

MEMORANDUM

To: RRC Members
Steve Albert/WTI
Debbie Alke, Administrator/Aeronautics Division
Mike Bousliman, Administrator/Information Services Division
Jeffery M. Ebert, P.E./District Administrator-Butte
Larry Flynn, Administrator/Administration Division
Dwane Kailey, Administrator/Highways and Engineering Division
Bob Seliskar/FHWA
Jerry Stephens, P.E./WTI MSU
Jon Swartz, Administrator/Maintenance Division
Mike Tooley/Director
Duane Williams, Administrator/Motor Carrier Services Division
Pat Wise/Deputy Director
Lynn Zanto, Administrator/Rail, Transit, and Planning Division

From: Susan C. Sillick, Manager
Research Programs

Date: July 2, 2013

Subject: 6/26/2013 RRC Meeting Notes

Action items are underlined and bolded.

RRC Members Present: Debbie Alke, Dwane Kailey, Bob Seliskar, Sue Sillick, Pat Wise, and Lynn Zanto.

Other Attendees: Tom Atkins, Stephanie Brandenberger, Kris Christensen, and Scott Helm

1. Annual TRB Staff Visit

MDT sponsors TRB core services and the National Cooperative Highway Research Program (NCHRP), and as such, TRB staff visit MDT at least every other year. During the RRC meeting, Scott Babcock and Rick Pain gave an overview of TRB. Also, it was noted, for the rest of this day and the morning of the next Scott and Rick would give another TRB overview to MDT staff, and would meet with MDT staff to understand MDT's recent successes and challenges. The successes can be shared with other states, and the challenges could potentially be solved by the successes of other states or research projects, as appropriate. [View the TRB presentation.](#)

Dwane Kailey stated that there is so much information in the field of transportation that it is hard to sort through it all to determine what may be applicable to Montana. Rick suggested the [Practice-Ready Papers Database](#) is a good place to start. Also, Sue noted Research staff sends information from all sources to MDT staff.

2. **Budget Report:** Attached

No discussion.

3. **Research Projects – current listing:** Attached

The projects approved to move forward to the technical panel stage during last month's RRC meeting have been added to the listing. Sue asked RRC members to review the suggested technical panel members listed for each project to determine if any changes need to be made.

a. **13-002: Safety Impact of Differential Speed Limits on Rural 2-Lane Highways in Montana**

Lynn Zanto will add someone from Planning to this Technical Panel. Also, Lynn and Dwane would like a MACO representative on this panel. Finally, Bob Seliskar asked about an FHWA representative. Note: Marcie Allen was assigned to this panel.

b. **13-006: Speed Limits Set Lower than Engineering Recommendations**

It was suggested the Transportation Commissioners be kept informed of progress.

c. **13-008: Testing Woolen "Made in Montana" Roadside Reclamation Products**

Dwane questioned Dennis Dirks' participation on this panel; **Lynn will talk to Phil Johnson.**

d. **13-010: Special Event Traffic**

Kris will contact Carol Strizich for representatives from the three communities (Billings, Bozeman, and Missoula) involved in this research.

e. **13-021: Moving Ahead for Progress in the 21st Century Act (MAP-21): The Primary National Freight Network and its Relationship to state Systems and Needs**

This panel is pending hiring of the Multimodal Bureau Chief position in Planning.

In addition, Bob Seliskar requested **Research staff add Drew Sielbach to the "Comparison of Predicted and Measured Prestress Losses" panel if it moves forward and to the "Investigation of Prefabricated Steel Truss/Bridge Deck Systems" panel. Dwane said he would talk to Kent Barnes about moving this latter project forward more quickly.**

4. **Reports:** Available on Research [website](#)

See Implementation/Technology Transfer/Performance Measures discussion below.

a. **Assessing the Extent and Determinates of Induced Growth** (10-016) – Final and Project Summary Reports

5. **Proposals:** Attached

a. **[Simplified SPT Performance-Based Assessment of Liquefaction and Effects Pooled-Fund Study](#)**

Scott Helm and Stephanie Brandenberger were present to discuss MDT participation in this pooled-fund study. The goals of this project are to develop a simplified performance-based liquefaction analysis for design of structures and embankments in earthquake susceptible areas, and to create and deliver practical design tools based on state/region specific soil conditions.

The current design practice is not standardized and may yield overly conservative designs or undesirable performance. This study is structured such that MDT will have direct impact on project parameters, test site locations, and study deliverables. Also, 5-10 sites in Montana will be used in this project.

Achievement of project goals will yield MDT PE cost savings in reduced design time using standardized methods and tools; potential significant construction cost savings by using performance-based methods for liquefaction trigger assessment; and consistent, reliable, and realistic designs tailored to conditions found in Montana.

A total of \$30,000 is requested, \$15,000 per year for two years beginning in FFY 2014. This amount could easily be saved on one MDT construction project with the deliverables from this pooled-fund study.

Dwane Kailey asked if it is realistic that we can standardize this analysis. Scott stated there are very definite deliverables and believes the final projects will be implementable. This project has defined goals and deliverables, and is not open-ended. Stephanie has experience with the research team and is confident in their abilities to deliver. It was stated that this research is exciting as it could be ground-breaking.

Debbie Alke made a motion to approve the funding of this pooled-fund study for a total of \$30,000. Dwane seconded the motion. All RRC members present voted in favor of the motion; the motion passed. **Sue will post the commitment to the transportation pooled-fund website and will obligate funds in 2014 when the project is moved to “Cleared by FHWA” status.**

6. **Implementation/Technology Transfer/Performance Measures**

a. **[Assessing the Extent and Determinates of Induced Growth](#)**

Tom Atkins was present to discuss the results of this project, the purpose of which was to develop guidance and screening tool for assessing induced growth. Tom stated the deliverables for this project, including: defined processes, checklists, training session (6/25/13), and an adaptive management plan will help standardize MDT’s environmental assessments, especially Category Exclusions. This will result in more consistent and defensible environmental assessments. Revised methods will be added to the Environmental Manual.

b. Research Performance Measures

Sue announced that Research is moving into performance measures for research projects. Benefit-cost ratios (B/C) and return on investment (ROI) were determined for the below two research projects.

i. **Pile Cap Performance Measures Report**

The average (average of a high and low calculation) B/C and ROI for this project are approximately 9:1 and 8, respectively.

ii. **Rest Area Performance Measures Report**

The average (average of a high and low calculation) B/C and ROI for this project are approximately, 31:1 and 30, respectively.

c. **Spring Research Newsletter**

Sue announced the Spring Research newsletter was published in May and the summer issue will be published in early August.

7. Department/Division Hot Topics – RRC Members Roundtable Discussion

Dwane indicated he gave Sue's phone number to Melinda Barnes from Bike/Walk Montana for discussion of a possible research project.

cc: Craig Abernathy/Research Section w/attachments
Audrey Allums/Grants Bureau
Kent M. Barnes, P.E./Bridge Bureau
Katy Callon/Research Section w/attachments
Kevin Christensen/Highways and Engineering Division
Kris Christensen/Research Section w/attachments
Ryan Dahlke, P.E./Consultant Design Bureau
Chris Dorrington/Data and Statistics Bureau
Lisa Durbin/Construction Administration-Bureau
Mike Dyrdahl/Highways and Engineering Division
Paul R. Ferry, P.E./Highways Bureau
Paul Jagoda, P.E./Construction Engineering Bureau
Tom Martin, P.E./Environmental Services Bureau
Doug McBroom/Multimodal Programs Bureau
Shane Mintz/District Administrator-Glendive
Ed Toavs/District Administrator-Missoula
Roy Peterson, P.E./Traffic & Safety Bureau
Suzy Price/Contract Plans Bureau
Jim Skinner/Planning and Policy Analysis Bureau
Rob Stapley/Right of Way Bureau
Stefan Streeter, P.E. /District Administrator-Billings
Matt Strizich, P.E./Materials Bureau
James A. Walther, P.E./Highways and Engineering Division
Dave Hand/District Administrator-Great Falls
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