

MEMORANDUM

To: RRC Members
Debbie Alke, Administrator/Aeronautics Division
D. John Blacker, Administrator/Maintenance Division
Mike Bousliman, Administrator/Information Services Division
Monte N. Brown, Operations Manager/Business Process Solutions Unit
Robert E. Burkhardt/Federal Highway Administration
Jim Currie, Deputy Director/Department of Transportation
Jeffery M. Ebert, P.E./District Administrator-Butte
Larry Flynn, Administrator/Administration Division
Loran Frazier, P.E., Administrator/Highway and Engineering Division
Jim Lynch, Director/Department of Transportation
Dennis Sheehy, Administrator/Motor Carrier Services Division
Sandra S. Straehl, Administrator/Rail, Transit, and Planning Division

From: Susan C. Sillick, Manager
Research Programs

Date: December 11, 2007

Subject: Summary of Minutes from the July 31, 2007 RRC Meeting

The following RRC members were present: Debbie Alke, John Blacker, Mike Bousliman, Monte Brown, Bob Burkhardt, Bill Cloud (for Sandy Straehl), Jim Currie, Loran Frazier, Dennis Sheehy, and Sue Sillick.

1. **Budget Report** – Attached
2. **Research Project – current listing** – Attached

2a. **Development of Wildlife Crossing Structures for Small and Large Species and Analysis of their Effectiveness** (04.016) – Request for Approval-in-Concept for Scope of Work - Attached

Pat Basting/Missoula-Environmental met with the RRC to request an Approval-in-Concept for this project on behalf of the Technical Panel so that an RFP can be issued.

The purpose of this project is to determine the effectiveness of animal crossing structures and associated wildlife fencing in providing improved public safety and permeable roadways by investigating animal-vehicle collisions and animal crossing structure usage before and after construction. White-tail deer is the species of focus for this investigation; however, it is likely that data on other species will also incidentally be collect and may be used.

This project differs from US 93 North as it consists of shorter fencing segments due to the terrain; however it will be conducted in a rigorous statistical manner consistent with US 93 North to allow the data to be combined for improved rigorous statistical analysis.

The data for US 93 South will be collected for at least three years pre-construction and post-construction.

John Blacker made a motion to proceed with an RFP. Mike Bousliman seconded the motion. All present voted in favor of the motion.

3. **Reports:** Available Upon Request

3a. **Axial Capacity of Piles in Intermediate Geomaterials (IGM)** – Progress Report – May 2007

3b. **Bozeman Pass Wildlife Monitoring** - Progress Report – May 2007

3c. **Disparity/Availability Study (6.010)** – Progress Reports – May and June 2007

3d. **Highway Project Cost Estimating Best Practices (04.018)** – Progress Reports – March, April, May and June 2007

3e. **LTAP** – Progress Report – April 2007

3f. **Developing a One Stop Shop for Traveler Information in Montana (05.013)** – Progress Report – May and June 2007

3g. **Summer Transportation Institute** – Progress Reports – May and June 2007

3h. **Research in Support of Container/Trailer on Flatcar in Intermodal Service on Montana's Class 1 Railroads (05.015)** – Progress Report – June 2007

3i. **Automated Cost Recovery: A Feasibility Study** – Progress Report – June 2007

3j. **Evaluation of Methods for Estimation of Bridge-Pier Scour for Coarse Bed Streams Based on Measured Pier Scour in Montana** – Progress Report – June 2007

3k. **Determining the Current Rates of Motor Fuel Tax Evasion for the State of Montana** – Final Report – FHWA/MT-06-007/8180

3l. **Determining the Current Rates of Motor Fuel Tax Evasion for the State of Montana** – Summary Report 8180

3m. Highway Construction On-The-Job Training Program Review – Final Report
- FHWA/MT-07-007/8117-28

3n. Warm Water Species Fish Passage in Eastern Montana Culverts – Final Report
– FHWA/MT-07-009/8182

3o. Fish Passage in Montana Culverts: Phase II – Passage Goals – Final Report
– FHWA/MT-07-010/8181

3p. Experimental Assessment of Aggregate Surfacing Materials – Final Report
– FHWA/MT-07-011/8117-30

4. **Contract Extensions:** None

5. **Proposals:**

5a. Fuel Tax Revenue Forecasting

Bob Turner/Fuel Tax Management attended the meeting on behalf of the Technical Panel which recommends this proposal for funding.

In Montana, more than 50 percent of the highway funding comes from motor fuel taxes. Given the role fuel tax revenues play in transportation investments, it is important to understand the effects of increased fuel prices on fuel consumption.

The expected slowing in the growth of vehicle miles of travel (VMT) and improved fuel efficiency will likely accelerate erosion of the revenue generated from fuel tax, widening the gap between transportation revenues and the cost of maintaining and building transportation infrastructure. Therefore, many states have begun to re-examine their forecasts of fuel tax revenues and the long-term health of their transportation funding.

With the revenue from gas tax crucial to the building and upkeep of Montana's highways, this project is proposed in order to update our financial planning.

Upon discussion by the RRC members, the vote was put on hold until information can be obtained to clarify several points.

- ▶ Can Cambridge Systematics provide MDT with Montana specific tools or will it be canned information from other states?
- ▶ Who is going to replace Dan Hodge on the Cambridge Systematics team?
- ▶ Could Montana look at studies from other states internally?

- ▶ Will this project tell us at what point the cost of gas affects revenue or becomes inelastic?
- ▶ How does this proposal tie into alternative fuels?
- ▶ Does the Governor's Budget Office fuel forecast take into consideration the same details as this study?

5b. I-15 North Corridor-Canadian Truck Load Bridge and Roadway Analysis (06.003)

Dan Hill/Pavement Analysis attended the meeting on behalf of the project Technical Panel to recommend funding for this proposal.

The Montana Department of Transportation (MDT) is investigating the impacts of allowing Canadian B-trains operating at the weight limits used in Alberta, Canada to travel on Interstate Highway 15 between Great Falls and the Canadian border. In an 8 axle configuration, the maximum allowable gross weight of a B-train in Alberta of 140,000 pounds (Alberta Government, 2007) is significantly higher than the allowable gross weight on a comparable 8 axle Montana A-train of 117,000 pounds. Therefore, it is expected that users and providers of transportation services may make adjustments in their operations to take advantage of this increased cargo capacity. Subsequent impacts associated with these adjustments range from changes in the composition of the traffic stream along this corridor, to changes in the demands the new vehicle stream places on the highway infrastructure of the corridor, to changes in the economic activity of the industries associated with the specific freight hauled by these vehicles. Investigation of these various impacts is essential in assessing the feasibility of moving forward with this initiative. Furthermore, based on the assessment of the impacts of extending the operation of Canadian B-trains on this specific segment of I-15 to Great Falls, it may be possible to obtain an indication of the economic impacts that would be realized if their operations were further extended along this corridor.

The specific objectives of the project are:

1) to determine the expected changes in truck traffic on the Interstate 15 corridor between Great Falls and the Canadian border if Alberta Canadian B-trains are allowed to operate on this section of highway (note that such vehicles can already operate on this corridor between Shelby, MT and the Canadian border, which is within the study area).

2) if an increase in truck traffic is expected, to further determine the economic impact of this increase in the Great Falls area.

3) depending on the outcome of the analysis for Great Falls (i.e., if an economic benefit is expected), to determine the benefit expected in other Montana communities if the corridor is opened to heavier B-trains statewide.

4) to identify the issues, if any, that motor carriers are currently facing along this corridor in filling backhauls.

This information will be provided to MDT for their use in further study of permitting B-trains operating at Alberta weight limits to travel on the I-15 corridor to Great Falls.

Jim Currie made a motion to fund this project at \$34,366.00 (MDT cost). Loran Frazier seconded the motion. All present voted in favor of the motion.

6. Implementation/Technology Transfer:

6a. Warm Water Species Fish Passage in Eastern Montana Culverts

Dr. Joel Cahoon/MSU, Bozeman presented the results of this project, including a recommended design procedure. See http://www.mdt.mt.gov/research/docs/research_proj/fish_passage_warm/final_presentation.pdf for more information.

He noted that the FHWA had just published a new culvert design report and is also working on a new design manuals. The results from both of these two projects are included in both of these documents.

6b. Fish Passage in Montana Culverts: Phase II – Fish Passage

Dr. Joel Cahoon/MSU, Bozeman presented the results of his project including a recommended design procedure. See http://www.mdt.mt.gov/research/docs/research_proj/fish_passage/phaseII/final_presentation.pdf for more information.

7. Department/Division Hot Topics – RRC Members Roundtable Discussion – No discussion

cc: Craig L. Abernathy/Research Programs
Lisa Autio/Research Programs
Kent M. Barnes, P.E./Bridge Bureau
Bruce H. Barrett/District Administrator-Billings
Kevin Christensen/Highways and Engineering Division
Lisa Durbin/Construction Administration-Bureau
Mike Dyrdaahl/Highways and Engineering Division
Paul R. Ferry, P.E./Highways Bureau
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Paul Jagoda, P.E./Construction Engineering Bureau
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Michael P. Johnson/District Administrator-Great Falls
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