

State Planning and Research Program Quarterly Report

PROJECT TITLE: TPF-5 (129) Recycled Unbound Pavement Materials

OBJECTIVES: To investigate the use of recycled materials in constructing unbound pavement layer. To identify the critical material properties of these recycled materials (strength, stiffness, drainage, volume changes, unsaturated properties, etc.) and develop a testing protocol that can accurately predict pavement performance. To determine what, if any, environmental concerns there may be surrounding the use of these recycled materials.

PERIOD COVERED:

January 1, 2007 – March 31, 2008

PARTICIPATING AGENCIES:

Minnesota, Texas, Ohio, Wisconsin, Michigan, California

PROJECT MANAGER:

Benjamin Worel

LEAD AGENCY:

Mn/DOT

PRINCIPAL INVESTIGATOR:

Craig Benson

University of Wisconsin / RMRC

SP&R PROJECT NO:

TPF-5 (129)

PROJECT IS:

☐ Planning
☒ Research &
Development

ANNUAL BUDGET:

\$390,000 Total (5 years of funding)

PROJECT EXPENDITURES TO DATE:

Past Quarters

- June 30, 2007 TAP meeting

This Quarter

- No expenditures

WORK COMPLETED:

The design and strategy for the instrumentation and construction for MnROAD have been finalized. Bids were received and are in the process of being accepted (in January 2008). Again the costs of the instrumentation and construction are being paid out of Minnesota SPR funds. Construction expected to start after May 1st.

A research team was selected and a work plan was developed/reviewed/updated to the TAPs approval. The PI and the University of Wisconsin is working to develop a contract with the 4th revision. This will be posted once the contract is complete this next quarter (May 2008).

SUMMARY OF ACTIVITIES EXPECTED TO BE PERFORMED NEXT QUARTER:

1. Contract will be established and work will begin with the University of Wisconsin (May 2008).

STATUS AND COMPLETION DATE:

1. Future TAP meeting is planned at MnROAD for June/July 2008. This will allow the contractor to start the literature review and MnROAD construction will be going for review. A December 2008 meeting is planned in Madison, WI to visit the UofWI lab facilities and the RMRC center.

TPF-5(129)
Recycled Unbound Pavement Materials (MnROAD Study)
Minnesota Lead State

Commitments & Contacts

Currently Funding = \$450,000 (only \$390,000 committed*)
\$350,000 Contract (held \$25,000 WI*)
+ \$25,000 State Travel/Meetings (held \$5,000 WI*)
+ \$50,000 Monitoring (held \$30,000 WI*)

| | CA | MI | MN | OH | TX | WI | |
|---------------------------------------|---|--|---|--|---|--|------------------|
| 2007 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | |
| 2008 | 15,000 | 15,000 | 15,000 | 15,000 | 15,000 | 0* | |
| 2009 | 15,000 | 20,000 | 15,000 | 15,000 | 15,000 | 0* | |
| 2010 | 15,000 | 25,000 | 15,000 | 15,000 | 15,000 | 0* | |
| 2011 | 15,000 | 0 | 15,000 | 15,000 | 15,000 | 0* | Totals |
| Total | 75,000 | 75,000 | 75,000 | 75,000 | 75,000 | 75,000* | \$450,000 |
| Obligated FMIS as of (1/25/08) | 0*** | 30,000 | 75,000 807,352** | 30,000 | 15,000 | 15,000 | \$165,000 |
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* Wisconsin only commits one year at a time but is in the study fully funded – we need to discuss this issue.

** Minnesota is also using its own extra SPR funding for its construction costs.

*** Need to work on State Obligations (get money in the fund).