

IOWA HIGHWAY RESEARCH BOARD (IHRB)
Minutes of April 30, 2021

Regular Board Members Present

D. Claman
W. Dotzler
J. De Vries
C. Burke
R. Koester
R. Knoche
A. Bradley
D. Sanders
W. Weiss
T. Roll
J. Fantz
B. Wilkinson
A. McGuire
T. Kinney

Alternate Members Present

T. Malone

Members with No Representation

Executive Secretary

V. Goetz

The meeting was held online via Microsoft Teams on April 30, 2021 at 9:00 a.m. by Chair Dave Claman with an initial number of 14 voting members/alternates.

1. Agenda review/modification – new business item to discuss

Motion to Approve by R. Koester; 2nd by A. Bradley
Motion carried with 13 Aye, 0 Nay, 1 Abstaining

2. Minutes Approval form the February 26, 2021 meeting

Correction:
Misspelling under Adjourn – Correct Misspelling of
Knoche

Motion to Approve by T. Kinney; 2nd by R. Knoche

Motion carried with 13 Aye, 0 Nay, 1 Abstaining

*** member left meeting***

- 3. Final Report: TR-758, “Use of Cold Gas Dynamic Spraying for Repair of Steel Structures”,** Behrouz Shafei, Iowa State University, \$50,000 (15 Min)
<http://publications.iowa.gov/35989>

Motion to Approve by R. Knoche; 2nd by J. DeVries
Motion carried with 13 Aye, 0 Nay, 0 Abstaining

member joined meeting

- 4. Final Report: TR-720, “Development of Bio-Based Polymers for Use in Asphalt – Phase II”,** Chris Williams, Iowa State University, \$174,998, (15 Min).
<http://publications.iowa.gov/35986>

Motion to Approve by W. Dotzler; 2nd by R. Koester
Motion carried with 14 Aye, 0 Nay, 1 Abstaining

member joined the meeting

***another member left meeting ***

- 5. Final Report: TR-723, “Implementation of the Negative Moment Reinforcing Detail Recommendations”,** Brent Phares, Iowa State University, \$149,197 (15 Min)
<http://publications.iowa.gov/35987>

Motion to Approve by R. Knoche; 2nd by D. Sanders
Motion carried with 12 Aye, 0 Nay, 2 Abstaining

*****Member joined meeting*****

- 6. Final Report: TR-746, “Impacts of Internally Cured Concrete Paving on Contraction Joint Spacing Phase II: Field Implementation of Internally Cured Concrete for Iowa Pavement Systems”,** Peter Taylor, Iowa State University, \$263,903 (15 Min)
<http://publications.iowa.gov/36060>

Discussion

V. Goetz mentioned the next phase project will look at Super Absorbent Polymers for internal curing.

Q: Is it easy to find these lightweight fine aggregates in the State of Iowa?

A: We checked for suppliers. We had a donation from Buildex north of Kansas City. Minnesota had another Supplier; Iowa does not have a natural source or local suppliers.

Q: In Washington and Winneshiek County projects, were they the same contractor? Is there an incentive for smoothness?

A: This was done as a demonstration project and, our County Engineer colleagues kindly volunteered these projects. We had two different contractors. We did get benefit as a better ride quality.

Q: Q: With reduced permeability, bridge overlays seem like a good candidate for this.

A: Yes, several studies have used this in bridge decks for the same reason producing reduced permeability.

Motion to Approve by T. Kinney; 2nd by W. Dotzler

Motion carried with 14 Aye, 0 Nay, 1 Abstaining

7. STIC Incentive 2021 New Idea Ranking:

The IHRB serves as the State Transportation Innovation Council and encourages the use of innovation to advance transportation in Iowa. Every federal fiscal year the IHRB will review proposed For more information on the STIC Incentive program, please visit:

<https://www.fhwa.dot.gov/innovation/stic/>

STIC Incentive 2021:

Results:

1. **UHPC Preservation and Repair: Peer Exchange with Iowa DOT (#3415) - \$25,000**
2. **Guidebook for Application of Polymer-modified Asphalt Overlays: from Decision-Making to Implementation (#3424) - \$40,000**
3. **Development of Digital As-Built for Use in Future Asset Management Applications (#3410) - \$50,000**
4. **e-Ticketing and Digital As-Built: implementation in rural areas (#3428) - \$40,000**
5. **2021/2022 Iowa Tribal Summit (#3418) - \$15,000**
6. **Data Driven Approaches to Identifying Multiple Streams of Information to improve TIM Training and Collaboration Opportunities. (#3425) - \$35,000**

#	Idea	Overall Rating
3415	<u>UHPC Preservation and Repair: Peer Exchange with Iowa DOT</u>	3.8
3424	<u>Guidebook for Application of Polymer-modified Asphalt Overlays: from Decision-Making to Implementation</u>	3.6
3410	<u>Development of Digital As-Built for Use in Future Asset Management Applications</u>	2.8
3428	<u>e-Ticketing and Digital As-Built: implementation in rural areas</u>	2.4
3418	<u>2021/2022 Iowa Tribal Summit</u>	2.2
3425	<u>Data Driven Approaches to Identifying Multiple Streams of Information to improve TIM Training and Collaboration Opportunities.</u>	2.0

Motion to Approve by R. Koester, 2nd by R. Knoche

Motion carried with 15 Aye, 0 Nay, 0 Abstaining

8. 13th International Low Volume Roads Conference – Funding Discussion, Nancy Whiting, Transportation Research Board

The Iowa County Engineers Association is hosting TRB’s 13th International Conference on Low Volume Roads in Cedar Rapids, IA in 2023. The Iowa Highway Research Board will become an official sponsor of the conference. Sponsorship level is for minimum of \$40,000

Motion to Approve by R. Knoche, 2nd by A. McGuire

Motion carried with 15 Aye, 0 Nay, 0 Abstaining

9. New Business

- Campaign for Innovative Project Ideas will open later this summer – more details to come.
- The IHRB will explore the possibility of visiting the Bio-Asphalt Plant located west of Ames for the September Meeting

10. Adjourn

The next regular meeting of the Iowa Highway Research Board is scheduled for Friday, June 4, 2021 at 9:00 am Online via Microsoft Teams Meeting.

Motion to Adjourn by J. DeVries, R. Knoche

Motion carried with 10 Aye, 0 Nay, 5 Abstaining

Vanessa Goetz, IHRB Executive Secretary