IOWA DEPARTMENT OF TRANSPORTATION

To Office Iowa Highway Research Board Attention Regular and Alternate Members
 Date
 February 15, 2007

 Ref. No.
 080.31

From Mark Dunn

Office Research and Technology Bureau

Subject Board Meeting on February 23, 2007

The February meeting of the Iowa Highway Research Board will be held **Friday**, **February 23**, 2007 at 9:00 a.m. at the Iowa Department of Transportation, Materials East/West Conference Room, Ames, Iowa.

AGENDA

- 1. Agenda review/modification
- 2. Minutes from the January, 2007 meeting
- 3. Update TR-544, "Technology Transfer Toolbox: A Research Implementation How-To Guide," (Pooled Fund with Pennsylvania DOT) Ed Engle, IA DOT (15 mins)
- 4. Problem Statement *Effects of Salt Pre-Wetting and Anti-Icing on the Performance of Cracked Bridge Decks*, Fouad Fanous, ISU (15 mins)
- IHRB 2nd Solicitation 06-07 RFP Discussion: RFP 06-12, *Improving Safety for Slow Moving Vehicles on Iowa's High Speed Rural Roadways*, Neal Hawkins, ISU/CTRE (\$100,000)

RFP 06-10, *Development of LRFD Design Procedures for Bridge Piles in Iowa*, Sri Sritharan, ISU/CTRE Bridge Engineering Center (\$250,000)

- 6. Proposal Structural Design, Construction and Evaluation of a Prestressed Concrete Bridge Using Ultra High-Performance Concrete Pi Girders, Terry Wipf, ISU/CTRE (\$80,000)(15 mins)
- 7. Selection of proposals from the Innovative Projects RFP for presentation at the April meeting; estimated funding available: (60 minutes)
- 8. Develop strategic research needs for FY 07-08. Please submitted topics to <u>mark.dunn@dot.iowa.gov</u> prior to the meeting. Deadline is March 6, 2007. (5 minutes)
- 9. Discuss May Travel Meeting options (5 mins)
- 10. New business
- 11. Adjourn

The April, 2007 meeting of the Iowa Highway Research Board will be held on **FRIDAY**, April 27, 2007 at 9:00 a.m. in the East/West Materials Conference Room at the DOT. MJD

INNOVATIVE PROPOSALS LIST FEBRUARY 2007

Automated Monitoring of Bank Erosion Using a Photo-Electronic Erosion System, Thanos Papanicolaou, The University of Iowa (\$46,135)

Ethanol Plant By-Product Uses for Pavement Geo-Materials Stabilization, Halil Ceylan, ISU/CTRE (\$189,014)

Embedded Micro-Electromechanical (MEMS) Sensors and Systems for Monitoring Highway Structures and for Infrastructure Management, Halil Ceylan, ISU/CTRE (\$99,571)

Analysis of Available Field Data on Scour Around Bridge Abutments and Comparison of Recently Acquired Laboratory Data Through NCHRP 24-20 (Estimation of Scour at Abutments), Tatsuaki Nakato, The University of Iowa/IIHR (\$57,789)