

MEMORANDUM

To: RRC Members  
D. John Blacker, Administrator/Maintenance Division  
Monte N. Brown, Administrator/Administration Division  
Richard B. Clark, Administrator/Information Services Division  
Jim Currie, Deputy Director/Department of Transportation  
Dave Galt, Director/ Department of Transportation  
Joel M. Marshik, P.E., Administrator/Highway and Engineering Division  
Drew F. Livesay, Administrator/Motor Carrier Services Division  
Sandra S. Straehl, Administrator/Transportation Planning Division  
Bob Seliskar/Federal Highway Administration

From: Susan C. Sillick,  
Research Section

Date: 4/12/2005

Subject: Summary of Minutes from May 25, 2004 RRC Meeting

The following RRC members were present: John Blacker, Dick Clark, Jim Currie, Dave Galt, Joel Marshik, Bob Seliskar, Sandy Straehl, and Sue Sillick.

1. **Budget Report** – Attached – No additional comments
2. **Research Project – current listing** – Attached

2a. *Fish Passage at Road Crossings in Montana Watershed Providing Bull and Cutthroat Trout Habitat.*

Dave Galt would like the RRC to review project progress reports; Sue will send the web link to the RRC. Dave has also requested the PI submit a Phase II proposal, which will be presented to the RRC June 29, 2004.

Finally, Dave Galt is interested in a Technical Tour to Washington and Oregon to learn more about fish passage. Bob, Joel, John, Jim and Dave will discuss this tour, including funding.

3. **Reports:** Available Upon Request

3a. *A Study for the Economic Effects of Reconfiguring Montana's Two-Lane Highways* – Progress Report – March 2004

3b. *LTAP* – Progress Report – 1/1/04 – 3/31/04

3c. *Pavement Performance Prediction Models* (98.003) – Progress Report – April 2004

3d. *Evaluation of Biodiesel Fuel* – Progress Report – April 2004

3e. *Crack Sealing Cost Effectiveness* – FHWA/MT-04-006/8127 – Final Report

4. **Contract Extensions:** None

5. **Proposals:**

5a. *Effects of Defensive Vehicle Handling Training on Novice Driver Safety: A Case Study in Lewistown, Montana*

Michael Kelly, Ph.D. and Steve Albert/WTI, MSU, attended the meeting to present this proposal.

New teenaged drivers have the highest accident rates of any group of drivers. Research shows that drivers under the age of 19 have a crash rate that is four times that of the general driving population and the youngest drivers have a higher accident rate yet. The highest accident rate is experienced within 2 years of receiving the driving license. The crash rate decreases with driving experience. Research is needed to determine how to safely equip novice drivers with the important elements of experience before they encounter a need for it in an actual driving situation.

A discussion followed Dr. Kelly's PowerPoint presentation. Steve Albert mentioned he would like to purchase snowmaking equipment to allow winter driving testing and maintenance issues to be addressed. Steve will discuss this further with John. Dick reiterated that he feels Native American students should be included in this group of teenagers. Steve said the demographics of the Billings, Lewistown and Great Falls school districts will be investigated. Dick also mentioned that alcohol use should be included as a part of this study as this is a huge risk factor. Dr. Kelly indicated that risk assessment would be a part of the training program. Sandy indicated that socioeconomic factors should be included as part of this study.

Previously, the RRC approved \$100,000.00 a year for five years to fund this project. Bob Seliskar suggested Dave Galt might want to ask Mary Peters/FHWA if she would approach NHTSA for project funding.

The RRC will be kept informed of the progress being made on this project.

5b. *LTAP – Work Plan and Budget* – 6/1/04 – 6/30/05

Steve Jenkins, P.E./LTAP, MSU, was present to discuss LTAP's Work Plan and Budget for the coming year.

Following a presentation on this past year's accomplishments and plans for next year, Sandy Straehl made a motion to accept the work plan and budget as presented, approving \$59,000.00 as MDT's part of the funding formula. Dave Galt seconded the motion. The motion passed.

**5c. *Methods for Estimating Mean-And Low-Flow Characteristics at Ungauged Sites in Montana* – Pooled-Fund Study**

Steve Holnbeck/USGS, and Mike Wherley/Hydraulics Section attended the meeting to discuss this proposal.

The objective of this project is to develop methods for estimating mean and low flow characteristics in Montana based on regression analyses relating stream flow characteristics at gauged sites to basin and climatic characteristics at those gauged sites. A secondary objective is to use GIS to determine basin and climatic characteristics at gauged sites. This will provide MDT with much better tools to evaluate the adequacy of water plans and structures for mean and low-flow conditions.

MDT will partner in this project with DEQ, CSKT, BLM, and USGS.

Jim Currie made a motion to contribute \$33,750.00 to the project, conditional upon all parties funding this project as stated in the proposal. John Blacker seconded the motion. The motion passed. Dave Galt did not vote, as he was absent from the room at the time the vote was taken.

**5d. *Ride Specification Review* (03.002)**

Matt Strizich/Butte Construction attended the meeting to discuss this proposal, which the Technical Panel recommends for funding.

It is generally felt MDT's current ride specification, which was implemented in 1999, can be fine-tuned. The long-term benefits of optimizing this specification will recoup the costs of the research many times over and should help MDT to continue to improve the quality of paving provided to the road users of Montana.

It was noted that MCA would need to be included in any specification changes.

Joel Marshik made a motion to approve \$84,333.00 for this project. Dick Clark seconded the motion. The motion passed.

**6. Implementation/Technology Transfer:**

**6a. *Crack Sealing Cost Effectiveness* – Final Report**

Eli Cuelho/WTI, MSU, and Jim Stevenson/MDT Billings District discussed the results of this project, the purpose of which was to evaluate various routing techniques and sealant materials. The best combination appears to be Crafc0, especially Crafc0 522, with the 4:1 routing method. MDT changed its specification based on early results from this project. However, it was noted that there seems to be a disconnect between MDT's specifications and material performance over time; it is possible the specification can be tightened up. Both Jim and Eli suggested further research in locations with expensive soils and determining whether we need to crack seal at all.

John Blacker said there is not a lot of savings to be had by conducting more crack sealing research. He said this study allowed us to refocus ourselves to prevent chipping away of the asphalt from the crack.

After much discussion, it was decided to review MDT's preventative maintenance program to ensure treatments are optimally timed. Eli will prepare a proposal.

cc: Craig Abernathy/Research Section w/attachments  
Debbie Alke, Administrator/Aeronautics Division  
Suzy Althof/Contract Plans Bureau  
Brooke Amestoy/Research Section w/attachments  
Kent M. Barnes, P.E./Bridge Bureau  
Bruce H. Barrett/District Administrator-Billings  
Lisa Durbin/Construction Administration Bureau  
Jeffery M. Ebert, P.E./District Administrator-Butte  
Paul R. Ferry, P.E./Highways Bureau  
Loran Frazier, P.E./District Administrator-Missoula  
John Horton/Right-of-Way Bureau  
Paul Jagoda, P.E./Construction Engineering Bureau  
Michael P. Johnson/District Administrator-Great Falls  
Russell G. McDonald/Human Resources Division  
Ray Mengel/District Administrator-Glendive  
Victoria A. Murphy, CPA, CFE/Highway and Engineering Division  
Jeanne Nydegger/Research Section w/attachments  
Timothy W. Reardon/Legal Services  
Jean A. Riley, P.E./Environmental Services Bureau  
James A. Walther, P.E./Highways and Engineering Division  
Duane E. Williams, P.E./Traffic & Safety Bureau  
Mark A. Wissinger, P.E./Highways and Engineering Division  
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