

## MEMORANDUM

To: RRC Members  
Debbie Alke, Administrator/Aeronautics Division  
Mike Bousliman, Operations Manager  
Jeffery M. Ebert, P.E./District Administrator-Butte  
Larry Flynn, Administrator/Administration Division  
Jennifer Jensen, Operations Manager  
Dwane Kailey, Operations Manager  
Jim Lynch, Director  
Roy Peterson, Administrator/Motor Carrier Services Division  
Bob Seliskar/FHWA  
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 21, 2011

Subject: 1/19/2011 RRC Meeting Notes

### **Action items are bolded.**

RRC members present: Debbie Alke, Mike Bousliman, Jeff Ebert, Dwane Kailey, Roy Peterson, Bob Seliskar, Sue Sillick, Jerry Stephens, Jon Swartz, and Lynn Zanto.

Others present: Fran Penner-Ray/OPI, Kent Barnes, Pam Buckman, Kevin Christensen, Kris Christensen, Paul Jagoda, Jake Goettle, Steve Jenkins, Justun Juelfs, Priscilla Sinclair, and Duane Williams.

#### 1. Budget Report: Attached

Dwane Kailey asked Sue Sillick if the projected state budget authority overrun was due to the FHWA earmark Research is managing. Sue confirmed this was the case.

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

##### a. Assessing the Extent and Determinants of Induced Growth (10-016) – Approval-in-Concept

Sue announced the SOW for this project was presented at the October 2010 meeting for approval-in-concept to issue an RFP. At that time, Jim Lynch requested a separate meeting to hear more about the project. This meeting was held. Jim gave the go ahead for

an e-mail ballot. This project was approved by a majority of RRC members via e-mail ballot. The panel is now working on the RFP.

b. LTAP Update

Steve Jenkins was present to give an update on LTAP. He discussed the training sessions provided in the first half of the fiscal year and those anticipated to be held in the second half of the fiscal year, LTAP focus areas, funding, and the LTAP needs assessment.

Steve was asked about who receives information on LTAP training. Steve indicated the city and county staff, the LTAP Advisory Board, and anyone else who requests to be added to the mail list all receive information on training opportunities. Steve added that brochures for training, monthly MT LTAP webinars, and other training and information opportunities are distributed to these folks. Sue said that both her and Kris Christensen are on the mail list and distribute materials to MDT staff who may be interested.

**It was suggested Steve add Kim Worthy, as the engineering and maintenance trainer, to LTAP's mail list.**

3. Reports: Available Upon Request

Sue announcement there were three final reports this month.

- a. Bozeman Pass Wildlife Monitoring – *Final Report*
- b. Burrowing Mammal Impacts on Paved Highways- Phase I (07.010)- *Final Report*
- c. Feasibility of Reclaimed Asphalt Pavement (RAP) in Portland Cement Concrete Pavements (PCCP) (09.004)- Progress Report- October 2010
- d. Ground Penetrating Radar Analysis – Phase II (08.013)- Progress Reports – May, October, and December 2010
- e. Interim Evaluation of Three Instrumented Bridges in Saco (09.017)- *Final Report*
- f. Montana Rest Area Usage (09.003)- *Final Report*
- g. LTAP- Progress Report- October 2010
- h. Motor Fuel Refunds (09.005) – Progress Reports – March and June 2010
- i. Steel Pipe Pile/Concrete Pile Cap Bridge Support Systems: Confirmation of Connection Performance (09.016) Progress Report – June 2010
- j. US 93 Post-Construction Wildlife-Vehicle Collisions and Wildlife Crossing Monitoring and Research- Progress Report- December 2010
- k. US 93 South Wildlife Monitoring (04.016) – Progress Report – October 2010

4. Contract Extensions: None

5. Proposals: Attached

A new funding process was announced by Dwane. Proposals will be accepted or rejected by the RRC. If accepted, the Management Team will take these proposals to Jim for final funding approval. Also, Dwane asked why it takes some research projects a year or even two

before the proposal is brought to the RRC for funding approval. Sue explained the process and why it takes some projects longer than others. Sue also said that for some projects implementation begins before the final report. The final report is just that - a final report. Results are provided to the technical panel throughout the project as soon as they are in. Recently, this process was formalized by requiring task reports. After each task is completed, it will be documented and submitted to MDT. These reports will be written as if a chapter of the final report. **Sue said she would make a concerted effort to decrease any delays and move projects through the system as quickly as possible. Sue asked Jerry Stephens to do the same on his end.**

- a. The Montana Graduated Licensing Program: Evaluating its Effectiveness in Reducing Crashes of Teenage Drivers

A presentation was requested by Jim. Fran Penner-Ray from OPI was present to discuss this proposal.

Motor vehicle crashes are highest among teenagers and higher still among young teenagers (14.5 to 16). The Montana GDL program is rated marginal due to the licensing of teenagers under the age of 16. The National Safety Council recommends GDL programs be evaluated due to the variation in GDL programs among the states. Several states have evaluated their GDL programs; however, no predominately rural state has conducted such an evaluation. The purpose of this project is to conduct a comprehensive evaluation of Montana's GDL program to determine its effectiveness and identify optimal core components of Montana's GDL program.

There were problems viewing the PowerPoint slides. These slides are available upon request.

There were quite a few questions. The timing of the project was questioned. It was suggested that since we have missed the window of opportunity for the current legislative session, we would have more data for statistical robustness if the project was completed before the next session. Some committee members questioned MDT's role in this type of research. Fran indicated OPI was education-focused and didn't have funds for evaluation. It was suggested evaluation should be a requirement of the legislation. Sue noted the MDT funding request is for \$18,960. The total project cost is \$32,256 with match from OPI and WTI totaling \$13,300. Also, Priscilla asked how the effect of the GDL would be teased out of the research results from other factors, such as implementation efforts of the highway safety plan.

Mike Bousliman moved to recommend to Jim funding this project at \$18,960. Jeff Ebert seconded the motion. The motion passed with two votes opposing the motion. Debbie Alke and Lynn Zanto voted against the motion.

**The Management Team will take this proposal to Jim for final funding approval.**

b. New Arch Bridge Technology for Short Spans (10-002)

Kent Barnes was present to discuss this proposal on behalf of the Technical Panel, which recommends funding this project.

The purpose of this project is to evaluate cost-effective solutions for constructing short-span vehicle crossing structures in Montana. Kent says he fully anticipates implementing the results of this project in a demonstration project as soon as results are available.

Dwane made a motion to recommend to Jim funding this project at \$43,278. Jon Swartz seconded the motion. The motion passed with all present voting in favor of the motion.

**The Management Team will take this proposal to Jim for final funding approval.**

c. Next Generation Transportation Construction Management – Pooled-Fund Study

Paul Jagoda was present to discuss this pooled-fund study. The purpose of this project is to: 1) improve the efficiency of the delivery of transportation projects such as through the use of appropriate project delivery methods, contracting methods and contract management provisions, new technology, and new communication and documentation practices; 2) improve the quality of construction through the use of advanced construction management tools, practices, and performance measures; and 3) improve risk management procedures. Some of the deliverables anticipated from this study are: 1) alternative contracting selection manual, documenting consistent definitions of project delivery systems, procurement methods, and contract management methods; 2) information sharing of lessons learned on alternative contracting practices; 3) development of experimental or pilot projects to test new methodologies; 4) information sharing on new and emerging project delivery strategies such as design-build, public-private partnerships, construction manage at-risk, alliancing, and early contractor involvement; 5) information sharing on new construction management techniques to improve the efficiency of delivering projects; and 6) the creation of an updated guide for improving constructability reviews and implementation procedures in both traditional and non-traditional delivery systems.

Dwane asked Paul about the sponsor and lead state for the study. FHWA is the sponsor and Colorado is the lead state. Dwane stressed the importance of the project addressing rural issues and results in benefits to MDT. Sue indicated this is one of the benefits of paying to play. We can make sure Montana issues are addressed.

Dwane made a motion to recommend to Jim funding this pooled-fund study at \$10,000 per year for three years and a total of \$30,000. Lynn seconded the motion. All present voted in favor; the motion passed.

**The Management Team will take this proposal to Jim for final funding approval.**

d. Performance-Based Evaluation of Advanced Warning Systems Using a Virtual Intersection Test-Bed (10-006)

Duane Williams presented this proposal on behalf of the Technical Panel which recommends funding this project.

The purpose of this project is to use an advanced driving simulator to develop a virtual test bed within which to collect driver data in response to different types of advance warning signs and timing algorithms. The results will inform performance-based design decisions and MDT policy on intersection signing.

Dwane questioned the \$105,220 cost. He said it seemed high to him. The non-resident tuition, in-state travel, and simulator rental were specifically questioned. It was noted contracts are on a cost reimbursement basis; if the funds are not spent they are not dispersed. Given this, Jerry indicated the most important consideration in hiring graduate students for projects is quality. If Montana students are available; they are hired. Travel was budgeted at \$1,000 for three trips. Travel at state rates is required and, again, if the funds are not spent, they are not paid out. Jerry indicated the simulator rental rate was discounted for this project. A suggestion was made to use a generic scenario to decrease project cost. Also, it was noted by developing a test bed, there will be about a \$50,000 cost savings for future projects.

Dwane indicated our highest priority is single vehicle run-off-the-road accidents, not accidents as a result of advanced warning signals. Duane indicated this project is more to help with consistency in the use of advanced warning signals across the state to give motorists a consistent message and after development of the virtual test bed it can be used for other human factors studies in the future. It was mentioned there is a project in Idaho looking at the cultural issues of single vehicle run-off-the-road accidents.

Dwane made a motion to reject this proposal. Mike seconded the motion. The motion passed with one dissenting vote. Jon opposed the motion and indicated he would have liked to see as proposal revised based on the comments discussed today.

Jerry mentioned the WTI simulators may be useful for visualization in design. Dwane indicated that was a possibility and further conversations should occur.

e. Testing & Evaluation of Recovered Traction Sanding Material (09.008)

Justun Juelfs was present to discuss this project on behalf of the Technical Panel, which recommends this proposal for funding. Justun provided a hand out with images and issue listings regarding clean up and disposal of traction sanding material.

Although our use of this material has decreased, we will likely continue to use it for winter maintenance. Recycling may be a viable option to offset a portion of the total cost as well as enhancing MDT's image. Many sites are running out of suitable disposal

areas. The purpose of this project is to evaluate various alternative recycling options with cost/benefit analyses.

Jon made a motion to recommend to Jim funding this project at \$52,890. Debbie seconded the motion. The motion passed with all present voting in favor of the motion.

**The Management Team will take this proposal to Jim for final funding approval.**

6. Implementation/Technology Transfer: None
7. Department/Division Hot Topics – RRC Members Roundtable Discussion

No discussion.

cc: Craig Abernathy/Research Programs  
Kent M. Barnes, P.E./Bridge Bureau  
Kevin Christensen/Highways and Engineering Division  
Kris Christensen/Research Programs  
Bill Cloud/Data and Statistics Bureau  
Tim Conway, P.E./Consultant Design Bureau  
Lisa Durbin/Construction Administration-Bureau  
Mike Dyrdaahl/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  
Doug McBroom/Multimodal Programs Bureau  
Ray Mengel/District Administrator-Glendive  
Doug Moeller/District Administrator-Missoula  
Suzy Price/Contract Plans Bureau  
Timothy W. Reardon/Legal Services  
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  
Duane E. Williams, P.E./Traffic & Safety Bureau  
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