



IOWA HIGHWAY RESEARCH BOARD (IHRB)

Minutes of February 28, 2025

Regular Members Present

M. Nop
A. Buss
D. Harness
J. DeVries
R. Koester
R. Knoche
D. Sanders
A. Bradley
T. Roll
A. Clemons
B. Wilkinson
B. Skinner

Alternate Members Present

J. Ferro

Members with No Representation

J. Thorius
A. Kersten

Executive Secretary

V. Goetz

Administrative Assistant

T. Bailey

Visitors

Lee Bjerke
Khyle Clute
Justin Dahlberg
Kejin Wang
Shauna Hallmark
Mohamed ElBatanouny

Iowa County Engineers Association
Iowa Department of Transportation
Iowa State University/InTrans
Iowa State University/InTrans
Iowa State university/InTrans
Wiss, Janney, Elstner Associates Inc.

1. Agenda review/modification
Common consent

2. Minutes Approval from the December 03, 2025 meeting
Common consent

3. TR-791, Final Report, "Bridges Designed for Minimum Maintenance", Mohamed Elbatanouny, Wiss, Janney, Elstner Associates, Inc., \$350,000, (20 Min)

Q. Did you classify all the roadways according to how much salt for the State Routes?

A. We looked at different bridge types in a rural area both were maintained very high. We spoke to a maintenance person; one was maintained 4 times a day near a school and the other was maintained multiple times because someone was killed there a few years ago.

Q. There were 3 levels of how much we salt, how many bridges are in each of these areas and what are the expected life of each one right now as we design it along with what changes would we need to make to meet the 75 years? Is this part of the implementation?

A. Yes, working with Iowa experts and subject matter experts to look at design manual. Coming up with an area where we have medium sized risk, like rural areas and urban areas.

Q. Will the STIC project that's focused on implementation also be expanded to the bridge approaches that you mentioned wasn't fully implemented yet?

A. The first step is a structure that has two layers of reinforcement. It is designed to need nothing under it to be supported, like a small bridge. The focus of this is to be a concrete element.

Motion to Approve by A. Buss 2nd by R. Knoche

Motion carried with 12, 0, 0

Member Joined.

4. TR-807, Final Report, "Beneficial Use of Iowa Waste Ashes in Concrete through Carbon Sequestration", Dr. Kejin Wang, Iowa State University, \$60,000, (20 Min)

Q. Between the different sources, do you have the same concern for variability in the effect of carbonization on just production variability?

A. We did not look into the variation effects.

Motion to Approve by R. Koester 2nd by J. DeVries

Motion carried with 13, 0, 0

5. FY 25 STIC Project Ranking

Motion to Approve the top ranked idea by J. DeVries 2nd by T. Roll

Motion carried with 12, 0, 0

- a. **STIC-4259 - Secondary Road Implementation of Stiffness Modulus Data for Unpaved Roads, \$156,250**
- b. STIC-4256 - Evaluating the Effectiveness of Modified Culverts for Flood Mitigation in Iowa, \$156,250
- c. STIC-4253 - Helical Piles for Low Volume Road Bridges, \$125,000
- d. STIC-4263 - Implementation of TR-791 – Bridges Designed for Minimum Maintenance, \$156,250
- e. STIC-4262 - Analysis of Friction Characteristics using the Scanning Electron Microscope, \$90,000

6. FY 25 AID Project Ranking State Applications

Motion to Approve the top rank idea for each category by T. Roll 2nd by A. Clemons

Motion carried with 13, 0, 0

- a. **AID-4257, Continuation of the collection of unpaved road strength modulus values using validated intelligent compaction (VIC) technology - County Sub-Recipient Application**
- b. **AID-3484, Self-Cleaning Culvert Mitigation Pilot – Iowa DOT Application**
- c. AID-4006, Validated Intelligent Compaction Roller for Iowa
- d. AID-4269, Statewide Demonstration of CAV Data-Driven Signal Corridor Prioritization and Signal Timing Recommendation

7. Granular Research Road Partnership with Camp Dodge - \$500,000, Lee Bjerke, ICEA Service Bureau.

Motion to Approve by B. Skinner 2nd by A. Clemons
Motion carried with 12, 0, 0

8. New Business

- Jacob Thorius is the new Vice Chair for 2025 and will be Chair in 2026.
- March IHRB meeting will be held in Iowa City, please state if you are not attending.
- April IHRB meeting will be held with Iowa State University.
- Making efforts to increase our communications with our research projects with our YouTube channel. All IHRB presentations will now be on our YouTube channel as recorded webinars.
- A consultant has assisted in cleaning up our research projects in the national database.
- Purchased a knowledge management software with the goal of reestablishing a research library to support our projects.
- Last September, we had an Innovation Peer Exchange and learned about an AI product that converts a 200-page research report into an audio conversation or podcast. It transformed into 10 minutes creating voice actors in a discussion format. Awaiting State of Iowa AI Use policy, but this is a new communication effort we will likely explore.
- In July, IHRB will be celebrating our 75 year Anniversary of our first meeting. IHRB selected a special logo to use in 2025.

9. Adjourn

The next regular meeting of the Iowa Highway Research Board is scheduled for March 28, 2025 at the Driving Safety Research Institute (DSRI), College of Engineering, 2401 Oakdale Blvd, Iowa City, Iowa 52242

For a list of current members or for more information about the Iowa Highway Research Board visit our website <https://iowadot.gov/research/Programs-and-Partnerships/Iowa-Highway-Research-Board>. To submit Project Ideas visit <https://ideas.iowadot.gov/>
TB/VG