

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**

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 department has expanded the Michigan State Transportation Innovation Council (MI-STIC) to include the additional members from House, Senate, Asphalt Pavement Association of Michigan (APAM), Michigan Concrete Association (MCA), Michigan Association of Drain Commission (MADC), Michigan Aggregates Association (MAA), Michigan Association of Counties (MAC) and Michigan Road Preservation Association (MRPA) in addition to the existing members from Federal Highway Administration (FHWA), MDOT, American Council of Engineering Companies (ACEC), Michigan Infrastructure and Transportation Association (MITA), Ottawa County Water Resources, County Road Association (CRA) of Michigan, Michigan Municipal League (MML), National Association of County Engineers (NACE), Washtenaw Area Transportation Study (WATS), and Local Technical Assistance Program (LTAP). This collaborative stakeholder group represents various levels of the highway community to comprehensively and strategically consider all sources of transportation innovation.

B. Collaborative Stakeholder Group Quarterly Activities

For the current reporting period, MI-STIC meetings were scheduled and held on December 13, 2019 and March 27, 2020. The following items were discussed:

- i. The reporting requirements of P.A. 66 of 2019, Section 661.
- ii. The development of an innovative website, which would be an external interface tool demonstrating department accomplishments in deploying

innovation statewide. The initial focus would be on areas of research, new products, innovative contracts, and traffic flow and mobility.

- iii. 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. The finalized MI-STIC Incentive 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/>
- iv. Updates to the existing MI-STIC charter.
- v. New products and materials process.
- vi. The MI-STIC Peer Exchange, which will take place with other states to learn, share, and network on transportation innovation processes, funding, structures, and best practices (Note: originally scheduled for April 2020, but now postponed).
- vii. MI-STIC meetings have been scheduled for June, September, and December 2020.

C. Submissions Presented for Review

Accomplishments for the first quarterly reporting period were the establishment of the collaborative stakeholder group and the collaborative stakeholder group quarterly activities noted in Sections IIA and IIB above.

D. Submission Recommendations

Submissions adopted/not adopted by the department

Accomplishments for the first quarterly reporting period were the establishment of the collaborative stakeholder group and the collaborative stakeholder group quarterly activities noted in Sections IIA and IIB above.

Michigan
State Transportation Innovation Council
Meeting Minutes
March 27, 2020, 8:30 a.m. – 10:00 a.m.
Virtual Meeting

Attendance:

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), Denise Donohue (CRA of MI), Wayne Harrall (Kent County), Tony Kratofil (MDOT), Bob Lindbeck (Alger County), Laura Mester (MDOT), Chuck Mills (APAM), Andy Pickard (FHWA), Steve Puuri (CRA of MI), Jean Ruestman (MDOT), Wayne Schoonover (GTCRC), Christine Simon (Senate), Brad Wieferich (MDOT)

Guests: Janet Geissler (MDOT)

Absent: Paul Ajegba (MDOT), Tom Barrett (Senate), Ryan Buck (WATS), Glenn Bukoski (MITA), Joe Bush (MADC), Matt Chynoweth (MDOT), Russell Jorgenson (FHWA), Doug Needham (MAA), Jack O'Malley (House of Representatives), Todd White (MDOT),

- 1) Welcome – Tony Kratofil
 - a) Tony opened the meeting with a welcome statement.
 - b) There has been an increase in cyber security issues. Please be aware and cautious of unknown sources.
 - c) Ted Burch discussed the MI-Innovation Dashboard. This dashboard is a means to show where every state is at with innovation projects. Only those Every Day Counts (EDC) initiatives that have been selected by each state are reporting a goal. If they have already been institutionalized within Michigan, then there is no need to monitor a goal percentage. Michigan was awarded six Accelerated Innovation Deployment (AID) projects and is leading the country with the amount of money brought in through this grant program.
 - d) Tony discussed how the Michigan Department of Transportation (MDOT) is working on how new products, outside of EDC initiatives, are being reported. The contents of the report will be pulled from multiple places and presented in an easy-to-read format in one place on our MDOT website.

- 2) MI-STIC Peer Exchange Status – Ted Burch
 - a) The April peer exchange has been cancelled and will be rescheduled at a later date.
 - b) Peer exchanges are a good way for states to see how other states with similar issues are handling things.
 - c) Ted said that there is a lot of interest from the 10 states who are interested in attending this STIC peer exchange.

- 3) Innovation Presentation: North American International Auto Show-Mobility and Passenger Transportation – Janet Geissler
 - a) Janet reviewed a PowerPoint presentation and highlighted the various components of the auto show.
 - i) Issued by MDOT, PlanetM (MDEC) and the Governor’s office.
 - ii) Funded through MDOT, however, the full cost is not endured by the State as others who are part of the projects are providing funding as well.
 - iii) Purpose is to provide and demonstrate innovative solutions and cutting-edge technologies that showcase automated vehicle (AV) technology capabilities.
 - iv) Level 3 is conditional - AV can overtake a slower vehicle but driver in control; Level 4 is high - AV can intervene; and level 5 is complete AV control.
 - v) Two AV demonstrations for Airport Shuttle are from Dataspeed and FEV North America.
 - vi) Five AV demonstrations for Downtown Detroit Circulator and Robo Taxi are from Continental, Navya, Yandex, Local Motors, and SmartCone.
 - vii) A mobility challenge is scheduled for June 6-21, 2020 from 9 a.m. to 7 p.m.
 - b) Tony asked that anyone willing to participate as ambassadors are encouraged to do so. This would cover three shifts over a two-week span. (*After meeting* – Please contact Shellie Zamponi, MDOT at ZamponiS1@michigan.gov if interested)

- 4) CRA Local Innovation Sub-committee – Bob Lindbeck
 - a) The goal of the sub-committee is to “stockpile” specifications for all innovative materials; to serve as a central location for information for all to use.
 - b) Angela Kline of the Jackson County Road Commission and Lance Malburg of Dickinson County are active participants on this sub-committee.
 - c) This sub-committee reports to the CRA Engineering committee.

- 5) Local Agency Research Board Concept – Steve Puuri
 - a) LTAP at Michigan Technical University is doing the research for this sub-committee.
 - b) The purpose of this board would be to compliment and formalize the CRA Local Innovation Sub-committee which Bob talked about.
 - c) To show successes and failures and to collaborate.
 - d) A Beta testing site of proven technology.
 - e) Steve Puuri, Tim Colling and Denise Donahue are points of contacts.
 - f) Tim discussed the great program Minnesota has and gave us a link to their website: Minnesota Local Road Research Board: <https://lrrb.org/>.

- 6) STIC Incentive Funded Project Status – Carol Aldrich and anyone with an update
 - a) Carol presented an Excel spreadsheet which outlines the status and funding of the existing STIC Incentive projects. There are five active projects.
 - b) Steve Puuri gave an update of the Local Warranty Training project and said they are almost complete and LTAP has created several training videos available online for viewing at <https://michiganltap.org/pavement-warranties>.
 - c) Carol mentioned the cone penetration equipment has been purchased and we are hoping to add them to the December agenda for a brief presentation
 - d) Ted mentioned the timing of the VPI is very appropriate since many of these tools can be used in the current virtual world we live in today.
 - e) Tim mentioned LTAP will have webinar next Wednesday to help with our work from home virtual needs.

- f) Brad asked about the central repository of final reports for each of the STIC projects and Carol will look into adding the links to our MDOT/FHWA website found at:
https://www.michigan.gov/mdot/0,4616,7-151-9623_61313-507811--,00.html

Action Item: Carol will look into obtaining copies of the final reports and adding the link to the STIC website.

- 7) MI-STIC Charter Update – Carol Aldrich and Ted Burch
 - a) Ted explained the charter is 90 percent complete, but we need to determine our committee communication goals and metrics for innovation. We may also want to include the current requirement of reporting to the legislature.
 - b) We are anticipating sending the charter around via email for electronic signatures once completed.
- 8) EDC-6 Update – Ted Burch
 - a) New Initiatives are being vetted now. A meeting with AASHTO, NACE, and other industry representatives will occur, and then once finalized, it will be rolled out in June or July 2020.
 - b) Looking at October 2020 for the EDC-6 summit in Minneapolis.
 - c) Per Wayne, nothing has come in yet from NACE and the upcoming NACE conference has been canceled.
- 9) New Michigan STIC Incentive Ideas or Proposals – All
 - a) We have reached out several times asking for new STIC Incentive applications and we do not have any submitted to date. The due date to have it in the program and finalized with FHWA is August 1, 2020.
 - b) The Local Agency Research Board Concept will be discussed further and possibly submit for the peer exchange or maybe development of the organization depending on eligibility. A draft application should be completed by the end of April 2020 and finalized at our next meeting on June 22, 2020.
 - c) No other ideas were brought forward for discussion.
- 10) Open Discussion
 - a) Carol hopes to have a draft ARCGIS website available for MDOT innovations in the next few months and will provide an overview of the draft website hopefully at the next STIC meeting.
 - b) The legislature requires section 661 of the Transportation Appropriation reporting of MDOT innovations quarterly, with the first due date of April 1, 2020.
 - c) If anyone has any ideas for STIC projects, let Ted or Carol know.

Action Item: Carol is anticipating an overview of the MDOT innovation website at the June 2020 STIC meeting.