

# Meeting Agenda Wednesday, March 2, 2022 @ 1:00 PM MDOT Aeronautics Bldg., 2<sup>st</sup> Floor Conference Room 2700 Port Lansing Road, Lansing, Michigan

A meeting of the Transportation Asset Management Council (TAMC), <u>A Michigan Public Body</u>, will take place at the time and location listed above. Accommodations can be made for persons who require mobility, visual, hearing, written, or other assistance for participation. Large print materials, auxiliary aids or the services of interpreters, signers, or readers are available upon request. Please contact Orlando Curry at <u>517-335-4381</u> or complete <u>Form 2658 for American Sign Language (ASL)</u>. Requests should be made at least five days prior to the meeting date. Reasonable efforts will be made to provide the requested accommodation or an effective alternative, but accommodations may not be guaranteed.

Public Comment for non-agenda items is available at the beginning and ending of the meeting, typically limited to 3 minutes. Public comment on agenda items is also available with each item when called upon by the TAMC Chair.

Meeting Telephone Conference Line: +1 248-509-0316 Access Code: 831 066 359 #

Web Meeting Access Link: Click here to join the meeting

- 1. Welcome Call to Order
- 2. Changes or Additions to the Agenda (Action Item as needed) Any items under the Consent Agenda may be moved to the regular agenda upon request of any Council member, member of the public or staff member.
- 3. Public Comments on Non-Agenda Item
- 4. Consent Agenda (Action Item)
  - **4.1.** Approval of the January 5, 2022 Meeting Minutes (Attachment 1)
  - **4.2.** Approval of October 6, 2021 Meeting Minutes (Attachment 2)
  - **4.3.** TAMC Financial Report (Attachment 3)
- 5. ACTION ITEMS (Action)
  - **5.1.** Consideration of Budget Amendments for Bay City Area Transportation Study & Saginaw Area Transportation Agency (*Attachment 4*)
  - **5.2.** Unified Work Program for Planning Organizations (Memo)(Attachment 5)
  - **5.3.** Consideration of Approval of Transportation Asset Management Plans (Attachment 6)
- 6. Presentation
  - 6.1. Center for Technology & Training 2021 TAMC Training Report Colling/Torola (Attachment 7)
  - 6.2. PASER Data Collection and Forecast Costa
- 7. New Business
  - 7.1. TAMC Expectations (Attachment 8)
  - **7.2.** TAMC Coordinator Next Steps
- 8. Correspondence & Announcements
  - **8.1.** TAMC Schedule of Activities & Training 2022 (Attachment 9)
- 9. Committee Review & Discussion Items
  - **9.1** Bridge Committee Update *Curtis/Jones/Wieferich*
  - **9.2** ACE Committee Update *Bradshaw/Mekijan* 
    - 9.2.1 Celebration and Conference Update
    - 9.2.2 Draft Annual Report (word only)
  - **9.3** Data Committee Update *McEntee/Tubbs*
- 10. Public Comments

- 11. Member Comments
- 12. Adjournment

Next Meeting, April 6, 2022 1 PM – 3 PM MDOT Aeronautics Bldg., 2700 Port Lansing Road, Lansing, Michigan

## TRANSPORTATION ASSET MANAGEMENT COUNCIL MEETING January 5, 2022 at 1:00 p.m. MEETING MINUTES

This meeting was held via hybrid with Microsoft Teams and at the Michigan Department of Transportation Aeronautics Building Auditorium, 2700 Port Lansing Road, Lansing, Michigan. Below are meeting minutes as provided under Act 267 of the Public Acts of 1976 as amended, or commonly referred to as the Open Meetings Act. Accommodations can be made for persons who require mobility, visual, hearing, written, or other assistance for participation. Large print materials, auxiliary aids or the services of interpreters, signers, or readers are available upon request. Please contact Orlando Curry at 517-335-4381 or complete Form 2658 for American Sign Language (ASL). Requests should be made at least five days prior to the meeting date. Reasonable efforts will be made to provide the requested accommodation or an effective alternative, but accommodations may not be guaranteed.

#### \*\* Frequently Used Acronyms List attached

#### **Members Present:**

Derek Bradshaw, MAR, Lansing, MI Joanna Johnson, CRA, Lansing, MI – Chair Gary Mekjian, Lansing, MI Rob Surber, DTMB/CSS, Lansing, MI Todd White, MDOT, Lansing, MI

Bill McEntee, CRA, Lansing, MI – Vice-Chair Robert Slattery, MML, Mount Morris, MI\* Brad Wieferich, MDOT, Lansing, MI

Ryan Buck, MTPA, Lansing, MI

\* Via Microsoft Teams

#### **Support Staff Present:**

Roger Belknap, MDOT Cheryl Granger, DTMB/CSS Gloria Strong, MDOT Tim Colling, MTU/LTAP Dave Jennett, MDOT

#### **Public Present:**

Ed Hug, SEMCOG

#### **Members Absent:**

Kelly Jones, MAC Jennifer Tubbs, MTA

#### 1. Welcome – Call-To-Order:

The meeting was called-to-order at 1:02 p.m.. Everyone was introduced and welcomed to the meeting.

#### 2. Changes or Additions to the Agenda (Action Item, as needed):

**Motion:** D. Bradshaw made a motion to add 5.5, 2022 TAMC Celebration and Conference, and 5.6., Region Increase in Budget Adjustments to the agenda; B. McEntee seconded the motion. The motion was approved by all members present.

#### 3. Public Comments on Non-Agenda Items:

None

#### 4. Consent Agenda (Action Item):

- 4.1. Approval of November 3, 2021 Meeting Minutes (Attachment 1)
- 4.2. TAMC Financial Report (Attachment 2)
- R. Belknap provided an updated copy of the TAMC Budget Financial Report.

**Motion:** B. McEntee made a motion to approve the Consent Agenda; G. Mekjian seconded the motion. The motion was approved by all members present.

#### 5. Action Items – R. Belknap (Memo/Action):

## 5.1. - Consideration of Adopting the 2022 – 2024 TAMC Strategic Work Program (Attachment 3):

R. Belknap provided an updated Strategic Work Program which includes changes made at the August 2021 Strategic Planning Session and the previous Strategic Work Program. It was noted that Christopher Bolt attended the Strategic Planning Session as a representative of the MAC in August 2021. Kelly Jones is his replacement.

**Motion:** G. Mekjian made a motion to approve the 2022-2024 TAMC Strategic Work Program; B. McEntee seconded the motion. The motion was approved by all members present.

## 5.2. – Consideration of Policy for the Collection of Roadway Surface Condition Data for 2022 (Attachment 4):

R. Belknap reported that what has been included in this policy is what was implemented in 2021 and specifically includes the option of two or three member rating teams and maintains the training programs as they were in the past. The big change is going back to the collection of no less than 50 percent of federal aid roads as was policy prior to 2021.

D. Bradshaw requested that the policy be cleaned up to clearly show the agencies have an option and it is permissible to use a two or three-member team for PASER data collection instead of just using a two-member team as they did this past season for safety reasons. J. Johnson stated it is up to the road commission or region if they want to use a two or three-member team and this information should be added to page 2 of the policy. In Section B of the policy, it is recommended that the regions make a formal call for projects. It is required that the Regional Planning Organization/Metropolitan Planning Organization (RPO/MPO) me a formal call for interest for non-federal aid data collection and all requests should be received by October 1. T. Colling also requested that it is allowable for MTU to provide PASER training as a hybrid in the Policy. R. Buck suggests having the last virtual training pushed as far prior to the data collection season as possible. The Council is supportive of both virtual and in-person trainings.

**Motion:** D. Bradshaw made a motion to accept the Policy for the Collection of Roadway Surface Condition Data for 2022 as amended per discussions above at today's meeting; G. Mekjian seconded the motion. The motion was approved by all members present.

**Action Item:** R. Belknap will make the discussed modifications to the subject policy and finalized the policy.

5.3. – Consideration of Policy for the Submittal and Review of Transportation Asset Management Plans for Roads, Bridges, and Transportation Infrastructure (Attachment 5): This policy update has been worked on by the TAMC ACE Committee and focused mostly on recent TAMP legislation to incorporate into the policy. It was noted that on page one, second paragraph, the policy states that small agencies that submit a TAMP to switch funds from major to minor, under Public Act 51, will be encouraged to include in their TAMP the seven element

requirements as stated in Public Act 325. It should also be noted that TAMC does not have authority to approve switching of funds from major to minor.

**Motion:** T. White made a motion to approve the subject policy with the amendments as discussed; B. Wieferich seconded the motion. The motion was approved by all members present.

**Action Item:** R. Belknap work with J. Johnson and send out the Policy for the Collection of Roadway Surface Condition Data for 2022 and the Policy for the Submittal and Review of Transportation Asset Management Plans for Roads, Bridges, and Transportation Infrastructure via EGov once they are finalized.

**Action Item:** T. Colling will share the above policies at the MTU trainings.

## 5.4. – Consideration of Approval of Transportation Asset Management Plans for Groups A and B – D. Bradshaw/G. Strong (Attachment 6):

#### **Group A TAMPs**

G. Strong provided a status update of TAMP submissions for Public Act 325 Group A and Group B agencies.

For Public Act 325, Group A, there are 41 agencies due under Public Act 325; 21 TAMPs were received by the October 1, 2020, deadline. A total of 34 TAMPs of the 41 TAMPs due have been received, and seven agencies did not submit a TAMP. One TAMP, City of Portage, was recently submitted, reviewed and approved on November 3, 2021, by the TAMC ACE Committee to go on to the Council for their review and possible approval.

**Action Item:** G. Mekjian has agreed to reach out to the two cities from Group A that have not submitted their TAMPs to inquire if MML or TAMC can provide any assistance with the completion of their TAMP as required by PA 325.

#### **Group B TAMPs**

For Public Act 325, Group B, there are 41 agencies due; 15 TAMPs were received by the October 1, 2021, deadline. There has been six TAMPs received after the October 1, 2021 deadline. A total of 21 agencies did not submit a TAMP as required by Public Act 325. G. Strong has done a review of the submitted TAMPs where six TAMPs were found to need additional information. G. Strong recommended today to the ACE Committee approval of the following three Group B TAMPs: City of Port Huron, Gogebic County Road Commission, and the City of Dearborn. The ACE Committee approved the three Group B TAMPs to go on to the Council at their February 2022 meeting for their review and possible approval.

At the November 3, 2021, TAMC ACE Committee meeting, the Committee approved the following agencies to go on the Council for their approval at the January 5, 2022, TAMC meeting:

- 1. Emmet County Road Commission
- 2. Washtenaw County Road Commission
- 3. City of Rochester Hills
- 4. Livingston County Road Commission
- 5. Road Commission of Oakland County
- 6. Alpena County Road Commission
- 7. City of Battle Creek
- 8. City of Kalamazoo

- 9. City of Saginaw
- 10. Marquette County Road Commission
- 11. Wexford County Road Commission
- 12. Houghton County Road Commission
- 13. Mackinac County Road Commission

**Motion:** D. Bradshaw made a motion to approve the above listed agencies from Group A and B as recommended by G. Strong and the TAMC ACE Committee as having met the requirements of Public Act 325; R. Buck seconded the motion. The motion was approved by all members present.

#### 5.5. – 2022 TAMC 20 Year Celebration and Conference – D. Bradshaw/G. Strong

G. Strong did an on-site visit to Great Wolf Lodge located in Traverse City, Michigan, and found the venue to be an appropriate location to hold the TAMC 20 Year Celebration and Conference. It is her recommendation to the ACE Committee to hold the event at the Great Wolf Lodge, Traverse City on September 28, 2022. Once the location has been approved and contracted, G. Strong will set up the TAMC Conference Planning Committee meetings and will invite Council members to participate to give their input to the event. Past TAMC chairpersons and award recipients will be invited to the grand event.

**Motion:** T. White made a motion to hold the TAMC 20 Year Celebration and Conference at the Great Wolf Lodge in Traverse City, MI on September 28, 2022; G. Mekjian seconded the motion. The motion was approved by all members present.

#### 5.6. – Region Increase and Budget Adjustments – D. Bradshaw/R. Belknap

R. Belknap reported that the Saginaw County Road Commission, who had previously reported that they had overspent on their 2021 costs for PASER data collections, has found a solution to stay within their 2021 budget. However, the Northeast Council of Government (NEMCOG) reported that they will have a \$8,528.49 shortfall in their 2021 budget. The ACE Committee approved R. Belknap's recommendation to go on to the Council to request the TAMC budget be modified by using the TAMC Spring Conference funds (\$10,000) to pay the additional \$8,528.49 to NEMCOG that will not be used this year to cover the shortfall.

**Motion**: D. Bradshaw made a motion to approve the budget amendment as presented to the Council to use the \$10,000 from the TAMC Spring Conference funds to pay the \$8,528.49 NEMCOG funds shortage; B. McEntee seconded the motion. The motion was approved by all members present.

Action Item: R. Belknap will submit a budget amendment request to MDOT Finance on behalf of TAMC.

#### <u>6. Michigan Infrastructure Council Update – J. Johnson:</u>

No representative from the MIC was present at today's meeting. J. Johnson reported that the MIC continues to search for a new Director. L. Steckelberg, continues to act as the Interim Executive Director for the MIC.

## 7. Correspondence & Announcements: 2022 TAMC Schedule of Activities and Trainings – R. Belknap (Attachment 7):

R. Belknap provided a list of TAMC activities and trainings to the Council. J. Johnson encouraged all Council members to share any events from the respective agencies to be placed on the TAMC list if relative to TAMC. Visibility from the Council at MTPA, MML, and CRA events helps make people aware of services TAMC offers to agencies. The Council would like TAMC support staff to continue doing the TAMC booths at events. On December 15, 2021, R. Belknap and D. Jennett did a brief TAMC update at the RUCUS conference.

**Action Item:** T. Colling will check to see if it is possible for TAMC to have a booth at the upcoming Regions Conference at Shanty Creek.

#### **8.** Committee Review and Discussion Items:

#### 8.1. – Bridge Committee Update – B. Wieferich

The Bridge Committee discussed the revised Bridge Policy and investment infographics. R. Curtis will be pulling additional bridge information together for these items. Discussions were had on the possible use of the IIJA funds that many people in transportation are awaiting.

#### 8.2. – ACE Committee Update – D. Bradshaw

The ACE Committee met today and approved additional TAMPs that will be forwarded to the Council at their February 2022 meeting for possible approval. Also, ACE Committee also discussed the subjects under today's agenda items 5.4., 5.5., and 5.6.

#### 8.3. – Data Committee Update – B. McEntee

The data collection season has ended. Agencies are indicating they are wrapping up their PASER data collections. The goal was 100 percent federal aid data collection. Two regions have significant turn-over with staff and they have not submitted all their data in the system as of yet. Around 102,000 federal aid and non-federal aid miles have been reported. They have a lot of information for the data analyst to work with for the 2021 annual report. The latest release from CSS are the TAMP and STIP changes. They will active these when Council tells them to. They are also working on culvert data from Roadsoft to MGF then to TAMC and other smaller TAMC tasks. For IRT training on December 15<sup>th</sup> CSS had over 50 participants. CSS will provide the new 2022 training dates to R. Belknap

Dashboards are all updated and completed on November 1, 2021. MDOT will likely pursue the same avenue this year as they did last year for their data collection. R. Belknap is looking for Council member volunteers to do a 20-minute presentation for the PASER and IRT trainings. Slides are ready to go. There is an IRT training on January 25, 2022, and February 22, 2022, they need Council members to sign up to do the presentation as soon as possible. J. Johnson volunteered to do the January 25, 2022 training presentation, and R. Slattery will do the February 22, 2022 training presentation.

**Action Item:** Roger will send the list out so Council members can sign up.

#### 9. Public Comments:

T. Colling complimented the TAMC for accomplishing their goals and meeting their deliverables for 2021. Ed Hug shared that he is happy that they collected 100 percent of their roads for PASER data. Even though it was a lot of work to accomplish, it is nice to have a good PASER data set. It was determined that TAMC is not responsible for international crossing data sets. It is a public vs. private issue and possible GIS issue. In the past it was excluded. It may be possible that private agencies are handling these inspections. T. White stated he will check to see who has done this in the past. E. Hug also spoke with Carmine Palombo, who was hoping TAMC would hold their 2022 conference in Traverse City. He will share this information with C. Palombo that TAMC is working on plans to hold the 2022 TAMC 20 Year Celebration and Conference at the Great Wolf Lodge in Traverse City, Michigan.

#### **10. Member Comments:**

- G. Mekjian will be out of town for the February 2022 TAMC and ACE meetings.
- J. Johnson sent out an email on December 16, 2021, inquiring if any TAMC members wish to change committees. If any Council members are interested in changing to please let her know.
- When tasks are assigned, it would be nice to have deadlines assigned to each task.

- The MIC will be doing another Asset Management Champions Program.
- Just a reminder that Data Committee meetings now begin at 1:30 p.m. instead of 1:00 p.m.

11. Adjournment:
The meeting adjourned at 2:19 p.m. The next meeting is scheduled for February 2, 2022, 1:00 p.m., MDOT Aeronautics Building, 2700 Port Lansing Road, Lansing, Michigan

TAMC F	REQUENTLY USED	
ACRON	YMS:	
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY	
	AND TRANSPORTATION OFFICIALS	
ACE	ADMINISTRATION, COMMUNICATION, AND	
	EDUCATION (TAMC COMMITTEE)	
ACT 51	PUBLIC ACT 51 OF 1951-DEFINITION: A	
	CLASSIFICATION SYTEM DESIGNED TO	
	DISTRIBUTE MICHIGAN'S ACT 51 FUNDS. A	
	ROADWAY MUST BE CLASSIFIED ON THE ACT 51	
	LIST TO RECEIVE STATE MONEY.	
ADA	AMERICANS WITH DISABILITIES ACT	
ADARS	ACT 51 DISTRIBUTION AND REPORTING SYSTEM	
ВТР	BUREAU OF TRANSPORTATION PLANNING (MDOT)	
CFM	COUNCIL ON FUTURE MOBILITY	
СРМ	CAPITAL PREVENTATIVE MAINTENANCE	
CRA	COUNTY ROAD ASSOCIATION (OF MICHIGAN)	
CSD	CONTRACT SERVICES DIVISION (MDOT)	
CSS	CENTER FOR SHARED SOLUTIONS	
DI	DISTRESS INDEX	
ESC	EXTENDED SERVICE CONTRACT	
ETL	Exchange, Transfer, and Load	
FAST	FIXING AMERICA'S SURFACE TRANSPORTATION	
	ACT	
FHWA	FEDERAL HIGHWAY ADMINISTRATION	
FOD	FINANCIAL OPERATIONS DIVISION (MDOT)	
FY	FISCAL YEAR	
GLS	GENESEE-LAPEER-SHIAWASSEE REGION V	
REGION V	PLANNING AND DEVELOPMENT COMMISSION	
GVMC	GRAND VALLEY METRO COUNCIL	
HPMS	HIGHWAY PERFORMANCE MONITORING SYSTEM	
IBR	INVENTORY BASED RATING	
IRI	INTERNATIONAL ROUGHNESS INDEX	
IRT	INVESTMENT REPORTING TOOL	
KATS	KALAMAZOO AREA TRANSPORTATION STUDY	
KCRC	KENT COUNTY ROAD COMMISSION	
LDC	LAPTOP DATA COLLECTORS	
LTAP	LOCAL TECHNICAL ASSISTANCE PROGRAM	
MAC	MICHIGAN ASSOCIATION OF COUNTIES	
MAP-21	MOVING AHEAD FOR PROGRESS IN THE 21 <sup>ST</sup>	
	CENTURY (ACT)	

MAR	MICHIGAN ASSOCIATION OF REGIONS	
MDOT	MICHIGAN DEPARTMENT OF TRANSPORTATION	
MDTMB	MICHIGAN DEPARTMENT OF TECHNOLOGY,	
	MANAGEMENT AND BUDGET	
MIC	MICHIGAN INFRASTRUCTURE COMMISSION	
MITA	MICHIGAN INFRASTRUCTURE AND	
	TRANSPORTATION ASSOCIATION	
MML	MICHIGAN MUNICIPAL LEAGUE	
MPO	METROPOLITAN PLANNING ORGANIZATION	
MTA	MICHIGAN TOWNSHIPS ASSOCIATION	
MTF	MICHIGAN TRANSPORTATION FUNDS	
MTPA	MICHIGAN TRANSPORTATION PLANNING	
	ASSOCIATION	
MTU	MICHIGAN TECHNOLOGICAL UNIVERSITY	
NBI	NATIONAL BRIDGE INVENTORY	
NBIS	NATIONAL BRIDGE INSPECTION STANDARDS	
NFA	NON-FEDERAL AID	
NFC	NATIONAL FUNCTIONAL CLASSIFICATION	
NHS	NATIONAL HIGHWAY SYSTEM	
PASER	PAVEMENT SURFACE EVALUATION AND RATING	
PNFA	PAVED NON-FEDERAL AID	
PWA	PUBLIC WORKS ASSOCIATION	
QA/QC	QUALITY ASSURANCE/QUALITY CONTROL	
RBI	ROAD BASED INVENTORY	
RCKC	ROAD COMMISSION OF KALAMAZOO COUNTY	
ROW	RIGHT-OF-WAY	
RPA	REGIONAL PLANNING AGENCY	
RPO	REGIONAL PLANNING ORGANIZATION	
SEMCOG	SOUTHEAST MICHIGAN COUNCIL OF	
	GOVERNMENTS	
STC	STATE TRANSPORTATION COMMISSION	
STP	STATE TRANSPORTATION PROGRAM	
TAMC	TRANSPORTATION ASSET MANAGEMENT	
	COUNCIL	
TAMP	TRANSPORTATION ASSET MANAGEMENT PLAN	
TPM	TRANSPORTATION PERFORMANCE MEASURES	
UWP	UNIFIED WORK PROGRAM	
WATS	WASHTENAW AREA TRANSPORTATION STUDY	

S:/GLORIASTRONG/TAMC FREQUENTLY USED ACRONYMS.03.15.2021.GMS

## TRANSPORTATION ASSET MANAGEMENT COUNCIL MEETING October 6, 2021 at 1:00 p.m. MEETING MINUTES

This meeting was held via hybrid with Microsoft Teams and at the Michigan Department of Transportation Aeronautics Building Auditorium, 2700 Port Lansing Road, Lansing, Michigan. Below are meeting minutes as provided under Act 267 of the Public Acts of 1976 as amended, or commonly referred to as the Open Meetings Act. Accommodations can be made for persons who require mobility, visual, hearing, written, or other assistance for participation. Large print materials, auxiliary aids or the services of interpreters, signers, or readers are available upon request. Please contact Orlando Curry at 517-335-4381 or complete Form 2658 for American Sign Language (ASL). Requests should be made at least five days prior to the meeting date. Reasonable efforts will be made to provide the requested accommodation or an effective alternative, but accommodations may not be guaranteed.

#### \*\* Frequently Used Acronyms List attached

#### **Members Present:**

Derek Bradshaw, MAR, Lansing, MI\*
Joanna Johnson, CRA, Lansing, MI – Chair
Robert Slattery, MML, Mt. Morris, MI\*
Jennifer Tubbs, MTA, Lansing, MI
Todd White, MDOT, Mt. Pleasant, MI\*

\* Via Microsoft Teams

#### **Support Staff Present:**

Roger Belknap, MDOT Rebecca Curtis, MDOT Robert Green, MDOT Eric Mullen, MDOT

#### **Public Present:**

Jean Bohaczek-Hardy, MSU Brad Sharlow, MDOT Larry Steckelberg, MIC

#### **Members Absent:**

Gary Mekjian, MML

#### 1. Welcome – Call-To-Order:

The meeting was called-to-order at 1:00 p.m. Everyone was introduced and welcomed to the meeting. Attendance was verified by roll call by G. Strong. Meetings can be held remotely and members can vote if an emergency order is in place. The person or persons in an area that is under emergency orders can be part of the quorum and their vote will count. R. Buck is in Washtenaw County, which is under a state of emergency, is able to vote at today's meeting. The emergency order can be in the county where the meeting is being held and/or where the person physically is per L. Steckelberg.

Ryan Buck, MTPA, Ann Arbor, MI\* Bill McEntee, CRA, Lansing, MI – Vice-Chair Rob Surber, DTMB/CSS, Marshall, MI\* Brad Wieferich, MDOT, Lansing, MI

Tim Colling, MTU/LTAP Cheryl Granger, DTMB/CSS Dave Jennett, MDOT Gloria Strong, MDOT **Action Item:** Following today's meeting, L. Steckelberg will share the Attorney General Opinion that the MIC received regarding meetings and members voting that are subject to the Open Meetings Act and working remotely under an emergency order. If necessary, TAMC will seek additional information.

#### 2. Changes or Additions to the Agenda (Action Item, as needed):

None

#### 3. Public Comments on Non-Agenda Items:

None

#### 4. Consent Agenda (Action Item):

- **4.1.** Approval of September 1, 2021 Meeting Minutes (Attachment 1)
- **4.2.** TAMC Financial Report (Attachment 2)
- R. Belknap provided an updated copy of the TAMC Budget Financial Report.

**Motion:** D. Bradshaw made a motion to approve the Consent Agenda; B. Wieferich seconded the motion. The motion was approved by all members present.

#### 5. Presentation – Michigan Mobility 2045 – B. Sharlow, MDOT:

B. Sharlow gave an update on the Michigan Mobility 2045 State Long-Range Transportation Plan and the main edits to the plan. The Public stakeholders commend period was held 07/22/2021-08/31/2021. This plan is for federal-aid eligible roads and not all roads. They added a 30-page Executive Summary with hyperlinks and a new Chapter on Plan Implementation. MDOT will be taking the plan to the State Transportation Commission on November 4, 2021 for adoption of the Plan. This will provide a good platform for some outreach. Based upon one suggestion, for the next plan they will discuss possibly getting Access points. It was suggested that MDOT may want to find out what the needs are for rail and non-motorized. B. Sharlow stated that MDOT intends to do this in a future plan.

#### 6. Michigan Infrastructure Council Update – L. Steckelberg:

L. Steckelberg informed the attendees that he is the Interim Executive Director for the MIC and they continue to seek a full time, permanent Executive Director for the MIC. They are also working on getting a Departmental Analyst to assist the MIC. The MIC has completed their FY 2021 Annual Report and it is on their website. On page 10 of the MIC Annual Report there are references to TAMC efforts. The MIC portal project has also been completed and they are in the process of getting a contract in place for trainings. They are also working on a 30-year plan for asset management across the state as well as a statewide plan for infrastructure.

#### 7. Correspondence & Announcements:

**7.1.** – TAMC 2021 Fall Virtual Asset Management Conference – R. Belknap (Attachment 3): The Fall TAMC Virtual Asset Management Conference will be held half days on October 27 and 28, 2021. Zoom is the platform that will be used for the conference. There are currently over 100 people registered to attend. A draft agenda is being provided to the Council for their review.

#### 7.2. – TAMC Launches Culvert Asset Management Program – R. Belknap (Attachment 4)

Communications have gone out regarding the TAMC Culvert Asset Management Program on various platforms. Culvert trainings had strong attendance. Joanna Johnson, TAMC Chair, reached out to the Michigan Association of Counties (MAC) for a replacement for Christopher Bolt, who took a new position in California. J Tubbs commented that only the member agencies have control over their appointments. Chair Johnson read the excerpt from the letter for appointment.

#### **8. Action Items:**

#### 8.1. – Policy for the Collection of Bridge Condition Data – R. Curtis (Memo/Attachment 5):

A copy of the revised Policy for the Collection of Bridge Condition Data was provided and a few of the major changes that were made to the policy were shown which included the following four items below. This policy applies to the collection of Bridge data on mileage owned by Act 51 agencies where "Bridge" Includes:

- Bridges as defined by the National Bridge Inspection Standards (NBIS), referred to as NBI Bridges
- Tunnels as defined by the National Tunnels Inspection Standards (NTIS), referred to as
- Structures that are less than 20-feet and therefore do not fall under the National Bridge Inspection Standards, but the agency chooses to inspect as a bridge rather than as a culvert for asset management purposes, referred to as Non-NBI Length Bridges.
- Bridges crossing over a roadway of an Act 51 agency but do not fall under the National Bridge Inspection Standards and they do not carry highway traffic, referred to as Non-NBI Bridges.

**Motion:** B. Wieferich made a motion to approve the Policy for the Collection of Bridge Condition Data as revised; D. Bradshaw seconded the motion. The motion was approved by all members present.

#### 9. Committee Review and Discussions Items:

#### 9.1. – Bridge Committee Update – R. Curtis

At the last Bridge Committee meeting the release of the Non-NBI Culvert Training Guide and the Bridge condition policy were the two major items of discussion. Christopher Bolt, the MAC representative for TAMC, announced his leaving TAMC and his acceptance of a new position as Public Works Director in Petaluma, California. A letter to the MAC requesting a replacement to TAMC has been sent.

#### 9.2. – ACE Committee Update – D. Bradshaw

At today's ACE Committee meeting the Committee discussed the TAMC Strategic Work Program and their tasks associated with the program.

**Action Item:** T. Colling will look into finding other agency best practices and share with the ACE Committee to possibly build on their finding to create a better TAMC.

The ACE Committee discussed how G. Strong, during her view of small agency TAMPs, should handle agencies that do not submit TAMPs containing the seven elements required of large agencies. She has been asked to send an email to the agency requesting the addition of the missing elements. The seven elements are not required for the small agency TAMPs.

The ACE Committee again discussed the TAMC 20 Year Celebration Conference. The ACE Committee would like to inform the upcoming attendees at the TAMC Virtual Fall Conference on October 27 and 28, 2021 of a date and possible city that the celebration will be held.

**Action Item:** D. Bradshaw requested all Council members look at their respective representative agencies calendars and send any conference or meeting dates that their agencies are having in late summer or fall (September and October of 2022) that may conflict with the TAMC celebration to D. Bradshaw by Friday, October 8, 2021, so G. Strong can solidify a date for the celebration in 2022. He also asked the Council members to place their preferences for dates and locations in the email response to him.

**Action Item:** D. Bradshaw informed the Council for the celebration to be successful, it is going to require participation from TAMC members. D. Bradshaw requested volunteers from the Council to participate on the Conference Planning Committee. G. Strong will set a meeting with the Conference Planning Committee in the very near future and share the dates and location information so a date and possible location can be selected and shared at the 2021 Fall Virtual Conference at the end of this month.

The ACE Committee briefly talked about TAMC bylaws. More discussion regarding bylaws will be held next month.

**Action Item:** The ACE Committee also requested feedback from their members on any suggested changes or modifications to the TAMC bylaws as discussed at the August 4, 2021, TAMC Strategic Planning Session. More to come on this.

#### 9.3. – Data Committee Update – B. McEntee/R. Belknap

R. Belknap gave an update on this seasons PASER data collections which was approximately 20,000 miles of PASER data collected. At the most recent Coordinators Call, most agencies stated that they will collect 100 percent of federal aid roads except for SEMCOG that are experiencing some challenges for their large region. Many have collected their data but have not uploaded it into the IRT. If TAMC in some way can help SEMCOG, please let them know.

R. Belknap wants the Data Committee to analyze how the PASER data was collected this year. TAMC needs to decide to go back to three-member teams or stay with the two-member option. TAMC does not have any information as of yet on the cost savings of using a two-member team as opposed to a three-member team. R. Belknap will have that information after all invoices have been submitted.

For the Statewide Strategic Program, the Data Committee is reviewing Eric Costa's, TAMC Data Analyst, work and how this information can be made understandable to the legislature and public, etc. The Data Committee will give more information at the November Council meeting.

B. McEntee is attempting to talk with D. Bradshaw about the small agencies and how uneven the distribution is between the regions. B. McEntee is also talking to T. Colling about doing a mini TAMP for the small agencies.

Mike Toth gave a very informative presentation on the MIRE data collection effort at the last Data Committee meeting.

#### **10. Public Comments:**

R. Belknap informed the attendees that the TAMC Conference will be held virtually on October 27 and 28, 2021.

#### 11. Member Comments:

TAMC thanks Nan Ewald, CSS, for her work with the TAMC. She will be receiving a letter and plaque from the TAMC.

#### 12. Adjournment:

The meeting was adjourned at 2:34 p.m. The next Council meeting is scheduled for November 3, 2021, 1:00 p.m., at the MDOT Aeronautics Building, 1<sup>st</sup> Floor Auditorium, 2700 Port Lansing Road, Lansing, MI

TAMC F	REQUENTLY USED	
ACRON		
AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	
ACE	ADMINISTRATION, COMMUNICATION, AND EDUCATION (TAMC COMMITTEE)	
ACT 51	PUBLIC ACT 51 OF 1951-DEFINITION: A CLASSIFICATION SYTEM DESIGNED TO DISTRIBUTE MICHIGAN'S ACT 51 FUNDS. A ROADWAY MUST BE CLASSIFIED ON THE ACT 51 LIST TO RECEIVE STATE MONEY.	
ADA	AMERICANS WITH DISABILITIES ACT	
ADARS	ACT 51 DISTRIBUTION AND REPORTING SYSTEM	
ВТР	BUREAU OF TRANSPORTATION PLANNING (MDOT)	
CFM	COUNCIL ON FUTURE MOBILITY	
СРМ	CAPITAL PREVENTATIVE MAINTENANCE	
CRA	COUNTY ROAD ASSOCIATION (OF MICHIGAN)	
CSD	CONTRACT SERVICES DIVISION (MDOT)	
CSS	CENTER FOR SHARED SOLUTIONS	
DI	DISTRESS INDEX	
ESC	EXTENDED SERVICE CONTRACT	
ETL	Exchange, Transfer, and Load	
FAST	FIXING AMERICA'S SURFACE TRANSPORTATION ACT	
FHWA	FEDERAL HIGHWAY ADMINISTRATION	
FOD	FINANCIAL OPERATIONS DIVISION (MDOT)	
FY	FISCAL YEAR	
GLS REGION V	GENESEE-LAPEER-SHIAWASSEE REGION V PLANNING AND DEVELOPMENT COMMISSION	
GVMC	GRAND VALLEY METRO COUNCIL	
HPMS	HIGHWAY PERFORMANCE MONITORING SYSTEM	
IBR	INVENTORY BASED RATING	
IRI	INTERNATIONAL ROUGHNESS INDEX	
IRT	INVESTMENT REPORTING TOOL	
KATS	KALAMAZOO AREA TRANSPORTATION STUDY	
KCRC	KENT COUNTY ROAD COMMISSION	
LDC	LAPTOP DATA COLLECTORS	
LTAP	LOCAL TECHNICAL ASSISTANCE PROGRAM	
MAC	MICHIGAN ASSOCIATION OF COUNTIES	
MAP-21	MOVING AHEAD FOR PROGRESS IN THE 21 <sup>ST</sup>	
	CENTURY (ACT)	
MAR	MICHIGAN ASSOCIATION OF REGIONS	
MDOT	MICHIGAN DEPARTMENT OF TRANSPORTATION	
MDTMB	MICHIGAN DEPARTMENT OF TECHNOLOGY, MANAGEMENT AND BUDGET	
MIC	MICHIGAN INFRASTRUCTURE COMMISSION	
MITA	MICHIGAN INFRASTRUCTURE AND TRANSPORTATION ASSOCIATION	

MML	MICHIGAN MUNICIPAL LEAGUE	
MPO	METROPOLITAN PLANNING ORGANIZATION	
MTA	MICHIGAN TOWNSHIPS ASSOCIATION	
MTF	MICHIGAN TRANSPORTATION FUNDS	
MTPA	MICHIGAN TRANSPORTATION PLANNING	
	ASSOCIATION	
MTU	MICHIGAN TECHNOLOGICAL UNIVERSITY	
NBI	NATIONAL BRIDGE INVENTORY	
NBIS	NATIONAL BRIDGE INSPECTION STANDARDS	
NFA	NON-FEDERAL AID	
NFC	NATIONAL FUNCTIONAL CLASSIFICATION	
NHS	NATIONAL HIGHWAY SYSTEM	
PASER	PAVEMENT SURFACE EVALUATION AND RATING	
PNFA	PAVED NON-FEDERAL AID	
PWA	PUBLIC WORKS ASSOCIATION	
QA/QC	QUALITY ASSURANCE/QUALITY CONTROL	
RBI	ROAD BASED INVENTORY	
RCKC	ROAD COMMISSION OF KALAMAZOO COUNTY	
ROW	RIGHT-OF-WAY	
RPA	REGIONAL PLANNING AGENCY	
RPO	REGIONAL PLANNING ORGANIZATION	
SEMCOG	SOUTHEAST MICHIGAN COUNCIL OF	
	GOVERNMENTS	
STC	STATE TRANSPORTATION COMMISSION	
STP	STATE TRANSPORTATION PROGRAM	
TAMC	TRANSPORTATION ASSET MANAGEMENT	
	COUNCIL	
TAMP	TRANSPORTATION ASSET MANAGEMENT PLAN	
TPM	TRANSPORTATION PERFORMANCE MEASURES	
UWP	UNIFIED WORK PROGRAM	
WATS	WASHTENAW AREA TRANSPORTATION STUDY	
C /CI CDIACTDONI		

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TAMC Transportation Asset		FY20 Budg		FY20 Yea		F	Y21 Budget	FY21 Yea		Date		FY22 Budget		FY22 Year	to D	ate
Management Council																
	cent invoice)	\$		Spent	Balance		\$	Spent		Balance		\$		Spent	Е	Balance
<ol> <li>Data Collection &amp; Regional-Metro Planning Asset Management Progate Battle Creek Area Transporation Study</li> </ol>	Dec	\$ 20,500	00 9	\$ 20,346.46	\$ 153.54	\$	20,500.00	14,858.26	¢	5,641.74	\$	20,500.00	\$		\$	20,500.0
Bay County Area Transportation Study	4QTR-21	\$ 19,900					19,900.00			437.45	\$		\$		۶ \$	19,900.0
Central Upper Peninsula Planning and Development	4QTR-21	\$ 50,000				\$	50,000.00			-	\$		\$	-	\$	50,000.0
East Michigan Council of Governments	Jan	\$ 108,000	.00	\$ 108,000.00	\$ -	\$	108,000.00 \$	69,436.58	\$	38,563.42	\$	108,000.00	\$	11,112.49	\$	96,887.5
Eastern Upper Peninsula Regional Planning & Devel.	1QTR-22	\$ 25,000	.00	\$ 25,000.00	\$ -	\$	25,000.00 \$	12,650.36	\$	12,349.64	\$	25,000.00	\$	1,069.55	\$	23,930.4
Genesee Lapeer Shiawasse Region V Planning Com.	Jan	\$ 46,000	.00	\$ 46,000.00	\$ -	\$	46,000.00 \$	20,287.67	\$	25,712.33	\$	46,000.00	\$	-	\$	46,000.0
Grand Valley Metropolitan Council	1QTR-22	\$ 24,000			\$ -	\$	24,000.00			135.69	\$	24,000.00			\$	23,945.0
Kalamazoo Area Transportation Study	1QTR-22	\$ 22,000			\$ 9.81		22,000.00 \$			11,064.55	\$	22,000.00			\$	22,000.0
Macatawa Area Coordinating Council	4QTR-21	\$ 19,000			\$ 16,642.40		19,000.00 \$			4,906.43	\$	19,000.00			\$	19,000.0
Midland Area Transportation Study  Northeast Michigan Council of Governments	1QTR-22 Dec	\$ 21,000 \$ 51,000		, , , , , , , , , , , , , , , , , , , ,	\$ - \$ -	\$	21,000.00 \$ 59.528.49 \$				\$	21,000.00 51,000.00			\$ \$	19,776.7 40,997.7
Networks Northwest	4QTR-21	\$ 75,000				\$	75,000.00			56,913.48	Ś	75,000.00			\$	75,000.0
Region 2 Planning Commission	Sept	\$ 40,000		,	\$ -	Ś	40,000.00			36,598.00	\$	40,000.00			\$	40,000.0
Saginaw Area Transportation Agency	4QTR-20	\$ 21,000			\$ 6,209.87	1.	21,000.00		\$	21,000.00	\$		Ś		\$	21,000.0
Southcentral Michigan Planning Commission	1QTR-22	\$ 55,000					55,000.00			36,728.83	Ś	55,000.00			\$	55,000.0
Southeast Michigan Council of Governments	Dec	\$ 174,000			\$ -	\$	174,000.00			-	\$		\$			148,177.1
Southwest Michigan Planning Commission	4QTR-21	\$ 41,000					41,000.00			26,731.65	\$	41,000.00	\$		\$	41,000.0
Tri-County Regional Planning Commission	4QTR-21	\$ 40,000	.00	\$ 40,000.00	\$ -	\$	40,000.00	14,212.00	\$	25,788.00	\$	40,000.00	\$	-	\$	40,000.0
West Michigan Regional Planning Commission	4QTR-20	\$ 88,000			\$ 14,048.21		88,000.00 \$		\$	88,000.00	\$	88,000.00	\$		\$	88,000.0
West Michigan Shoreline Regional Development Com.	Jan	\$ 54,000					54,000.00			12,150.94	\$	. ,	\$		\$	53,730.2
Western Upper Peninsula Regional Planning & Devel.	4QTR-21	\$ 42,000				\$	42,000.00			30,057.91	\$	42,000.00			\$	42,000.0
MDOT Region Participation & State Vehicle Use	10/28/20	\$ 30,000					30,000.00 \$		\$	30,000.00	\$	30,000.00			\$	30,000.0
PASER Quality Review Contract	8/25/20	\$ 50,000			\$ 50,000.00		50,000.00 \$		\$	50,000.00	\$	50,000.00			\$	50,000.0
Data Collection & Regional-Metro Progam Total		\$ 1,116,400	.00	\$ 1,005,529.63	\$ 110,870.37	\$ .	1,124,928.49	612,148.43	>	512,780.06	>	1,116,400.00	>	49,555.17	\$ 1,0	J66,844.8
III. TAMC Central Data Agency (MCSS)																
Project Management	12/22/21	\$ 64,200	.00 5	\$ 72,225.00	\$ (8,025.00)	) \$	56,580.00	45.844.73	Ś	10.735.27	\$	65,093.00	Ś	7,660.00	Ś	57,433.0
Data Support /Hardware / Software	12/22/21	\$ 37,000			\$ 8,324.45		25,870.00	•	\$	2,632.02	\$	44,298.00			\$	44,298.0
Application Development / Maintenance / Testing	12/22/21	\$ 166,000			\$ (1,217.02)		171,250.00	•		(3,384.38)				44,678.54		158,201.4
Help Desk / Misc Support / Coordination	12/22/21	\$ 53,250	.00 \$	\$ 49,634.15	\$ 3,615.85		67,360.00 \$	98,289.56	\$	(30,929.56)	\$	26,679.00	\$	8,254.19	\$	18,424.8
Training	12/22/21	\$ 26,000	.00	\$ 18,486.22	\$ 7,513.78	\$	16,170.00 \$	9,619.47	\$	6,550.53	\$	14,000.00	\$	-	\$	14,000.0
Data Access / Reporting	12/22/21	\$ 28,500	.00 \$	\$ 36,500.00	\$ (8,000.00)	) \$	37,720.00	23,216.90	\$	14,503.10	\$	22,000.00	\$	6,718.30	\$	15,281.7
TAMC Central Data Agency (MCSS) Total		\$ 374,950	.00	\$ 372,737.94	\$ 2,212.06	\$	374,950.00	374,843.02	\$	106.98	\$	374,950.00	\$	67,311.03	\$ 3	307,638.9
IV. MTU Training & Education Program Contract	Dec	\$ 225,000	.00 :	\$ 224,280.94	\$ 719.06		\$211,391.21	165,599.61	\$	45,791.60		\$210,658.15	\$	-	\$ 2	210,658.1
V. MTU Activities Program Contract	Dec	\$ 115,000	.00 :	\$ 115,011.82	\$ (11.82)	)	\$129,464.81	55,085.04	\$	74,379.77		\$128,424.93	\$	-	\$ :	128,424.9
·																
VI. TAMC Expenses																
Fall Conference Expenses	12/10/19	\$ 10,000				\$	- \$		\$	-	\$	10,000.00			\$	10,000.0
Fall Conf. Attendence Fees + sponsorship Fees	12/10/19			,		\$	- \$		\$	-	\$	-	\$		\$	-
Net Fall Conference		\$ 16,890		\$ 6,781.90	\$ 10,108.10		4 474 54		\$	-	,	40.000.00	\$		\$	-
Spring Conference Expenses	6/27/19 6/27/19	\$ 10,000	.00			\$	1,471.51		\$	1,471.51	\$	10,000.00	\$		\$ \$	10,000.0
Spring Conf. Attendence Fees + sponsorship Fees Net Spring Conference	6/27/19	\$	- 5		\$ 10,000.00				\$		۶	-	ç		۶ \$	
Unallocated / Contingency	5,21113	\$ 10,000			\$ 10,000.00		20,000.00		\$	20,000.00	\$	10,000.00	Ś		۶ \$	10,000.0
Other Council Expenses (Member Mileage Expenses/Printing/Etc.)	3/12/20	\$ 10,000			\$ 7,953.76		10,000.00		\$	9,838.50	\$	10,000.00	Ś		\$	10,000.0
TAMC Expenses Total		\$ 46,890			\$ 38,061.86		31,471.51		\$	31,310.01	\$	40,000.00	\$		\$	40,000.0
Total Program .		\$ 1,878,240		\$ 1,726,388.47			1,872,206.02			664,368.42	\$	1,870,433.08	\$	-	\$ 1,8	870,433.0
Appropriation		\$ 1,876,400	.00		8.08%	6 \$ :	1,876,400.00			35.49%	\$	1,876,400.00				100.00
					_					_						
/// Caracial Danianta with Community D. 1		EV22 D		F1/20 11					ar to	Date		FY22 Budget		FY22 Year	το Β	ate
.,		FY20 Budg	et	FY20 Yea	r to Date	F	Y21 Budget	FY21 Yea						Spent		Balance
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)		\$		Spent	Balance		\$	Spent		Balance		\$		-	\$	69,004.4
VII. Special Projects with Separate Budgets  MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)  Central Data Agency (MCSS)	9/16/20	\$ \$ 25,000	.00	<b>Spent</b> \$ 18,738.00	Balance \$ 6,262.00	\$	\$ 70,000.00	<b>Spent</b> \$ 995.55		69,004.45	\$	69,004.45	\$			77,258.0
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)  Central Data Agency (MCSS)  MTU Culvert Project Activities & Training Program	Dec	\$ 25,000 \$ 55,011	.00	<b>Spent</b> \$ 18,738.00 \$ 55,011.46	<b>Balance</b> \$ 6,262.00 \$ -	\$	\$ 70,000.00 135,007.92	Spent 995.55 60,085.15	\$	69,004.45 74,922.77	\$	69,004.45 77,258.02	\$		\$	
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered)		\$ \$ 25,000 \$ 55,011 \$ 472,863	.00 .46 .51	Spent \$ 18,738.00 \$ 55,011.46 \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51	\$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$	Spent 995.55 60,085.15	\$ \$	69,004.45	\$	69,004.45 77,258.02 117.59	\$	-	\$	117.5
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered) Central Upper Peninsula Planning and Development	Dec 2/25/21	\$ 25,000 \$ 55,011 \$ 472,863 \$	.00 .46 .51	<b>Spent</b> \$ 18,738.00 \$ 55,011.46 \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$	Spent 995.55 60,085.15	\$ \$ \$	69,004.45 74,922.77	\$ \$	69,004.45 77,258.02 117.59 24,000.00	\$ \$	-	\$ \$	117.5 24,000.0
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered) Central Upper Peninsula Planning and Development East Michigan Council of Governments	Dec	\$ 25,000 \$ 55,011 \$ 472,863 \$	.00 .46 .51	\$pent \$ 18,738.00 \$ 55,011.46 \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51	\$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$ - \$ - \$	Spent 995.55 60,085.15 - 5 - 5	\$ \$ \$ \$	69,004.45 74,922.77	\$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00	\$	- - -	\$ \$ \$	117.5 24,000.0 42,000.0
Il Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered) Central Upper Peninsula Planning and Development East Michigan Council of Governments Northeast Michigan Council of Governments	Dec 2/25/21	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$	.00 : .46 : .51 : .	\$ 18,738.00 \$ 55,011.46 \$ - \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$ - \$ - \$ - \$	Spent 995.55 60,085.15	\$ \$ \$ \$ \$	69,004.45 74,922.77	\$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00	\$ \$ \$ \$	- - -	\$ \$ \$ \$	117.5 24,000.0 42,000.0 10,000.0
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered) Central Upper Peninsula Planning and Development East Michigan Council of Governments Northeast Michigan Council of Governments Networks Northwest	Dec 2/25/21 Nov	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$ \$	.00 : .46 : .51 :	\$ 18,738.00 \$ 55,011.46 \$ - \$ - \$ - \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$ - \$ - \$ - \$ - \$ - \$	Spent 995.55 60,085.15	\$ \$ \$ \$ \$	69,004.45 74,922.77	\$ \$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 16,000.00	\$ \$ \$ \$	- - - -	\$ \$ \$ \$ \$	117.5 24,000.0 42,000.0 10,000.0 16,000.0
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)  Central Data Agency (MCSS)  MTU Culvert Project Activities & Training Program  TAMC Administration & Contingency (Unencumbered)  Central Upper Peninsula Planning and Development  East Michigan Council of Governments  Northeast Michigan Council of Governments  Networks Northwest  Southcentral Michigan Planning Commission	Dec 2/25/21	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$	.00 : .46 : .51 : .	\$ 18,738.00 \$ 55,011.46 \$ - \$ - \$ - \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$ - \$ - \$ - \$	Spent 995.55 60,085.15	\$ \$ \$ \$ \$	69,004.45 74,922.77	\$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 16,000.00 6,000.00	\$ \$ \$ \$	- - - - -	\$ \$ \$ \$	117.5 24,000.6 42,000.6 10,000.6 6,000.6
VII Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)  Central Data Agency (MCSS)  MTU Culvert Project Activities & Training Program  TAMC Administration & Contingency (Unencumbered)  Central Upper Peninsula Planning and Development  East Michigan Council of Governments  Northeast Michigan Council of Governments  Networks Northwest	Dec 2/25/21 Nov	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$ \$ \$	.00 : .46 : .51 :	\$ 18,738.00 \$ 55,011.46 \$ - \$ - \$ - \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 \$ 135,007.92 \$ 274,117.59 \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ - \$ -	Spent 995.55 60,085.15	\$ \$ \$ \$ \$ \$	69,004.45 74,922.77 274,117.59 - - - -	\$ \$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 6,000.00 33,000.00	\$ \$ \$ \$ \$ \$	- - - - -	\$ \$ \$ \$ \$	117. 24,000. 42,000. 10,000. 16,000. 6,000. 33,000.
VII Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered) Central Upper Peninsula Planning and Development East Michigan Council of Governments Northeast Michigan Council of Governments Networks Northwest Southcentral Michigan Planning Commission Southeast Michigan Council of Governments	Dec 2/25/21 Nov	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$ \$ \$ \$ \$	.00 : .46 : .51 :	\$ 18,738.00 \$ 55,011.46 \$ - \$ - \$ - \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 135,007.92 274,117.59	Spent 995.55 60,085.15	\$ \$ \$ \$ \$ \$	69,004.45 74,922.77 274,117.59 - - - -	\$ \$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 16,000.00 6,000.00	\$ \$ \$ \$ \$ \$ \$	- - - - - - -	\$ \$ \$ \$ \$ \$	117. 24,000. 42,000. 10,000. 16,000. 6,000. 33,000. 27,000.
VII Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3) Central Data Agency (MCSS) MTU Culvert Project Activities & Training Program TAMC Administration & Contingency (Unencumbered) Central Upper Peninsula Planning and Development East Michigan Council of Governments Northeast Michigan Council of Governments Networks Northwest Southcentral Michigan Planning Commission Southeast Michigan Council of Governments Southest Michigan Council of Governments Southwest Michigan Planning Commission	Dec 2/25/21 Nov	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$ \$ \$ \$ \$ \$ \$	.00 : .46 : .51 :	\$ 18,738.00 \$ 55,011.46 \$ - \$ - \$ - \$ - \$ -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 135,007.92 274,117.59	Spent 995.55 60,085.15 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 -	\$ \$ \$ \$ \$ \$ \$	69,004.45 74,922.77 274,117.59 - - - - - - -	\$ \$ \$ \$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 6,000.00 33,000.00 27,000.00	\$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - -	\$ \$ \$ \$ \$ \$ \$	117.1 24,000.1 42,000.1 10,000.1 16,000.1 6,000.1 33,000.1 27,000.1
VII Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)  Central Data Agency (MCSS)  MTU Culvert Project Activities & Training Program  TAMC Administration & Contingency (Unencumbered)  Central Upper Peninsula Planning and Development  East Michigan Council of Governments  Northeast Michigan Council of Governments  Networks Northwest  Southcentral Michigan Planning Commission  Southwest Michigan Planning Commission  Tri-County Regional Planning Commission	Dec 2/25/21 Nov	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$ \$ \$ \$ \$ \$ \$	.00 : .46 : .51 :	Spent 18,738.00 5 55,011.46 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	<b>Balance</b> \$ 6,262.00 \$ - \$ 472,863.51 \$ -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 135,007.92 274,117.59 2 -	Spent 995.55 60,085.15	\$ \$ \$ \$ \$ \$ \$ \$	69,004.45 74,922.77 274,117.59 - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 16,000.00 33,000.00 27,000.00 34,000.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$	117.: 24,000.: 42,000.: 10,000.: 16,000.: 6,000.: 33,000.: 27,000.: 34,000.:
MI Local Agency Culvert Inventory Pilot (FY18 HB4320 S-3)  Central Data Agency (MCSS)  MTU Culvert Project Activities & Training Program  TAMC Administration & Contingency (Unencumbered)  Central Upper Peninsula Planning and Development  East Michigan Council of Governments  Northeast Michigan Council of Governments  Networks Northwest  Southcentral Michigan Planning Commission  Southeast Michigan Council of Governments  Southwest Michigan Council of Governments  Southwest Michigan Planning Commission  Tri-County Regional Planning Commission  West Michigan Regional Planning Commission	Dec 2/25/21 Nov Dec	\$ 25,000 \$ 55,011 \$ 472,863 \$ \$ \$ \$ \$ \$ \$ \$	.000 :.46 :.51 :	Spent 18,738.00 5 55,011.46 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 -	Balance   \$ 6,262.00   \$ - \$ 472,863.51   \$ - \$ - \$ - \$   \$ 5 - \$   \$ 6 - \$   \$ 7 - \$   \$ 7 - \$   \$ 8 - \$   \$ 9 -	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	\$ 70,000.00 135,007.92 274,117.59 5	Spent 995.55 60,085.15	\$ \$ \$ \$ \$ \$ \$ \$	69,004.45 74,922.77 274,117.59 - - - - - -	\$ \$ \$ \$ \$ \$ \$ \$	69,004.45 77,258.02 117.59 24,000.00 42,000.00 10,000.00 6,000.00 33,000.00 27,000.00 34,000.00 34,000.00	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	- - - - - - - - - - - 909.93	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	117.5
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#### Notes:

TAMC voted to extend service dates of FY20 contracts with Regional-Metro Planning to expire on 9-30-21; the contract for PASER Quality Review has been extended to 9-30-21

TAMC voted to extend service date of FY21 contracts with Regional-Metro Planning to expire on 9-30-22; TAMC voted to move the balance of unspent Mi Local Agency Culvert Inventory Pilot funds from FY18 into FY22's Special Projects Program



## Memo

**To:** TAMC & TAMC ACE Committee Members

From: Roger Belknap, TAMC Coordinator

Date: February 17, 2022

Re: TAMC FY21 Budget Amendment Requests

We received notification that there are two planning agencies that will need budget amendments to fully reimburse expenses for data collection from this past year.

- 1. The Bay City Area Transportation Study (BayCATS) will have a shortfall for FY2021 that cannot be managed without a contract modification and TAMC Budget Amendment. For FY21, BayCATS received \$19,900 in funding and has billed \$19,462.55, which leaves a fund balance of \$437.45. Recently, there's been a transition in the role of Executive Director at BayCATS and during this timeframe of transition BayCATS received an additional invoice from the City of Bay City for asset management program activities that would require an additional \$1,700.97 above the \$437.45 balance.
- 2. The Saginaw Area Transportation Agency (SATA) will have a shortfall for FY2021 that cannot be managed without a contract modification and TAMC Budget Amendment. Initially, we thought there may be a different option for SATA, however that option was not workable, and our best option is the contract modification. For FY21, SATA received \$21,000 in funding and has received invoices for program expenses totaling \$38,342.21, which leaves a shortfall of \$17,342.21.

After review of the current TAMC Budget, there are several areas where funds remain available that could be used to amend both the FY21 BayCATS and SATA contracts to add in the \$1,700.97 and \$17,342.21 and not cause shortages elsewhere. Perhaps the funds could be taken from unused resources in the Education Training or Technical Assistance Activities programs as we have received the final invoices for these two programs from Michigan Tech University for FY21, and there is a balance of more than \$120,000 for these programs. On February 2, 2022, the TAMC ACE Committee meeting, ACE supported moving this conversation to full council. Ultimately, support action is needed as the contract amendment would need the TAMC approval.



Demetra M. Manley, Executive MPO Director "Moving Saginaw Towards a Seamless and Safe Transportation System"

4805 Towne Centre Road Suite 104 Saginaw, Michigan 48604 Phone: 989-395-8544

Email: dmanley@satampo.org

#### **MEMO**

TO;

Roger A. Belknap, TAMC Coordinator

FROM:

Demetra M. Manley, Executive MPO Director

DATE:

February 8, 2022

SUBJECT: 2021-0008/Z2R1 Contract Amendment

The Saginaw Area Transportation Agency (SATA) will have a shortfall for FY2021 Asset Management Program that cannot be managed without a contract modification and a TAMC Budget Amendment. For FY2021, SATA received \$21,000 in funding and has received invoices for a cost breakdown of the FY2021 expenses with invoices from both the City of Saginaw and the Saginaw County Road Commission.

SATA Administration and coordination expenses	\$ 2,568.77
Saginaw County Road Commission expenses	25,675.51
for PASER Data Collection and related tasks	38,342.21
City of Saginaw expenses for PASER Data Collection	10,097.93
related expenses	

Total FY2021 \$38,342.21

Asset Management of SATA



## Memo

**To:** TAMC Members

**From:** Roger Belknap, TAMC Coordinator

**Date:** February 17, 2022

Re: Asset Management Program Unified Work Program Language

In January, TAMC updated policies for Roadway and Bridge data collection that impact the procedural tasks of the Regional and Metropolitan Planning agency's support of the TAMC Strategic Work Program. In addition to those policy updates, TAMC also approved the culvert inventory and condition data collection policy last fall. With all of these policy changes and added program activities, staff added language to the Unified Work Program (UWP) language for the Asset Management program. The Asset Management UWP is the basis for the contracts that the Michigan Department of Transportation (MDOT) has with the 21 Regional and Metropolitan Planning agency's for administering the TAMC funding for allocating training and data collection reimbursements to these agencies and their respective local road agencies.

Attachment 5 is an ACE Committee Approved (February 2, 2022) draft that highlights the proposed changes to ensure the UWP is consistent with TAMC's policies for data collection. Staff recommends TAMC review this language and if ready, approve it at the March 2, TAMC meeting. Ultimately, we will need TAMC approval to amend the UWP. MDOT, Federal Highway Administration and TAMC support staff will be participating in FY2023 pre-UWP meetings with each Regional and Metropolitan Planning agency throughout the next few months. It is recommended that this language be updated ahead of establishing the FY2023 contracts with these planning agencies.

TAMC	Αp	proved	

#### **ASSET MANAGEMENT**

The resources allocated to the Metropolitan/Regional Planning Organization (MPO/RPO) from the Transportation Asset Management Council (TAMC) annual budget shall be utilized to assist in the completion of the TAMC Work Program. All work shall be consistent with the policies and priorities established by the TAMC. All invoices submitted for reimbursement of Asset Management activities shall utilize Michigan Department of Transportation (MDOT) standard invoice forms and include the required information for processing. The MPO/RPO shall complete the required products and perform tasks according to the timeframes and directives established within TAMC's data collection policies, which can be found on the TAMC website (<a href="http://www.michigan.gov/tamc">http://www.michigan.gov/tamc</a>). The MPO/RPO will emphasize these tasks to support the largest Public Act 51 agencies (agencies that certify under Public Act 51 a minimum of 100 centerline miles of road) within the planning area when resources are limited. The activities eligible for TAMC reimbursement include the following:

#### **TASKS**

- I. Training Activities
  - A. Attendance at training seminar(s) on the use of Pavement Surface Evaluation and Rating (PASER) and Inventory-based Rating System for unpaved roadways.
  - B. Represent MPO/RPO at TAMC-sponsored conferences and seminars, including attending either the Spring or Fall TAMC Conference.
  - C. Attend TAMC-sponsored Investment Reporting Tool (IRT) training seminars.
  - D. Attend TAMC-sponsored Asset Management Plan Development training seminars.
- II. Roadway Inventory and Condition Data Collection Participation and Coordination
  - A. Federal Aid System:
    - 1. Organize schedules with Public Act 51 agencies within MPO/RPO's boundary for participating in Federal Aid data collection efforts; ensure all participants of data collection have access to State of Michigan travel reimbursement rates.
    - Coordinate, participate and facilitate road surface data collection on no less than one-half of the Federal Aid System in accordance with the TAMC Policy for the Collection of Roadway Condition Data on Federal Aid Eligible Roads and Streets.
    - Collect unpaved roadway condition data on approximately half of any unpaved Federal Aid eligible roadways using the Inventory-based Rating System developed by the Michigan Technological University's Center for Technology and Training.
  - B. Non-Federal Aid System:
    - 1. It is required that the RPO/MPO make a formal call for interest for NFA data collection reimbursements to their respective Act 51 agencies annually, and that requests by Act 51 agencies are submitted to their respective RPO/MPO by October 1 each year to assist in the coordination of data collection priorities of the following data collection season. The RPO/MPO may allocate

- reimbursements for Non-Federal Aid data collection to Public Act 51 agencies according to the resources available to them in the manner that best reflects the priorities of their area and supports the TAMC work.
- 2. Coordinate Non-Federal Aid data collection cycles with Public Act 51 agencies with an emphasis on the top 125 agencies.
- Ensure all participants of data collection understand procedures for data sharing with TAMC as well as TAMC policy and procedures for collecting Non-Federal Aid data.
- Participate and perform data collection with Public Act 51 agencies on an asneeded basis for the data collection of Non-Federal Aid roads when requested.

#### III. Equipment

- A. Ensure rating teams have the necessary tools to complete the federal aid data collection activity by maintaining a laptop compatible with the Laptop Data Collector and Roadsoft programs, a functioning Global Positioning System (GPS) unit, and other required hardware in good working order.
- B. Communicate any equipment needs and purchases with the TAMC Coordinator; laptops are eligible for replacement on a three-year cycle.

#### IV. Data Submission

- A. Develop and maintain technical capability to manage regional Roadsoft databases and the Laptop Data Collector program; maintain a regional Roadsoft database that is accurate and consistent with local agency data sets.
- B. Coordinate Quality Assurance/Quality Control activities and data submission tasks according to protocols established in TAMC Data Collection Policies for Federal Aid and Non-Federal Aid Roads.
- C. Monitor and report status of data collection efforts to TAMC Asset Management Coordinator through monthly coordinator calls and/or monthly or quarterly program updates that are mailed with invoices.
- D. Provide links on agency websites and reports to the TAMC website, interactive maps and dashboards for the dissemination of roadway data.

#### V. Asset Management Planning

- A. Participate and attend TAMC-sponsored training and workshops in order to provide technical support for Asset Management Plan development activities.
- B. Provide an annual reporting of the status of Public Act 51 agency Asset Management Plans and keep abreast of the status of these plans for updates and revision.
- C. Provide technical assistance and training funds to Public Act 51 agencies during the development of local Asset Management Plans using TAMC templates when applicable; coordinate these tasks with an emphasis on the Top 125 agencies.

#### VI. Technical Assistance

- A. Provide technical assistance to local agencies in using the TAMC reporting tools for planned and completed infrastructure investments or any other TAMC Work Program Activity.
- B. Integrate PASER ratings and asset management into project selection criteria:
  - 1. Analyze data and develop road preservation scenarios.
  - 2. Analyze performance of implemented projects.

#### VII. Bridge and Culvert Inventory and Condition Data Collection

- A. Provide administrative and technical assistance to Public Act 51 agencies and MDOT for reimbursement of TAMC funds for participation in data collection efforts for culvert inventory, condition assessment and data submission.
- B. Utilize TAMC reporting forms to communicate progress and expenditures of Public Act 51 agencies to assist TAMC in the Culvert Mapping Pilot Report.
- C. Act 51 agencies must submit a written request for reimbursement; the request should include a total estimate of costs (actual costs claimed must not exceed the estimated costs) for the data gathering, trained/certified team members' time, and vehicle use. This request must also clarify which fiscal year the data collection and reimbursement will take place. Requests for bridge data collection reimbursement authorization are required to be received by the RPO/MPO by October 1 of each year. The RPO/MPO decision on what requests for reimbursement are approved may consider available budget, absence or age of bridge data to be collected and the last year of reimbursement to the road agency for that bridge data set.

#### **Required Products**

- I. PASER data for Federal Aid System submitted to TAMC via the IRT.
- II. PASER data for Non-Federal Aid System submitted to TAMC via the IRT.
- III. Quarterly or monthly activities reports submitted with invoices to TAMC Coordinator.
- IV. Create an Annual Report of Asset Management program activities as well as a summary of annual PASER condition data by local agency, functional classification, and Public Act 51 Legal System; provide links to the Regional Annual Report on agency website and submit copies to TAMC Coordinator by April 1 of each year.
- V. Prepare a draft status report of Public Act 51 agency Asset Management activities and plans within MPO/RPO boundary by September 30 of each year.



#### March 2, 2022

#### **GROUP A**

Based upon my review of the following transportation agencies Group A TAMPs, I am recommending approval of the following agencies from the TAMC ACE Committee today to be submitted for approval to the Council:

- 1. City of Romulus Department of Public Works
- 2. City of Wyoming

#### **TAMPs Current Status:**

				Pending	Total TAMPs
# of Group A	# TAMPs	# TAMPs	# TAMPs Not	Awaiting	Received
Agencies Due	Received by	Received After	Submitted	Additional	&
by October 1,	October 1,	October 1, 2020		Information	Recommended
2020	2020			_	for Approval
				PENDING	To-date
				REVIEW	
41	21	14	6	0	35

#### **TAMPs with Dates Received:**

1. Ottawa County –	22. Huron County Road Commission –
TAMPs received 12/09/2019 and 01/19/2021	TAMP received 10/01/2020
Approved by Council 11/03/2020	Approved by Council 03/03/2021
2. Iosco County Road Commission –	23. City of Royal Oak –
TAMP received 03/09/2020	TAMP received 10/06/2020
Approved by Council 11/03/2020	Approved by Council 03/03/2021
3. Oceana County Road Commission –	24. City of Southfield –
TAMP received 09/03/2020	TAMP received 11/20/2020
Approved by Council 11/03/2020	Approved by Council 03/03/2021
4. Cheboygan County Road Commission	25. City of Farmington Hills –
TAMP received 09/16/2020	TAMP received 12/01/2020 and 09/29/2021
Approved by Council 11/03/2020	Approved by Council 03/03/2021
5. Alger County Road Commission	26. Clinton County Road Commission –
TAMP received 09/23/2020	TAMP received 10/02/20
Approved by Council 11/03/2020	Approved by Council 03/03/2021

6. Wayne County Road Commission -	27. Lenawee County Road Commission –
TAMP received 09/29/2020	TAMP received 10/02/20
Approved by Council 11/03/2020	Approved by Council 03/03/2021
Approved by Council 11/05/2020	Approved by Council 05/05/2021
7. Macomb County Department of Roads –	28. Dickinson County Road Commission –
TAMP received 09/29/2020	TAMP received 10/28/2020
Approved by Council 11/03/2020	Approved by Council 03/03/2021
8. Genesee County Road Commission -	29. City of Ann Arbor –
TAMP received 09/30/2020	TAMP received 10/07/2020
Approved by Council 11/03/2020	Approved by Council 05/05/2021
9. Berrien County Road Department –	30. City of Dearborn Heights –
TAMP received 09/30/2020	TAMP received 04/20/2021
Approved by Council 11/03/2020	Approved by Council 06/02/2021
10. City of Walker –	31. City of Kentwood
TAMP received 09/30/2020	TAMP received 04/22/2021
Approved by Council 11/03/2020	Approved by Council 06/02/2021
11. City of Lansing –	32. City of Norton Shores –
TAMP received 09/30/2020 and 08/11/2021	TAMP received 04/26/2021
Approved by Council 11/03/2020	Approved by Council 07/07/2021
12. Muskegon County –	33. City of Portage
TAMP received 09/30/2020	TAMP received 09/10/2021
Approved by Council 11/03/2020	Approved by Council 01/05/2022
13. City of Livonia –	34. City of Romulus Department of
TAMP received 09/30/2020	Public Works
Approved by Council 11/03/2020	TAMP received 02/14/2022
	Recommending to ACE 03/02/2022
14. Osceola County Road Commission –	35. City of Wyoming
TAMP received 10/01/2020	TAMP received 09/21/2020,
Approved by Council 11/03/2020	09/22/2021, and 02/15/2022
15. Monroe County Road Commission –	Recommending to ACE 03/02/2022
TAMP received 10/01/2020	
Approved by Council 11/03/2020	
**	
16. St. Joseph County Road Commission – TAMP received 10/12/2020	
Approved by Council11/03/2020	
17. Calhoun County –	
TAMP received 10/19/2020	
Approved by Council 11/03/2020	

18. City of Troy –	
TAMP received 08/28/2020	
Approved by Council 03/03/2021	
19. Road Commission of Kalamazoo County	
TAMP received 09/30/2020	
Approved by Council 03/03/2021	
20. City of Grand Rapids –	
TAMP received 09/30/2020	
Approved by Council 03/03/2021	
21. Sanilac County – TAMP received 09/30/2020	
and 11/09/2020 updated TAMP uploaded	
Approved by Council 03/03/2021	

#### **Group A Agencies that Have Not Submitted Their TAMPs:**

1. Baraga County	5. Mason County
2. Bay County	6. Midland County
3. Hillsdale County	
4. City of Jackson	

#### Michigan Department of Transportation TAMP

Although the Michigan Department of Transportation (MDOT) is not listed amongst the agencies in Group A, TAMC would like to acknowledge that MDOT submits their TAMP to the Federal Highway Administration (FHWA) every four years. The MDOT TAMP was certified by FHWA on July 12, 2018, therefore, MDOT's next TAMP is not due until July 12, 2022 (four years from when FHWA certified their first TAMP). 11/2021 - MDOT has started preparing the MDOT TAMP that is required to be submitted to FHWA by July 12, 2022.

Respectfully submitted, Gloria M. Strong March 2, 2022 TAMC Group A TAMP Status Update 03.02.2022



#### March 2, 2022

#### **GROUP B**

Based upon my review of the following transportation agencies Group B TAMPs and the approval to forward on to the Council from the TAMC ACE Committee on 01/05/2022 and 02/02/2022, respectively, I am recommending and requesting approval of the following agencies TAMPs from the Council:

- 1. City of Port Huron
- 2. Gogebic County Road Commission
- 3. City of Dearborn
- 4. Shiawassee County Road Commission
- 5. Missaukee County Road Commission

Based upon my review of the following transportation agencies Group B TAMPs, I am recommending approval of the following agencies from the TAMC ACE Committee today to be submitted for approval to the Council:

- 1. Kent County Road Commission
- 2. Montmorency County Road Commission

#### **Group B TAMPs Current Status:**

				Pending	Total TAMPs
				Review or	Received
# of Group B	# TAMPs	# TAMPs	# TAMPs Not	Awaiting	&
Agencies Due	Received by	Received After	Submitted	Additional	Recommended
by October 1,	October 1,	October 1, 2021		Information	for Approval
2021	2021			_	To-date
41	15	10	16	5	20

#### **TAMPs with Dates Received:**

1. Gogebic County	22. City of Garden City
TAMP received 03/24/2021 & 11/09/2021	TAMP received 01/05/2022
Approved by ACE 01/05/2022	Needs additional information
Recommending to Council 03/02/2022	
2. Emmet County Road Commission	23. Kent County Road Commission
TAMP received 09/09/2021	TAMP received 01/06/2022
Approved by ACE 11/03/2021	Recommending to ACE 03/02/2022
Approved by Council 01/05/2022	

3. Washtenaw County TAMP received 09/14/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	24. City of Taylor TAMP Received 01/06/2022 Needs additional information
4. City of Rochester Hills TAMP received 09/23/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	25. Gratiot County Road Commission TAMP Received 01/07/2022 Needs additional information
5. Livingston County TAMP received 09/24/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	26.
6. Road Commission of Oakland County TAMP received 09/27/2021 Approved by ACE 11/03/2021 Approved Council 01/05/2022	27.
7. Montmorency County (Submitted in TAMP Survey) TAMP received 09/24/2021 02/17/2022 - Agency is moving their TAMP into the TAMP submission area of the IRT and modifying their Traffic Signal information as discussed. – Gloria Strong Recommending to ACE 03/02/2022	28.
8. Alpena County TAMP received 09/28/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	29.
9. City of Battle Creek TAMP received 09/28/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	30.
10. City of Kalamazoo TAMP received 09/29/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	31.
11. Shiawassee County Road Commission TAMP Received 09/30/2021 Approved by ACE 02/02/2022 Recommending to Council 03/02/2022	32.

12. Marquette County Road Commission TAMP received 09/30/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	33.
13. City of Saginaw TAMP received 09/30/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	34.
14. Wexford County Road Commission TAMP received 09/30/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	35.
15. City of Roseville TAMP received 09/30/2021 Needs Additional Information	36.
16. City of Dearborn TAMP received 10/01/2021 Approved by ACE 02/02/2022 Recommending to Council 03/02/2022	37.
17. Houghton County Road Commission TAMP received 10/06/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	38.
18. Van Buren County Road Commission TAMP received 10/12/2021 Needs additional information	39.
19. Missaukee County Road Commission TAMP received 10/15/2021 Approved by ACE 02/02/2022 Recommending to Council 03/02/2022	40.
20. Mackinac County Road Commission TAMP received 10/28/2021 Approved by ACE 11/03/2021 Approved by Council 01/05/2022	41.
21. City of Port Huron TAMP received 12/15/2021 Approved by ACE 01/05/2022 Recommending to Council 03/02/2022	

#### **Group B Agencies that Have Not Submitted Their TAMPs:**

1. Alcona County	12. Menominee County
2. Arenac County	13.Newaygo County
3. Benzie County	14. Ontonagon County
4. City of Burton	15. Otsego County
5. Charlevoix County	16. City of St. Clair Shores
6. Clare County	
7. City of Detroit	
8. Ionia County	
9. Isabella County	
10. Lake County	
11. Leelanau County	

#### **Michigan Department of Transportation TAMP**

Although the Michigan Department of Transportation (MDOT) is not listed amongst the agencies in Group A, TAMC would like to acknowledge that MDOT submits their TAMP to the Federal Highway Administration (FHWA) every four years. The MDOT TAMP was certified by FHWA on July 12, 2018, therefore, MDOT's next TAMP is not due until July 12, 2022 (four years from when FHWA certified their first TAMP). MDOT has begun working on their TAMP for 2022.

Respectfully submitted, Gloria M. Strong March 2, 2022 TAMC Group B TAMP Status Update 03.02.2022

### TAMP SMALL AGENCIES STATUS REPORT 2021-2022 March 2, 2022

Agency Name:	Submitted a document as their TAMP?	Date of Last TAMP:	Did TAMP include 7 Elements ?	Missing Elements:	Notes:
City of Allen Park	Yes	2020	No	All except	Uploaded Street Asset
				Pavement	Management Plan only
City of Bad Axe	No		No	All	Not a plan; list just shows streets
City of Bay City	Yes	2021	No	All except Pavement, risk of failure, and coordination efforts	Used MTU template however it is very incomplete and no table of contents, etc. Most of the required elements are missing and no approval; unfinished TAMP.
Big Rapids	Yes	2021	No	All	Agency submitted a good 2021- 2027 Capital Improvement Program Only
Village of Bloomingdale	No	2021	No	All	Only submitted a half page of bullets describing what needs to be done. This is not a TAMP.
City of Bronson	<mark>Yes</mark>	<mark>2021</mark>			TAMP is dated 2017 TAMP is expired
City of Carson City	Yes	2020			
Cheboygan City	Yes	2020			
City of Clare	Yes	2021	No	All	Only a two page document with items that they plan to do
City of Croswell	Yes	2021	No		2017-2023 60-page Capital Improvement Program
Village of Decatur	Yes	2020			
Village of Dundee	Yes	<mark>2021</mark>	No		TAMP is dated 2019 – TAMP expired
City of Eastpointe	Yes	2020			
Village of Elberta	Yes	2021	No	Only has Streets	Only street information
City of Fennville	Yes	2020			
City of Fremont	Yes	2021	No		FY 21-39 Capital Project Schedule
City of Grosse Pointe	Yes	2021	No	Roads Only	2020 PASER Rating and Asset Management Plan
City of Harper Woods	Yes	2021	No		
Village of Harrietta	Yes	07/02/2021	No		
Linden, City of	Yes	06/07/2021	No	Bridges, Traffic Signals, Culverts	Pg. 64 has approval "pavement asset mgmt. approved." Did good, fair, poor for performance measures
Quincy, Village of	Yes	Submitted 06/22/2021; but version is 2017	No	Bridges, Traffic Signals, Culverts, Approval	TAMP is Expired. Past 3 years. Did good, fair, poor for performance measures

St. Charles, Village	Yes	06/25/2021	No	Bridges, Signals,	Did good, fair, poor for	
of				Culverts, Approval	performance measures	
City of Hastings	Yes	2020				
City of Holland	Yes	2021				
City of Houghton	Yes	2020				
City of Inkster	Yes	2020				
City of Ishpeming	Yes	2020				
City of Laingsburg	Yes	2021				
City of Linden	Yes	2021				
City of Madison	Yes	2021				
Heights						
City of Manistee	Yes	2020				
City of Marine	Yes	2021				
City of Mason	Yes	2021				
County of Mecosta	Yes	2021				
City of Monroe	Yes	2021				
City of Montrose	Yes	10/25/2021				
City of Mt. Clemens	Yes	09/23/2021				
City of Negaunee	Yes	2020				
City of New Buffalo	Yes	2020				
City of Novi	Yes	2020				
County of Oscoda	Yes	2020				
Village of Pentwater	Yes	2021				
City of Pontiac	Yes	2021				
City of Potterville	Yes	2020				
Village of Quincy	Yes	2021				
City of Riverview	Yes	2021				
City of Rochester	Yes	2021				
City of Rockwood	Yes	2021				
City of Saline City	Yes	2020				
Village of Sand Lake	Yes	2021				
City of Sault Ste.	Yes	2021				
Marie						
Village of Shareham	Yes	2020				
City of South Haven	Yes	2020				
Village of St. Charles	Yes	2021				
City of St. Joseph	Yes	2021				
Village of	Yes	2020				
Stevensville						
City of Swartz Creek	Yes	2021				
City of Tawas City	Yes	2021				
Village of Grosse	Yes	2020				
Pointe Shores						
Village of Union City	Yes	2021				
City of Westland	Yes	2021				
City of Williamston	Yes	2020				
City of Wixom	Yes	2020				
Wolverine	Yes	2021				
City of Wyoming	Yes	2021				
City of Zilwaukee	Yes	2021				

Village of Wolverine	Yes	08/26/2021		
Village of Chesaning	Yes	09/09/2021		
City of Rockford	Yes	09/28/2021		
City of North	Yes	10/20/2021		
Muskegon				
City of Tawas City	Yes	10/21/2021		

TAMPs are good for three (3) years. Every three years a new TAMP must be submitted.

The TAMP should include the following –

#### **SEVEN ELEMENTS:**

- 1. Assets: Pavement, Bridges, Traffic Signals, Culverts
- 2. Performance Goals
- 3. Performance Outcomes
- 4. Risk of Failure
- 5. Coordination
- 6. Funding
- 7. Proof of TAMP Approval

Michigan Transportation Asset Management Council

#### 2021 TAMC Training Program Results

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January 18, 2022



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#### **2021 TAMC Training Program Results**

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#### 2021 TAMC Training Program Results

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#### **2021 TAMC Training Program Results**

#### **Executive Summary**

Training Michigan local agencies on the management of their road and bridge assets is one of the missions of the Michigan Transportation Asset Management Council (TAMC). The Center for Technology & Training (CTT) conducts trainings on asset management that fall under eight training categories in the TAMC Training Program. The trainings held in 2021 were (see table below):

- Transportation Asset Management (TAM) Conference,
- Pavement Surface Evaluation and Rating (PASER) Training,
- TAM for Local Officials (LO), and Gravel Road Basics (GRB) for LO,
- Bridge Asset Management (AM) Training Series,
- Inventory-based Rating System™ Training,
- Pavement Asset Management Plan (AMP) Workshop,
- Culvert Asset Management Webinar, and
- Compliance Plan Training Webinar.

The Compliance Plan Training Webinar is an introductory class to the asset management plan, called the "compliance plan", that local road-owning agencies produce to comply with Public Act 325 and also overviews the Pavement Asset Management Plan Workshop and Bridge Asset Management Webinar & Workshop Series that produce elements needed to build a compliance plan.

In 2021, two of the Bridge AM Training Series Workshops, two of the Pavement AMP Workshops, eight of the PASER Trainings, and one of the TAM Conferences were eliminated due to the travel and gathering restrictions imposed by the State of Michigan. In order to adapt to and overcome these restrictions, the CTT reformatted these training programs into virtual events and held two multi-session Pavement AMP Workshops, two multi-session Bridge AM Training Series Workshops, three virtual PASER Trainings, and one TAM Conference. The CTT also reformatted four of the TAM for LO/GRB for LO trainings to be delivered remotely in a virtual format.

Training Program	Total Participants	Number of Training Events	Average Class Attendance
TAM Conference	136	1	136
PASER Training	514	3 (not including 1 webinar)	171
TAM for LO/GRB for LO	134	5	27
Bridge AM Training Series Workshop	18	2 (not including 4 webinars)	9
IBR System™ Training	198	3	66
Pavement AMP Workshop	22	2 (not including 2 webinars)	11
Culvert AM Webinar	80	1	80
Compliance Plan Training Webinar	32	2	16
Total	1134	19	60

Participant attendance at all of the training programs in 2021 totaled 1134. Sixty-four percent of the 1134 total participants in 2021 represent Michigan local agencies, which is the target audience for the TAMC Training Program. The delivery of PASER Trainings in 2021 in an all-virtual format was well

received by the participants as observed in the written feedback received (see Appendix B). The TAM for LO/GRB for LO training program continues to reach a very large portion of the state and all types of local agencies through the use of remote delivery.

### Introduction

The Michigan Transportation Asset Management Council (TAMC), which came into being as a result of Public Act 499, accomplishes its mission of enabling a coordinated, unified method for Michigan's local road-owning agencies for managing their road and bridge assets by providing those agencies with technical training on asset management principles. The Center for Technology & Training (CTT), housed at Michigan Technological University, offers training programs on behalf of TAMC. In 2021, the TAMC Training Program delivered by the CTT had a total of 1134 participants.

### **Summaries of the TAMC Training Program Events**

The major TAMC Training Program trainings conducted in 2021 were:

- Transportation Asset Management (TAM) Conference,
- Pavement Surface Evaluation and Rating (PASER) Training,
- TAM for Local Officials (LO)/Gravel Road Basics (GRB) for LO,
- Bridge Asset Management (AM) Training Series,
- Inventory-based Rating (IBR) System<sup>™</sup> Training,
- Pavement Asset Management Plan (AMP) Workshop,
- Culvert Asset Management Webinar, and
- Compliance Plan Training Webinar.

The Compliance Plan Training Webinar was an introductory class to the asset management plan, called the "compliance plan", that local road-owning agencies produce to comply with Public Act 325 and also overviews the Pavement Asset Management Plan Workshop and Bridge Asset Training Series that produce elements needed to build a compliance plan. Figure 1 shows the attendance totals by each TAMC training program, and Table 1 presents a detailed summary of the statistics for each program.

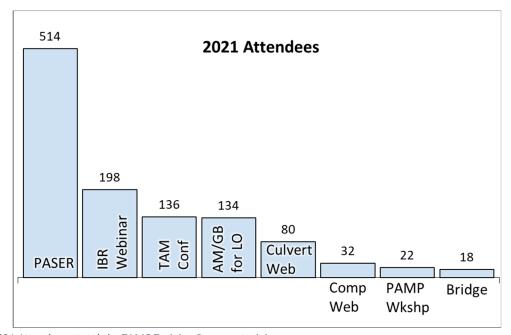


Figure 1: 2021 Attendance totals by TAMC Training Program trainings

**TABLE 1: Summaries of Each TAMC Training Program Trainings in 2021** 

			<u> </u>	
	Total Participants	Training Events (Original)	Dates, Locations, and (Parti	cipants)
TAM Conference	136	1 (2)	Reformatted Delivery 10/27 to 10/28 – Virtual (136)	
PASER Training	514	3 (11)	PASER 3 Day Series 02/23 to 02/25 – Virtual (297) 04/13 to 04/15 – Virtual (127) 06/15 to 06/17 – Virtual (90)	PASER Data Cycle <sup>1</sup> 03/25 – Webinar (42)
TAM for LO/GRB for LO	134	5 (5)	09/21 – Harrison, AM/GB for LO (14)  Reformatted Delivery 03/30 – Webinar (open enrollment), AM for 05/26 – Webinar (open enrollment), GB for 06/09 – Webinar (hosted by Kalamazoo CRC 09/22 – Webinar (hosted by Kalamazoo CRC	LO (42) ), AM for LO (14)
Bridge AM Training Series Workshop	18	2 (4)	Reformatted Delivery 05/11 to 05/19 – Four-part Virtual Workshop (11) 09/08 & 09/15 – Two-part Virtual Workshop (7)	Webinars <sup>2</sup> 05/04 - Part 1 (11) 05/06 - Part 2 (12) 08/31 - Part 1 (12) 09/02 - Part 2 (10)
IBR System™ Training	198	3 (3)	03/02 – Webinar (130) 04/22 – Webinar (49) 06/22 – Webinar (19)	
Pavement AMP Workshop	22	2 (4)	Reformatted Delivery 05/20 to 05/21 – three-part Virtual Workshop (15) 09/09 to 09/10 – three-part Virtual Workshop (7)	Webinars <sup>3</sup> 05/13 – Webinar (15) 09/07 – Webinar (7)
Culvert AM Webinar	80	1 (1)	10/21 – Webinar (80)	
Compliance Plan Training Webinar	32	2 (2)	06/01 – Webinar (17) 09/01 – Webinar (15)	

<sup>&</sup>lt;sup>1</sup> PASER Data Cycle Webinars are shown for reference only and are not included in the PASER Training totals.

<sup>&</sup>lt;sup>2</sup> Bridge AM Training Series webinars are not reported in Bridge AM Workshop totals because it is expected that participants register for both webinars and the workshop; counting participants who attended the webinars in addition to the workshop would result in double-counting of the participants. The webinar numbers are shown for reference only.

<sup>&</sup>lt;sup>3</sup> Pavement AM Workshop webinars are not reported in Pavement AMP Workshop totals because it is expected that participants register for the webinar and the workshop; counting participants who attended the webinar in addition to the workshop would result in double-counting of the participants. The webinar numbers are shown for reference only.

In 2021, all trainings were delivered remotely in a virtual format except for the combined TAM for LO/GRB for LO class in Harrison due to the travel and gathering restrictions imposed by the State of Michigan. In order to adapt to and overcome these restrictions for the remaining training programs, the CTT provided the TAMC Training Program events via remote delivery in a virtual format. Table 2 summarizes the changes to the TAMC Training Program events.

**TABLE 2: TAMC Training Program Event Summary (Number of Events)** 

		Held as	Reformatted	Total Held
Event	Cancelled	Original Mode	Deliver Mode	(Change from Original)
TAM Conference	2	0	1	1 (-1)
PASER Training	11	0	3	3 (-8)
TAM for LO/GRB for LO	4	1	4	5 (0)
Bridge AM Training Series	4	0	2 multi-	2 ( <mark>-2</mark> )
Workshop			session	
IBR System™ Training	0	3	0	3 (0)
Pavement AMP Workshop	4	0	2 multi-	2 ( <mark>-2</mark> )
			session	
Culvert AM Webinar	0	1	0	1 (0)
Compliance Plan Training	0	2	0	2 (0)
Webinar				
Total	25	7	12	19 (-13)

### 2021 Transportation Asset Management Conference

For the 2021 Transportation Asset Management Conference, the CTT participated in organization meetings, distributed promotional materials, handled participant registration, produced conference web-based materials, facilitated at the conference, and provided event connectivity and logistical support. The 2021 on-site Transportation Asset Management Conferences were cancelled due to travel and gathering restrictions imposed by the State of Michigan. In order to adapt to these restrictions, a virtual conference was held. This virtual conference included such topics as best practices, agency experiences, Michigan infrastructure challenges and opportunities, and technical details. Appendix A contains demographic attendance data; individual presenter evaluations with regard to presentation quality, relevancy, and comprehensiveness; and written feedback from participants.

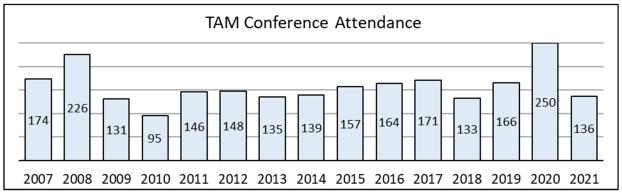


Figure 2: Total TAM Conference participants for 2007 to 2021

#### 2021 PASER Training

The CTT provided instruction at the 2021 PASER Training sessions, provided relevant *PASER Manuals*, and both produced and provided the accompanying Michigan-specific *TAMC Data Collection Manuals* and associated handouts. All eleven of the planned on-site sessions were cancelled due to travel and gathering restrictions imposed by the State of Michigan. The training was converted to a virtual format and was well received by the participants as shown in the written feedback. The CTT updated presentations to reflect data collected in 2020, quality control results, and changes in legislation and TAMC policies, and the CTT also continued to implement blended learning strategies with the use of participant-controlled slide animations and polling.

The PASER certification exam was canceled for 2021. This was implemented on December 2, 2020 in the "TAMC Policy for Pilot Collection of Roadway Surface Condition Data in 2021". Of the 514 PASER training participants in 2021, forty-nine percent of the 2021 participants already met the rating eligibility training requirements of being trained or certified in 2018, 2019, or 2020.

Starting in 2017, a supplemental webinar, called Master the Roadsoft Data Collection Cycle for Planning Organizations, was developed and conducted that provided instructions on navigating the data cycle process. The CTT provided this data cycle webinar training again in 2021. In addition, the CTT developed promotional material and coordinated participant registration. Appendix B displays demographic attendance data, evaluation results, and written feedback from the PASER Training events.

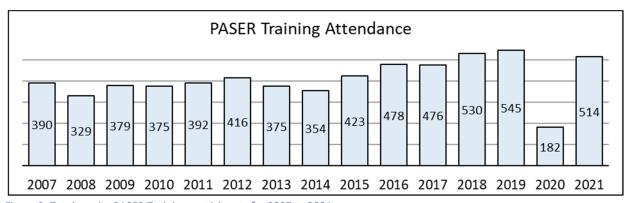


Figure 3: Total on-site PASER Training participants for 2007 to 2021

### 2021 Transportation Asset Management for Local Officials and Gravel Road Basics for Local Officials

The CTT solicited for 'host' agencies for each training in order to target local officials in the immediate jurisdiction; open enrollment sessions provided officials statewide with the opportunity to attend an event not associated with a host agency. In addition, the CTT provided instruction for the training sessions and produced promotional and handout materials.

In 2019, the CTT started marketing the TAMC Training Program training "Introduction to Transportation Asset Management for Elected Officials" as "Transportation Asset Management for Local Officials" (TAM for LO) and began offering a supplemental training called "Gravel Road Basics for Local Officials" (GRB for LO). The GRB for LO training gives the same basic information as the Introduction to Asset Management for Local Officials but with a focus on gravel roads. Both the TAM for LO and GRB for LO classes are designed for and targeted towards local elected and appointed officials. One on-site event and four virtual trainings were held in 2021. The 2021 on-site event in Harrison was a combined TAM for LO/GRB for LO training.

The webinar mode for delivering these trainings has proved to be an effective way to reach participants from Michigan's top 40 cities. In 2020, there were 44 webinar participants from top 40 city agencies and, in 2021, there were 17 participants from top 40 city agencies. This is more than the all the Top 40 city participants from 2007 through 2019 combined which was 35. Figure 5 shows the 2021 participant locale for the on-site events compared to the webinar events. Appendix C contains the demographic attendance data, evaluation results, and written feedback from the 2021 training classes.

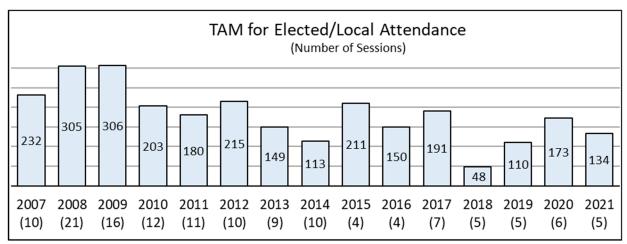


Figure 4: Total TAM for LO and GRB for LO participants for 2007 to 2021

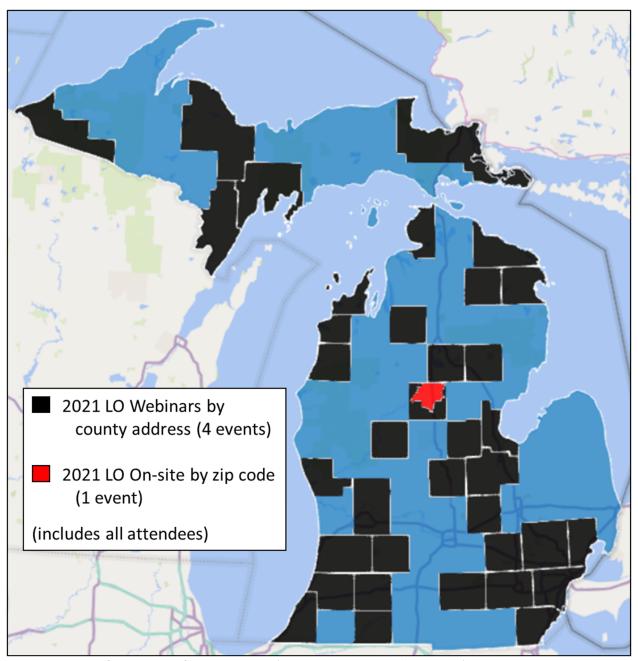


Figure 5: 2021 TAM for LO and GRB for LO participants (mapped by participant billing address)

### 2021 Bridge Asset Management Training Series

The CTT provided instruction, training materials, and data-parsing tools for local agencies on bridge asset management and creating an asset management plan. The training consists of a two-part webinar series that covers basic and advanced topics related to bridge asset management followed by a handson workshop where participants produce their own a bridge asset management plan template that is specific to their agency. Due to travel and gathering restrictions imposed by the State of Michigan, the CTT conducted two workshops in virtual format. These two workshops were multi-session events spread out over several days allowing participants to see a demonstration of the tools and to ask questions or troubleshoot problems during the workshop. Between workshop sessions, participants were able to work on their agency-specific plans from their worksite allowing them to access all the necessary agency data to complete their bridge asset management plan; lack of readily-available agency data reduced productivity at on-site sessions held in past years. The spring workshop (four-session workshop) offered more contact hours (8 hours) than a single on-site workshop (5 hours); the fall workshop (two-session workshop), which was a late transition from on-site to virtual and therefore re-figured into two sessions rather than four, offered the same amount of contact hours as a single on-site workshop. In 2021, the CTT provided extensive one-on-one virtual assistance using screen-share technology. Appendix D contains the demographic attendance data, evaluation results, and written comments received from participants of the Bridge Asset Management Workshops.

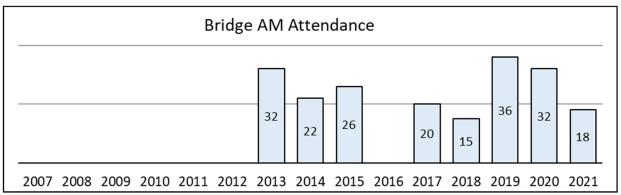


Figure 6: Total Bridge AM Training Series workshop participants for 2007 to 2021 (2013 was the first year of offering this training)

### 2021 Inventory-based Rating System™ Training

The CTT provided instruction and training materials for managing gravel roads at the Inventory-based Rating System™ Training. An IBR System™ manual was developed in 2018 that describes the system, the premise behind it, and the process for data collection using IBR System™. This system is required for submitting rating data to TAMC on the unpaved road network. Appendix E contains the demographic attendance data, evaluation results, and written feedback from the Inventory-Based Rating System™ Training sessions.

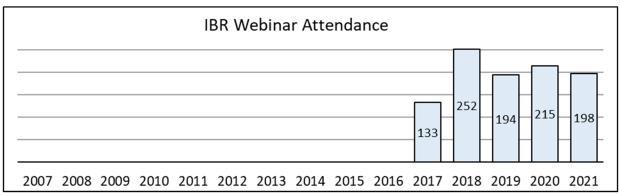


Figure 7: Total IBR System™ Training webinar participants for 2007 to 2021 (2017 was the first year of offering this training)

#### 2021 Pavement Asset Management Plan Workshop

The CTT provided instruction, training materials, and data-parsing tools for local agencies to create their own pavement asset management plan. This workshop was updated based on the feedback received from the Transportation Asset Management Council and their various committees. Due to travel and gathering restrictions imposed by the State of Michigan, the CTT conducted two workshops in a virtual format. These two workshops were multi-session events spread out over several days allowing participants to see a demonstration of the tools and to ask questions or troubleshoot problems during the workshop. Both the spring and the fall workshop (three-session workshop) offered the same contact hours (7 hours) as a single on-site workshop. In 2021, the CTT also provided extensive one-on-one virtual assistance using screen-share technology. Appendix F contains the demographic attendance data, evaluation results, and written feedback from the Pavement Asset Management Plan Workshop.

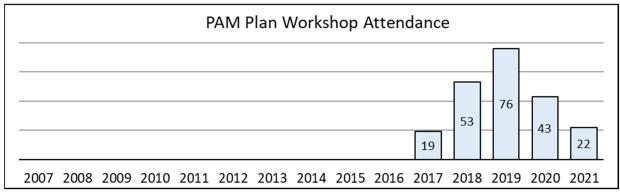


Figure 8: Total Pavement AMP Workshop participants for 2007 to 2021 (2017 was the first year of offering this training)

### 2021 Culvert Asset Management Webinar

The CTT updated and provided instruction and training materials for the Culvert Asset Management Webinar, which is a training incorporated from the *Culvert Condition Evaluation Webinar Training* and the *Culvert Data Collection Webinar Training*. There was one Culvert Asset Management Webinar conducted with a total of 80 participants. Appendix G contains the demographic attendance data, evaluation results, and written feedback from the Culvert Asset Management Webinar.

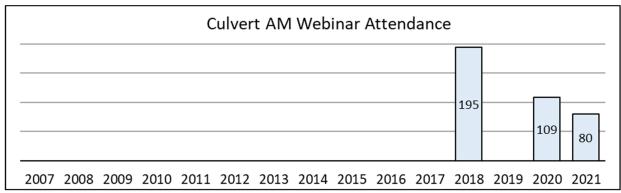


Figure 9: Total Culvert Asset Management Webinar participants for 2007 to 2021 (2018 was the first year of offering this training)

### 2021 Compliance Plan Training Webinar

The CTT provided instruction, training materials, and data-parsing tools at the Compliance Plan Training Webinar. This webinar provided instruction to participants on how to produce a compliance plan, use a training document template, and use the tools to merge their data into the template. Appendix H contains the demographic attendance data, evaluation results, and written feedback from the Compliance Plan Training Webinar.



Figure 10: Total Compliance Plan Training Webinar participants for 2007 to 2021 (2019 was the first year of offering this training)

### **Summary of Historical Attendance**

In 2021, the TAMC Training Programs had a total of 1134 participants compared to 1050 participants in 2020. Table 3 shows a breakdown of the attendance from 2007-2021 and 2021 by agency type and training program, and the 2021 participants that are from Michigan local agencies.

TABLE 3: Historical Summary of TAMC Training Attendance by Agency Type and Program

	ar Samm	u., c
	2007-	
Agency Type	2021	2021
Counties	33.8%	38.4%
Large cities	8.7%	13.6%
Small cities and villages	14.0%	9.3%
Townships	10.1%	2.9%
Other	33.4%	35.9%
Total	100%	100%

		2021	
			Participants
	2007-		that are MI
Training Program	2021	Count	Local Agencies
TAM Conference	2371	136	42.6%
PASER Training	6158	514	62.6%
TAM for LO/GRB for			
LO	2720	134	99.3%
AM Workshop	874	-	-
Bridge AM Training			
Workshop	201	18	77.8%
IBR System ™Training	992	198	55.1%
Pavement AMP			
Workshop	213	22	68.2%
Culvert AM Webinar	384	80	67.5%
PA 325 Overview	83		-
Compliance Plan			
Training Webinar	169	32	68.8%
Total	14,165	1134	64.1%

Figure 11 charts the historical TAMC Training Program attendance from 2007 to 2021. Figure 12, Figure 13, Figure 14, and Figure 15 show the historical agency participation in TAMC training events from 2007-2021 by county agency, the top 40 cities, small agencies (small cities and villages), and townships respectively. These are mapped by the participants' billing county for county agencies and billing zip code for the top 40 cities, small agencies, and townships. These four figures account for over 66 percent of the participants training from 2007 to 2021.

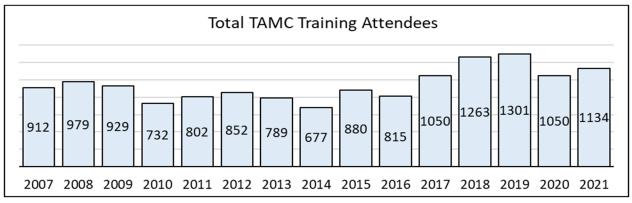


Figure 11: Total TAMC Training Program participants for 2007 to 2021

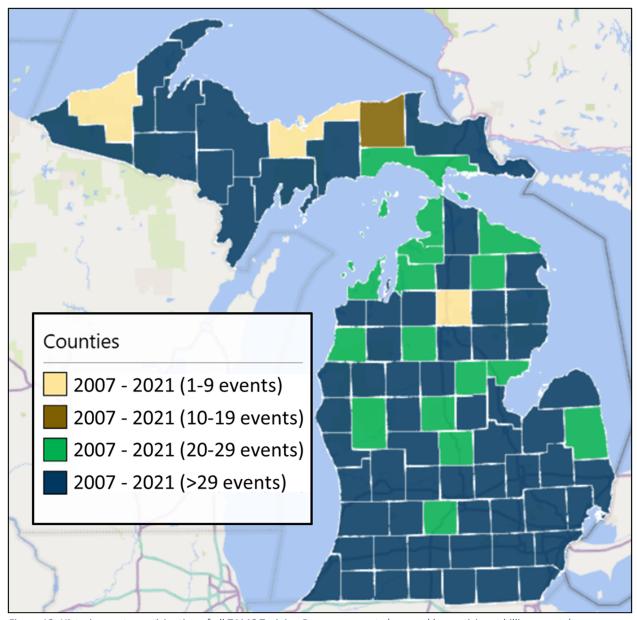


Figure 12: Historic county participation of all TAMC Training Programs events (mapped by participant billing county)

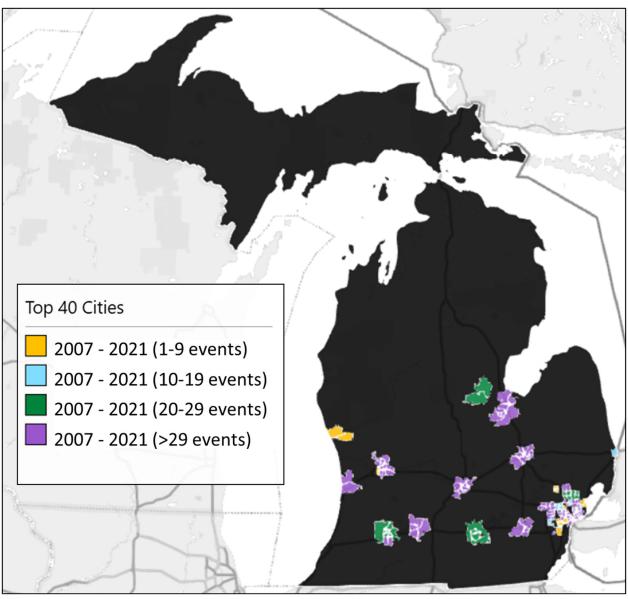


Figure 13: Historical top 40 cities participation of all TAMC Training Program events (mapped by participant billing zip code)

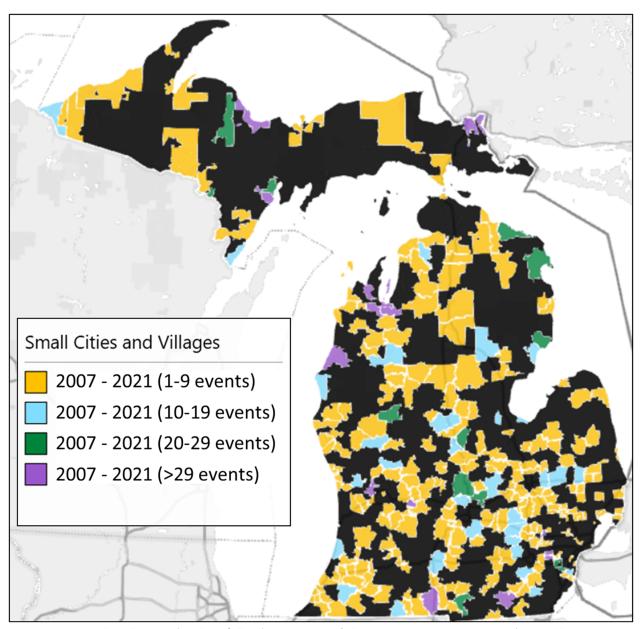


Figure 14: Historical small agency (small city/village) participation of all TAMC Training Program events (mapped by participant billing zip code)

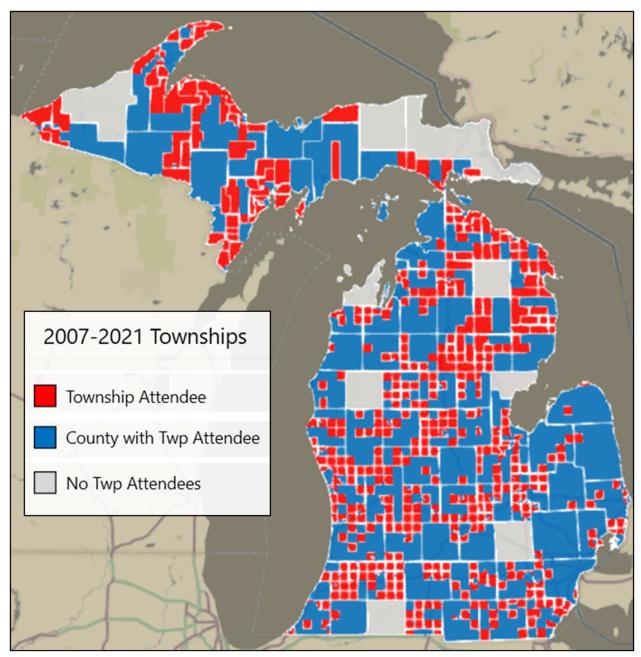


Figure 15: Historical township participation of all TAMC Training Program events

Enrollment numbers for this year compared to previous years can be broken down on a program-by-program basis (Figure 16). The 2021 TAM Conference attracted 136 total participants, which represents a decrease in participation when compared to 2020's total enrollment of 250. PASER Training increased from 182 total participants in 2020 to 514 in 2021. The IBR System™ Training decreased from 215 participants in 2020 to 198 in 2021. The TAM for LO/GRB for LO had a decrease from 173 participants in 2020 to 134 in 2021; Figure 17 illustrates the distribution of TAM for LO/GRB for LO *on-site* event locations statewide from 2007 to 2021 with the size of the circle representing the amount of participants attending.

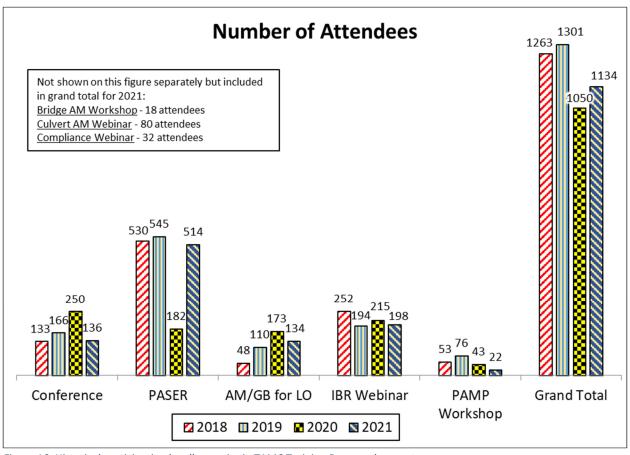


Figure 16: Historical participation by all agencies in TAMC Training Program by event

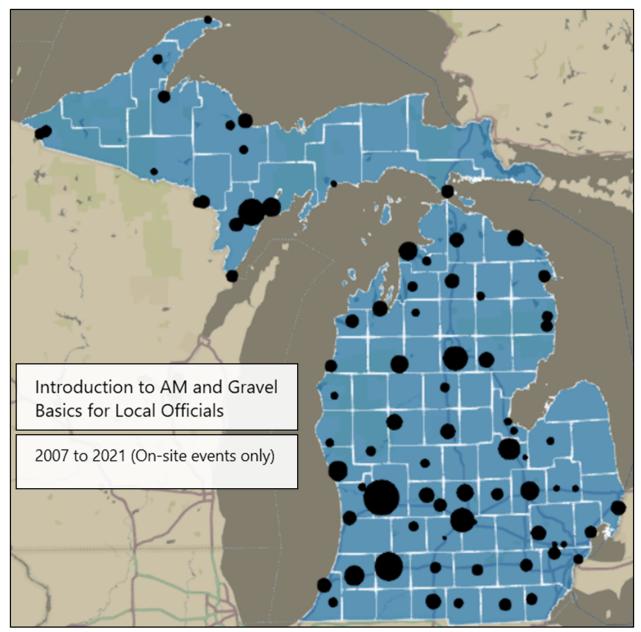


Figure 17: Introduction to Asset Management for Elected/Local Officials—now TAM for LO—and GRB for LO locations of events from 2007 to 2021 by city location (circle size depicts size of event attendance)

### **Conclusion**

In 2021, 25 on-site training events were cancelled due to the travel and gathering restrictions imposed by the State of Michigan. In order to adapt to and overcome these restrictions the CTT changed many of the training programs to be delivered remotely using a virtual format.

Over 64 percent of the 1134 total participants in 2021 represent Michigan local agencies, which is the target audience for the TAMC Training Program. The TAMC Training Program exhibited an increase in total attendance in 2021 and had an average of 60 participants for the 19 training events. In 2021, the PASER Training events were delivered remotely, and reached 514 participants and received very positive feedback on the virtual format.

The TAM for LO/GRB for LO trainings continue to reach a very large portion of the state and all types of local agencies by delivering the trainings remotely. It is recommended to continue delivering at least a portion of these events remotely using a virtual format even if travel and gathering restrictions are lifted.

The Pavement Asset Management Plan Workshop underwent minor updates due to feedback received. Similarly, the PASER Training and its accompanying training materials will undergo updates for 2022 based on feedback received and remote delivery/virtual format requirements.

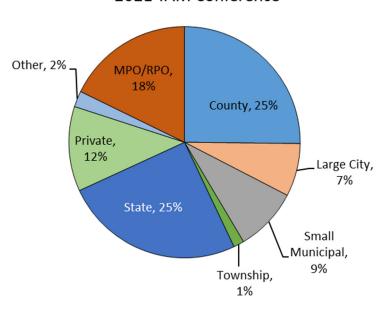
Appendices A through H have the demographic participant data, received evaluation results, and written feedback from all 2021 training events. The vast majority of the comments received for 2021 are positive and show participants understand the materials presented. The CTT will continue to update training materials and methods when possible to be able to provide the best learning experience for participants.

# **Appendix A: 2021 Transportation Asset Management Conference Participant Demographics and Evaluation Results**

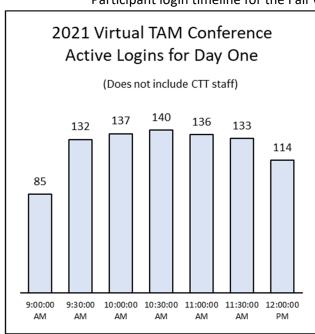
(Due to rounding, some totals may not be 100%)

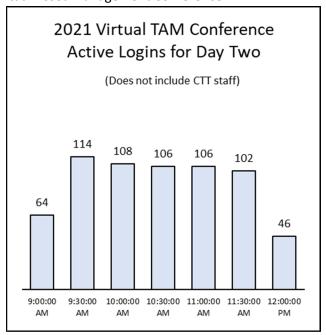
### **Participant Demographics**

2021 TAM Conference

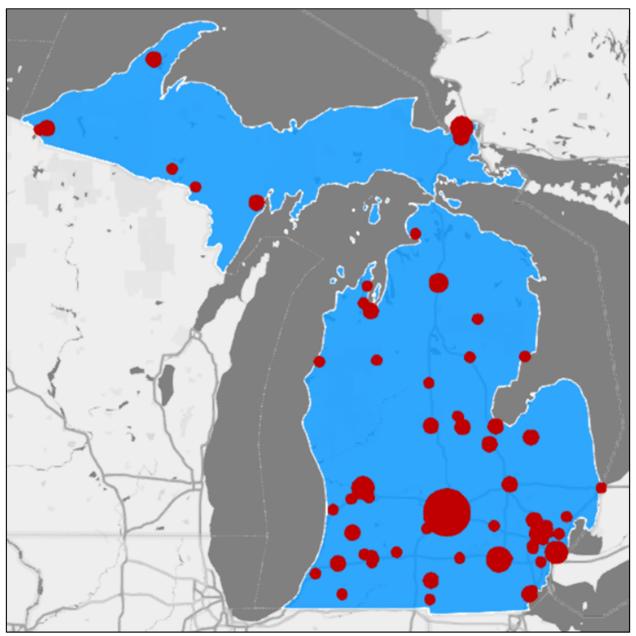


Participant login timeline for the Fall Virtual Asset Management Conference





## **Participant Location Demographics**



Participant location for the fall virtual Transportation Asset Management Conference (mapped by participant billing address)

# 2021 Virtual Transportation Asset Management Conference – Evaluations and Written Feedback (67 responses)

Feedback Rating - National Asset Management		
Perspectives - Christina Leach, Andy Pickard		Count
	5	21
	4	35
	3	6
	2	3
	1	0

### Written Comments on - National Asset Management Perspectives - Christina Leach, Andy Pickard

Very informative.

The comparison to other states was the best part.

This presentation seemed to be geared toward state officials and for those with influence at MDOT. We all already know that asset management is important, which is the reason for this conference. As I recall from attending previous conferences, most of those in attendance are from local agencies. Therefore, this presentation did not seem to fit and was not tailored for this audience.

Good summary from FHWA's perspective.

Well organized and it was helpful to get a sense of where Michigan falls within the overall US push on asset management.

Christina was an excellent presented that provided relevant information.

very good. especially for newer staff or newer to program

Clear and concise, easy to understand

Good basic holistic overview

it would be nice to have it recorded

Good tips on other state plans to review that have exhibited strengths in areas that might be areas of improvement for Michigan's plans.

It was good to see what other states are doing in this field.

I learned a lot of things.

Good information from the federal level.

Very informative. Enjoyed hearing best practices from other states as well as what Michigan's TAMP strengths and weaknesses are.

Answered all questions

It was interesting seeing the national perspective and what the need on their end.

Ok, but I'm interested more in future guidance which perhaps will be covered tomorrow

Good overview, wished they would have drilled down a bit more for local agencies.

Feedback Rating - Michigan Transportation Asset Management Plan - Zach Rable, Michael Case	Count
5	23
4	35
3	7
2	0
1	0

## Written Comments on - Michigan Transportation Asset Management Plan - Zach Rable, Michael Case

Very Informative.

Again, did not seem to be geared toward most of those in attendance at this conference. We all already know that asset management is important.

Learned a lot about the required update to MDOT's TAMP.

The Q & A section was good.

Valuable information, easy to understand

Good to refocus on what drives asset management as well as how different plans are integrated.

Good case studies.

Good to see MDOT is making steps forward with their asset managing plan.

Enjoyed hearing about MDOT's current AM plan status.

liked the example that even small local agencies need / can use an asset management plan

Enjoyed learning about current status of TAMP and when next TAMP is due as well as the improvements being made from last TAMP. Good to learn how TAMP relates to other planning documents like the LRP and 5YTP.

Answered all questions

Good to see interplay between asset management and planning/funding

Good to know, good to know who to reach out to.

Feedback Rating - TAMC Culvert Asset Management Program - Chris Gilbertson, Mike TenBrock	Count
5	34
4	26
3	1
2	0
1	0

# Written Comments on - TAMC Culvert Asset Management Program - Chris Gilbertson, Mike TenBrock

Glad to see this getting going.

Very nice and informative presentation relevant to the attendees at this conference.

Good info.

Good practical information and great to have examples of issues with being reactive and the positives of being proactive.

Good overall presentation, good content.

good presenters but culverts not as perennate to my program. but process and story great.

Valuable information, good examples, well presented

Good to see that this isn't a "one shot" effort. Great examples!

Great presentation & example from Mike TenBrock regarding his experience and lesson learned regarding the culvert asset management program.

Solid examples of how this works for a county agency.

Excellent summary plus specific examples.

Good illustrations

Enjoyed hearing the example from RCKC.

Enjoyed hearing about the culvert inventory and data elements collected to make informed decisions.

Answered all questions

With only 1 full time employee in the Engineering Department I do not know how I will be able to adequately inspect the 4,563 culverts in my county on top of all the other duties I have.

You are missing "Asset Management Plans of All Sizes: Small and Large Agency Considerations". This was the best presentation of day 1 including how long term planning benefits all other local agencies and has significant efficiency benefits

Feedback Rating - County Roads Investment Study: Financing the Future of County Road Agencies - Larry Brown	Count
5	34
4	26
3	3
2	0
1	1

# Written Comments on - County Roads Investment Study: Financing the Future of County Road Agencies - Larry Brown

Very Informative.

Lots of good info into how the investment study was made and submitted.

Very nice and informative presentation relevant to the attendees at this conference.

Huge effort. Nice job!

Amazing job Larry!

Good presenters, time filler though.

Very interesting detailed presentation that not only demonstrated funding needs but the process of how they were arrived at.

The speaker demonstrated a lot of historical knowledge and background, it was nice to get this perspective.

Very informative.

identifying needs is great... but generating funds to bridge gap is the challenge.

Enjoyed Larry's historical background and investment study outcome.

Appreciate all the legwork that went into this investment gap analysis

Answered all questions

Feedback Rating - Michigan Infrastructure Council Program Update - John Weiss, Erin Kuhn, Larry Steckelberg	Count
5	24
4	33
3	2
2	0
1	0

### Written Comments on - Michigan Infrastructure Council Program Update - John Weiss, Erin Kuhn, Larry Steckelberg

Very Informative.

Didn't know these programs existed and will be making use of them going forward.

Very nice and informative presentation relevant to the attendees at this conference.

Learned a lot of new info!

Good update.

Good to hear an update about this effort and ways to develop.

Valuable information

Now to start using the project portal!

I like the idea of a long range look for solutions

As one of the AM Champions, I like hearing about the MIC and future endeavors.

Answered all questions

Feedback Rating - Looking 20 Years Forward: Transportation Asset Management in 2041 & How Michigan Can Remain an Industry Leader - Joanna Johnson, FHWA Members, Robert Green, Tim Colling	Count
5	33
4	20
3	4
2	0
1	0

Written Comments on - Looking 20 Years Forward: Transportation Asset Management in 2041 & How Michigan Can Remain an Industry Leader - Joanna Johnson, FHWA Members, Robert Green, Tim Colling

Well put together and articulate. Moving forward I agree with Tim Colling's statement about shifting the focus to service impacts for decisions beyond asset condition. Simply, not all assets need fixing and some may be better off removing or not building in the first place. There's criteria, systematic ways to evaluate, come up with creative options, make a decision which is somewhat an art putting together. Asset management is somewhat a misnomer - the actual practice and principles are about the service, not the "asset" or "thing" which I think can be confusing.

Shows anything is possible.

Future looks bright!

Q&A, with the 'roundtable' format was good.

great job all.

Could have been a little more structured.

Valuable information

Glad to see local, state and federal views integrated in this presentation

A little tough to follow the flow, but very well-spoken panel.

Nice to have a knowledgably group to answer questions. Great job. Tim 's explanation about data collection in the future was great.

Answered all questions

### What did you like most about this event?

Representation from all levels of government, strong ownership by asset owners and agencies I thought was really great and important.

It covered a good range of topics.

Hearing the different agencies give their real world scenarios on how they use AMP to improve their system.

Good look into how other counties operate and the issues they face.

The practical side of the conference and what we can do as an agency to better implement asset management.

Seeing asset management from all levels of government.

- Mix of presenters (Fed, State and local) various perspectives was great. - Examples that can be scalable to smaller agencies - Presenters were well prepared and some of the back and forth kept the energy up even with a virtual presentation.

Learning what's going on.

A broad variety of subjects

**Great topics** 

The roundtable discussion was very good

The ease of doing a virtual meeting and easily connect. Good tech support

The interactive panel session was great discussion.

the open discussion and question answering with/by people working on these things

Virtual setting, good presenters and discussion topics

update on project portal

Pace was good and kept presentations moving

Breaking this up into two three-hour sessions was a good choice for a virtual conference, it's easier for me to take in the material and be focused for half-day sessions than a six-hour, one day session.

The culvert discussion

updates on all the work that has been completed and resources available that I was not aware of.

Really appreciated the information on asset management plans of all sizes - especially Mark Worden and his work with Kalamazoo County townships.

A half day is enough for these virtual conferences; good agenda.

I liked the presentations where the focus of the discussion was asset management from a practical level and included supporting data on why asset management was important.

Connection. Community. Sharing the message in meaningful simple way.

Broke out into two days instead of being one whole day.

I know it might not be popular, but the virtual conference has some advantages, things like cost, time commitment come to mind. Also understand the lack of network opportunities and spontaneous discussions that can happen.

The conversation/presentation on TAMC's Culvert Asset Management Program.

The status of TAMPs and AM strategies from other agencies.

The entire session was very informative. As a traffic safety expert that is not involved in road maintenance, it gave me a lot of information that I can relate to my position.

Virtual

Shared experiences from other agencies.

To have it virtually over two days. In-person one day is nice, but one day virtually can be a lot of just staring at a screen.

1) It was virtual. Like the flexibility. 2) Little to no drag time. Condensed and information packed schedule/format. 3) Good range of topics/experience centered around asset management

Comprehensive

Enjoyed the different perspectives on TAMP

"Asset Management Plans of All Sizes: Small and Large Agency Considerations". This was the best presentation of day 1 including how long term planning benefits all other local agencies and has significant efficiency benefits

### What aspects of this event could be improved?

Continuing from my comment in #12, a stronger focus on service delivery rather than the assets themselves. Page 5 in this document could be helpful -

https://www.assetmanagementbc.ca/wp-content/uploads/Building-Community-Resilience-Through-Asset-Management-Alberta.pdf. Its one of the better guidance documents I've seen to illustrate principles so its not complicated yet robust and applicable to varying communities. Also, diversity among the speaker line up - some aspects were okay, I know this is a starting point for folks to get to know leadership but certain aspects may need deliberate planning for inclusivity moving forward.

One short break each day would have been nice.

A little shorter.

Don't need to have presentations from FHWA.

As a virtual event, it was well done and the 3 hr window is a good target.

Plan Tips

A little break time between sessions, do not start early.

Possibly shorter/more presentations that cover more variety.

Hopefully in-person attendance can happen in the future.

put answers in Q&A, even if answered live

Help presenters with virtual environments so that they can be seen

Staying engaged for three hours straight is still a lot of material to digest, a couple of 2-5 minute breaks would be good just to have an opportunity to stretch our legs, get up from our screens, and regroup.

Hungry for the day when it can be in person again.

When conditions allow it a combination of virtual and in person would be great.

Include legislation for their thoughts on funding

Keep it going.

We should be showcasing future and present technology for collecting our assets and how we can move forward in technology to aid/help our effort in collecting accurate data.

Looking forward to in-person gatherings again.

Just the usual technology/user error issues with online training.

love to be in person

In person

Would be nice to get presentations beforehand to take notes right on the PowerPoint

In person would be better.

More local examples of benefits from asset management

# Please suggest specific topics/presenters that might be relevant to you/your agency for future trainings.

As a team sport, would be nice to see other functions present, whether it's finance, IT, HR to name a few. Representation was fairly engineering heavy which is typical but doesn't have to be. May be a challenges survey or discussion panel would be helpful - whether it's money, skills, technology, get an understanding of what types of people are attending, issues agencies are facing, do live polls with their devices to gather data, see what's on people's minds.

More practical presentations like the culvert asset management information.

Culvert update for next year - anything new learned? Focus on coordination with utilities for both planning and during maintenance/construction

Plan Tips

Anything regarding asset management, policies, MPOs, etc.

Automated data collection methods that agencies are using.

Continued update on Project Portal

It's always helpful to hear examples of how these topics are used by other agencies (RCKC, Kent CRC, etc.).

Automated data collection for PASER data in the future.

Any new innovations in preventive maintenance from around the world.

We should be showcasing future and present technology for collecting our assets and how we can move forward in technology to aid/help our effort in collecting accurate data.

Utility coordination plans/examples.

### Additional comments/suggestions:

More topics that could be relevant are integration with climate change adaptation, risk and resilience management, and digital strategy. This is not about doing more work for mandates as I know that's not fun - it's about how agencies might have dealt with or be preparing for some tough realities like extreme weather, IT security, and using accelerated technology to get better results.

Very good overall.

Thank you for making this one virtual. It is harder for agencies to go to the fall conference since so much travel time is involved. Nice that it was virtual so that we can have a chance to attend.

I do like the convenience of online participation.

I continue to look at how nonmotorized facilities can be integrated into TAMC

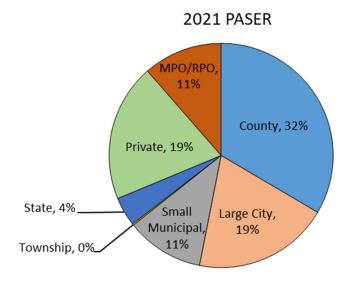
good job

Good conference!

# **Appendix B: 2021 PASER Training Participant Demographics and Evaluation Results**

(Due to rounding, some totals may not be 100%)

### **Participant Demographics**



### **2021 PASER Training –Evaluations**

What years have you attended PASER Training?		
2020	148	
2019	210	
2018	188	
2017	158	
2016	127	
2015	102	
2014	78	
2013	69	
2012	62	
2011	59	
2010	57	
2009	46	
2008	46	
2007	43	
2006	37	
2005	33	
2004	35	
None of the above	173	

What years have you used PASER to rate roads?		
2020	137	
2019	194	
2018	167	
2017	138	
2016	120	
2015	93	
2014	81	
2013	67	
2012	64	
2011	57	
2010	58	
2009	50	
2008	53	
2007	42	
2006	39	
2005	33	
2004	33	
None of the above	206	

Which PASER Training topics did you find most helpful or most interesting?		
Rating exercises	317	
Distress identification	106	
Rating rules	24	
Other	11	
Data cycle	9	
(hlank)	5	

If you are a new/experienced rater, which part of the PASER data collection process seems/has been unclear or confusing for you?	
N/A - I felt all topics were thoroughly and clearly	
covered	342
Distress identification	33
Data cycle	27
Rating rules	24
Rating exercises	20
Other	10
(blank)	16

Do you feel as though the rating exercises built up your confidence/benefitted you in rating roads?		
Yes	461	
No	7	
(blank)	4	

Has this training as a whole increased your confidence for using the PASER system to rate pavements accurately?		
Yes	462	
No	8	
Blank	2	

If you have collected PASER or IBR data before, which materials have you found most beneficial?		
PASER Cheat Sheet	303	
TAMC Data Collection Manual	71	
Michigan Sealcoat Guide	60	
IBR System Quick Guide	60	
TIC PASER Manuals (Asphalt Roads, Concrete Roads,		
Sealcoat, Gravel Roads, Brick & Block)	51	
PASER slides (available on website)	36	
IBR System Manual	17	

#### 2021 PASER -Written Evaluations

# Which PASER Training topics did you find most helpful or most interesting? Select one and explain:

Data cycle - It is important to know why you are rating

**Distress identification -** This seminar gives a lot more insight why the planning is done for which roads are resurfaced versus being sealed.

**Distress identification -** distress evaluation

**Distress identification -** Experience helps

**Distress identification -** good refresher

**Distress identification** - The entire class was excellent!! It was so well done. I learned much. It was very well organized, relevant, well prepared, and meets our needs. One of the best classes that I have ever attended. I look forward to attending again next year. My only suggestion would be to have a replay available for review on your website for attendees. I can't say which part was most interesting/helpful because the entire class was incredibly interesting and helpful. Very high quality class!! Thank you!

**Distress identification -** Asphalt and Concrete Distress

**Distress identification** - I do a lot of paving and this helped me to identify areas that could possibly need base repair.

**Distress identification -** The interactive exercises were fantastic to have "hands on" experience to properly rate conditions.

**Distress identification** - Day one of distress identification and the "how" behind what makes pavements deteriorate was helpful and interesting to review. I think the rating exercises are always beneficial.

**Distress identification -** Pavement distresses and TAMC presentation.

**Distress identification -** It's always a good refresher

**Distress identification** - Refreshing my memory about the different types of distresses

**Distress identification** - The rating exercises are very useful, but there are so many caveats and subjective decisions that the thorough discussion of the distress identifications provides the greatest benefit.

**Distress identification** - All new topics for me, so most of the information was helpful, but seeing examples of each rating and being able to identify them was extremely helpful.

**Distress identification -** the process of talking through the slides and showing why it was rated an 8 or a 7 or other similar issues.

Distress identification - It seems to be subjective Repetition is helpful.

**Distress identification** - Just reviewing identifying distresses is helpful. After many years of rating it is easy to quickly pick a rating based on the overall appearance of the segment without identifying all of the distresses.

**Distress identification -** Matching a distress with a picture showing that distress is most helpful. This makes it easier to apply those distresses with the cheat sheet to the rating exercises.

**Distress identification -** The distress identification will help me in my current position when determining potential fixes for roads in my area.

**Distress identification** - Identifying the type of distress and the relevant photographs were helpful. In addition, the rating exercises are also helpful for a quick brush up.

**Distress identification** - I think they did a better job this year of explain how road decay.

**Distress identification** - We as a company often investigate roadways/parking lots and being able to properly identify distresses in existing pavements helps with our reports and knowledge

**Distress identification -** I generally enjoy the reasoning for occurrences of certain distress types. Especially more rare spotting's.

**Distress identification** - Both describing the different distresses and the rating exercises was a good introduction for me.

**Distress identification -** great to learn the right words to use to talk about this!

**Distress identification -** helped to evaluate the pavement surface distress for selecting the right method for repair

**Distress identification -** The Distress Identification, really gives one the understanding of how a road declines. The Rating exercises are as equally helpfully

**Distress identification -** Distress Identification refresher helped me to identify the differences in similar distresses, such as raveling versus polishing.

**Distress identification** - Helps explain the reasons for ratings and why potential fixes are applied.

**Distress identification -** Refresher on identification / visuals and overall road rating. This helps our agency with consistence between raters.

**Distress identification** - It helped put words and meaning to things I have seen on the roads for years as well as readings why roads may become damaged in a certain way.

**Distress identification -** The PASER Training overall was excellent! The rating exercises were very helpful.

**Distress identification -** Always good to get refreshed on different distresses

**Distress identification** - This part seems the most important - if this is memorized the rating is easier.

Distress identification - I liked the graphs used to identify the distress

**Distress identification -** Still in the learning process so this is very valuable.

Distress identification - Load distribution and discussion of fixes

Distress identification - Good to review

Distress identification - Very helpful information

**Distress identification** - The distress identification helps review what is important while rating

**Distress identification** - It is always good for a refresher on how to view the distress on a pavement and to make the distinction between structural and or not. The Rating exercises were also very helpful to actually see a pavement and determine which distresses are ruling the ratings in each case.

**Distress identification** - being new to PASER rating, distress identification was very interesting to learn what to look for and how to identify them.

**Distress identification** - The distress identification because it explained what could cause those issues and will be able to be proactive in explaining requirements to contractors when building the jobs.

**Distress identification -** I found most interesting the how the identification of distress shows the difference between weathered failures and base failures.

**Distress identification -** The distress identifications were very helpful. I feel more comfortable in identifying defects.

**Distress identification** - I felt that the examples of distress identification were the most helpful. The specific examples we went through Thursday, as well as the segment example was useful.

Distress identification - The distresses were described with lots of detail

**Distress identification -** I had very basic knowledge and it was nice to have a layperson review.

**Distress identification** - I enjoyed the pictures explaining why it would be rated the way it was. This helped a lot for when I rated it a different rating.

**Distress identification -** Asphalt/concrete distress identification

Rating exercises - Determining how the agency chooses roads to resurface.

**Rating exercises -** The rating exercises help to identify the nuisances between the ratings and the distresses that drive each road rating.

Rating exercises - Good to have non-bias view of road distress and what the rating should be.

**Rating exercises -** It's always helpful to run through those exercises, and how some of the conditions fall on the line and could be interpreted either way sometimes.

Rating exercises - Being able to identify the different criteria that break down each rating

**Rating exercises -** Explanations of ratings, key things to lookout for that define each rating, cut offs are helpful.

**Rating exercises** - I have been with Bay County for a year and knowing that we use PASER to rate the roads, it was helpful to sit with our group and go over the ratings together to better understand the differences.

Rating exercises - More interactive, enjoyed explanation of correct vs. incorrect choices

Rating exercises - Learned how to Rate the Roads

**Rating exercises** - Definitely the most interesting part of the series. Find it very helpful to go thru some real world examples. You guys always do a great job. As a consultant, I find it helpful to know the proposed fix for scoping work.

**Rating exercises -** quick discussions after polling was great to explain ratings, learned quite a bit there.

Rating exercises - Practice helps to learn

Rating exercises - I appreciate the real-world examples.

Rating exercises - Rating exercises to help stay constant ratings for all.

**Rating exercises -** Seeing examples with images of actual roadway conditions rather than descriptions helps a bunch for me.

Rating exercises - the closest to real life rating

Rating exercises - Being all remote you all did a great job giving examples and having the key buttons on the examples. I did like the plan, typical and buttons on one screen. Some of the asphalt slides when the plan and typical was shown you lost the buttons. Overall this went a lot better than I was expecting. Thank you.

**Rating exercises** - I find that the Rating Exercises are a good refresher on how to apply the rating scores. As a local agency employee, it's nice to have as we only rate roads once a year.

**Rating exercises** - The interactive rating exercises help to visualize and practice identifying distresses. I feel like the virtual training rating exercises were easier for me to identify distresses and rate the road more accurately than I do in-person.

Rating exercises - Helped me notice road conditions

Rating exercises - Good to see where some of the subtle clues make a difference

**Rating exercises** - I had never worked on rating roads before. The photos and explanations as to why the choice I made was correct, or incorrect helped. Thanks.

Rating exercises - Easy to follow

**Rating exercises** - I found the rating exercises most helpful because as it progressed I found myself getting better and better in my ratings.

Rating exercises - It helps to know how everyone else would rate distresses

**Rating exercises -** I am a hands-on learner. Seeing examples helps me picture specific situations and master the solutions.

Rating exercises - Being able to see real life examples helps.

**Rating exercises -** Training exercises seem to help us be more consistent across the board in my opinion.

Rating exercises - I like the hand-on part of the training, even if I wasn't very good at it.

Rating exercises - To me everything we went over was helpful a lot to me because I have never done this before

**Rating exercises** - These exercises give me the practice and refresher I need to keep the rating process in my memory! I personally enjoy the virtual training even more than in person, hope this continues!

**Rating exercises** - Using different examples of asphalt, concrete and seal coat pictures and going over those examples explaining why we gave them that specific PASER rating

**Rating exercises -** The new tools used to help identify the distresses along with the thoughtful discussions was valuable.

**Rating exercises -** The rating exercises are always helpful to see examples and hear the explanation of how the rating was derived, and hear the tips that help rating in the field easier

Rating exercises - Good visual help

Rating exercises - Working through examples really helped with visualizing rules [and] ratings.

**Rating exercises -** The added buttons to highlight the distresses really help identify what rating fits best.

**Rating exercises -** The rating exercises was the most helpful portion of this training because it allowed us to actually put to use what we learned the previous days.

**Rating exercises -** All of the training was great. It was all well explained and the pace of going over was nice.

**Rating exercises** - Since I haven't been out rating, it's nice to get the experience/training for determining the ratings.

**Rating exercises** - First time trainee, each day was helpful to hear and see the information. I feel I need some more practice but it will be good to get in a vehicle with a co-worker that has experience to bounce ratings off of each other. Thank you.

Rating exercises - I appreciate that the polls are used during the training to keep me engaged.

Rating exercises - It helped test us about everything we learned.

**Rating exercises** - I like seeing examples and rating them together simply to attempt to see what you all see as the experts.

Rating exercises - Always a great review

Rating exercises - It is helpful to ensure I am evaluating roads in the same manner as others.

Rating exercises - Compare with others on thoughts of why each rating was picked

**Rating exercises** - The distress ID was a helpful primer but putting the information into practice helps me most to work through how to apply it. Helped to hear thought process for each rating type.

Rating exercises - Shows how different opinions can be.

**Rating exercises** - The rating exercises helped the most since they kept me engaged and provided real world examples that I was able to put the training to the test.

Rating exercises - Fun, interactive

Rating exercises - Good to go through the rating exercises to recalibrate for each year.

**Rating exercises -** PASER rating is somewhat subjective and it is nice to hear and see what other people are rating.

Rating exercises - The exercises help with read examples, what to look for when out in the field.

Rating exercises - It was helpful to have explanations and test to see if I chose the correct rating.

**Rating exercises -** The rating exercises truly helped me understand what to look out for and why we identify to what rating.

**Rating exercises** - Hands on training exercises were a great training tool to help understand the rating scales and with identifying the various distress types.

Rating exercises - Seeing the different types of road condition and how they are rated.

**Rating exercises** - Always nice to refresh thinking and identification. Able to have some conversation on what other people see and how a rating may be between two ratings.

**Rating exercises -** Unable to select all of the above. The entire training is valuable. I'd say the rating exercises are more valuable than others but it's all valuable.

Rating exercises - this training has gotten much better over the years. Great Job!

**Rating exercises -** The best way to learn for me is do examples to check my knowledge and then the explanations afterwards helped if I missed something.

**Rating exercises -** This is my first exposure to rating and it was great to run through the exercises with detailed explanation and identification of concern points. I especially liked the clickable layovers.

Rating exercises - Real world examples really help refresh me what to look for.

Rating exercises - Seeing examples of roads with breakdown of ratings

**Rating exercises** - It helps having visuals to look at, it makes it easier to rate.

Rating exercises - The selection tabs above the photos help distinguish the distress

Rating exercises - Interactive exercises

**Rating exercises** - Because Transportation Planning is only a part of what I do for work, exercises are helpful to me

Rating exercises - Visual rating was most helpful

Rating exercises - Rating is what it is all about - the rest just supports the rating.

Rating exercises - Trying to see what the experts see.

Rating exercises - It was nice to see specific examples and have walked through them.

**Rating exercises -** We mostly use PASER rating for parking lots so just having further explanation on what to look for was really helpful.

**Rating exercises -** Rating exercises are always a helpful refresher.

Rating exercises - Explanations with examples are leagues ahead of simply reading through the list.

**Rating exercises -** The rating exercises were great because they shed some light on what was meant by the training.

Rating exercises - "Hands On" experience always helps me the most.

Rating exercises - Best part of the presentation due to the hands on approach to teaching this.

**Rating exercises -** Seeing how the PASER categories were used were the most helpful. Hard to determine what is what just reading it. The visualization helped a lot!

Rating exercises - Rating exercises are the best way to get comfortable with the rating scales.

Rating exercises - I think seeing the examples with all the various distresses helps me to identify the distresses in the field and understand exactly what each distress actually looks like in the field

**Rating exercises** - The rating exercises were very helpful especially the discussion with helpful pointers after.

Rating exercises - I like hands on learning and this was great to really enforce the content!

Rating exercises - I expect to directly apply this while doing road ratings.

**Rating exercises -** I like the buttons where it would highlight the distress in the photo. That really helped identify the distress in the photos.

Rating exercises - The explanations and discussing differences helps

Rating exercises - Thanks for keeping us involved.

**Rating exercises -** This exercise provides a way to be sure we understand the information being taught.

**Rating exercises -** Walking through the different ratings and explaining what they are is very helpful for me.

Rating exercises - Refreshes the skills needed to work in the field

Rating exercises - It's a great refresher.

Rating exercises - The rating exercises really hone the identification skills

**Rating exercises** - Going through the various pictures and determining the rating was very helpful. Having the presenter explain the reasoning behind each rating helps sets a solid foundation to the ratings.

Rating exercises - Real - life examples are usually the most helpful.

Rating exercises - Practice is always good, and testing is important to go along with that.

**Rating exercises -** Helps to see some of those examples that could go either way and talk through them.

Rating exercises - I learn best by doing

Rating exercises - The exercises help with learning how to identify specific distresses.

Rating exercises - great exercises to apply lessons and then have discussion of why chosen; whole rating exercise helps "cement" the lesson (pun intended)

Rating exercises - Real world rating examples always help.

Rating exercises - Find rating is the best way to become proficient and accurate at rating

**Rating exercises -** This was similar to hands on training which benefitted me greatly as a first year road rater.

Rating exercises - Great presentation

**Rating exercises -** I like seeing examples of what to look for on actual roads. It helps put the information to real life use.

Rating exercises - The exercises brought the entire training together and was very helpful.

Rating exercises - Seeing examples and how the ratings are applied are a big help.

**Rating exercises -** Great class liked the rating exercises also liked the going over the ratings done the in-person class years ago liked it better but sign of the times

Rating exercises - The cheat sheet really helps for a novice like me when it comes to rating.

**Rating exercises** - how to learn how to visually see the potential issue, then having to calculate to find the correct rating.

**Rating exercises -** After going over distress identification, it's good to practice what you learned or thought you learned during the training.

Rating exercises - The rating exercises because it is nice to see the pictures of what it should look like.

Rating exercises - The rating exercises allowed me to put the first few days of training into practical use. I found it very helpful when Andy and Pete walked thru each photo, provided clues, then explained why the correct answers is what it was. Thanks for your time!

Rating exercises - It gave a visual in understanding the rules and identification of the distress.

**Rating exercises** - It was nice to get examples and I had a lot of trouble with viewing and hearing the adobe connect at the same time.

Rating exercises - Some of the tips as my ratings were on spot or within 1

**Rating exercises -** To see how my rating compares to others and discussion and explanation of the roads

Rating exercises - Love the rating exercises. Gets you dialed in.

**Rating exercises -** The Rating Exercises are a good tool. Might have get some more pics. Looks like your recycling pics.

**Rating exercises** - Real world situations are not perfect and don't always fall into the guide lines as you would expect. This is especially evident on low volume concrete roads. As such example rating exercised help provide confidence in evaluating road distresses and rating criteria.

**Rating exercises** - The rating exercises are always the most helpful because they show you examples of how the PASER system is applies to different cases.

**Rating exercises -** I think the rating exercises are the most beneficial.

**Rating exercises -** The visuals of ratings were great and helped to put a good picture to the rules and what is needed and to also introduce multiple elements to consider into a single view.

Rating exercises - Seeing real life examples helps picture field conditions.

Rating exercises - The "Check Your Knowledge" and response/quiz-type/visual questions were very helpful in testing my knowledge and overall understanding for multiple elements of the training. I want to be equipped to guide staff who will be primarily conducting ratings and support them where needed, so understanding my own comprehension and testing my skills are critical. Background on road maintenance was also helpful to understand construction processes/what it means for visual indicators.

**Rating exercises -** Seeing wide range of answers on exercises

Rating exercises - It was good to have examples of various roads and good practice to rate them

Rating exercises - The examples are the most helpful.

**Rating exercises** - It was helpful to see the examples and talk it through.

Rating exercises - Helpful to see the different opinions on ratings

Rating exercises - Most helpful was the determination between an age stress and structural stresses.

**Rating exercises** - Rating exercises that help to recognize defects and hierarchy of the defects were the most helpful.

Rating exercises - very helpful to help establish ratings

**Rating exercises -** The practice of plotting thru the PASER cheat sheet helps solidify the different elements of each category.

**Rating exercises** - After the distress identification day, the rating exercises helped me master all the concepts. This final day made me feel confident to rate roads on the job.

Rating exercises - Poll questions are helpful

Rating exercises - Good illustration for the cases on the cheat sheet

Rating exercises - I gain the most out of the interactive portions of the training

**Rating exercises** - I found all the topics useful. All topics complimented the other. The rating exercises helped to put teaching into action.

**Rating exercises -** Showing real examples and given the option to rate them was a great help in application of the information provided during the training

**Rating exercises -** "Interesting" would be a subjective term depending on the individual. Exercises help most to tie in the rules/identification to the actual real-world application.

Rating exercises - Pictures with ratings and explanations by Pete.

Rating exercises - The rating exercises were the most helpful.

Rating exercises - I found the exercises helpful because of the examples I could work with in a controlled environment where I was given appropriate ratings after having a chance to try to rate them myself

**Rating exercises** - the rating exercises were most interesting because after the answer was given they explain why the rating was chosen. so the instructors went into more detail on why it should have that rating. The pictures and highlights on what to look for when rating were helpful.

**Rating exercises -** Highlighting of the distresses using different colors because some distresses are not very obvious from the photograph

**Rating exercises** - Rating exercises are very helpful to first time rater. Would like to have more examples or link to go over more examples. Right now do not feel very confident in correctly rating a road.

**Rating exercises -** Going through examples is the most helpful way to learn how to rate and what to look for when rating, this includes knowing when and when not to look for specific elements present in the road.

**Rating exercises -** This is where the lessons from the first two days came together. We got to see what we know and what we have to work on.

Rating exercises - The cheat sheets are the most helpful, both for the training and real-life rating.

**Rating exercises** - It always good to see specific examples and reasons why they should be rated a certain number. It is good to see how the ratings were usually within one or two for the examples by the group.

**Rating exercises -** The different criteria for grading roads, because some of them seemed super specific. Also, knowing when white lines matter and when they don't.

**Rating exercises -** Opportunities to practice and apply knowledge to real-world examples allow me to feel more comfortable going out and rating roads.

Rating exercises - The examples and rating exercises were very helpful

Rating exercises - It was good to see examples and understand why the road was rated that way.

**Rating exercises** - Prior to 2021 I haven't been involved in RCOC's collection efforts but thought I was familiar with how PASER worked, turns out I wasn't. This training was very beneficial, great job to all involved.

Rating exercises - I needed some practice in evaluating pavement before rating again.

**Rating exercises** - Talking through the thought process of rating various stretches of the road was the most helpful when paired with the cheat sheets. The combination of the cheat sheet and conversation solidified the process, I feel I could confidently perform PASER rating after this exercise.

**Rating exercises -** The rating exercises were very helpful to anticipate real-world conditions. The explanations for each particular issue was good to help calibrate myself.

Rating exercises - We do not have cement or seal coat roads, I did learn a lot about asphalt

**Rating exercises** - It was very helpful when the issues with the roads were very clearly explained. It was done really well for the asphalt portion, but it felt rushed and difficult for the concrete and seal coat portion.

Rating exercises - I found the polls to be helpful and they kept everyone engaged.

Rating exercises - The exercise really tied things together.

Rating exercises - Seeing how to apply the damages to the roads and how to rate them.

**Rating exercises -** The visual of actual photo and profile views with the distress markings was very helpful

Rating exercises - Visual Rating Exercises

**Rating exercises** - learning how to use the cheat sheet while doing the rating exercises is the most practical way to learn

Rating exercises - They gave you real examples of the roads....

**Rating exercises -** Always good to see different examples to help identify field conditions when out rating.

Rating exercises - With this being my first year, very helpful. Pictures were great too!

Rating exercises - Helpful for those that don't rate frequently

**Rating exercises** - The rating exercises were very helpful for acclimating to the system and seeing various examples of real roads that we could be rating.

Rating exercises - I liked doing the ratings and then getting [an] explanation after it

Rating exercises - Practice makes perfect.

Rating rules - Just the numerous examples and visuals

**Rating rules -** Specifically the alligator cracking in the wheel paths reducing the score. Also the difference in structural and non-structural distresses.

**Rating rules -** I found the rating exercises to be helpful. It's nice to see real world examples for using the ratings.

Rating rules - This is my first PASER training so it was all very helpful

**Rating rules -** Good to know how to weigh distresses, i.e. crack spacing is more important than crack width

Rating rules - It was a good refresher to see the specific rating rules for pavement.

Rating rules - I found rating rules the most helpful as they are the basis for analysis.

Rating rules - I've worked in the field for a few years. The rating rules put words and rules to what I saw in the field.

**Rating rules -** Whole training was great and very helpful. Explained a lot from basic explanation to examples.

**Other** - It was a combination of Rating exercised and rules along with the Data Cycle being secondary. It was a nice refresher for asphalt and concrete and the exposure to the MI sealcoat guide. I used to rate for private property owners or out of state roadway owners, however, it was useful to see how MI handles business now after not working locally in a while.

Other - I think all aspects of the training is important in its own way. Especially for first time raters.

Other - The whole training exercises was great to me. It gave me a view of all categories

Other - I selected others, meaning all of the above.

**Other** - Helps to explain the thought process and to sort out which factors define the correct rating.

Other - All if it, I'm new

Other - The most helpful portion of the training is the yearly updates of TAMC policy changes.

Other - I liked the insight on when and why certain repairs are done

**Other** - Being new to the entire PASER role, all of the information was extremely helpful and interesting. I learned a lot and gained a lot of knowledge to put toward my first year as an Assistant Engineer at the Saginaw County Road Co.

Other - All

**Blank -** They were all good, great re-fresher

## If you are a new/experienced rater, which part of the PASER data collection process seems/has been unclear or confusing for you? Select one and explain:

Data cycle - just need to study more on this topic. (personally)

**Data cycle** - Detail step by step process of the data cycle and laptop data collection import and export portion.

**Data cycle** - I'm not sure what is meant by data cycle, so that is why I would say it wasn't explained well.

**Data cycle -** Not sure about the second day topics. We don't typically submit for funding but just use on community streets to plan for future repairs and improvements

Data cycle - I think that this topic is hard to explain through zoom when I have never used Roadsoft.

**Distress identification -** Hard to see the distresses

**Distress identification -** Distress identification was well covered. I believe it is the hardest to clarify because everybody sees different distresses. Some seem to be highlighted while others appear to be missed person-to-person.

**Distress identification -** There were some inconsistencies in the exercise versus the cheat sheet, only a few, but it made it a bit confusing on those specific instances.

**Distress identification -** I think it is covered well but it's where I think some (including myself) struggle with a lack of consistently doing PASER throughout the year.

Distress identification - It's always good to have a refresher on [identifying] distress in your surfaces.

**Distress identification -** For newer raters, the terminology might take a little longer to pick up on the lingo.

**Distress identification -** Concrete distresses - we have very few concrete roads so I always find identifying distresses and rating them very difficult

**Distress identification** - I did have trouble with the data collection in grayer areas.

**Distress identification -** Concrete distress are [somewhat] confusing

**Distress identification** - I wouldn't say unclear or confusing per say, but remembering all the terms to identify levels of distress is challenging.

**Distress identification** - The concrete distress identification could have been evaluated more slowly.

N/A - I felt all topics were thoroughly and clearly covered - Distress topics were cover thoroughly

N/A - I felt all topics were thoroughly and clearly covered - I think delivered well.

N/A - I felt all topics were thoroughly and clearly covered - N/A

**N/A - I felt all topics were thoroughly and clearly covered -** All topics were clearly covered. I do think that the concrete rating is more difficult than the asphalt rating as the distresses are tougher to identify.

N/A - I felt all topics were thoroughly and clearly covered - Still a nice refresher.

**N/A - I felt all topics were thoroughly and clearly covered -** Concrete distresses could be covered more thoroughly.

N/A - I felt all topics were thoroughly and clearly covered - All topics were very well explained

N/A - I felt all topics were thoroughly and clearly covered - Concrete ratings were the hardest

**N/A - I felt all topics were thoroughly and clearly covered - I felt you guys did a good job explaining** the topics, as well as giving breaks and the Michigan Cities questions to keep us relaxed during.

Other - Rating a segment by the worst distress and/or by the consistent rating??

**Other** - Most of the topics were straight forward, but the sealcoating section was pretty confusing and concrete as well. They were explained decently (I think the PASER guide is just a little unclear and the instruction did the best it could).

**Other -** I should have had a copy of the cheat sheet to rate before, using only my notes was frustrating. My misunderstanding

**Other -** I was not familiar with treatment types so that was hard for me when having to use that for rating especially on the concrete.

Other - Other meaning all of the above

Other - Concrete Rating was skimmed in comparison to Asphalt Rating

Other - Import and export of LDC cycle

**Other -** I know that these time[s] are creating for a different teaching atmosphere, but I think as a new rater I definitely need additional practice in rating and identification of distresses.

Other - Concrete - N/A for my county

**Rating exercises** - Interpretation of deteriorations and how they relate to a PASER number has changed over time. I think the rating exercises are great to review every year to keep up with most current interpretations/standards. Concrete pavement especially has been difficult to rate.

Rating exercises - Sometimes I thought maybe too much help was given right away. I had and answer then changed it while listening and was off by one. I understand that we were under a time restraint and you were trying to speed it up, but being my first time I would have liked to read through and try figuring it out myself first.

**Rating exercises** - The photo's were a bit difficult to rate, but the explanations helped. I would have learned less if I had only taken the test with no explanation, especially on the ones that I had made an incorrect rating on.

**Rating exercises** - Would be nice to have transverse crack spacing on asphalt rating exercises to leave less subjectivity to the rating process. I feel like some of the ratings would be much clearer should those numbers be provided.

**Rating exercises** - I thought the asphalt rating exercises were very helpful, but I wish we could've spent some more time and had more explanation for the concrete rating exercises

**Rating exercises -** The rating for concrete was difficult for me. I think there should have been more time devoted to concrete.

Rating exercises - The rating exercises did make a difference in the overall PASER Rating Training.

Rating exercises - Hands on

**Rating exercises** - Some rating exercises are on the fence between 2 ratings. Still ends up pretty close usually as far as ratings are concerned.

Rating exercises - Need more examples or link to more examples to practice.

**Rating exercises -** It depended on who was presenting on whether or not I was able to understand what was being said.

**Rating rules -** I was a little unclear about the rules. I believe that after reading them separately I would understand better.

**Rating rules -** Can be hard to remember all the rating rules throughout the year, but the course is always good at refreshing that knowledge

Rating rules - Pretty fine line between some of these ratings

**Rating rules -** The topics seemed all over the place on day 2, more structure needed.

Rating rules - Rating rules for concrete roads was one part I struggled with.

**Rating rules -** More time could be taken to point out constraining rating factors, such as all alligator cracking is 3 or lower.

**Rating rules -** This should improve with more practice.

Rating rules - There was not always consistency between what the presenter said and what is written on the cheat sheets. For example, on one example that was rated as a #6, the presenter stated it was in part because of staining on the road. However, on the cheat sheet, there was no mention of staining. Similarly, another example was rated as Asphalt #5 - edge cracking was mentioned as one reason it was rated as #5, however, the phrase "edge cracking" is not listed on Asphalt #5 in cheat sheet. It does, however, state, "Longitudinal cracks: first signs, at edge". Perhaps this is the same as edge cracking, but I'm not sure. In short, it would be helpful to keep all terms consistent, unless that was indicated previously and I just didn't hear that part.

**Rating rules -** The concrete rating process could have been explained better. A lot of the descriptions are close to one another and could have used more visual examples.

**Rating rules -** Sometimes it is hard to judge how deep damage is without being told, but I think that's just an experience gap problem.

Rating rules - concrete

**Blank** - For some reason, the concrete exercise needed a little bit more thinking and not as obvious because it seemed like I got more wrong. It may just be because I had myself calibrated earlier to a different type of pavement and got confused - not related to instruction quality.

**Blank** - I may have just missed a few minutes of this because of connection issues

**Blank** - The sealcoat manual shows a 1 to 5 rating and the class used 1 to 10. The cheat sheets provided did not include one for sealcoat

## Do you feel as though the rating exercises built up your confidence/benefitted you in rating roads? - Explain

**Yes** - Yes. I am someone who learns very well by more hands on experience, so exercising the knowledge given to me helped me learn and will help me when I use the PASER system in the future.

**Yes -** Yes, you can actually see them.

**Yes** - Yes, the explanations at the end helped me understand why I got one wrong when I did, so my answers were more accurate as we went.

**Yes -** Yes, most were the same or within one rating of the correct one.

Yes - Yes, I would've been much more confused rating without that section of the training

**Yes** - Yes, I liked that examples were given for each of the distress types so I could understand the terms being used.

Yes - Yes, I believe it built up my confidence. I will now pay more attention to the roads as I drive them

**Yes** - Yes, but needed more examples or link to more examples to practice before rating roads in real life.

**Yes** - Yes it was helpful to hear the reasons for the ratings and why the ratings couldn't be lower for the most part.

**Yes** - Yes but I think it will be a bit different when working in the field.

**Yes -** Yes - especially having the opportunity to go through why I was right or wrong and see how other people answered.

Yes - Without them, it would be harder to figure out what is the problem with some of the roads.

Yes - well explained

**Yes -** we can rating exercises

Yes - Very helpful

**Yes** - Utilizing multiple examples of the different types of roadways and going through each [example] both showcasing the distresses and also just using the naked eye without showing the distresses

**Yes** - This was greatly appreciated. Comments for why it would be one number vs. another was great. The interaction was a great way to stay engaged. You can read the handouts, but to hear and see how it would be rated was very helpful. Loved having a plan view to go with photo's. This was all well done.

**Yes -** This is a good refresher every year to begin to again focus on road ratings

Yes - They're good exercises.

**Yes -** They helped me test my skills at viewing and rating roads. Helped to realize why I was wrong or why I was correct in my thinking.

Yes - They always help clarify or serve as a good reminder of the specifics, especially for those tricky concrete rating forms. Because so many communities have different methods for repairs it's a good reminder what CTT/TAMC sees as the appropriate fix (since concrete is only partially distress related, as part of the consideration is what fix to do). Some communities I work with will \*never\* do partial depth joint repairs, and only rarely do full depth joints, they tend to lean towards full slab replacement instead of adding the additional joints.

**Yes -** These go by way too fast, and should have more time overall devoted to them. Less to the day two stuff.

**Yes -** There were a couple I was way off on, yikes, but many others I had correct or one away from correct. I think field discussion will be good for me for practice with an experienced co-worker.

Yes - The rating process is much clearer to me. Thank you

Yes - The rating exercise's were very helpful

Yes - The rating exercises reinforced the skills that I previously learned but only use annually.

**Yes -** The rating exercises made me confident to rate roads. There was a good combination of guidance and independence.

Yes - The rating exercises helped when I was getting the majority correct.

**Yes -** The rating exercises gave examples of some of the close calls which builds my confidence in choosing the correct rating.

Yes - The rating exercises help determine your skill level at rating

Yes - The pictures with the explanations really helped point out key factors in rating.

Yes - The more exercises the more accurate the rating becomes by practicing

Yes - the explanations which determine ratings were very helpful.

Yes - The explanations reinforce the learning content

**Yes** - The explanations of why on each one proved the most helpful as I typically leaned more towards the higher rating, but then understood why it would be lower.

**Yes -** The exercises, especially the asphalt was good. The concrete and sealcoat were a little difficult to grasp but was good enough.

**Yes -** The exercises showed several different types of roads with the same rating numbers. It helped to show the different ratings.

**Yes -** The exercises helped to get a feel of how I rated them compared to how they are really rated. Helped me calibrate my mind to the process better.

Yes - The exercises are well done!

Yes - The exercises are really important, but it's more difficult on a home computer screen

Yes - The examples are helpful in showing exactly how to identify road conditions.

Yes - Specifically the asphalt exercises were most helpful

**Yes** - Similar comment as before, nice to be in a forum, and on the few I may have been off by one, was able to see there were usually a fair amount of others who made the same choice.

**Yes** - Seeing specific examples on slides [and] walking through the cheat sheet to rate was extremely helpful.

Yes - Seeing is believing.

**Yes** - see above

Yes - Reviewing distresses helps hone skills not used over the winter

Yes - Review!

Yes - Repetition is beneficial

**Yes** - Real world examples

**Yes -** Real examples help to make the ratings clear.

Yes - Real examples are always better and getting a visual was just what I needed.

Yes - Rating exercise and photos really help.

Yes - Provides real world examples, good exercise.

Yes - Practice practice practice

Yes - Practice makes perfect!

Yes - Practice always helps!

Yes - Pictures help a bunch

Yes - PASER is not something I use on a daily basis, so refreshing my mind on it has been helpful.

Yes - Nice to recalibrate. I know it is hard to get good pictures of road distresses.

**Yes -** Multiple examples of the different forms of roadway conditions & techniques was very helpful in the Training.

**Yes -** more so for HMA than for concrete

Yes - More practice is better.

Yes - More experience makes me a better rater

**Yes -** Made sure I was evaluating roads in the same manner as others.

**Yes** - Love the rating exercises!

Yes - Like to have a refresh every year

Yes - Learned to look for the worst defect instead of trying to evaluate each type of distress

**Yes -** I've been asked on multiple occasions to rate the conditions of the road and now have a basis to start from.

**Yes -** It's useful to do these exercises since it allows you to see the road and get a direct answer right after.

Yes - It's good practice.

Yes - It was very helpful to go through the exercises, and see how close others rated the same photos.

**Yes -** It was good practice to rate roads as practice.

**Yes** - It was definitely helpful getting experience and getting checked. I wish I did better on some portions, but I definitely feel confident with the asphalt rating.

Yes - It made me realize that I need more practice before being let loose and conduct ratings.

**Yes** - It is great to see the pictures from different angles and different types of roads and to be able to highlight the distresses then rate them with the cheat sheet. Great practice

Yes - It is always good to see examples and what the rating should be. Usually my rating was correct.

**Yes** - It helps cover the real situations

**Yes** - It helped connect the first day, covering distress and the last day applying these to specific PASER ratings.

**Yes** - It benefitted me because after each question the instructor explained why the rating was chosen.

**Yes** - Initially, I rated roads "better" than they were. After the explanations I was able to be a little more [in line] with what the instructors were rating roads.

**Yes -** I was pretty spot on with the rating, but again pretty fine line between the middle group of ratings.

**Yes -** I was doing rating with my dad before, and now I have a clearer idea, even though it has been years since I did it.

**Yes -** I was able to see that I am capable of rating accurately without the fear of putting in the wrong rating.

**Yes -** I think the only thing that would need to be changed is the [angles] in which we are viewing the road and information [regarding] the road (i.e. when the road was constructed).

Yes - I liked it. Most of the time I was within one or on for the examples.

Yes - I like the Zoom rating exercises. You can see the road problems easier.

**Yes -** I learned a lot. This is my first experience with PASER training.

**Yes -** I learn mostly by seeing examples and trial and error.

Yes - I have not rated roads yet. These exercises helped me to be more comfortable with the ratings.

**Yes -** I have gone with the DPW while they rate the roads, now I understand what the numbers mean and will be helping with the ratings

**Yes -** I have felt as if I now understand 100% more, but that is only because the presenters along with the resources provided. I do wish there could be additional practice for rating.

**Yes** - I have been part of multiple project ratings but this is extremely helpful.

**Yes** - I have a better understanding on how to rate a road as we thought it was the average of the complete road (both lanes), not by the worst lane.

Yes - I had zero knowledge about rating roads and now I feel like I'm able to go out and do it

Yes - I got most of the ratings correct, or I was within one, which I thought was acceptable.

Yes - I got most of the ratings correct and if I did not get it correct, I was within one rating

**Yes -** I felt very successful with the asphalt paving aspect.

**Yes** - I do think when being a new rater going out with an experienced rater is very helpful. Having the photos and the rating exercises really does help since PASER is a visual evaluation.

Yes - I am new to rating, so the cheat sheet and examples have helped me better understand rating.

**Yes -** I am limited to the City roads. It helps to see other classifications of roads to be clear on the level of distress.

Yes - Helps to verify rating year to year but could be a video.

Yes - Helps me to know the areas I need to review more before going out to rate.

**Yes -** helpful hints to figure out the ratings.

Yes - Help compare different distresses and ratings

Yes - Having not rated roads before this training ensures that I will record PASER ratings well.

Yes - hands on experience to go with the learning material

Yes - Great to review and get input from CTT.

**Yes -** Got most of them right - even concrete

Yes - Good refresher - verified I still have a pretty good handle on rating

Yes - good idea of what to look for and what others see.

Yes - Getting those questions correct gave me confidence for when I will go out and rate for real.

Yes - gave a good visual

**Yes -** Experience always helps

Yes - Easy to follow

Yes - Discussion and helpful pointers after about key distresses really helped.

**Yes -** Considering I started at 0, yes, I feel the exercises significantly prepared me for rating roads more confidently. Would ideally still like more practice though.

Yes - Because its clear what to look for when rating road

Yes - As stated, I will do this during road ratings in the field.

Yes - As stated above, it was helpful to better understand the rating process

**Yes -** As above I should have had a copy of the cheat sheet to rate before, using only my notes was frustrating. My misunderstanding

Yes - Always good to hear how the rating was derived

**Yes** - Always good to go over with someone else to see what their rating is to make sure you are doing things correctly and build confidence.

Yes - Again with the cheat sheet being handy, it helps a lot.

**Yes -** A better variety would be better but overall good examples to rate

**Yes** - I was uncertain about how well I understood the rating system through the second day but feel much more capable after the exercises. Helps to see real examples and hear the explanation for each rating.

No - Repetitive

No - I became more confused. It may have been helpful in one of the previous days.

**No** - I already have some confidence in the rating process, only issue was dealing with determining crack spacing without any accurate means of measurement.

No - Go a little too long.

**No** - Although I got many of the rating exercises correct, I feel like I wouldn't have if the presenter did not highlight every distress. Many distresses were not apparent from the photograph (which is understandable as many distresses would be difficult to see anyway), so I feel when I rate a road for the first time, I may not be so easily able to accurately rate sections.

**No** - A cheat sheet with photos or more exercises to do on our own would be helpful. The exercises were great, and I could probably use some more for practice.

## Has this training as a whole increased your confidence for using the PASER system to rate pavements accurately? - Explain

Yes - Added information to access roadways.

**Yes** - More confidence each year the training is completed, always great to have a refresher.

**Yes** - Very informative.

**Yes -** The explanation between the nuances of each rating helps one get more confident in making that decision.

Yes - Training increase Confidence

**Yes -** very clear on proper ratings by presenters helps rate accurately.

Yes - It has been a while since I did the training and helps to get refreshed on content

Yes - As a first year PASER trainee, any training would increase my confidence

**Yes** - I had no previous experience, and this gave me confidence.

**Yes** - Increased confidence in performing a rating but not about how the entire process works. I'm very new to this and it seemed like the class was geared towards people who already had an idea of what was going on. A few references and terms that were thrown around that went over my head.

Yes - It was a great virtual class

Yes - Some pavement types were gone over too quickly for first timers

**Yes -** I believe that the training helped me with becoming a better rater. It's beneficial having such experienced lecturers provided by MTU-CTT.

Yes - I feel more experienced at rating

Yes - See Above

Yes - Yes I feel I will be able to rate more accurately after this training.

**Yes -** I started knowing nothing, now I have a baseline to move forward with.

Yes - Yes, I believe so.

Yes - Really helpful modules. Well explained and organized!

**Yes** - The presentation is always well put together, goes through at a good pace and provide a good amount of different examples that are very helpful

Yes - Once again going over examples with a couple hundred people to get a good consensus

Yes - Great to get the breakdown of the ratings and then put that to use in the exercise

Yes - Between the instruction, exercises, and materials provided, I feel that I'll be fine.

Yes - the cheat sheets are very helpful and the exercises were great to identify distresses.

**Yes -** Always good to go over with someone else to see what their rating is to make sure you are doing things correctly and build confidence.

Yes - Yes. I was unaware, besides a few manual flip throughs, of what PASER was all about.

**Yes -** My ratings were fairly close and on par with everyone else and what the moderators answer was.

**Yes** - I have a much better understanding of the main components of the rating system and what differentiates rating numbers.

**Yes -** Good review while we are caught up in our [town's] ratings.

**Yes -** The training has helped [me] learn the rules and distresses and the cheat sheet made is very helpful for when rating.

Yes - The rating of the concrete section was very helpful to me

Yes - Helpful.

Yes - Review!

Yes - Nice refresher.

**Yes -** Combining the types of distresses with the ratings and then using those to rate pictures is very effective

Yes - I had no experience before so this was helpful.

**Yes** - As a first time trainee of PASER, this training did an excellent job helping me to become acquainted with the material and methods.

Yes - Good information. Good links to documents. Presenters were clear and helpful.

Yes - Was confident before, but nice to refresh and test skills.

Yes - This is my first experience with PASER training.

Yes - Yes, I learned a lot and everything was explained in great detail

Yes - Repetition.

**Yes** - Yes - I had no experience with PASER before this training and I feel pretty comfortable with the system now.

Yes - The training covers PASER ratings and their criteria.

Yes - I feel more confident about it.

**Yes** - It is nice to have a refresher

Yes - Graphics and explanations were very good.

**Yes** - Have rated for several years, but it is always good to have a refresher each year before going out to rate.

Yes - Pulls it all together

**Yes -** The more you use PASER the better you become.

Yes - Annual refreshers are good.

Yes - But we still want gloves !!

Yes - I got feedback on my ratings.

**Yes -** This helped summarize key info for road ratings.

Yes - I had no knowledge of any of the topics covered prior to this webinar.

Yes - Great resources and tools to rate roads accurately.

**Yes** - The three day course was very instructive!

**Yes** - having the cheat sheet is key as you can add your personal notes to help you identify and rate pavements.

Yes - It has been over a decade.

Yes - for the tips from the experts, however, having a manual on hand is necessary.

**Yes -** practice makes perfect.

Yes - As previously indicated

Yes - More practice the better.

Yes - I was familiar with PASER before, and now I have a chance in the wild to test my knowledge.

**Yes -** I already felt confident with my PASER rating ability, but attending this training every year is a good refresher for the upcoming rating season.

Yes - Helps to verify ratings and any changes year to year

**Yes -** Still would like more practice, but as a whole, yes.

**Yes** - It helps identify key distresses

**Yes** - It's nice practice to have the repetition and multiple examples back to back to help solidify my rating understanding.

**Yes** - Yes, I feel really confident rating roads after this training. I have had no experience rating roads in the past, so it was a great learning experience.

**Yes** - I better understand where to get and reference the PASER manual, cheat sheets, and other tools so that I can comfortably know that I am rating properly.

**Yes** - Yes, it is a fairly straight forward system but keeping in mind the factors that differentiate rating between two scores.

Yes - Training increases confidence as well as the exercises...

**Yes -** Before the training, I had little to no knowledge surrounding how to go about rating roads. So I am much more confident in my ability to use the PASER system than I was before.

Yes - the resources that are made available and the level of detail the instructors went into.

**Yes -** Yes, I believe I do feel more confident overall in rating pavements accurately than I did before the training

Yes - I wouldn't know anything about it if not for the training.

**Yes -** This training, along with the cheat sheet and knowing how to use it makes me very confident in rating confidently and accurately.

Yes - It has made me more knowledgeable on the subject.

**Yes -** It's all about those practice problems! This course was a really good refresher of the techniques I learned in 2019.

Yes - I am new to PASER rating so any training at all has helped with my confidence.

**Yes -** This will be my first season performing PASER ratings. I am confident I will be an asset to my evaluation team now that I have attended this course. The materials are descriptive and easy to use.

**Yes -** The explanation if I got one wrong made me realize why a rating is what it is, and that gave me confidence.

**Yes -** It was a nice refresher for someone who hasn't rated in a few years. The rating exercises were very helpful.

**Yes -** I understand the rating system now

**Yes -** I definitely feel more knowledgeable with everything PASER rating since I've never been trained with this before.

**Yes -** There would be less applied knowledge to how to rate roads, I wouldn't have much of a sense for it.

Yes - Refreshers are always good especially after taking a year off

No - most of the class I kept losing video so I missed a lot of the information

**No** - Being someone who never participated in PASER rating and our engineer leaving our agency I will be put into this and expected to take over and run with a program that was probably largely neglected and the asset management will be complicated most likely.

No - I've seen it many, many times.

**No** - As stated before, the training made me realize I need to study the materials to gain a better understanding of the criteria and ratings.

**No** - I think if you have a deep strength asphalt road (9 inches or more) or composite road with a good base, the road may be in better condition than the PASER scoring indicates if it is an old pavement that has not been maintained and has an oxidized surface.

**No** - It appears I would need someone experienced to go out with me.

If you have collected PASER or IBR data before, which materials have you found most beneficial?

Please explain/comments:

PASER Cheat Sheet, Michigan Sealcoat Guide, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) - All helpful

**PASER Cheat Sheet -** Because it clearly tells you what to look for

PASER Cheat Sheet, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) - Only have ever used the PASER cheat sheets or manuals off this list. Typically we used our own little handbook that was created by my old employers to be more applicable for private sector ratings to include parking lots in addition to roadways.

PASER Cheat Sheet, Michigan Sealcoat Guide, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block), IBR System Manual, IBR System Quick Guide - All materials are beneficial. Especially when in the field and need quick a reference or to answer questions that you might need to figure out or reference quickly.

PASER Cheat Sheet, Michigan Sealcoat Guide, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block), IBR System Manual, IBR System Quick Guide - PASER cheat sheet

PASER Cheat Sheet - Makes is easy and quick reference when out rating roads

**PASER Cheat Sheet** - I find that it's absolutely critical for me to have the PASER Cheat Sheet & TAMC Data Collection Manual with me as I rate roads with my colleagues.

PASER Cheat Sheet - I feel the cheat sheets are the most beneficial.

**PASER Cheat Sheet -** We use the cheat sheets anytime we rate.

**Blank** - I haven't collected TAMC PASER before, but it looks like the PASER Cheat Sheet will be very useful.

**PASER Cheat Sheet -** Sometimes the manuals can get too in depth and a cheat sheet helps eliminate a fair amount of variables

**PASER Cheat Sheet, IBR System Quick Guide** - The cheat sheets are great and easy to reference while rating when you have a decision to make between two ratings.

PASER Cheat Sheet, Michigan Sealcoat Guide - Cheat sheets are a great quick reference.

**PASER Cheat Sheet -** I have not rated before but based on the examples that we covered in the training the PASER cheat sheet was extremely helpful.

PASER Cheat Sheet - Easy to use.

PASER Cheat Sheet, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) - Great resources!

PASER Cheat Sheet - Will laminate the cheat sheets for the raters in my agency. Useful tool.

PASER Cheat Sheet - The cheat sheet is short and sweet and allows quick reference while out rating PASER Cheat Sheet, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) - I mostly rate private roads and parking lots for clients, so do not do much data collection or IBR. Cheat sheet is by far the best tool available in my opinion, and always carry it with me when rating. The PASER manuals are nice for a back-up or when additional information or photos are helpful.

PASER Cheat Sheet - its all great

**PASER Cheat Sheet, PASER slides (available on website)** - I think having more visuals showing various distresses with the associated PASER rating would help as a reference prior to rating roads, it would help me as a refresher.

**PASER Cheat Sheet -** Breaks it down easier.

**TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) -** The manuals are put together very well.

PASER Cheat Sheet - PASER cheat sheet is a great quick guide/tool.

**PASER Cheat Sheet, Michigan Sealcoat Guide, IBR System Quick Guide** - The guides can help you determine which rating the road should receive. Examples of what fix could be used assists sometimes.

**PASER Cheat Sheet, IBR System Quick Guide -** The cheat sheets are the most functional tool while rating.

PASER Cheat Sheet, PASER slides (available on website), TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block), IBR System Quick Guide - All listed above are, good resources and reference

PASER Cheat Sheet, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) - I typically work with Metro Detroit Asphalt and Concrete pavements. These manuals and the cheat sheet work well for me.

**PASER Cheat Sheet -** This is a good quick reference.

PASER Cheat Sheet, TIC PASER Manuals (Asphalt Roads, Concrete Roads, Sealcoat, Gravel Roads, Brick & Block) - Discussion in training is the best. Manuals do not cover every question

PASER Cheat Sheet - I will use the cheat sheet the most while out on site

PASER Cheat Sheet, Michigan Sealcoat Guide, IBR System Manual - The resources are very helpful.

PASER Cheat Sheet - Narrows the thought process.

PASER Cheat Sheet, IBR System Quick Guide - Always keep the guides handy - refer to them often

PASER Cheat Sheet - Easy to use in the field.

PASER Cheat Sheet, PASER slides (available on website) - Good to verify

PASER Cheat Sheet - I always use the cheat sheet when rating

**PASER Cheat Sheet -** Cheat Sheets are easy to reference while rating pavement. Not too hard to manage while driving. The manual is great to get your ready to go in the field.

PASER Cheat Sheet, IBR System Quick Guide - Easy to take in vehicle for reference.

**PASER Cheat Sheet -** All the materials are nice to have but the cheat sheet is easy and simple to use when rating.

PASER Cheat Sheet, IBR System Quick Guide - self-explanatory really.

**Blank** - I have not collected PASER or IBR data before. However TIC PASER for asphalt, [concrete], sealcoat), IBR & PASER Cheat Sheets will be helpful tools to have on hand without needing a 20-page manual.

PASER Cheat Sheet - I haven't collected before, but the cheat sheet was most helpful in the training Blank - N/A But the PASER Cheat Sheet seems very helpful!

#### Additional questions/comments:

Great format this year!

Great refresher course!

Please don't change a thing! It was great! The presenters were excellent as well!!

Great Job. Loved the training.

Great job as always! Thanks for making program interesting and engaging.

On the pavement distress graphics (not photos) try to keep the distress label type visible after clicking on it.

prefer in person learning

Thank you for the great educational resources!

The virtual training for PASER was really nice. I like the course being split over a 3 day period.

Pretty good class. I enjoyed the fun questions to break it up. I enjoyed the survey like questions as well. The information was well presented.

Great job! Thank you!

Went well for the virtual training. Looking forward to meet everyone in person again!

Wish more City streets had been shown, not just county roads

training was done great

I think offering this virtual training was fantastic, please push for this to continue! Thanks!

Well done virtual training! Thank you for such a well-developed training experience and incorporating the distress tools.

Great training and class as always

Thank you, training was very helpful and well done. Interactive button [was] a big benefit.

Excellent training. Well done by all the presenters.

Thank you for your time.

good class with lots of info, thanks to all

I think this was great and we could have option for virtual every year

Training was well presented.

Very helpful. Thank you!

I think the virtual aspect of this training went very smoothly and I thank the speakers for their time and insight!

Nice presentation

Thank you!

Thanks!

I really enjoyed this training. Very helpful

Include the import and export steps to and from the RS and LDC.

Overall good experience for the virtual series. Pretty well honed training series (as I would hope after so many years!)

Thank you!

Awesome job!!

Well done.

Great webinar overall.

more examples, please.

I enjoyed the virtual style and not having to drive an hour plus for class.

Virtual class works fine for this training.

Some of the "key" condition signs are not on the cheat sheets. i.e., rusting shallow reinforcement for concrete or visible base for sealcoat.

Thanks!

Overall I thought this was a really good webinar! Thank you!

Very helpful for an introduction to someone who is new.

This is a well done training and was kept interesting nice job

Put together great, glad it was split up some.

Thank you for the training!

Thank you!!

thank you!!

Thanks.

The interactive distress slides where you click the distresses and they pop up were a great addition.

very informative and useful for pavement rating/evaluation

Keep up the good work! We truly appreciate it. "Even though we still are wearing four year old work gloves".

Thanks for the webinar!

Great presentation

Great flow of knowledge and learning day to day. Every day built upon the last. Excellent class!

Terrific!

Having experienced presenters [from] their own field is highly commendable for a successful training like this.

Thank you!! It's been a rough few years for you all, but you've done an excellent job [throughout] the years- and keep improving too!! Much appreciated!

Zoom was great, I really enjoyed the training online but miss completing in person. Great Job, thanks training was very good and well organized.

This was a great training. I feel very confident I can collect the correct data for PASER in a manner consistent with TAMC protocols.

Thank you for presenting the training in this manner.

The zoom worked well today - NO issues!

The staff took a troubling computer system and shifted to something (Zoom) that worked. Thanks for switching. The audio and video really worked well.

Thank you for providing the training

Thanks for the training

a little rushed at the end but not a big deal.

Thank you - Training was engaging and went by fast!

Great course

Day 1 was short, day 3 was long....maybe balance them out better.

Thank you

Enjoyed the changes. The rating exercise on Day 2 and the treatment of pavement explanations were quite helpful

Although I have done this for many years I appreciate the training, even in the virtual format. The presenters as usual were very good and kept the presentation very interesting.

Thank you for this great opportunity; I look forward to rating roads!

I was confused about what trainings were required this year. MDOT says we are not allowed to do rating this year so how is 100% of the system getting rated. We also are not allowed to have more than 1 person in a vehicle until at least July 12.

Thank you for all the great work you do!

the virtual format worked well.

Awesome class.

Great job!

I cannot differentiate seal coats and slurry coats with asphalt, so I don't feel confident that I'd be able to tell whether an overlay has been applied or not.

More PASER rating examples would be helpful or link to more examples to practice.

This training is always a good refresher course.

thank you for your time

Great training, thanks to all who contributed to building this webinar training series

Good course, thought you kept it light and fairly easy, but very informational.

Very educational Seminar.

The training was efficient and very helpful. The instructors explained things well for those of us where construction is not necessarily in our purview.

It was a great training! Thank you!

Thanks for your time!

Well done. Thank you

Thank you.

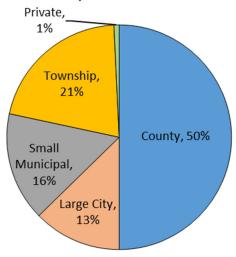
Nice job

# Appendix C: 2021 Transportation Asset Management for Local Officials/Gravel Road Basics for Local Officials Participant Demographics and Evaluation Results

(Due to rounding, some totals may not be 100%)

#### **Participant Demographics**

2021 TAM/GB for Local Officials



#### 2021 TAM for LO/GRB for LO-Evaluations

Participant Training Rating	Count
5	39
4	16
3	3
2	0
1	2
Blank	4

What is your position?	Count
Administrative staff	3
Elected/local official	8
Engineering staff	7
Other technical staff	1
Support staff	5
Technical staff	22
Other (please specify)	13
Blank	5

What is your position? (Other)
superintendent manager
County Highway Engineer
Software Engineer
Road commission managing director
public works supervisor
Township officials
On the Township road committee
Operations Manager
Owner Project Manager
Superintendent
Equipment Instructor
County Commissioner for South County in Kalamazoo.
Road commissioner

#### 2021 TAM/GRB for Local Officials –Written Evaluations

#### None

The teaching of this subject was made in a way anyone could understand. I appreciated that so much.

Just what I needed! Thorough overview with specific northern US examples, slides of the presentation, links to study materials and a video of the whole presentation to be offered later. What's more to want?

He conducts this training professionally every year

they seem real knowledgeable. We have used many of these treatments over the years and it is obvious they are familiar with them

Excellent class. Doing these on-line is really convenient. I hope you continue to offer these training sessions on-line. Learned a lot today.

As a new Township Supervisor, I gleaned an enormous of information that will make my life easier going forward.

It was very informative. Good graphics and explanations. Good info. Great analogies (house/car etc)

Nice job making a complicated subject easy to understand.

The audio froze periodically.

Good presentations with useful examples and illustrations.

More examples will be very helpful. The class was wonderful and enjoyed every sec

This was a very good presentation.

**Great presentation** 

very educational

great webinar

Good job explaining the programs that [I need to] follow to manage roadways

Would like to see a similar course with more in depth technical aspects.

Well done

Very good overview of asset management as it relates to roads

Excellent and very informative.

Hard subject done well

Excellent!

learned many things today

Very informative

Great presentation very informative. Thank you for valuable info.

Very good overview of common gravel road problems, particularly the seasonal (freeze/thaw) challenges.

Well done. Like the 1 presenter style, Often times time is wasted switching between presenters and their screens not working, etc...

Presentation was well done and informative.

Thank you for your patience and time!

Pete presented valuable information in a professional, pleasant fashion.

#### What did you like most about this event?

Lots of knowledge was presented

visual screens

For me it was just an update/review to keep up with things and see if there's anything new

The different road fixes

compact yet informative

How things were explained such as using [an] automobile or a house

Informational

The links to the resources

Going over an in-depth look on how to repair and maintain roads.

Online

The orderliness and pace of the presentation. Each topic built on the material already presented.

Beautifully presented, very informative

the explanation on the many different treatments

Graphics were very helpful in understanding what was being discussed.

The discussion on cost examples and types of pavement maintenance options and their life spans.

Very informative.

The format it was presented in, easy access.

the examples used to compare to roads (house/car)

Speakers were easy to listen to and understand; surveys help keep the audience engaged

Illustrations of various PM treatments

Easy to digest

The speakers were knowledgeable regarding the topic of discussion.

the information

covered a variety of road topics

all of it was informational

first section AMP Overview

Explanations and information about roads maintenance

Mix of fixes refresher course

Mixes of Fixes

the discussion of the various repair options

maintenance examples

different maintenance techniques

Description about Road Repairs.

Cold in place

A lot of good information

Straight forward information, direct and to the point

The pictures and videos really drove home the information

It was easy to follow along.

Pete is a very good presenter.

everything we learned

The time the Instructor took to make every segment plainly understood and had q/a available.

I probably would not have attended this class if it was hosted "live", so the webinar format allowed me to attend with a minimal time investment.

discussion on maintenance

The content was excellent.

I learned more about gravel roads that I did not know.

The asset management section

All the new information

Road Material section

high level - good

Great info! Great slides! Great presenter!

Great pics and illustrations adding clarity to oral and technical

#### What aspects of this event could be improved?

none

More on avenue of funding

not sure

I found no weaknesses - the topic, content, delivery, pace, and providing after class resources were all student centered. You delivered a high quality product.

More slides

I think it was top notch

As long as you record the webinars and post so participants can go back in and watch I would say no improvement is necessary.

There was considerable freezing/skipping, possible a different platform.

Keep online options available even after we are "done" with the pandemic

None

nothing

The audio.

none

all was good

slow down to absorb more

Outlines of segments left up longer

none

It is a rather dry subject. Charts, graphs and videos are good

I always appreciate in person meeting as it allows people to bounce ideas and learn what other departments are having success with

**Nothing** 

Perhaps some cross comparison (polls) between the participants to provide insight into different gravel road maintenance practices. Example: The presentation mentioned two dust control

applications per year - my agency does as many as five applications, due mostly to citizen complaints and/or high traffic volumes.

It was well done.

none

The difference in using 32A or 22A

nothing

update revenue graphic from house fiscal agency and how about something on pulverizing and returning roads to gravel

Can't think of a thing.

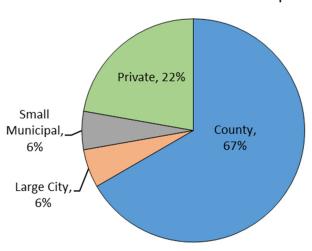
Well done as virtual.

## **Appendix D: 2021 Bridge Asset Management Training Series Workshop Participant Demographics and Evaluation Results**

(Due to rounding, some totals may not be 100%)

#### **Participant Demographics**

2021 BAM Workshop



2021 Bridge Asset Management Training Series Workshop – Evaluations

Participant Training Rating	Count
5	25
4	16
3	1
2	0
1	1
Blank	0

What is your position?	
Administrative staff	5
Engineering staff	22
Consultant	4
Other technical staff	1
Other (please specify)	7
(blank)	4

What is your position? (Other)	
Managing Director	
Regional planner	
Managing Director and Road Foreman	
MPO staff	
Manager	
Managing Director	
Retired county engineer	

## After completion of this class do you feel you know how to complete your pavement asset management plan?

Yes	10
No	4
Maybe	4

## How helpful is the TAMC pavement asset management plan tool in helping you to complete your pavement asset management plan?

Very Helpful	6
4	8
3	3
2	0
Not Helpful	0

## Prior to this class, did your agency have a written pavement asset management plan?

•	
Yes	4
No	14

## Prior to this class, did your agency have a written pavement asset management plan? - If 'yes', then for how many years have you had a written plan?

3
10
We didn't have a bridge one, though!
Bridge or Pavement??

When [is] your agency's compliance plan due?	
2021	2
2022	2
2023	4
My agency is not required to have an asset	
management plan under PA325.	4

#### When [is] your agency's compliance plan due? - Other (please specify)

Retired

I thought the last of the 3 groups were due 10/1/22. Did this get changed due to COVID?

2020

Various (doing them for multiple agencies)

2020

I am not familiar with Wayne County

#### 2021 Bridge Asset Management Workshop – Written Comments

#### **COMMENTS ON 2021 Bridge AM Training Series Workshop**

good explanations, kept everything moving.

Information was presented at a good pace, and the information provided would be helpful for those establishing an asset management program.

Very Informative and helpful

Good introduction to the process

nice presentation of bridge asset management concepts.

I liked the flow of the presentation. Easy to follow

Very informative and helpful

Would have been difficult to complete without the online sessions.

Nice slides and photos

For me, this was VERY basic and not very useful. However, I could see this being useful for someone who was brand new to how the bridge program works. I think you should be very clear in future offerings that Part 1 is not required in order to take Part 2, if you have a basic understanding of the bridge program.

Very informative.

Nice Job on Presentation today.

Very well organized and good info.

Good information, very thorough.

Good job CG!!

Very detailed, good job.

#### What did you like most about this event?

Discussion about creating asset management plan

Overall very knowledgeable

Good intro to the asset management program

Good review of bridge concepts, LBP program.

Information presented establishes a good baseline for those wishing to develop asset management plans.

The overview of how all of the resources will tie together

Very Informative and all the updated data helps the Bridge Inspection

All of the links to the data.

good all round info

nice examples, links to resources

Liked all of it

Straightforward and to the point.

Very helpful

Flow of the presentation

Very helpful with cost estimation

Overall, it was well presented for such a detailed, technical subject

I had the in class versions of this course and found the virtual to be more valuable because I could look through files in office and find needed data.

class was broke out in few training days

Step by Step process

Straight forward and not overly long

For Part 1, not much. Sorry.

Very informative, good coverage of the topic

New information

The pace and content was good.

Seeing tools used for bridge evaluation

**Broad overview** 

appreciated the virtual option

Explanation of how bridge AMPs are developed/implemented.

timeliness - also having a recording to go back to

Organization and length of material was good.

The thoroughness of the presentation.

It is a new subject to me

Life Cycle Analysis

It was organized well. With time to work at your own pace.

Informative

It is a new subject for me

Walking through how the tools work. Very handy!

### Please suggest specific topics that might be relevant to you/your agency for future events like this one:

How to approach bridge asset management plan if we have no dedicated funds

**Asset Management Basics** 

Determining goals. I liked what Tim said about not having to set goals too high. We have very limited funding and though we use a mix of fixes we don't always use all of them in the same year. In the end we still lack funding to keep up with having all fair and good roads.

Cleaning operations

More Information on getting lined up for funding and the application process

Transportation Maintenance Facilities Asset Management

A specific webinar training session on MDOT's LCCA Bridge excel template and a guide to be consistent with using the template.

Bridge Life Cycle Cost Analysis estimate worksheet.

What aspects of this event could be improved?

agency that already done this

None, good job.

take a little more time going over things

Well done no improvement needed

The description of the webinar series needs to be revised to clarify that Part 1 and Part 2 are not BOTH required if you are familiar with the bridge program.

No suggestions at this time.

Color Handout-file

This is for Question #9 below, it says Pavement Asset Management Plan... BRIDGE!! lol

More visuals

Sending Slides before the webinar

Hybrid - In person/virtual

Virtual Lunch coupons. . . lol Just kidding.

#### Additional comments/suggestions:

Is any of this information available in a binder form?

I would suggest that in future on-site training sessions, virtual access would still be available to those that cannot attend in person. The virtual webinars have been very convenient.

Love the virtual webinars

Note: Some questions above referenced the Pavement AMP, not bridge AMP

## What other trainings related to the asset management plan would be helpful to you in developing your agency's plan? (i.e. goal setting, forecasting condition, mix of fix planning)

Mix of fix planning

actually putting one together & seeing examples from other agencies.

Forecasting conditions

Take a look at the last three years of bridge PM projects on MDOT website. Talk to Keith [Cooper] about number of bidders on these projects and the bids that come in in comparison to the estimates. majority come in high

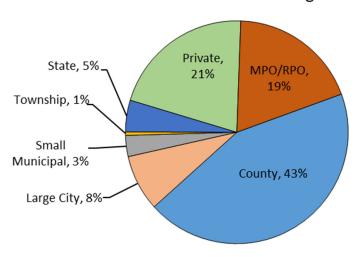
mix of fix planning

## Appendix E: 2021 Inventory-based Rating System™ Training Participant Demographics and Evaluation Results

(Due to rounding, some totals may not be 100%)

#### **Participant Demographics**

2021 IBR Training



#### **2021 IBR System™ Training –Evaluations**

Participant Training Rating	Count
5	50
4	7
3	2
2	0
1	0
Blank	118

Participant Position	Count
Administrative staff	20
Engineering staff	92
Support staff	38
Technical staff	25
Blank	2

What years have you attended IBR Training?	
2017	31
2018	49
2019	67
2020	49
None of the above	76

What years have you used IBR to rate roads?	
2017	23
2018	39
2019	52
2020	28
None of the above	110

Which IBR Training topics did you find most helpful or most interesting?	
Why rate roads and why rate gravel roads?	21
Why use the IBR System?	16
About the IBR System	42
Rating exercises	90
Other	6
(blank)	2

If you are a new/experienced rater, which part of the IBR data collection process seems/has been unclear or confusing for you?	
Why rate roads and why rate gravel roads?	2
Why use the IBR System?	4
About the IBR System	5
Rating exercises	15
N/A - I felt all topics were thoroughly and clearly	
covered	138
Other	5
(blank)	8

Do you feel as though the rating exercises built up your confidence/benefitted you in rating roads?	
Yes	165
No	9
(blank)	3

Has this training as a whole increased your confiden System to rate pavements accurate	_
Yes	170
No	7

If you have collected PASER or IBR data before, which materials have you found most beneficial?	
PASER Cheat Sheet	109
IBR System Quick Guide	77
TAMC Data Collection Manual	32
Michigan Sealcoat Guide	31
IBR System Manual	25
TIC PASER Manuals (Asphalt Roads, Concrete Roads,	
Sealcoat, Gravel Roads, Brick & Block)	21
PASER slides (available on website)	10

#### **2021 IBR Training –Written Evaluations**

COMMENTS ON 2021 IBR System™ Training
I thought this training was very helpful for me, before the training I was unaware of this rating
system.
Good job
Excellent
Short and to the point.
Thanks for making this easy to follow along with!
Very clear and helpful, thanks!
Very well done. Pete and Andy both gave presentations on the IBR rating system.
Short and sweet, pretty easy rating compared to paved roads I feel. Thank you.
Thank you!
Well presented, concise and informative
Rating exercises would have been helpful (similar to PASER training)
Pretty straight forward
Very informative answered my questions
good class
the Quick guide made it easy to understand thanks
Thorough, yet simple
Good training, very straightforward
clear and straight to the point.
Very straightforward and kept simple which makes it much easier.
That was very informative and simply explained

What did you like most about this event?
Remote, less driving that normal
All the specific information on how to rate a gravel road, such as the road surface, drainage and the
width of the road.
quick and to the point
informational
I like the ability to do this on line. Great presenters.
convenient
Short and to the point.

Good Refresher

Very efficient, clear, and concise.

Photos of roads and discussion how of those roads would be rated.

Content was clear and concise. Also provided helpful context when comparing with PASER rating.

The examples of the unpaved roads and rating them. Examples helped with the PASER training and the IBR as well.

The examples

Informative on IBR

Rating examples

How well the presentations described in detail the IBR system and how to properly rate unpaved roads.

specific tutorials on how to determine the ratings of the gravel-earth roads

It was short

Pictures giving examples

Direct and to the point!

Photos were great when explaining what you were talking about, visual explanation is the way to go when it comes to this kind of training.

Examples with IBR Guide

It was a nice review.

Informative and useful

Informative

**Cheat Sheet** 

Since I am relatively new to PASER and IBR, information regarding how to measure unpaved roads is interesting.

Rating exercises

online

Brevity

Direct and to the point, 1 hour

Well presented.

It was short, to the point and on time

**Practice ratings** 

rating practice

the content and information

learning the spec. of gravel roads

Cheat sheet and quiz parts

informative and simple to use

rating exercises

slides and explanations

Good review

The simplicity of it, and how you have examples.

exercises. It is good to practice what to look for.

IBR Quick Guide & Examples.

Simple & Straightforward!!

The questions at the end where you can rate the roads and practice what you learned.

learning more about the gravel road rating system

The example portion

#### **Rating Exercises**

### Please suggest specific topics that might be relevant to you/your agency for future events like this one:

Anything relating to rating roads, tree trimming, road worker safety, winter maintenance of roads.

Culvert inspections/data recording

PASER, TAMC

Drainage and/or Driveway Culvert Install Instructions

Training on the other asset management features in Roadsoft- culvert, guard rail, pavement markings, sign module

Do some exercises to rate example roads

More paved road assessment classes. New inspector training for new construction MDOT projects.

Evaluation of what roads to improve (IBR)

**HMA MIX** 

The fact that you can't rate until after first week in April because of snow greatly affects us, because we can't, and end of November won't be able to either.

maybe touch a little more on Roadsoft.

I Will work to attend Asset Management and many other [trainings] that correlates to IBR & PASER.

#### What aspects of this event could be improved?

In person, when available, for better interaction.

I thought everything was perfect. Packed with useful information but not drug on when it was not needed.

sound quality

I know this was more straight forward than the PASER training, but I did like the participant interaction of the rating exercises. Give a picture of the road and have it rated.

Perhaps spend more time on the actual rating examples.

Thought it was good. Thank you.

Add rating exercises

more samples, rating

Keep the same.

it was all good.

Show how to rate using RoadSoft

It was good

#### Additional comments/suggestions:

Great job!

Like that it is via Webinar

Thanks for your time and efforts!

I think it was good and to the point

When doing the questions at the end of the presentation, I would recommend using better pictures and measurements so the people who are learning can see accurate examples.

Thank you!

Which IBR Training topics did you find most helpful or most interesting? Select one and explain:

Why rate roads and why rate gravel roads? - Explaining how gravel roads are used differently from paved and reasons why they are still important - some may not come across or use them often so it may not be as obvious

Why rate roads and why rate gravel roads? - I found it interesting in Michigan 33% of total road network is gravel roads.

Why rate roads and why rate gravel roads? - Just learning that it's important to not leave gravel roads out of the inventory, all roads serve a purpose.

Why rate roads and why rate gravel roads? - Rating our local infrastructure is critical to improving it, explaining the why not just the how really improves participation in the process.

Why rate roads and why rate gravel roads? - Rating system

Why rate roads and why rate gravel roads? - Honestly I thought it was all super helpful and interesting because I was unaware of most of how this stuff worked prior to the class. I was really happy to learn about the rating system for a gravel road, such as the thickness of the gravel on the roads surface and the width of the road as well as the drainage of the road and how all of those ratings combined give you an overall rating for the specific road/ road section that you are on.

Why use the IBR System? - Helped to distinguish from other ratings systems.

Why use the IBR System? - I didn't know anything about IBR, so the reasoning behind it was helpful.

Why use the IBR System? - It helps explain why this is a preferred rating system as opposed to surface conditions.

Why use the IBR System? - The explanation that IBR is not a predictive tool but strictly inventory based.

**Why use the IBR System?** - The reasons why we rate with the IBR system. The percentage at which we rate them and the rating tips

**About the IBR System** - Always good to have a refresher on the guidelines.

**About the IBR System** - Helpful understanding the rating criteria and how it was chosen to be the criteria

**About the IBR System** - I have watched IBR training webinars in the past, but I wanted to get a better understanding on the history of the IBR system for gravel roads and why it's used. I don't use the IBR rating system near as often as PASER as our federal-aid road network is comprised of all paved roads.

About the IBR System - I like the entire session. Thanks,

**About the IBR System** - Images of the types of ratings being discussed.

**About the IBR System** - Information on the IBR system and how to rate gravel roads since had no experience before.

**About the IBR System** - It is helpful to go over the IBR System and the Rating exercises as a refresher.

About the IBR System - Learning how gravel roads are rated was helpful to understand the scoring

**About the IBR System** - Overall description

About the IBR System - Reviewing the description of the system is always helpful.

**About the IBR System** - the Rating exercises were helpful as well and covered well with the Quick Guide, but the background and usage of the IBR was very beneficial to learn.

**About the IBR System** - This was my first year learning about the software. So, the parts I liked best today was learn about the software itself and what makes for a good, fair or poor rating.

**About the IBR System** - Though there weren't any rating exercises, I find the information helpful when photos of examples are shared and explained.

**About the IBR System** - Understanding depth variation

Rating exercises - Visual examples are very helpful, as well as describing what we are seeing

**Rating exercises** - The explanation of the rating system and the rating exercise was most helpful in understanding for me who has never used the IBR system before.

**Rating exercises** - Being able to see what the good, fair and poor unpaved roads will look like and how much difference between them.

Rating exercises - Checking ditches

Rating exercises - gain experience on rating

Rating exercises - great to better understand what the ratings mean!

Rating exercises - helped to visualize the different rating categories

Rating exercises - helps make quicker decisions when actually rating

Rating exercises - I am still new to the whole rating system, so the Rating exercises are very helpful.

Rating exercises - I found the examples to be very useful.

Rating exercises - I like the pics and examples of different road conditions and their ratings and why.

Rating exercises - IBR Training is pretty straightforward so the Rating exercises were most beneficial.

Rating exercises - It is helpful to put into practice what one learns.

Rating exercises - It was very helpful being walked through how to actually do it

Rating exercises - Nice to calibrate before going out for the year.

**Rating exercises** - Photos/Visual training is good for me to learn if it hands on isn't available so it was helpful to see the measuring tape in the field.

Rating exercises - Practice is a good refresher

**Rating exercises** - Rating Roads was the reason for the training, and practice is what I find most helpful. Especially when we don't have too many gravel roads in the communities where I have rated.

Rating exercises - Seeing the real world examples of the conditions is most helpful.

Rating exercises - Showing the differences between good, fair, and poor for each category

Rating exercises - The exercises used to understand how to rate gravel roads is very useful.

**Rating exercises** - the number of unpaved roads in Michigan surprised me, I now have a better understanding of the total system in Michigan

**Rating exercises** - The Rating exercises were very helpful as you walked through the different elements that factor into the final IBR rating.

Rating exercises - The rating of the thickness of the gravel

Rating exercises - This is a straight forward rating system, east to implement and understand

**Rating exercises** - This was the most helpful part of the training because you get to see how well you understand the rating system. If I didn't get something correct, I know I need to focus on that portion of the training.

Rating exercises - Training slides that actually show how conditions being rated look

Other - All of the above

Other - All topics very interesting

**Other** - Can't just pick one that is important and or helpful as all material that is presented is important for training new and veteran raters.

Other - Looking at ratings and how we come to that conclusion.

If you are a new/experienced rater, which part of the IBR data collection process seems/has been unclear or confusing for you? Select one and explain:

Why rate roads and why rate gravel roads? - We have a lot of gravel roads and a variety of weather patterns that effect these roads. They can change daily. Rating the gravel roads frequently seems to be a waste of resources.

Why use the IBR System? - This topic was covered, but doesn't completely make sense. What the training sounds like it was saying is that surface conditions do not matter at all to a gravel roads rating. As long as the width, drainage, and structure [are] good, a road covered in potholes could technically be a highly rated road.

Rating exercises - I think rating exercises like what was done during the PASER training would have been more helpful. I felt that these examples were where I learned the most with being right vs wrong on my rating. Having some exercise on the IBR would have been helpful since now no experience.

**Rating exercises** - Again, I am still fairly new to the whole rating system. The quick guides are very helpful.

Rating exercises - Help explain what measures structural adequacy.

Rating exercises - I don't think it's necessary for IBR to be as in depth as the PASER training, but some interactive question response with some exercises like has been done with PASER could be helpful.

Rating exercises - More rating exercise examples similar to the PASER training would help.

**Rating exercises** - Not enough rating exercises

**Rating exercises** - The rating was covered fairly quickly. The PASER training included rating where the attendees could participate. I found that much more helpful for learning how to rate roads.

Rating exercises - would like to see more rating exercises

**Other** - Have not been sure how to evaluate structural adequacy without knowledge of gravel depth. Maybe go through a few more examples of rutting/potholes that would meet criteria for poor, fair, good categories.

Other - How to rate depth if I don't have that data/knowledge

**Other** - Structural adequacy--most difficult to get my head around when only seeing the road every other year.

**Other** - There wasn't interactive rating exercises like there was for PASER. the "agree or disagree" or "What is the rating of this road" etc. I wanted that type of rating exercise.

**N/A - I felt all topics were thoroughly and clearly covered** - As a new inspector I thought the topics were well covered.

N/A - I felt all topics were thoroughly and clearly covered - good

### Do you feel as though the rating exercises built up your confidence/benefitted you in rating roads?

**Yes** - Definitely, I am a visual/ hands on learner so having the pictures available for me to see while the presenter talked about how to rate that road gave me a really good idea of what a road looks like and what the rating you would come up with would be and how to get to the final rating of the road.

Yes - Yes, always good to review.

Yes - Would still like to see a few more examples (e.g., roads rated 4-7)

**Yes** - Will still need some practice and it would also be good to talk to the maintaining agency to confirm my own evaluation.

Yes - To understand the basis of the IBR system.

**Yes** - This training didn't really have the rating exercise, just the walk through example. Being an easier rating system is wasn't as important.

Yes - They need to be more like the PASER ones though, more like quizzes

**Yes** - the refresher is very helpful in reinforcing our rating process.

Yes - the more rating exercises help benefit new raters like me

Yes - The explanation was clear and understandable

Yes - The cheat sheet provided is point on in what is expected.

**Yes** - Seeing a real world application, that simulates an experience we will see in the field allows the users something to fall back on. Sometimes graphics or illustrations don't always covey this.

Yes - Repetition.

Yes - Provided good examples of what to look for when rating.

Yes - practice makes better

Yes - Practice is always helpful

**Yes** - It's very helpful to rate with the context of others opinions on the ratings.

**Yes** - It's nice to be able to see examples and hear about how it works, instead of just trying to read information and figure it out for myself.

Yes - It's good practice.

Yes - It showed me where I needed to learn more and where I am doing okay.

Yes - It seems pretty straightforward and seeing several different examples was beneficial.

**Yes** - I wouldn't have even thought about the high grass causing issues, and would probably have been out of my car quite a bit instead of waiting for it to be cut, or been putting it in the wrong category

**Yes** - I think a lot of the rating exercises were pretty straightforward with some of the structural rating being a bit more challenging as you are going off of photos.

Yes - Hands on examples

**Yes** - Going through the examples gave me confidence.

**Yes** - Examples help to illustrate various features of gravel roads and the categories used for rating them.

Yes - Examples are great for how to identify certain things.

Yes - Each category of rating was covered well

Yes - Confirmed my ratings with Pete's

**Yes** - As a new inspector knowing where to go if I have questions gives me confidence to complete the task.

Yes - Applying the rating methods helps to better understand in practice.

Yes - a few more examples wouldn't hurt

No - We didn't do rating exercises for IBR training and I think it would have been helpful to do so.

No - They weren't the same kind of format as the PASER class...

**No** - There were no rating exercises that the training went through. I think there should have been as they are very helpful in the past.

No - Not for first time rater

No - Not enough time spent on that - No attendee participation

No - It's hard to distinguish features based on the image.... not much you can do.

No - Didn't do any

## Has this training as a whole increased your confidence for using the IBR System to rate pavements accurately?

Yes - Yes, the training helps as a nice refresher to prepare for rating.

Yes - Training has improved. The newer cheat sheets are much better than the originals.

Yes - Provided a well-rounded understanding of IBR.

Yes - Not having performed this, the examples and explanations were helpful.

Yes - It was very specific

**Yes** - It is clear what is expected when using the IBR system to rate pavements.

**Yes** - I would feel more comfortable to rate pavements in the field than previously, but overall, I don't understand what the exact process is for my role at an MPO to collect the required data

Yes - I was unsure on how to rate gravel roads before.

Yes - I gained a better understanding of the topic

Yes - I feel better with having the rating scale and understanding of how to execute the ratings

Yes - I didn't have any experience before

Yes - Good refresher.

Yes - Examples are good. Need more though, and quizzes

**Yes** - don't get a lot of experience rating gravel in our area but it does come up so always good to refresh

Yes - Confusing question.... IBR vs Pavement

Yes - All the knowledge I have plus the use of the quick guide gives me confidence to rate the roads.

**No** - This was training for gravel roads. The question above specifically sites using the IBR System to rate pavements.

No - Pavements do not use IBR!

No - More examples would be nice

**No** - It will take me a bit with the rating sheet in hand before I become confident.

No - IBR has increased my confidence to rate gravel roads. However, not pavement.

**No** - Besides learning the background of IBR and how the rating works without the exercises my confidence in being able to rate on my own is low.

### If you have collected PASER or IBR data before, which materials have you found most beneficial?

I have never rated a road before, but after this training I am looking forward to getting out in the field and doing this and learning more about it.

I like these for the other road ratings.

Once out in the field, the short guides (cheat sheet, sealcoat guide, quick guide) are always the most useful. Other listed info is good prior to going out and handy to have along just in case......

This will be my first year

I have not before but with quick looks at the different materials I believe that the quick guide and cheat sheet are most helpful for when out rating.

Only been through trainings. The PASER cheat sheet is helpful so is the IBR quick guide

The rating exercises are most beneficial. In the field the PASER cheat sheet is a must!

When someone needs assistance these all come in very handy.

Reference sheets.

Never rate without the cheat sheet for when questions arise

All of the materials provided are beneficial out in the field.

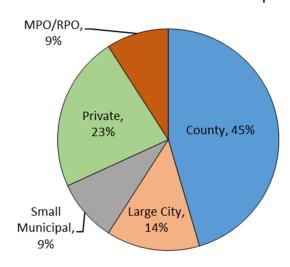
Additional questions/comments:
N/A - Thank you.
The instructors did a great job at communicating the material with the class
Thanks for the training.
it was a nice and quick intro that covered it well.
Why was this done over Zoom instead of the usual way?
The class was very informative. thank you
Thank you!
Very good
very good
Great training
thanks!
Again the instructors are very knowledgeable of the subject. Good job!

## Appendix F: 2021 Pavement Asset Management Plan Workshop Participant Demographics and Evaluation Results

(Due to rounding, some totals may not be 100%)

### **Participant Demographics**

2021 PAM Plan Workshop



**2021** Pavement AMP Workshop –Evaluations

Participant Training Rating	Count
5	9
4	2
3	0
2	0
1	0

How did you hear/learn about this event?	
E-mail	9
Flyer/brochure	1
CTT website	3
Newsletter	0
Referral	0
Other (please specify)	My Boss

## After completion of this class do you feel you know how to complete your pavement asset management plan?

•		
	Yes	9
	No	0
	Maybe	2

## How helpful is the TAMC pavement asset management plan tool in helping you to complete your pavement asset management plan?

Very Helpful	10
4	1
3	0
2	0
Not Helpful	0

## Prior to this class, did your agency have a written pavement asset management plan?

Yes	4
No	7

### When your agency's compliance plan due?

and your agency o compilation plant and	
2021	7
2022	1
My agency is not required to have an asset	
management plan under PA325.	2

# Prior to this class, did your agency have a written pavement asset management plan? - If 'yes', then for how many years have you had a written plan?

don't know. I saw a copy of this form used, but I doubt they took this class since a lot of the chart items did not get address (like deleting out road types with 0%)

they were done by a different office so unknown

17 years

15, but not as detailed

#### What is your position?

, ,	
Engineering staff	5
Administrative staff	1
Other technical staff	2
Other (please specify)	3

### What is your position? - Other (please specify)

<i>I</i>	
Planner	
Manager	
Transportation Planner	

### 2021 PAM Plan Workshop -Written Evaluations

### **COMMENTS ON 2021 Pavement AM Plan Training**

Learned a lot. Very helpful.

Got a little behind while working through some items on userdata2 sheet since Andrew speaks somewhat fast and was chatting with Vicki or Tim through the chat which made me not pay attention more. Luckily Vicki was able to tell me how to get back to where we you were at. Hopefully I didn't miss too much in the breakout we did, but I'm glad I did because we wouldn't have figured out why my Network 2 City Minor road data never populated. That was due to all those segments being listed as "City Local" as the legal system in Roadsoft, so of course the export was incorrect. Had to update the DATAhistorical rating tab to correct the macro data imports so it could populate correctly. Then jumped right back in when you pulled up the word document. Only missed a good portion of the chart formatting.

Happy to have you live to help us through this process

Very good and specific.

Covered all questions

### What did you like most about this event?

I like the walk through of each step, that was very helpful.

Nice hands-on use of the pavement template.

willingness to answer questions

Useful for beginners

Very personal

The direct walk through and explanation of the Excel template

Using my county's data and seeing my data right alongside the training

Hands on

Excellent level of detail and specific instruction.

Detailed

### Please suggest specific topics that might be relevant to you/your agency for future events like this one:

Right number of participants. Got attention when needed. Class wasn't bogged down.

Maybe going through Roadsoft modeling example instead of the NCPP.

Always looking for more analysis on composite pavement treatments.

#### What aspects of this event could be improved?

giving more time for people to fill out userdata2 fields. didn't have enough time to enter in the network 2 fields once Andrew went down there.

just minor technical difficulties

### When your agency's compliance plan due? - Other (please specify)

Work for an MPO, will provide assistance to those that have to produce a plan for PA325.

I think 2021. I'm not familiar with the schedule, but I know I'll probably get assigned to do the next one.

**Not Sure** 

## What other trainings related to the asset management plan would be helpful to you in developing your agency's plan? (i.e. goal setting, forecasting condition, mix of fix planning)

Goal Setting, incorporating the Roadsoft strategy tool into the training

forecasting conditions, goal setting.

Figuring out how to get Roadsoft inputs correct and see what those forecasting tools would be able to help support within this document.

Forecasting

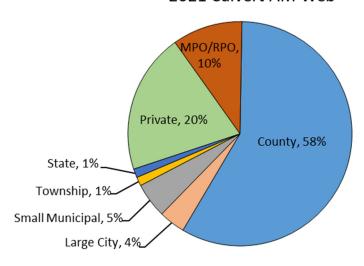
forecasting

# **Appendix G: 2021 Culvert Asset Management Webinar Participant Demographics and Evaluation Results**

(Due to rounding, some totals may not be 100%)

### **Participant Demographics**

2021 Culvert AM Web



### 2021 Culvert AM Webinar –Evaluations

Please evaluate the overall quality of the presenters.	Count
100 to 90	29
89 to 80	11
79 to 70	5
69 to 60	2
59 to 50	5
49 to 40	1
39 to 30	0
29 to 20	0
19 to 10	0
9 to 0	0

#### 2021 Culvert AM Webinar -Written Evaluations

### What did you like most about this event?

Incorporation of great pictures and examples to understand the assessment.

The thoroughness of the material presented

Much needed guidance on some first steps our agency will need to take to get our culverts inventoried and rated.

The information pertaining to Roadsoft. Also the examples of the vicinity of the culverts.

great pictures to help explain details of the conditions. and moving back and forth between presenters is nice.

the explanations and information of what a culvert is and recognizing failures

Information was solidly presented

clear understanding of the program

Good pictures and examples

the content

The charts and picture examples

examples

webinar- easy to attend

This training was easy to understand; I was able to follow along the entire time even though my background is in AM not necessarily engineering.

Real world examples and engineer judgement [latitude] in ratings

The pictures and hands on slides

the convenience of the online course, as well as the multiple presenters, it changes the flow of the course and keeps the listeners attentive.

Clearly explained rating/evaluation procedures, supported by visual examples, easy to understand and follow.

Yes

The way the information was presented, easy to follow and understand.

The rating example at the end of the presentation.

Presentation was well coordinated

the pictures were so helpful to understand the evaluation of the culvert

Most if not all info is helpful for our MS4 program

comprehensive overview of the assessment process

Useful info, quick and concise

Clear and precise examples

I liked the examples of how to rate the culverts.

Good pictures and examples

Rating examples at the end of the presentation.

The examples

The pictures and resources

Example problems

Rating

good presentation on rating scale

I liked learning about the different characteristics of deterioration on a culvert and how to identify them. This will help greatly.

It was really comprehensive and covered a lot of the different aspects of culverts.

Rating exercise

The last couple slides going thru a rating

Examples of the situations

Good photos and real world examples of culvert issues

Great slides!

skew

The details were well explained and shown. Also, the materials that were provided were very nice.

Equipment needed

### What aspects of this event could be improved?

### **Nothing**

More Roadsoft training. More in depth of the use to the new update.

it was good

no suggestion

More information as to what sizes are required for inspection

**Nothing** 

Less talk of guardrail since it has its own rating system more talk of bank and slope erosion since this is a Soil Erosion and Sediment control issue with EGLE

Consider breaking it down into multiple presentations - two hours is a bit long. Two one hour shows would be preferred.

the time in between switching through the presenters was a bit long

A quick break in the middle

maybe make an interactive portion

nothing

nothing comes to mind.

No new comments

Maybe something to interact with, to keep the attention of the audience.

Roadsoft was mentioned several times. It would have been nice to include examples of how to input the data collected in the field into the software.

None

I am not seeing much aspects that can be improved

None

More examples.

Was a little long and detailed on the ratings.

More examples

More rating examples

More interactive/longer

Rating exercise examples could help, just like in the PASER training to make it more interactive for viewers.

Nothing major -- the links to resources were provided in the chat, which I appreciated. Maybe include them ahead of time so folks can review and bring questions.

Culvert Material Identification and historical materials for certain historical dating. Most of the Culverts have not been inventoried and we have no way to date them or guess

I think this is a good intro into inspecting culverts and managing inventory

nothing really

## Please suggest specific topics/presenters that might be relevant to you/your agency for future trainings.

N/A - Thought all material was presented well.

Muskegon County Road Commission is big on using Roadsoft, so in depth training on that. Also possible different causes and effects to repairing culverts that don't include replacement. Example slip ins or liners.

none that I can think of now.

causation and repair recommendations

Culvert Asset Management/ Funding

culvert asset management training PASER rating training concrete/HMA tech, application, inspection training

I am not familiar with your course catalog so maybe you have already covered it, but soil erosion solutions.

Bridge Load Rating using BRR

small examples to fix the culvert or ways to extend the lifespan of the culvert

Storm water gravity main assessment

More rating exercises.

How to find culverts in the field. They are hard to locate with tall grasses, buried, etc.

traffic signals

Topics to potentially include in a future training: guardrail, signs, signals, bridges to name a few. For instance, guardrail - could maybe talk about data collection, things to look for etc.

Local agency asset management expectations and best practices

Considerations to permitting and how this guides designs on culvert replacement.

### Additional comments/suggestions:

For us personally we would like more Roadsoft. Also maybe showing where or how to enter the new data before showing all the data would be useful for us specifically.

I learned a lot and appreciate the efforts put into the training.

Thanks for adding lots of picture examples they were really helpful.

good job

Great presentation and thanks for your time.

Overall good presentation and introduction to the new local agency culvert guide.

None! This was great.

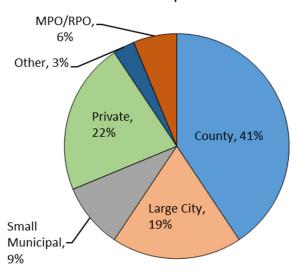
Thank you

# **Appendix H: 2021 Compliance Plan Training Webinar Participant Demographics and Evaluation Results**

(Due to rounding, some totals may not be 100%)

### **Participant Demographics**

2021 Compliance Web



**2021 Compliance Plan Training Webinar – Evaluations** 

Participant Training Rating	Count
5	14
4	10
3	0
2	0
1	0

How did you hear/learn about this event?	
E-mail	21
Flyer/brochure	1
CTT website	4
Newsletter	0
Referral	1
Other (please specify)	0

What is your position?						
Engineering staff	12					
Administrative staff	5					
Consultant	3					
Other (please specify)	1					
(blank)	3					

### What is your position? - Other (please specify)

**Transportation Planner** 

### 2021 AM Compliance Plan Webinar - Written Evaluations

### **COMMENTS ON 2021 Compliance Plan Training**

Nice refresher.

Always helpful to click through the process

I would like a little more discussion and hands on going through the exports.

Great content. Covered a lot

Good presentation overall.

#### What did you like most about this event?

on line is easier

Liked that it was via internet

very informative and helpful planning infrastructure improvement projects

Walking through the steps.

Very Personal

Hands on

Discussion on the templates

Nice detail and explanations.

showing how to edit things

Detailed

The virtual setting.

tips/tricks for using the templates

Access to plans and templates

Demonstration of the Macro-Enabled Spreadsheets

I actually prefer webinars. Good information, its a refresher for me as I get ready to update our asset mgt plan

### Please suggest specific topics that might be relevant to you/your agency for future events like this one:

a walk through of the templates for the road plan.

Difference between Roadsoft and NCCP

Updating the plan

more explanation of goals.

Onsight projections

### What aspects of this event could be improved?

editing the graphs.

little more visual examples of the exports.



# Memo

2/25/22 Submitted by the TAMC Chair Joanna I. Johnson for TAMC review, consideration and discussion.

With the unexpected recent staffing changes, we have an opportunity to continue to work together in expectations for both the TAMC and the administrative staff. The TAMC's mission is defined by legislation and further clarified by TAMC Policies. We have included the important excerpts from the TAMC enabling legislation and by-laws for reference.

The TAMC understands that we have no control over who the department assigns to support the council. It is also important for the department to acknowledge the requirements by legislation to assign the necessary support staff to accomplish the goals of the TAMC.

Over the last decade TAMC has experienced an unusual amount of turnover from the staff assigned as support, which does make it difficult to keep things moving forward. There have also been changes to how the TAMC administrative staff is structured within the department, sometimes without notice and unclear to the TAMC on the effects of such changes.

With the growth of our work and in the interest of continuing key areas of our Strategic Work Program, it is important for any staff the department assigns clearly understands the TAMC roles and responsibilities. Additionally, we encourage the department to evaluate the workload and assign the appropriate number of staff as necessary. It would be an expectation to have a position similar to that of the MIC Executive Director. The MIC enabling legislation shares similar language in this area to that of the TAMC.

With a vacancy comes the opportunity to re-evaluate the position description and we look forward to working with the department on the process of moving forward as we have done in the past. To ensure the department is able to make the appropriate staff assignments required to effectively support the TAMC efforts, we have included expectations and the roles and responsibilities of support staff. Those duties include, but are not limited to:

- Support of TAMC Policies
- Recommendations of new or supportive efforts necessary to fulfill the TAMC work program.

- Preparation of all TAMC/Committee meeting packets and participation in meeting updates.
- Administrative support up to and including the support of the open meetings act, minutes, scheduling, etc.
- Coordination, participation and scheduling of all conferences, and training programs.
- Attendance at participating agencies' conferences, presentations, or as needed for representation or training on behalf of the TAMC.
- Timely completion of the Annual Report.
- Timely updates of all news releases, websites, and any outreach on behalf of the TAMC.
- Coordination and monitoring of all partnering agencies' supporting the TAMC including CSS, Michigan Tech, LTAP, etc.
- Coordination and monitoring of all state planning and development agencies in work supporting the TAMC.
- Other duties as assigned.

We look forward to working together to accomplish our collective goals of the TAMC.

Public Act (PA) 499 of 2002: "... (4) The department shall provide qualified administrative staff and the state planning and development regions shall provide qualified technical assistance to the council...." (PA 323 of 2018: "...(13) The departments of agriculture and rural development; environmental quality; natural resources; technology, management, and budget; transportation; and treasury shall provide qualified administrative and technical staff to the Michigan infrastructure council....)

TAMC Bylaws: "... Staffing: The Michigan Department of Transportation shall provide qualified administrative staff and the state planning and development regions shall provide qualified technical assistance to the Transportation Asset Management Council. a. Michigan Department of Transportation assigns a full-time Coordinator primarily responsible for the management and coordination of the Transportation Asset Management Council's activities including development of the three (3) year work program, budget, and annual report as required by law; provide project management of activities needed to carry out the Transportation Asset Management Council's work program; manage the on-going development and maintenance of the Transportation Asset Management Council's website and performance measure dashboards. Additional Michigan Department of Transportation staff provides administrative support to the Transportation Asset Management Council, as necessary. b. In addition to Michigan Department of Transportation staff, the Transportation Asset Management Council annually contracts with Michigan's Regional and Metropolitan Planning Organizations to provide technical assistance related to the promotion of asset management principles and data collection within each regional boundary...."

Date	Event	Council Member or TAMC Support Staff	Time & Location	TAMC Booth	Presentation	Comments and added Information / website / flyer
OCTOBER		TAINIC Support Staff			No	
10/278/21 - 10/28/21	Fall Transportation Asset Management Virtual Conference		9 AM - 1 PM Each Day	No	Yes	https://www.michigan.gov/tamc/0,7308,7-356-82157,00.html
NOVEMBER					No	
11/4/21	State Transportation Commission Meeting		MDOT Aeronautics & Web Meeting	No	No	
DECEMBER					No	
12/9/21	MIC Meeting		1 PM - 4 PM - Web Meeting	No	No	
12/14/21	TAMC IRT Training	Roger Belknap/Dave Jennett	WEBINAR: 9 AM-Noon	No	Yes	
12/15/21	Roadsoft User's Conference - RUCUS	TAMC Support Staff	Mt. Pleasant - 8 AM-5PM	No	Yes	http://ctt.nonprofitsoapbox.com/component/events/event/1126
JANUARY 1/25/22 - 1/27/22	PASER & IBR Training (Webinar)	Roger Belknap	WEBINAR: 8 AM-11 AM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamc-paseribr.pdf
1/25/22	TAMC IRT Training	Joanna Johnson	WEBINAR: 9 AM-Noon	No	Yes	https://www.michigan.gov/documents/tamc/2022 TAMC IRT Training Schedule 745738 7.pdf
FEBRUARY						
2/8/22 - 2/10/22	County Engineers Workshop	Joanna Johnson	Hybrid - Web & Shanty Creek	Maybe	No	http://ctt.nonprofitsoapbox.com/upcoming-events/event/1087
2/22/22	TAMC IRT Training	Bill McEntee	WEBINAR: 9 AM-Noon	No	Yes	https://www.michigan.gov/documents/tamc/2022 TAMC IRT Training Schedule 745738 7.pdf
2/22/22	Culvert Asset Management Training	Kelly Jones	WEBINAR: 9 AM-11AM	No	Yes	http://ctt.nonprofitsoapbox.com/2022culvertfeb
2/23/22	PASER & IBR Training (On Site)	Joanna Johnson	Road Commission of Kalamazoo County, 3801 E Kilgore Rd, Kalamazoo, MI 49001 8 AM-12 PM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamc-paseribr.pdf
2/24/22	PASER & IBR Training (On Site)	Joanna Johnson	Weber's Restaurant & Boutique Hotel, 3050 Jackson Ave, Ann Arbor, MI 48103 8 AM-12 PM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamc-paseribr.pdf
MARCH						
3/1/2022	Culvert Asset Management Training	Kelly Jones	WEBINAR: 9 AM-11AM	No	Yes	http://ctt.nonprofitsoapbox.com/2022culvertmar
3/8/2022	TAMC IRT Training	Rob Surber	WEBINAR: 9 AM-Noon	No	Yes	https://www.michigan.gov/documents/tamc/2022 TAMC IRT Training Schedule 745738 7.pdf
3/8/22 - 3/10/22	Annual CRA Highway Conference & Roadshow	Staff	Lansing Center, Lasing, MI	Yes	No	https://info.micountyroads.org/events/details/2022-highway-conference-and-road-show-576
3/10/2022	Transportation Asset Management for Local Officials Webinar		WEBINAR: 9 AM-Noon	No	No	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamlo-march.pdf
3/15/22-3/16/22	Michigan Municipal League Capital Conference	Staff	Lansing, TBD	Yes	No	
3/15/22 - 3/17/22	2021 Michigan Bridge Week Conference	Al Halbeison	Ann Arbor Marriott Ypsilanti at Eagle Crest 1275 S Huron Street, Ypsilanti, MI, 48197	No	Yes	http://ctt.nonprofitsoapbox.com/component/events/event/1090
APRIL						
4/12/22 - 4/14/22	PASER & IBR Training (Webinar)		WEBINAR: 8 AM-11 AM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/filyers/2022tamc-paseribr.pdf
4/19/22	TAMC IRT Training		WEBINAR: 9 AM-Noon	No	Yes	https://www.michigan.gov/documents/tamc/2022 TAMC IRT Training Schedule 745738 7.pdf
4/20/22	PASER & IBR Training (On Site)	Bob Slattery	Treetops Resort, 3962 Wilkinson Rd, Gaylord, MI 49735 8 AM-12 PM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamc-paseribr.pdf
4/21/22	PASER & IBR Training (On Site)	Bob Slattery	Marquette Charter Township, 1000 Commerce Dr, Marquette, MI 49855 8 AM-12 PM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamc-paseribr.pdf
4/26/22 - 4/27/22	2022 Highway Maintenance Conference		Shanty Creek Resort, 5780 Shanty Creek Rd, Bellaire, MI,49615	No	No	http://ctt.nonprofitsoapbox.com/component/events/event/1089
MAY						
5/10/22	TAMC IRT Training	Brad Wieferich	WEBINAR: 9 AM-Noon	No	Yes	https://www.michigan.gov/documents/tamc/2022 TAMC IRT Training Schedule 745738 7.pdf
5/24/22 - 5/26/22	APWA Great Lakes Expo		Boyne Mountain Resort - 1 Boyne Mountain Rd, Boyne Falls, MI 49713	No	Opportunity?	http://michigan.apwa.net/EventDetails/27280
JUNE 6/15/22 - 6/17/22	PASER & IBR Training (Webinar)		WEBINAR: 8 AM-11 AM	No	Yes	http://www.ctt.mtu.edu/sites/ctt/files/flyers/2022tamc-paseribr.pdf
JULY						

Date	Event	Council Member or TAMC Support Staff	Time & Location	TAMC Booth	Presentation	Comments and added Information / website / flyer
7/26/22 - 7/29/22	MTPA Annual Conference	Ryan Buck	THE UNIVERSITY OF MICHIGAN-FLINT RIVERFRONT BANQUET CENTER & THE HILTON GARDEN INN FLINT	No	Yes	http://www.mtpa-mi.org/
AUGUST						
8/30/2022	Culvert Asset Management Training	Kelly Jones	WEBINAR: 9 AM-11AM	No	Yes	http://ctt.nonprofitsoapbox.com/2022culvertaug
SEPTEMBER						
9/28/2022	TAMC Conference	All Hands on Deck	Great Wolf Lodge, Traverse City, MI	Yes	Yes	