

Meeting Minutes

Wisconsin Highway Research Program
Flexible Pavement TOC
WisDOT Truax Center
March 11, 1999

Call to Order

Meeting was called to order at 1:30pm by Len Makowski, committee chairman.

Meeting Minutes Approval

The committee approved the February 12, 1999 meeting minutes.

Meeting Attendees

Those in attendance were Len Makowski, Tom Brokaw, Tom Amon, Jack Weigel, Judie Ryan, Wes Shemwell, Bob Schmitt, and Jim Crovetti. The following is a list of committee members.

Name	Representation	Phone	Fax	E-mail
Len Makowski	WisDOT	414-548-5618	414-548-6465	Leonard.Makowski@dot.state.wi.us
Tom Brokaw	WisDOT	608-246-7934	608-246-4669	Thomas.Brokaw@dot.state.wi.us
Hussain Bahia	UW-Madison	608-265-4481	608-262-5199	Bahia@engr.wisc.edu
Tom Amon	B.R. Amon and Sons	414-723-2547	414-723-2666	
Jack Weigel	Payne and Dolan	414-524-1732	414-524-1730	JWeigel@PayneandDolan.com
Judie Ryan	WisDOT	608-246-5456	608-246-4669	Judith.Ryan@dot.state.wi.us
Wes Shemwell	FHWA	608-829-7521	608-829-7526	Wesley.Shemwell@fhwa.dot.gov
Bob Schmitt	UW-Platteville	608-342-1239	608-342-1566	Schmitro@uwplatt.edu
Bill Poston, Jr.	Earth Tech	608-828-8154	608-836-9767	Bill_poston@earthtech.com
Jim Crovetti	Marquette Univ.	414-288-7382	414-288-7521	James.Crovetti@Marquette.edu
Erv Dukatz	Mathy	608-779-6392	608-781-4694	Edukatz@mathy.com

WisDOT District Research Projects Survey

1. Len Makowski distributed a memo soliciting potential research projects from the WisDOT districts and a tabulation of district responses. A ranking system identified the following research projects in order of priority:
 - (1) Minimum pavement thickness for Superpave mixes;
 - (2) Rational procedure for determining structural coefficients of existing flexible pavements;
 - (3) Evaluation of Superpave gyratory compaction efforts for medium to low volume traffic loadings;
 - (4) Use of different asphalt binder grades for different lifts;
 - (5) Determine the temperature and density relationship after completed rolling of hot mix asphalt; and
 - (6) *What is the relationship between asphalt densities and long-term pavement performance.
*Suggested research project by districts (not by TOC Flexible Pavement Committee)

2. There was discussion among the committee of which research projects should be selected.
 - a. Judie Ryan stated there is a layer thickness question for the Superpave gyratory compactor. There is a question of whether the gyratory mold should have end-plate materials that simulate actual field compaction conditions (sand, crushed concrete, etc.). There is also a question of whether 92% density is achievable over all types of bases without being detrimental to the mix.
 - b. The committee agreed that three projects should be selected, and that draft RFPs be written.
 - c. Jim Crovetto suggested that each project be in the \$30,000 - \$40,000 range to meet the budget. If there is additional research dollars, add a fourth project. If the committee feels strongly about five research projects, all should be recommended for RFPs.
 - d. Len Makowski raised the question of whether to phase larger research projects that are above \$40,000 or greater than one year in duration.
 - e. Tom Amon stated that we must meet the research objectives and remain within budget.
 - f. Wes Shemwell suggested that refinements be made to the RFPs by the steering committee to meet budget limitations.
 - g. Tom Amon observed that some projects may require a lower budget since the research would involve data collection and analysis under existing field testing protocols.
 - h. Jack Weigel stated that NCHRP funding for research projects is a function of available funding and time to complete the study.

Structural Coefficient Study

1. Jim Crovetto described a “look up” value. Must provide designers with specific values, and how to achieve the value. Need to define the number with respect to soil support. Need a process to characterize existing pavements when using the “look up” value.
2. Designers may have a recommended thickness difference of two inches for a particular pavement design.
3. Wes Shemwell noted that there is considerable difference in thickness coefficients (ex. – NHI and Asphalt Institute). This study would assist districts when using the current pavement design manual.
4. Lenny Makowski questioned the deliverables for this study. Are physical tests needed to test the road? Then, what would be the next level of analysis.
5. Jim Crovetto and Tom Amon discussed when a threshold is reached. Is this a policy question?
6. There was discussion of the study duration. Possibly a one year study, or 6 to 8 month study, and conducted in a single phase. Jim stated that 5 days of field data collection are needed.
7. Tom Amon was in favor of a two-year study if it meets the study objectives (\$40,000 for one year, or \$80,000 for 2 years). Describe phases to the steering committee for budgeting.
8. Jim Crovetto cautioned that we must look at funding from the next research cycle.

Selecting and Budgeting Three Research Studies

1. Lenny Makowski suggested that three research studies be selected and budgeted, then draft RFPs should be prepared and discussed among the committee.
2. The committee agreed that the structural coefficient study be selected with a budget of \$45,000 and duration of one year.

3. Tom Amon and Jack Weigel stated that the density/temperature relationship after cold-rolling be investigated. WisDOT districts did not rank this study within the top three, however, Tom, Jack, and Bob Schmitt felt this issue is important to both WisDOT and contractors so that an appropriate level of compaction is achieved.
4. The committee decided to fund the density/temperature study with a budget of \$35,000 and one year duration. This study would involve data collection using existing field testing methods. Additional density testing would most likely be necessary, and WAPA would be willing to donate additional density testing within reasonable limits.
5. The third project selected was the determination of minimum pavement thickness for Superpave mixes with a budget of \$25,000 for a one year duration.
6. A 7-step format was distributed for preparing RFPs.
7. The following table summarizes the studies selected for RFPs, budget, duration, total phases, and committee member drafting the RFP. Committee members writing RFPs are asked to provide the other committee members with a draft RFP prior to the next meeting.

Project Index (1)	Research Description (2)	Budget (3)	Duration (4)	Total Phases (5)	RFP Writer(s) (6)
1	Minimum pavement thickness for Superpave mixes	\$25,000	1 year	1	Judie Ryan
2	Rational procedure for determining structural coefficients of existing flexible pavements	\$45,000	1 year	1	Jim Crovetti
3	Determine the temperature and density relationship after completed rolling of hot mix asphalt	\$35,000	1 year	1	Tom Amon Bob Schmitt

Future Meetings

1. Future meeting dates are:
 - a. Thursday April 8 at 2pm
 - b. Thursday May 13 at 2pm
 - c. Thursday June 10 at 2pm (if necessary)
2. Meetings will be held at WisDOT Truax Office.

Meeting Adjournment

The meeting was adjourned at 3:30pm.