

MEMORANDUM

To: RRC Members
Debbie Alke, Administrator/Aeronautics Division
D. John Blacker, Administrator/Maintenance Division
Monte N. Brown, Administrator/Administration Division
Robert E. Burkhardt/Federal Highway Administration
Dick Clark, Administrator/Information Services Division
Jim Currie, Deputy Director/Department of Transportation
Loran Frazier, P.E., Acting Administrator/Highway and Engineering Division
Drew F. Livesay, Administrator/Motor Carrier Services Division
Jim Lynch, Director/Department of Transportation
Sandra S. Straehl, Administrator/Transportation Planning Division

From: Susan C. Sillick, Manager
Research Programs

Date: February 23, 2005

Subject: Summary of Minutes from February 22, 2005 RRC Meeting

The following RRC members were present: Debbie Alke, Monte Brown, Dick Clark, Loran Frazier, Drew Livesay, and Sue Sillick.

1. **Budget Report** – Previously distributed; no discussion.
2. **Research Project – current listing** – Previously distributed; no discussion.
3. **Reports:** Available Upon Request

3a. Implementation Plan for Wildlife Mitigation Measures Along Highway 83 in the Seeley-Swan Valley, Montana: Animal-Vehicle Collisions and Habitat Connectivity – Progress Report – January 2005

3b. Effects of Defensive Vehicle Handling Training on Novice Driver Safety. Phase I: Preparation for Advanced Driver Training – Progress Report – January 2005

3c. Potential Effects of Highway Mortality and Habitat Fragmentation on a Population of Painted Turtles – Progress Report – January 2005

3d. Evaluation of Wildlife Crossing Structures on US Highway 93 Evaro to Polson – Progress Report – January 2005

3e. Bat Use of Bridge Structures in the MDT Billings District: A Pilot Study – Progress Report – January 2005

3f. *The Effects of Landscape Features and Transportation Corridors on Movements and Habitat-Use Patterns of Lynx and Wolverines* – Progress Report – January 2005

3g. *Pavement Performance Prediction Models* (98.003) – Progress Report – January 2005

3h. *Ride Specification Review* (03.002) – Progress Report – January 2005

3i. *Evaluation of Organic Matter Addition and Incorporation on Steep Cut Slopes, Phase II* – Progress Report – January 2005

3j. *LTAP*- Progress Report – January 2005

4. **Contract Extensions:** None

5. **Proposals:**

5a. *Industry Best Practices (checklists, process metrics and templates) for Application Development Processes*

Marlin Sander/Information Services Division attended the meeting to discuss this proposal.

This research includes: 1) thorough analysis of the existing MDT Software Development Life Cycle (SDLC) data collection instruments, identify areas, which are incomplete, inconsistent, or inadequate to meet the needs of MDT, or fail to meet industry best practices recommendations; 2) propose modifications to correct those problems so that all instruments have a consistent standard format, meet industry best practices standards, designed to avoid duplication of information and effort, properly relate business processes to technical requirements, provide adequate foundations for technical decisions, and accurately represent the business process needs of MDT; 3) provide documentation on the use of instruments; and 4) reduce high-level templates to a level of detail sufficient for the purposes of MDT

UM-Missoula, and MSU-Bozeman (WTI and Computer Science Department) were contacted and submitted proposals for this project. Marlin indicated that the proposal from Dr. Gary Harkin's/MSU-Bozeman was the best proposal.

Loran Frazier made a motion to accept Dr. Harkin's proposal for \$23,460.00. Debbie Alke seconded the motion. All present voted in favor of the motion.

6. **Implementation/Technology Transfer:** None

7. **2005 Research Solicitation:** Attached

2005 Research Solicitation

| SUBJECT AREA | PROB NO. | PROBLEM TITLE |
|-----------------|----------|--|
| Environmental | 5.006 | Evaluation of fence modifications to exclude deer and elk from highways |
| Design | 5.008 | Design of a vertical shape portable concrete barrier |
| Human Resources | 5.009 | Business Market Analysis |
| Environmental | 5.010 | Compost application for optimized vegetation response |
| Planning | 5.013 | Integrating public/specialized transportation information into the 2-1-1 system |
| Traffic | 5.014 | Field Evaluation of passing lane operational benefits on two-lane rural roads in Montana |
| Planning | 5.015 | Logistics and marketing research in support of container on flatcar shuttle train on BNSF mainline to Port of either Seattle or Tacoma |

Following a discussion on the compiled ratings, Debbie Alke made a motion to move all research topics forward to Technical Panels for further consideration. Loran Frazier seconded the motion. All present voted in favor of the motion.

cc: Craig L. Abernathy/Research Programs
Suzy Althof/Contract Plans Bureau
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
John Horton/Right-of-Way Bureau
Paul Jagoda, P.E./Construction Engineering Bureau
Michael P. Johnson/District Administrator-Great Falls
Dwane Kailey, P.E./Acting District Administrator-Missoula
Russell G. McDonald/Human Resources Division
Ray Mengel/District Administrator-Glendive
Victoria A. Murphy, CPA, CFE/Highway and Engineering Division
Jeanne Nydegger/Research Programs
Timothy W. Reardon/Legal Services
Jean A. Riley, P.E./Environmental Services Bureau
Matt Strizich, P.E./Materials 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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