MEMORANDUM

To: RRC Members

Debbie Alke, Administrator/Aeronautics Division

D. John Blacker, Deputy Director

Mike Bousliman, Operations Manager

Monte N. Brown, Operations Manager/Business Process Solutions Unit

Jeffery M. Ebert, P.E./District Administrator-Butte Larry Flynn, Administrator/Administration Division

Jennifer Jensen, Operations Manager Dwane Kailey, Operations Manager

Jim Lynch, Director Bob Seliskar/FHWA

Dennis Sheehy, Administrator/Motor Carrier Services Division

Jerry Stephens, P.E./WTI MSU

Jon Swartz, Administrator/Maintenance Division

Lynn Zanto, Administrator/Rail, Transit, and Planning Division

From: Susan C. Sillick, Manager

Research Programs

Date: January 12, 2011

Subject: 5/26/2010 RRC Meeting Notes

Action items are bolded.

RRC members present:, John Blacker, Monte Brown, Jeff Ebert, Dwane Kailey, Dennis Sheehy, Sue Sillick, Jerry Stephens, and Jon Swartz.

Others present: Craig Abernathy, Kris Christensen, Eli Cuelho, Hal Fossum, Mark Goodman, Brandi Hamilton, Jeff Jackson, Rich Jackson, Steve Jenkins, George Mazur, and Doug McBroom.

1. **Budget Report:** Attached

John Blacker asked Sue how the continuing resolution, effective through the end of the calendar year, affected Research funding for FFY 2010. Sue replied that funding increased by about \$100,000 or \$200,000. The actual increase in federal funds was \$144,217.

2. **Research Project – current listing:** Attached

Sue announced that panels for all projects approved by the RRC in January have met and are either in the SOW or proposal development stage; two of these projects are being presented at this meeting,

3. **Reports:** Available Upon Request

No discussion

- a. Automatic Crash Notification: Assessing Montana's Motor Vehicle Crash and Related Injury Data Infrastructure- Progress Report- January 2010
- b. **Bozeman Pass Wildlife Monitoring** Progress Reports –January, February, March, and April 2010
- c. Impact of Increased Canadian Economic Development on Northern Montana Highways (08.002) Final Report
- d. **Interim Evaluation of Three Instrumented Bridges in Saco** (09.017)- Progress Report- February 2010
- e. LTAP- progress report- March 2010
- f. Montana Rest Area Usage (09.003)- Interim Report- March 2010
- g. **Motor Fuel Refunds** (09.005) Progress Report April 2010
- h. Steel Pipe Pile/Concrete Pile Cap Bridge Support Systems: Confirmation of Connection Performance (09.016) Progress Report April 2010
- i. **Steep Cut Slope Composting: Field Trials and Evaluation** (05.010) Progress Report March and April 2010
- 4. **Contract Extensions:** None
- 5. **Proposals:** Attached
 - a. Flood Frequency Analysis for MT Based on Data Through Water Year 2009 (10-013)

Mark Goodman, as the chair of the technical panel for this project, attended to present the USGS proposal. The technical panel recommends the RRC fund this proposal at \$130,000.

The objectives of this project are to 1) determine flood-frequency estimates for more than 660 USGS gaging stations in Montana; 2) investigate methods of adjusting flood-frequency estimates for short-term gaging stations with data restricted to either unusually wet or dry periods; 3) investigate the effects of climatic variability on our understanding of flood hydrology in Montana and potential emerging methods for determining more accurate flood-frequency estimates; and 4) investigate the use of a regional approach for flood-frequency estimates.

This data is critical as it serves as the basis of hydrological analyses for road structures with design criteria dependent on flood characteristics. The last available data is through 1998; this project will update data through 2009. Some of the benefits (business case

supporting this research) to MDT in completing this research include: 1) economical hydraulic design; 2) establishment of road grades and low beam elevations; 3) facilitation in securing flood permits; 4) improved stream restoration and fish passage; and 5) improved preliminary engineering and planning.

Dwane Kailey noted that when the topic statement for this project was presented, the RRC indicated it wanted to see a fair sharing of resources to fund this project. The total cost of this project is \$250,000, with MDT funding, \$130,000, USGS funding \$100,000, and MDNRC funding \$20,000. It was noted that the funding from USGS and MDNRC was the maximum funding available from these two agencies.

Also, it was noted that MDNRC plans to develop a user-friendly point-and-click application for hydraulic data to enhance access to this data. John Blacker said he would like partners other than MDT to participate in funding this new project to a larger scale.

John Blacker made a motion to fund this project at \$130,000. Dwane Kailey seconded the motion. The motion passed unanimously. **Research staff will work with USGS to execute a contract for this project.**

b. LTAP 2010-2011 Work Plan and Budget

Steve Jenkins was present to discuss the LTAP proposal for SFY 2011.

Steve distributed two maps identifying location and content of training in SFY 2010 and planned training for SFY 2011. Steve said he took to heart the suggestion that he conduct a user needs assessment. This was done in SFY 2010 through a number of methods, including: needs survey, class evaluations, and personal discussions with various stakeholders. Steve pointed out how the training scheduled for this upcoming SFY is related to meeting the needs as determined by the needs assessment.

Dwane Kailey made the motion to support LTAP with SPR funds totaling \$75,000. Other funding for LTAP comes from earmarked FHWA funds of \$140,000, local state gas tax funds totaling \$100,000, and MSU funds totaling \$2,000. Monte Brown seconded the motion. All present voted in favor of the motion. The motion passed. **Research staff will work with MSU to execute a SFY 2011 contract for LTAP.**

c. North/West Passage Pooled-Fund Study

Brandi Hamilton was present to request the RRC fund the Northwest Passage pooled-fund study with an additional \$25,000. The RRC approved the initial \$25,000 funding for this pooled-fund study in May 2008.

Brandi said the pooled-fund study is entering its ninth year and has members along I-90 and I-94 from Wisconsin to Washington. The goals of this program are to implement and evaluate integrated traveler information systems and coordinate maintenance operations across state borders. The long-term vision is to effectively use methods for sharing,

coordinating, and integrating traveler information across state borders and to influence ongoing standards development. The benefits of participation in this pooled-fund study include, the development of the Northwest Passage traveler information website; corridor-wide consistent event descriptions to facilitate consistent messages when sharing messages corridor wide; 511 system enhancements; and an integrated surface transportation weather observing, forecasting, and data management system.

Monte Brown made the motion to support this pooled-fund study with an additional \$25,000. Jon Swartz seconded the motion. All present voted in favor of the motion. The motion passed. **Research staff will obligate the funds for this pooled-fund study.**

d. Relative Operational Performance of Geosynthetics Used as Subgrade Stabilization – MDT Lead Pooled Fund (10-008)

Jeff Jackson was present, representing the technical panel for this project, to recommend the RRC approve this proposal in-concept as a pooled-fund study and to approve a \$100,000 commitment to this project.

There is a general consensus concerning the effectiveness of geosynthetics for subgrade stabilization. However, there is a lack of understanding and agreement on the material's properties needed for performance. Those properties need to be specified in order to ensure its beneficial use and to allow a broad range of products to be considered. This study will examine the performance of various geosynthetics for subgrade stabilization with the aim of relating this performance to material properties that can be incorporated into standard specifications to allow for a broad and economical use of geosynthetic products for a specific application.

Dwane Kailey expressed concern that geosynthetics have been around for a while and researched for years. He wondered why this hasn't been done before.

John Blacker indicated this was not a one size fits all. The application may be site specific. He questioned if we conduct this research, is it out-dated as soon as the research is complete?

Jeff Jackson indicated that this project will most likely not be the end all to this research, but it will take us to the next level. He also indicated that Wyoming DOT is interested in participating in this study and Idaho Transportation Department has committed \$60,000 (\$30,000/year) to this project.

John Blacker made the motion to go out for a pooled-fund study with a MDT contribution of \$100,000. He also stated he wants to know if other states are willing to support this project. Sue assured John the RRC would be kept abreast of project status.

Dwane Kailey seconded the motion. All present voted in favor of the motion. The motion passed. Research staff will post this project as a pooled-fund study to determine interest from other states.

6. Implementation/Technology Transfer:

a. Montana Transportation and Land Use Resources for Growing Communities (07.014)

George Mazur/Cambridge Systematics was present to discuss the <u>online resources</u> developed as the main final product for the <u>Local Transportation and Land Use</u> <u>Coordination research project</u>.

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

Dwane Kailey announced MDT joined the Region X Consortium, which is a consortium of state DOTs and University Transportation Centers (UTCs) in Alaska, Idaho, Oregon, Washington, and now Montana. WTI has joined along with MDT. Dwane indicated there is no cost to join and any costs will be project related and funding requested from the RRC. The purpose of this consortium is to facilitate collaboration on transportation research and education projects of mutual interest. Finally, Sue Sillick is MDTs representative to this consortium.

If you have any additions to the agenda, please contact me no later than 5/24/2010 at 444-7693 or ssillick@mt.gov. You will be notified of any last minute additions to the agenda by E-mail

cc: Craig Abernathy/Research Programs

w/attachments

Kent M. Barnes, P.E./Bridge Bureau

Kevin Christensen/Highways and Engineering Division

Kris Christensen/Research Programs

w/attachments

Tim Conway, P.E./Consultant Design 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

Michael P. Johnson/District Administrator-Great Falls

Tom Martin, P.E./Environmental Services Bureau

Ray Mengel/District Administrator-Glendive

Doug Moeller/District Administrator-Missoula

Suzy Price/Contract Plans Bureau

Timothy W. Reardon/Legal Services

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

Duane E. Williams, P.E./Traffic & Safety Bureau

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