

IOWA HIGHWAY RESEARCH BOARD (IHRB)

Minutes of April 26, 2013

Regular Board Members Present

A. Abu-Hawash
K. Jones
V. Dumdei
R. Younie
S. Okerlund
R. Knoche

W. Weiss
J.D. King
K. Mayberry
E. Steffensmeier
R. Fangmann

Alternate Board Members Present

S. Schram
D. Sprengeler

M. Parizek

Members with No Representation

D. Schnoebelen
R. Kieffer

P. Assman
T. Wipf

Secretary - M. Dunn

Visitors

Vanessa Goetz
Lori Pflughaupt
Linda Narigon
Dan Sprengeler
Scott Schram
Jesus Rodriguez
Max Grogg
Leighton Christensen
Chris Williams
Brent Phares
Myron Parizek
Dale Harrington

Iowa Department of Transportation
FHWA
Iowa DOT Library
Iowa State University/InTrans
Iowa State University/In Trans
Benton Co.
CP Tech Center

The meeting was held at the Iowa Department of Transportation Ames Complex, Materials East/West Conference Room, on Friday, April 26, 2013. The meeting was called to order at 9:00 a.m. by Chairperson Ahmad Abu-Hawash with an initial number of 10 voting members/alternates at the table.

Minutes

Motion to approve Minutes from the March 4, 2013 meeting

Motion to Approve by 1st R. Younie 2nd W. Weiss

Motion carried with 10 Aye, 0 Nay, 0 Abstaining.

*****1 member joined the table. Total voting members = 11.**

FINAL REPORT TR-630, Rural Traffic Calming, Shauna Hallmark, ISU/In Trans, (\$55,000)

BACKGROUND

Small rural communities often lack the expertise and resources necessary to address speeding and the persistent challenge of slowing high-speed through traffic. The entrances to communities are especially problematic given that drivers must transition from a high-speed, often-rural roadway setting to a low-speed community setting.

OBJECTIVES

Evaluate low cost traffic calming measures appropriate for small communities located on major highways (2nd Phase)

- Could not physically change roadway
- Low cost
- Appropriate for Iowa conditions (small rural communities)
- Funded by Iowa Highway Research Board, Iowa DOT, and FHWA

DISCUSSION

Q: Is the LED light visible in the Daylight?

A: Surprisingly it is very visible. We have not yet compared night and day that is something we can go back and compare to see if it makes a difference.

Q: What color are the lights?

A: The lights are the same color as the sign; you do not want to give drivers a different message with the lights then the sign.

Q: Have you thought about a way to effectively communicate some of this information to the communities that might be able to use this?

A: I have worked with Keith Knapp with L-top to get information out there. The tool box itself would be helpful; there is not much guidance for traffic calming.

Q: Do you think there is an advantage to changing things up from one thing to another over time?

A: Yes, we will go back out to do a 1 year after for all treatments. Regardless People get immune to this over time.

Q: How long has the white LED speed sign been up and has there been any vandalism?

A: It has been up almost a year and no, there has not been any vandalism.

Q: The displeasure from the farming community with the island was it because of being bolted to pavement or because of the channelizers?

A: They did not like it at all so we just removed them. It was said that they had to drive off onto the shoulder of the road; if they would have hit the channelizer it would have just come back up.

Q: You did not do a lot of the physical changes that show up in your tool box.

A: This was too expensive; we wanted to be able to remove if needed. We tried a speed table in the last study that is still in Gilbert.

Q: Do you think there is that much of a difference in Iowa then other places in the Country?

A: Traffic calming has been done in larger cities very little has been done in small towns.

Q: Do we really need to do research in Iowa or can we tap into others?

A: If they started putting bulb outs in small rural communities it could be transportable, but we have to think about it being a rural agriculture state or not. A small town in California may not look like a small town in Iowa because they do not have the farm equipment and we have a lot of elderly drivers so you would have to look at the demographics. I have not seen a lot of actual treatments in small towns.

Q: On your raised center island especially the one in Slater has there been any problems with snow removal and how did the modified to curbing perform verses Phase 1 channelizers.

A: Yes, but not because we didn't think about it. Slater was Phase 1; we spoke to the City snow plow driver and we had no problems with the farmers, but we did not speak to the County snow plow driver so the first snow they took all center islands out. We had them in until December and put them back in March. When we removed the Center Island the speed went up when we put them back speed went down. Phase 1 was much more successful we took out the modified curbing in October because the farmers did not care for it. Snow plows could go around successfully if they were careful.

IMPLEMENTATION DISCUSSION

If you could think of ways that we could share this; we presented it to NACE on Monday and a lot of people were interested. Maybe we could present it to the District Traffic Tech's and the District Local Systems Engineers. Seeing a presentation sometimes makes a difference. We have had lunch hour presentations so we can make that excisable to the districts. Through the website we have featured researches and it is searchable. We do not monitor how many people access the website, but we could. This is going on Federal Highways webpage and we can track it on CTRE webpage if you want. Maybe look at a person to person presentation at State fairs and County fairs so we can present the traffic changes and show what is changing and things we have done.

Motion to Approve by 1st R. Younie. 2nd R. Knoche.

Motion carried with 11 Aye, 0 Nay, 0 Abstaining.

FINAL REPORT TR-623, Quality Control/Quality Assurance Testing for Joint Density and Segregation of Asphalt Mixtures, Chris Williams, ISU/In Trans, (\$150,742)

BACKGROUND

Longitudinal joint quality control/assurance is essential to the successful performance of asphalt pavement and it has received considerable amount of attention in recent years. The purpose of the study is to evaluate the level of compaction at the longitudinal joint and determine the effect of segregation on the longitudinal joint performance.

OBJECTIVE

The objectives of this project were as follows:

- Evaluate available test methods for longitudinal joint quality control
- Develop density and permeability specifications to ensure the longitudinal joint with proper performance
- Identify the best joint construction method in Iowa
- Evaluate the effect of segregation on longitudinal joint density performance

DISCUSSION

Q: Did you analyze different types of rolling methods?

A: We had various ideas trying to do multiple joint methods on one project. We try to benchmark what they are doing and moving them to improvement.

Q: Is anyone using these heaters?

A: Mathey Construction is using it a substantial amount.

Q: At this time are you able to check what kind of temperature you have had at the joint after the heaters run through?

A: We do monitor the temperature and have been running at least 230; we are seeing differences in temperature where the joint heaters are.

Q: Doesn't there need to be some kind of control of the heat or does it control itself?

A: Not all joint heaters are the same but you have to make sure you keep your sensors clean; you do have to monitor the temperature as you go.

Q: With the research what are your thoughts of multiple longitudinal cracks; is that a temperature problem?

A: It comes down to once you get water infiltrated in the cracks this creates problems. If you hit the density right then you will have better long term performance and it all starts with moisture infiltration.

Q: When the contractors were talking last week at the joint seminar was there much discussion about the different styles of joints?

A: Best practices are out there; but if you ask some of the best contractors in the Country which way is the best practice A or B half would say A and half would say B.

IMPLEMENTATION

There has been a group of industry and agency people working on this issue and the Specifications Committee submitted changes to take cores at the joints which will go into effect this fall.

Motion to Approve by 1st V. Dumdei. 2nd K. Jones.

Motion carried with 11 Aye, 0 Nay, 0 Abstaining.

DISCUSSION

RFP for Short Span Prefabricated Bridge County Standards.

The RFP was reviewed as submitted to the Board. No changes were recommended.

Motion to Approve by 1st R. Younie. 2nd K. Jones.

Motion carried with 11 aye, 0 nay, 0 abstaining.

NEW BUSINESS

None.

ADJOURN

Motion to adjourn by 1st R. Younie. 2nd R. Knoche.

Motion carried with 11 aye, 0 nay, 0 abstaining.

The next meeting of the Iowa Highway Research Board will be held Friday, May 31, 2013, in the East/West Materials Conference Room at the Iowa DOT. The meeting will begin promptly at 9 a.m.



Mark J. Dunn, IHRB Secretary