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Michigan Winter Operations Conference



October 21-22, 2025
Shanty Creek Resort - Summit Village
Bellaire, MI



Michigan's
Local Technical
Assistance Program

CENTER FOR
**TECHNOLOGY
& TRAINING**

WELCOME



Michigan Winter Operations Conference is a 2-day conference intended for township, city, county, and state employees in positions ranging from Operators, Superintendents, Mechanics, Managers, Foremen, Directors of Public Works, and anyone else who is involved in any step of the process of moving snow! Generally, sessions will address a range of winter-related processes, safety measures, updates, and more.

Michigan Winter Operations Conference is hosted by the Center for Technology & Training (CTT), home of Michigan's Local Technical Assistance Program (LTAP).



The Center for Technology & Training (CTT) is a research center housed at the Department of Civil, Environmental, and Geospatial Engineering at Michigan Technological University.

The CTT works with local road agencies, the Michigan Department of Transportation, the Federal Highway Administration, and other transportation-related organizations to build, maintain, and manage public infrastructure.



**Michigan's
Local Technical
Assistance Program**

Michigan's Local Technical Assistance Program (LTAP) serves state, county, and municipal transportation personnel. Its mission is to bridge the gap between research and practice by conducting training sessions, providing engineering technical assistance, and serving as a clearinghouse for information related to state-of-the-art technology in the construction and maintenance of roads, bridges, and other transportation infrastructure.



**Michigan's
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Agenda

Day 1 - October 21, 2025

07:00 AM *REGISTRATION & BREAKFAST*

07:55 AM **WELCOME**

Presenter: Ingrid Sandberg, Center for Technology & Training

08:00 AM **PLOWING CUL DE SACS, ROUNDABOUTS, & INTERSECTIONS**

Barry County's mission is to continue to efficiently provide safe conditions for public travel on county roads and bridges. This presentation will focus on how they efficiently handle snow plowing in cul-de-sacs and intersections.

Moderators: Sam Lamerato, Public Fleet Advisors LLC

Presenters: Dylan Kennedy, Barry County Road Commission
Paul Ruesegger, Michigan DOT-Saginaw West
Ron Kent, Michigan DOT-Saginaw West

08:30 AM **CALIBRATION**

This session will address the following:

- A quick overview of the importance calibrating your winter equipment
- Why it should be a priority within your agencies winter maintenance best practices.
- Granular, liquid, operational and the importance of documenting calibration.

Presenter: Bryan Pickworth, City of Farmington Hills

09:00 AM **LIQUID ONLY ROUTE RESULTS**

MDOT completed its multi-year Direct Liquid Application (DLA) plow route pilots for the Michigan Legislature after the 2024/2025 winter season. In partnership with the Montcalm County Road Commission and MDOT Mount Pleasant and Grand Ledge Garages, pilot routes assessed several liquid products, including liquids containing different agricultural byproducts. This presentation will overview the findings of the final report, including operational performance, lessons learned, plus financial and environmental considerations.

Moderator: Kevin McCarthy

Presenter: Justin Droste, Michigan DOT

09:30 AM *BREAK*

Agenda

Day 1 - October 21, 2025 - Continued

09:45 AM CORROSION PREVENTION HOW-TOS & BEST PRACTICES

This session will highlight some "how-tos" and best practices of corrosion prevention. Scott will discuss the Michigan Department of Transportation's current ABC wash schedules, the use of salt neutralizers and preventative products they are currently using.

Moderator: Sam Lamerato, Public Fleet Advisors LLC

Presenters: Rob Hudec, Saginaw County Road Commission
Scott Moore, Michigan DOT-Fennville
Duane Poole, Bloomfield Township
Marco Nervo, Bloomfield Township

10:30 AM NOAA/NWS WEATHER UPDATE

Pat will cover National Weather Service resources in Michigan, with a focus on winter weather. There will be a brief discussion of winter weather forecasting challenges. This will include precipitation type and lake effect snow. Pat will finish up with a "Winter Outlook" for the winter of 2025-26.

Presenter: Patrick Bak, National Weather Service

11:15 AM EQUIPMENT OVERLOADING

During this session, Craig Ludwick will discuss equipment overloading.

Moderator: Kevin McCarthy

Presenter: Craig Ludwick, AIS Construction Equipment Corp.

11:45 AM AI AND TEMPERATURE BASED SPREADING

This session will address the following:

- What is AI?
- Examples of AI in winter operations
- AI best practices
- Actually using it

Moderator: Bryan Pickworth, City of Farmington Hills

Presenter: Wilf Nixon, Professional Snowfighters Association

12:00 PM LUNCH



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Agenda

Day 1 - October 21, 2025 - Continued

01:00 PM CHEMICALS

This session will address the following:

- How do chemicals work?
- What do chemicals do for us?
- Drawbacks of chemicals
- How and why agencies are using chemicals effectively
- Good practices in using chemicals

Moderator: Ingrid Sandberg, Center for Technology & Training

Presenters: Bryan Pickworth, City of Farmington Hills

Wilf Nixon, Professional Snowfighters Association

01:45 PM LESSONS LEARNED

The Northern Michigan ice event of 2025 was one of the largest area natural disaster Michigan has experienced in recent history. There was no loss of life during the event related to roads being impassable. The response from road agencies across the state providing assistance was outstanding. We need to document our successes for a playbook for future road and public works leaders. We need to look for ways to improve the timeliness of our ability to respond to areas of need. We need to improve our willingness to accept "help" from others. "Don't be too damn proud." We need to "practice mutual aid" before the next "Super Bowl." A winning team is always better with practice.

Moderators: Sam Lamerato, Public Fleet Advisors LLC

Kevin McCarthy

Presenter: Jerry Byrne, Kent County Road Commission

02:30 PM SELECTING THE RIGHT BLADE FOR YOU

Matt will discuss a brief history of the evolution of snow plow blades. He will begin with steel blades, then focus on the carbide inserted blades, armored Sabre blades, and even some blades of the future. Matt will discuss how the Sabre blade was created and talk about the history and, more importantly, the purpose behind it.

Moderator: Duane Poole, Bloomfield Township

Presenter: Matt Aquino, Built Blades, LLC

03:00 PM EXHIBITOR SHOW (IN-PERSON ONLY)



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2025 Exhibitors



AIS Construction Equipment Corp.
Beet Heet
Certified Power Solutions
Clear Heights Construction, LLC
Evolution Edges
Great Lakes Chloride, Inc.
Hoekstra Equipment
Kimco USA Inc.
Knapheide Truck Equipment
Liquid Calcium Chloride Sales, Inc.

MacAllister Machinery
Michigan Chloride Sales LLC
SoundOff Signal
SPC Specialty Products
St. Regis Culvert, Inc.
Truck & Trailer Specialties
Truck & Trailer Specialties of Boyne Falls, Inc.
UNIQUE Paving Materials Corp.
Whelen Engineering, Inc.
Wolverine Truck Group

Agenda

Day 2 - October 22, 2025

07:00 AM *REGISTRATION & BREAKFAST*

08:00 AM **DVIR AND VEHICLE WALKAROUNDS**

During this session, Dee will show a video of a walk around and plans to discuss some equipment.

Moderator: Rob Hudec, Saginaw County Road Commission

Presenter: Dee Thomas, Michigan Center for Truck Safety

09:00 AM **FLEET CHALLENGES: KEEPING EQUIPMENT ON THE ROAD**

During this session, Sam will discuss the details of keeping equipment on the road.

Presenter: Sam Lamerato, Public Fleet Advisors LLC

09:30 AM *BREAK*

10:00 AM **DRIVER FATIGUE**

Driver fatigue impairs cognition, reaction time, and safety. This presentation will review the physiology, safety risks, and evidence based strategies for fatigue prevention, including sleep hygiene, basic nutrition, structured rest and incorporating movement or stretching to maintain alertness.

Moderator: Sam Lamerato, Public Fleet Advisors LLC

Presenter: Nathan March, Asclepius Borealis, PLC

11:00 AM **TRAILER TIEDOWNS**

Officer Kammeron Bennetts will discuss load securement, MCL statute updates, snowplow MCL laws, and will field open floor questions/discussion.

Moderator: Kevin McCarthy

Presenter: Kammeron Bennetts, Michigan State Police



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Thank you to the Michigan Winter Operations Conference Planning Committee

Mark Crouch

Carl Fedders

Rob Hudec

Andy Manty

Bryan Pickworth

Duane Poole

Jacob Welch

Matt Wiktorowski



PRESENTERS

Matt Aquino

Built Blades, LLC

Matt Aquino is the inventor of the Sabre Armored Carbide Snowplow Blade and current sales manager for Evolution Edges. Matt has over 15 years of snow plow blade experience and is currently working in over 41 US States. Matt has experience with states, municipalities, contractors, and plow manufacturers.

Patrick Bak

National Weather Service

Pat Bak is a warning coordination meteorologist for the National Weather Service (NWS) – Gaylord. Bak leads office outreach programs and works extensively with external partners. Bak is also responsible for assessing and improving office products and services. Bak has been a NWS employee since 1993, beginning as a meteorologist intern in Sault Ste. Marie and then progressing to general meteorologist in Gaylord and senior meteorologist in Lincoln, Illinois. Bak holds a Bachelor of Science in Meteorology from Northern Illinois University.

Kammeron Bennetts

Michigan State Police

Officer Kammeron Bennetts began his law enforcement career in 2016, and joined the Michigan State Police Commercial Vehicle Enforcement Division in 2021. Officer Bennetts is assigned to the Gaylord post with a patrol area of 19 counties in the seventh district. Officer Bennetts is a FMCSA NAS level 1 certified inspector and a NAS HAZMAT certified inspector. He is also an on-scene traffic crash investigator dealing with serious injury/fatal crashes of commercial motor vehicles and passenger vehicles.

Jerry Byrne

Kent County Road Commission

Jerry Byrne has served the Kent County Road Commission (KCRC) for more than 40 years and was named managing director in October 2023. Prior to his current role, he led KCRC's maintenance division and local road construction for over two decades. Throughout his career, Jerry has built strong partnerships with the Michigan Department of Transportation, Kent County Emergency Response, townships, and neighboring jurisdictions, playing a key role in resource planning, emergency response coordination, and collaborative road maintenance efforts. Jerry also serves as president of the County Road Association's Board of Directors and holds a Bachelor of Science degree from Aquinas College.

PRESENTERS

Justin Droste

Michigan DOT

Justin Droste has worked at the Michigan Department of Transportation (MDOT) since 2005, and with Transportation Systems Management and Operations (TSMO) Maintenance Operations since 2012. As TSMO maintenance section engineer, Justin leads teams that provide statewide support for roadway and roadside maintenance systems, trainings, and best practices, as well as storm water pump station management. Justin was directly involved with the MDOT Salt Bounce and Scatter Studies, MDOT AVL and MDSS implementation, and served several years as a representative for the Clear Roads pooled fund study. Justin is a licensed engineer and earned a Bachelor of Science degree in Civil Engineering from Michigan State University.

Rob Hudec

Saginaw County Road Commission

Rob Hudec has been with the Saginaw County Road Commission since 1999, and has been the maintenance superintendent since 2003. Prior to joining the road commission, Hudec worked for MDOT's Bay Region, including performing bridge tender duties for bridges over the Saginaw River. Hudec earned an associate's degree from Delta College and attended Ferris State University-Flint for business management. Hudec is a board member and a past president of the Association of County Road Superintendents of Michigan, a member of Saginaw Counties Emergency Operations Center, a board member of the Saginaw County Storm Water Authority, and a member of Saginaw County Road Commission's safety committee.

Dylan Kennedy

Barry County Road Commission

Dylan Kennedy is the engineering technician for Barry County Road Commission (BCRC). Kennedy started at the BCRC in December of 2021 as a road worker before transitioning into his current role in October of 2022. Kennedy assists with engineering and operations activities throughout the year.

PRESENTERS

Sam Lamerato

Public Fleet Advisors LLC

Sam Lamerato, CPFP, is the principal of Public Fleet Advisors, LLC (PFA). His company conducts in-depth, on-site fleet assessments for municipalities and public fleet organizations in the United States as well as in Canada to ensure their fleets are efficient, effective, and competitive. Lamerato has been involved in fleet maintenance for 41 years and is regarded as a top government fleet manager in the country. He began his career with the City of Troy, Michigan, in 1974 and was promoted in 1982 to superintendent of fleet maintenance, a position he held until his retirement in 2015. Before retiring from his position of superintendent of fleet for the City of Troy, Lamerato oversaw the city's operation of over 500 pieces of equipment. Under his supervision, the City of Troy received recognition as an elite fleet in North America by Government Fleet Magazine in 2011, 2012, 2013, 2014, and 2015. Lamerato has served as a principal speaker for the Board of Directors for Public Fleet Summits and a principal advisor for Public Fleet Advisors. He is a lifetime member of the American Public Works Association (APWA), a former chair of the Michigan APWA Education Committee (1995-2015), a former chair of APWA Fleet Services Committee, and a former chair of APWA Fleet Certification Committee. He was appointed to the Chrysler Fleet Advisory Council and the Chrysler Police Advisory Board. Additionally, he has served as a judge for Government Fleet Magazine's Leading Fleets Award from 2011 to 2014 and from 2016 to 2017. Lamerato graduated from Motech Automobile Education Institute in 1974 and holds a State of Michigan certification as a mechanic, a certification as a Certified Public Fleet Professional (received in 2007), and a certification as an ASE Master for autos and medium/heavy trucks. He is the recipient of numerous awards, including 2014 Legendary Lifetime Achievement Award (Government Fleet Magazine), 2014 Hall of Fame designee for Government Fleet Magazine's Hall of Fame, 2011 Public Sector Fleet Manager of the Year (Government Fleet Magazine), 2010 City of Troy's #1 Best Fleet in North America (Government Fleet Magazine), 2010 APWA Professional Manager of the Year—Public Fleet, and the 2008 APWA Top Ten Leader Award (only fleet manager to receive this award). He also received a 2006 Civilian Commendation from the Troy Police Department in appreciation of his contribution to law enforcement.

PRESENTERS

Craig Ludwick

AIS Construction Equipment Corp.

Craig Ludwick has been a heavy equipment operator trainer and safety instructor at AIS Construction Equipment since 2023. In this role, Craig visits various customers to train their employees on the safe operation of heavy equipment. Craig is also a trainer of CPR/First Aid, confined space entry, and trenching and shoring safety. Previously, Craig was a heavy equipment operator for various companies over the course of 25 years. Craig also worked for AIS as a fleet tech prior to his current position at the AIS Training Center. Craig is a NCCER Certified Instructor and is part of the National Center for Construction Education and Research.

Nathan March

Asclepius Borealis, PLC

Nathan March has been the president and a physician at Asclepius Borealis since 2018. In this role, Nathan oversees employer-sponsored primary care clinics that focus on preventive health, chronic disease management, and occupational wellness. Nathan combines clinical expertise with leadership in program development and patient-centered care to improve health outcomes and support workplace wellness initiatives. Nathan is also a physician at West Front Primary Care and a former president of the Novello Physicians Organization. Nathan has earned a DO from Michigan State University and a Physician CEO from Northwestern University- Kellogg School of Management.

Kevin McCarthy

Kevin McCarthy is the retired superintendent of the Division of Public Works (DPW) for the City of Farmington Hills. McCarthy was with the City for over 36 years. McCarthy's responsibilities included managing 35 employees who conducted roadway maintenance, storm-water system maintenance, and right-of-way maintenance, as well as repairs for more than 300 centerline miles of public streets and for waste collection systems serving approximately 80,000 residents. McCarthy oversaw city-wide fleet acquisition, as well as management and maintenance of over 350 vehicles and heavy equipment. McCarthy was previously the city traffic engineer and senior engineer. McCarthy is a member of the American Public Works Association, the Southeastern Oakland County Public Works Association, and the Michigan section of the Institute of Transportation Engineers. McCarthy holds a Bachelor of Science in civil engineering from Michigan State University and is a 2014 graduate of the Michigan Public Service Institute. McCarthy is a licensed professional engineer in the state of Michigan.

PRESENTERS

Scott Moore

Michigan DOT-Fennville

Scott Moore has been with the Michigan Department of Transportation (MDOT) since 2014, beginning his career with the Grand Region Special Crews. In 2018, he was promoted to Fennville Maintenance Supervisor. Throughout his time at MDOT, Scott has also served as Region Fleet Manager, Facilities Team Member, and Region Work Element Coordinator, demonstrating his versatility and leadership across multiple operational areas. Prior to joining MDOT, Scott worked for the Kent County Department of Aeronautics as a Field Maintenance Operator and Mechanic. With more than 25 years of experience in road construction and maintenance, he has developed expertise in pavement markings, heavy equipment operations, truck operation and maintenance, and operational management.

Marco Nervo

Bloomfield Township

Marco Nervo has been the road division crew leader at Bloomfield Township since 2009. In this role, Marco assists the road foreman with daily operations, leads paving crews, and leads other asphalt and tree crews. Marco also assumes the foreman responsibilities whenever the foreman is away. Marco has earned a Michigan Public Service Institute certificate and a Road Scholar certificate.

Wilf Nixon

Professional Snowfighters Association

Dr. Wilfrid Nixon is the President of the Professional Snowfighters Association, a North American based non-profit trade association dedicated to creating a community of good practice for all who are involved in the activities of winter maintenance. Nixon began research in winter highway maintenance in the late 1980's working initially on ways of improving snow plow performance. Nixon has conducted research for a number of federal and state agencies, and has covered topics relating to plow and cutting edge performance, optimal chemical usage, snow fence design, plow and truck instrumentation, optimal uses of novel technologies in winter maintenance, and information management and decision making in winter maintenance. Nixon has written over 100 papers and reports on his research, and has made numerous presentations around the world. Nixon was recognized by APWA (the American Public Works Association) in 2021 as one of their top ten public works leaders of the year.

PRESENTERS

Bryan Pickworth

City of Farmington Hills

Bryan has spent over 34 years at the City of Farmington Hills, Michigan working through the ranks from a laborer to supervisor to currently a part-time safety and projects coordinator. Bryan facilitates right of way maintenance and equipment safety trainings as well as helps out where is needed. Bryan is a graduate of Michigan Public Service Institute. In 2011, the City of Farmington Hills, Michigan received the APWA's National Snow and Ice Control Award. Since then, Bryan has served on the APWA's National Snow and Ice subcommittee. Bryan continues to serve on various APWA certificate programs as an instructor and assist review committees as well as help coordinate Michigan's Snow Plow Operator Training program.

Duane Poole

Bloomfield Township

Duane Poole is a road foreman for Bloomfield Township. Poole began working for Bloomfield Township in 1999 as an equipment operator and was promoted to road division foreman in 2009. Poole is responsible for overseeing the daily operations of the road division, which include general paved and gravel road maintenance, patch paving, forestry operations, beautification projects, and snow and ice control. Poole was the president of the State Chapter - Michigan American Public Works Association in 2021-2022. Poole has a Bachelor of Arts degree from Michigan State University and a Michigan Public Service Institute certificate from Central Michigan University.

Paul Ruesegger

Michigan DOT-Saginaw West

Paul Ruesegger Jr has been a transportation maintenance supervisor at the Michigan Department of Transportation since 2016. In this role, Paul oversees daily activities for the Saginaw Westside garage. This includes everything maintenance, culverts, guardrails, snow removal, mowing, tree removal, and pavement repairs. Prior to his current role, Paul worked for 16 years as a transportation worker and was a private sector excavator operator and a directional drill operator.

Dee Thomas

Michigan Center for Truck Safety

Dolores Thomas has been a safety specialist at the Michigan Center for Truck Safety since December 18, 2018. In this role, Thomas is an educational instructor, focusing on federal and state regulations for commercial vehicles. Thomas is a retired Michigan State Police motor carrier officer after 30 years of experience.

Great Ideas Challenge

Do you have a great idea?

The Great Ideas Challenge rewards the great work that gets done at local road-owning agencies in Michigan. What makes a great idea? We're looking for innovative ideas that improve safety and efficiency, are cost effective, and can easily be adopted by other agencies. Submit your great idea today!



Visit www.michiganltap.org/great-ideas to Learn about prizes & submit your great idea today!



- Engraved plaque
- Free registration for two people to a CTT conference
(County Engineers' Workshop, Bridge Week, Highway Maintenance, or Winter Operations)
- Consideration for entry in the FHWA "Build a Better Mousetrap" competition



- Framed certificate
- Free registration for one person to a CTT conference
(County Engineers' Workshop, Bridge Week, Highway Maintenance, or Winter Operations)

**Questions & submissions
can be emailed to:
ctt@mtu.edu**



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Thank you for attending the 2025 Michigan Winter Operations Conference!

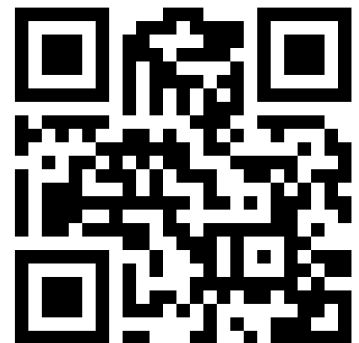
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