ITS Michigan Newsletter

JOIN TODAY!

Hello Craig,

There are lots of exciting things happening in the world of Intelligent Transportation Systems (ITS) in Michigan. The Intelligent Transportation Society of Michigan (ITS Michigan) is your link to these activities. This newsletter will help you keep up to speed on what's happening in ITS in Michigan and learn about opportunities to network with others in the field.

Here are upcoming ITS Michigan events:

- ITS Michigan Annual Meeting is **Oct. 2 and 3** at The Graduate Hotel in East Lansing
- ITS Michigan virtual Lunch and Learn, **Oct. 16**, noon to 1 p.m.: AV-Readi presented by AECOM
- ITS Michigan Board of Directors meeting, Wednesday, **Nov. 13**, at AECOM offices in Detroit
- ITS Michigan virtual Lunch and Learn, **Nov. 12**, noon to 1 p.m., presented by P3Mobility

New ITS Michigan officers and Board members settle in

Earlier this year, in May, the membership of the Intelligent Transportation Society of Michigan (ITS Michigan), through the organization's regular annual election, elected new society officers and re-elected some familiar faces to the Board.

Former Board vice president Tony Geara, deputy chief of mobility innovation at the City of Detroit, was elected new chapter president. He will serve in that post for two years.

Jeff Feeney, ITS/traffic-project manager, HNTB, was elected vice president.

Ahmad Jawad, director of mobility and smart technologies at D2 Traffic Solutions, was elected chapter treasurer.

Elise Feldpausch, connected-vehicle specialist at the Michigan Department of Transportation (MDOT), was elected secretary.

New ITS Michigan President Tony Geara.

Re-elected Board members include:
- Chris Zull of Progressive AE
- Dick Beaubien of Beaubien Engineering
- Gary Piotrowicz of the Road Commission for Oakland County
- Kriste Kibbey Etue of the Transportation Improvement Association
- Kiel McIntosh of Carrier and Gable
- Matt Klawon of AECOM
- Nikolai Moshchuk of General Motors
- Ryan Nowinski of Tyme Engineering

Jeff Feeney

Ahmad Jawad

Elise Feldpausch

Great agenda set for ITS Michigan Annual Meeting

MDOT Director Brad Wieferich.

State of Michigan Chief Mobility Officer Justine Johnson.

An amazing agenda has been lined up for the 2024 ITS Michigan Annual Meeting, which will take place Oct. 2 and 3 at the Graduate Hotel in East Lansing.

Among the speakers at the event will be Brad Wieferich, director of the Michigan Department of Transportation and Justine Johnson, chief mobility officer for the State of Michigan.

Additionally, Detroit sports broadcasting legend Matt Shepard will provide insight on the Detroit sports scene during the day-one luncheon (see story below for more on Shepard).

Among the topics that will be covered by industry experts during the conference are:
· Digital alerting: The future of roadway worker and user safety
· Next generation sensors in the ITS industry
· Visualization tools for connected fleets
· Successfully managing a dynamic traffic operations center team
· The I-94 Active Transportation and Demand Management project
· Navigating the challenges of sustainable infrastructure growth in progressive communities
· Update on MDOT's National Electric Vehicle Infrastructure (NEVI) program
· Enhancing arterial management using tools and data
· Hydrogen's future and its potential impact on transportation and mobility

· The people shaping the future of ITS and connected and autonomous vehicles
· Innovative mobility and accelerating vehicle-to-infrastructure deployment

Mobility Mingle
Following the event sessions on Wednesday, Oct. 2, there will be a social event: Mobility Mingle (see below for details).

Visit here to register for the annual meeting.

Former voice of the Detroit Tigers Matt Shepard will be luncheon speaker at ITS Michigan Annual Meeting Oct. 2-3

Former "voice of the Detroit Tigers" Matt Shepard will provide the luncheon keynote speech at the 2024 ITS Michigan Annual meeting on Oct. 2 in East Lansing.

Shepard has more than 25 years of broadcasting experience. He is a veteran of Detroit sports who has won multiple Emmy awards, including best play-by-play announcer. He was twice named MSBA Michigan Sportscaster of the year and was the winner of the prestigious Ty Tyson Award for "Excellence in Broadcasting."

Shepard spent five and a half seasons as the TV play-by-play voice of Detroit Tigers baseball, helping the network achieve number-one rated rankings throughout most of his tenure. He called historic moments like Miguel Cabrera's final game in the major leagues; Cabrera's 3,000th career hit and 500th home run; and a no

hitter. He proudly represented the network and team on the air and in the community at various functions, while working with Tigers legends Kirk Gibson, Jack Morris and Dan Petry.

In addition to his Tigers duties, Shepard has worked extensively for Fox Sports Detroit/Bally Sports Detroit as a play-by-play voice for the Detroit Pistons, Detroit Red Wings, CCHA hockey and the MHSAA high school football and basketball state championships. He called Detroit Lions' preseason games along with the statewide, "Lions Television Network" for 10 seasons. He also called NFL Europe games and Arena Football for FOX and has called college basketball, hockey, football and baseball for the Big Ten Network, CBS Sports and ESPN.

Shepard's resume also includes extensive work as a host and feature/game day reporter for Fox Sports Detroit's Tigers, Pistons and Red Wings coverage.

He was the radio voice for the University of Michigan basketball for 14 years and Eastern Michigan University football for 20 years. He hosted a daily sports talk show on WDFN (1130 AM) in Detroit for 15 years before partnering with the Michigan Sports Network, taking sports talk shows on a statewide radio/TV network.

During COVID, Shepard spearheaded "Operation Gratitude," working with local companies to help deliver meals to first responders.

Shepard has been married to wife, Lisa, for 33-years and they have four children: Chad, Sean, Scott and Rachel.

RCOC and U of M demonstrate new way of timing traffic signals using connected-vehicle data
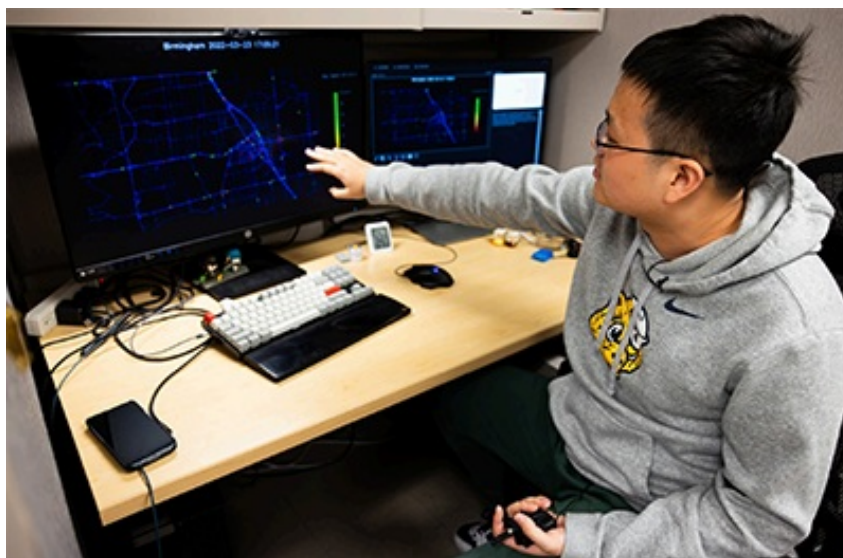
A University of Michigan graduate student works on the signal-timing project.

The Road Commission for Oakland County (RCOC), the University of Michigan Center for Connected and Automated Transportation (CCAT) and General Motors have partnered to document the benefits of a revolutionary way of retiming traffic signals using connected-vehicle technology.

Most motorists do not know what traffic-signal timing is, let alone understand the complexity of signal timings. Good signal timing, however, can improve traffic flow, traffic safety and the environment, while poorly timed signals can contribute to traffic congestion, make intersections less safe and cause increased air pollution.

Historically, setting or updating traffic-signal timing was a costly and labor-intensive process, and so many road agencies or municipalities do not frequently update the timing on their fixed-time traffic signals.

Traditionally, this process involved road agencies sending personnel to intersections to manually count the number of vehicles traveling in each direction for one five-hour period (including parts of the morning and evening rush hours and mid-day peak time). In addition to being both a costly, labor-intensive process, it is also subject to unreliability (if the observer looked away for a moment, lost track of his/her count or simply momentarily lost focus, the data would likely be at least somewhat inaccurate).

This study demonstrated, for the first time, that there is a less expensive, less time-consuming and more accurate means of collecting more reliable traffic data upon which to base signal timings. And not only is the data more accurate and less costly to collect, the fact that it is potentially accessible at any time is also significant.

Because of the labor involved and the cost of the traditional method of collecting traffic data (data collection alone represents more than 50 percent of the cost of traditional signal retiming), many communities and road agencies only update their traffic signal timing once every five or more years. Because traffic patterns can easily change much more frequently than five-or-more-year increments, this is an inefficient process.

Working together, CCAT and RCOC, with the assistance of General Motors, conducted an 18-month pilot study to test the potential to use connected-vehicle insights as an alternative method to gather the data needed to retime traffic signals. The study, conducted in Birmingham, resulted in a 20 to 30 percent reduction in the number of vehicle stops at the signalized intersections where changes were made.

This was the first-ever large-scale, cloud-based traffic-signal-retiming effort. The study demonstrated that there is a tremendous opportunity for communities and road agencies to recalibrate traffic patterns, thus reducing congestion, improving safety and reducing vehicle emissions, much more quickly and at much lower costs than traditional traffic-signal-retiming practices.

The effort involved using data collected from General Motors vehicles equipped with the requisite technology. The U of M system takes data from the GM vehicles and extrapolates larger traffic patterns that can then be used to determine the most effective timing for the traffic signals. This extrapolated data is far more accurate, more quickly available and less expensive to collect than the data traditionally used to generate traffic signal timing.

That means the potential demonstrated by this study could prove beneficial for governmental agencies in charge of traffic signals across the country and, in fact, all around the planet.

RCOC Deputy Managing Director and County Highway Engineer (and ITS Michigan Board member and former president) Gary Piotrowicz, who has a background in traffic-signal-system management, notes that data collection has always been the Achille's heel of the traffic-signal-timing world. "This study demonstrates that U of M's system, combined with data from connected vehicles, such as that provided by GM in this case, solves the age-old data collection problem."

In fact, Piotrowicz predicts this process will eventually be the norm for traffic-signal timing around the world. In that sense, the process demonstrated in this study is nothing short of revolutionary.

The study was funded by the United States Department of Transportation Strengthening Mobility and Revolutionizing Transportation (SMART) Planning and Prototyping Grant and

General Motors.

Current ITS Michigan President Tony Geara, left, presents McIntosh with the resolution of tribute at the July ITS Michigan Board meeting.

ITS Michigan Board honors former President Kiel McIntosh

At its July meeting, the ITS Michigan Board of Directors honored Immediate Past President Kiel McIntosh for his two years in the role, presenting him with a framed resolution of tribute.

McIntosh, a sales engineer at Carrier and Gable, served as ITS Michigan president from May of 2022 to May of 2024. Prior to that, he served as ITS Michigan vice president, secretary and treasurer. He remains on the ITS Michigan Board.

In addition to honoring McIntosh for serving as president, the award also notes that during his term, McIntosh established an annual sponsorship model that increased investment in the organization, led a successful 2022 ITS Michigan Annual Meeting and established the partnership that led to the joint 2023 Annual Meeting with ITE Michigan.

2024 Regional Transportation Operations Partnering Workshop Connects TIM Partners

On May 30, approximately 60 representatives of the traffic incident management (TIM) community gathered for the 18th annual Southeast Michigan Traffic Incident Management Partnering Workshop at the Wayne County Community College Ted Scott Campus in Belleville, Michigan.

Participants in the workshop ranged from professionals in police, fire, emergency management, safety service patrol operators and road agencies from the state, county and municipal levels. The partners planning the workshop included the Michigan Department of Transportation (MDOT), the Southeast Michigan Council of Governments (SEMCOG) and the Intelligent Transportation Society of Michigan (ITS Michigan).

The half-day workshop was opened with welcoming remarks from Dick Beaubien from Beaubien Engineering who chairs the SE Michigan Regional Transportation Operations Coordinating Committee sponsored by ITS Michigan. He noted that the partners in planning for the workshop shared the goals of applying computer and communication technology to make travel safer and more efficient for both travelers and first responders.

The objectives of the workshop were to develop partnering relationships among those with an interest in safe, quick clearance of traffic incidents; and a desire to clarify the roles of incident responders, foster an understanding of the roles of the different responders and develop an understanding of who is in charge of what.

Dennis Richards, from Incident Clear, showed the new technologies his company is using for safety service patrols in Metro Detroit, Lansing and Grand Rapids. One of the

devices is a snowplow-type attachment to clear debris from the traveled lanes of a freeway without putting a responder in the roadway.

Dawn Miller described the Mi-Time training program for responders. It teaches responders techniques for safe, quick clearance of traffic incidents. The goal is to train 50 percent of the responders in Michigan.

Courtney Cornwall, from Cavnue, described the test section along I-94 between Ann Arbor and Detroit that captures vehicle locations and speeds to provide better roadway operations and a better environment for automated vehicles.

Mohammed Al-Akash described the Macomb County Department of Roads' Traffic Operations Center co-location of traffic cameras, 911 dispatch, emergency management and information technology. He showed how freeway operations and arterial operations could be coordinated during traffic incidents.

Matthew Junak, from Intelligent Mobility Solutions at HNTB, talked about using advanced technologies to improve work-zone safety.

Alexander Prysiazniuk from the City of Detroit and Sarah Gill from MDOT's Traffic Operations Center described the coordination of efforts that went into making the NFL Draft event in Detroit a success for the city. Approximately 50 agencies coordinated their activities to make access to the multi-day event safe and efficient for more than 700,000 people. It was a time for Detroit to shine for the nation.

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