

Michigan Department of Transportation (MDOT)
FY 2020 Appropriation Reporting - Public Act 66 of 2019, Section 661

**INNOVATIVE ROAD MATERIALS, ROAD AND BRIDGE DESIGN, AND
CONSTRUCTION SPECIFICATIONS**

July 1, 2020

I. REPORTING REQUIREMENTS

Per Section 661 of P.A. 66 of 2019, the department shall perform the following:

- A. Establish a collaborative stakeholder group to review innovative road materials and innovative road and bridge design and construction specifications.
- B. Report quarterly on the activities of the collaborative stakeholder group.
- C. Describe innovative materials and innovative road and bridge design and construction specifications submitted for review.
- D. Describe the innovative materials and innovative road and bridge design and construction specifications submitted for review, the submissions recommended for adoption by the department and the submissions not recommended for adoption by the department.

II. REPORTING ACTIVITIES

A. Collaborative Stakeholder Group

The Michigan State Transportation Innovations Council (MI-STIC) is a collaborative stakeholder group representing various levels of the transportation community to comprehensively and strategically consider all sources of transportation. Please see the MI-STIC website for the current roster at the following link:

https://www.michigan.gov/mdot/0,4616,7-151-9623_61313-507811--,00.html

B. Collaborative Stakeholder Group Quarterly Activities

For the current reporting period, a MI-STIC meeting was held on June 26, 2020, and the following represent an overview of the quarterly MI-STIC activities:

- i. Presentation from Bay Region on the flooding and virtual public involvement near Midland.
- ii. Discussion regarding Local Innovation Subcommittee and development of a Local Agency Research Board.
- iii. The MI-STIC continues development of an innovative website. Key participants, with an interest in creating an external facing innovation website, have been identified and are meeting weekly to facilitate its creation. This innovation website will serve as an external interface tool demonstrating department accomplishments in deploying innovation statewide. The initial

focus will be on areas of research, new products, innovative contracts, and mobility/ flow and UAS/new technology.

- iv. The MI-STIC Peer Exchange, which was scheduled for April 2020, has been postponed due to the COVID-19 restrictions and has been rescheduled on August 5 and 6, 2020 in a virtual forum. The Peer Exchange is an excellent way to learn, share, and network on transportation innovation processes, funding, structures, and best practices with other states.
- v. Submittal of MI-STIC for a National STIC award.
- vi. The MI-STIC continues solicitation for the MI-STIC Incentive Program, which offers technical assistance and up to \$100,000 in federal funding per STIC, per year to support the costs of standardizing innovative practices in a state transportation agency or other public sector STIC stakeholder. MDOT has received approval from the Federal Highway Administration (FHWA) to fund \$40,000 for Cone Penetration Testing Training and Peer Exchange as it relates to EDC-5 Advanced Geotechnical Methods in Exploration (A-GaME). The remainder of the proposals must be submitted to FHWA by August 7, 2020 as referenced in the following links:
 - a. MI-STIC website:
https://www.michigan.gov/mdot/0,4616,7-151-9623_61313-507811--00.html
 - b. National STIC website:
<https://www.fhwa.dot.gov/innovation/stic/>
- vii. The next 2020 MI-STIC meetings are scheduled for September 25 and December 4.

C. Submissions Presented for Review

Accomplishments for the second quarterly reporting period are noted in Section IIB above.

D. Submission Recommendations

Submissions adopted/not adopted by the department

Accomplishments for the second quarterly reporting period are noted in Section IIB above.

Michigan
State Transportation Innovation Council
Meeting Minutes
June 26, 2020, 10:30 a.m. – 12:00 p.m.
Teams Virtual Meeting

Attendance

Present: Monica Ackerson (MRPA), Carol Aldrich (MDOT), Lisa Branch (MDOT), Gregg Brunner (MDOT), Ron Brenke (ACEC), Ted Burch (FHWA), Tim Colling (MTU-LTAP), Daniel DeGraaf (MCA), Russell Jorgenson (FHWA), Tony Kratofil (MDOT), Bob Lindbeck (Alger County), Laura Mester (MDOT), Chuck Mills (APAM), Doug Needham (MAA), Jack O'Malley (House of Representatives), Andy Pickard (FHWA), Steve Puuri (CRA of MI), Jean Ruestman (MDOT), Wayne Schoonover (GTCRC), Christine Simon (Senate), Brad Wieferich (MDOT)

Guests: Kim Zimmer (MDOT)

Absent: Paul Ajegba (MDOT), Tom Barrett (Senate), Ryan Buck (WATS), Glenn Bukoski (MITA), Joe Bush (MADC), Matt Chynoweth (MDOT), Denise Donohue (CRA of MI), Wayne Harrall (Kent County), Todd White (MDOT),

- 1) Welcome – Tony Kratofil and Russell Jorgenson
 - a) Tony opened the meeting with a welcome statement.
 - b) Russ highlighted the advantages of virtual Teams meetings.

- 2) Innovation Presentation: Midland Flooding and Virtual Public Involvement (VPI) – Kim Zimmer, Associate Bay Region Engineer - Operations
 - a) Kim presented a PowerPoint and discussed the impacts of the Midland flooding and VPI on infrastructure. Discussion included:
 - i) The benefits of VPI
 - ii) Several tools available
 - iii) Every Day Counts-5 Summit: MDOT is piloting with Ann Arbor
 - iv) Current projects for the Michigan Department of Transportation (MDOT) and Ann Arbor are I-94 to US-23 feasibility; M-28 reconstruction; US-12 Planning and Environmental Linkages (PEL); US-131/I-96 PEL; Nixon Road Corridor; Ann Arbor Railroad Quiet Zone
 - v) State Transportation Innovation Council (STIC) grant awarded to MDOT, who is recognized as a leader in the nation
 - vi) The Midland flooding event and the coordinated efforts between MDOT and other agencies at the federal/state/local level, emergency response and operation centers, 911 Central Dispatch
 - vii) The use of EMILY, a drone boat to inspect underwater infrastructure and bridge scour
 - viii) Challenges, such as limited resources, traffic control and routes washed out

Question(s):

1. Has there been an increase in public participation using VPI? (Christine Simons)

2. In using VPI, is there a concern for outside involvement lobbying for their own interests? Are there any outside project limits? (Brett Stanton)

Answer(s):

1. Yes, in some areas participating has quadrupled. Significant participation has been noted in the Upper Peninsula.
2. Yes, unfortunately there are some people that participate simply to troll or bully. Mechanisms are in place to help limit this. Comments are reviewed beforehand when possible and we do track the source of the comments. At the Town Hall meetings, software is used to screen all calls before they get pushed through.

No, there are no known outside project limits.

Ted stated that there is a concern that the VPI can be misused. However, the value of VPI is being shown by increased participation over conventional meetings, and input is broadening and now includes farmers, commuters, and truckers.

Action Item: Kim will provide links and videos presented.

- 3) MI-STIC Peer Exchange Status – Ted Burch
 - a) The August 5-6, 2020 Peer Exchange meeting has been changed to a virtual one using Microsoft Office Teams from 1:30 to 4:30 pm each day.
 - b) There are currently ten other states that are participating: Illinois, Wisconsin, Virginia, Alaska, North Dakota, Arizona, Texas, Missouri, Oklahoma and Pennsylvania.
 - c) Focus for these meetings is on information sharing (STIC setup, deployment, communication and to establish metrics).
 - d) If anyone would like to attend and does not have the meeting appointment or the agenda, please let Ted or Carol know.
- 4) CRA: Local Innovation Subcommittee Report – Bob Lindbeck
 - a) The next Local Engineering Committee meeting is July 1, 2020.
 - b) The next Local Innovation subcommittee meeting is July 22, 2020.
- 5) Local Agency Research Board Concept Update – Steve Puuri
 - a) A current proposal application is to create a Local Research Board.
 - b) One benefit of local research boards is speeding up the implementation of tried research.
 - c) Tim Colling praised the Minnesota Local Research Board and how it interfaces with the Department of Transportation program. Minnesota has been successful in obtaining “lower hanging fruit” projects and cost-sharing measures.
 - d) Another STIC application is to hold a peer exchange for the concept. The County Road Association would host this meeting and utilize the Local Technical Assistance Program to facilitate and document minutes. The research boards from the states of Iowa, Minnesota and Ohio would be invited. Currently, ten people need travel assistance to attend the meetings.
 - e) A live event is anticipated for April/May/June 2021.
 - f) Cost will be approximately \$20,900 in STIC funds and Michigan Technical University would contribute also.
 - g) Bob Lindbeck and Angie Klein will handle technical issues.

- h) Ted noted that a consensus would be needed from the STIC members to move forward with the two proposals.
 - i) Tony moved to have the committee members approve both applications and Russ supported. Motion approved.
- 6) STIC Incentive Funded Project Status – Carol Aldrich
- a) One new 2020 project submitted is for Cone Penetration. Training will be forthcoming.
 - b) The Warranty Training project is nearing completing and is in the finalization stage.
- 7) National STIC Excellence Award Application – Carol Aldrich
- a) Carol submitted the application this morning.
 - b) Carol thanked all of those people who provided endorsements.
- 8) Every Day Counts (EDC)-6 Update – Ted Burch
- a) Seven technologies are included.
 - b) Vetted through the American Association of State Highway Transportation Officials.
 - c) EDC Summit – Planned for Fall 2020 in Minneapolis has been changed to a virtual meeting. Solicitations will be going out soon.
- 9) New Michigan STIC Incentive Ideas or Proposals – All
- a) Remote Water Sensors research project is seeking a peer exchange to learn best practices from other states.
 - b) Tony discussed pump stations. More responsive. Is there a way to get alerts and if so, what would that entail? Tony would like to approve the funding for this project today to move the project forward.
 - c) As noted above in number 5, Tony, Russ and the rest of the committee agreed to move the two proposals for Remote Water Sensors Peer Exchange and Local Agency Research Board Concept Peer Exchange forward to FHWA STIC headquarters for approval.
 - d) Ted noted ideas and proposals can come from other sources, not just MDOT.
 - e) Ted reminded the members that applications need to be in by August 7, 2020 for FY2020 as this is the last year of the FAST Act.
 - f) Ted noted that Michigan received an AID grant for \$1 million for the 2nd Avenue Bridge I-94 project to begin in 2021. This bridge will be built off-site and then transported in place. Tony would like to invite the STIC members to attend and view the transportation of this bridge. MDOT will notify members of the exact future date/time/location.
 - g) Carol mentioned it would be nice to have a STIC representative present on the project at one of our future STIC meetings in 2021 once the project is completed.

Action Item: MDOT to provide STIC members with date/time/location.

Action Item: Carol to research and organize a STIC representative to present on the completed project in 2021.

10) Open Discussion

- a) Carol mentioned that the ARCGIS Innovation Website is currently in draft form and is being worked on. She hopes to have it rolled out next fall for the public website.

Question(s):

1. With there be links included on the website? (Ted Burch)
2. Will the website be available to anyone? (Russ Jorgenson)
3. Should Transit innovations be included on the website? (Jean Ruestman)

Answer(s):

1. Yes, under the more information link.
2. Yes, it is for the public.
3. Yes, this is intended to be a MDOT wide location to showcase our innovations.

Action Item: Jean will contact Janet Geissler and have her contact Carol to discuss adding the Transit innovations to the website.