Membership also allows us access to and participation on the subgroups within the fund that focus on flexible pavement (asphalt), rigid pavement (PCCP), Geotechnical issues, Intelligent Construction Technologies, and Preventive Maintenance of both concrete and asphalt roadways. Another benefit to MDT is ongoing sustainability research and a focus on innovative pavement recycling practices and materials. Historically, Intelligent Construction has been seen as more of a contractor tool, but with this as a focus of the project as well, MDT can learn more about the benefits of intelligent construction methods and how they can enhance efficiency, performance, and safety. Each member agency has two seats on the executive committee and membership in each of the 5 areas mentioned. The members direct the overall research but also contribute to budgeting, scheduling, and consultant selection. Membership also comes with travel reimbursement to NRRRA meetings and conferences, including TRB.

The commitment amount for this pooled fund study is \$75,000/year for five years (FFY 2023-2028). MnDOT leads the study.

Questions: How large is the track or facility in Minnesota? How much input would MDT get per pavement section (cells)? The test track has 60-100 different cells. Packet includes additional information. Oak will get more specifics.

Dwane Kailey made a motion to join the pooled fund. Dustin Rouse seconded the motion. No discussion. All RRC members present voted in favor.

### **AASHTO Technical Services Program**

Ed Ereth requested an annual contribution of \$15,000 to the program. He explained that the program provides MDT with a robust set of reliability matrix tools at a significant discount. The tools help MDT set their targets and FHWA data transfer.

Dwane Kailey made a motion to fund the program. Dustin Rouse seconded the motion. No discussion. All RRC members present voted in favor.

## **Tabled Research Proposal update**

### **23-007 Renewable Energy Generation within MDT ROW**

Aaron Anderson, as project champion, attended this meeting to request funding and move this project to the technical panel stage.

The project is to evaluate MDT's right of way (ROW) and determine if there are suitable candidates for a renewable project. MDT will conduct a financial analysis of developing renewable energy systems. If this analysis indicates that renewable energy production is cost effective, the project will develop a guidance for implementation of PV projects within MDT ROW. It will also research funding mechanism to install renewable energy systems and run cost estimates on a selected project location.

The total project budget is \$110,000. The estimated project period is 24 months.

Dustin Rouse made a motion to fund with \$110,000. Jon Swartz seconded the motion. All RRC members present voted in favor.

Research staff will proceed with forming the technical panel for this new MDT SPR-funded research project.

## **Project Cancelled**

### **22-008 Aging Conditions for Hot Mix Asphalt Cracking Test**

Oak Metcalf, as project champion, attended this meeting to discuss the research, which is recommended by the project technical panel for termination.

He clarified that Washington State University and MDT legal were at an impasse on some of the contract language, specifically regarding indemnity and location. However, this research is not a significant loss for MDT. It does have some benefits and would have provided info on long term aging. Oak is part of several task forces investigating this area from the national standpoint. He also conducted literature searches and discovered an NCHRP long term aging research that will be published soon. There is also other work in this area by the National Center for Asphalt Technology and the Asphalt Institute.

Rebecca noted that research staff will forward MDT research contract templates to out-of-state submitters to mitigate this in the future.

Dustin Rouse made a motion to terminate the project. Jon Swartz seconded the motion. All RRC members present voted in favor.

Research staff will terminate the project and unobligated the funds.

## **Research Program Highlights**

### **Nation Research Advisory Committee (RAC) annual meeting**

Rebecca attended the RAC conference this summer. Of particular interest was a session on innovation and how agencies develop a culture of innovation. This could be explored at a future RRC meeting.

### **WTI/MDT Roundtable**

Rebecca and David Kack hosted a short roundtable: What the research section could do for section supervisors and bureau chiefs. David noted that WIT-MSU, as state employees, are there to help MDT. He would encourage discussion of challenges and idea gathering within the sections and bureaus. MSU is part of the Mountain Plain Consortium so they can do about \$350k of research for \$175k of SPR funds. If they don't have in house researchers available for a particular topic they can turn to that group. WTI will also

have resources available through their participation the regional Tribal Technical Assistance program. Rebecca noted that following the outreach, she received two new stage 1 requests from Doug McBroom.

### **LTAP increase**

Rebecca noted that there will be a \$60,000 LTAP federal increase in the next federal fiscal year. She noted that LTAP has a one-to-one match requirement from the state side. There will be more to come down the road about the increase and research budget impacts.

## **Open Discussion**

### **TSP Programs**

Lisa Durbin mentioned another AASHTO TSP \$14,000 subscription program for TRAC and RIDES which may be of interest to the RRC down the road. Michelle Wheat and Angela Murolo are seeing if a couple of Helena schools are interested in a pilot project.

### **Historical Markers**

Director Mac Long brought up the idea to modernized historical markers in an innovative way.

### **WTI Director replacement**

David Kack's role replacement process is underway.