

Michiganite

Official Publication of the Michigan Section of the Institute of Transportation Engineers

Letter from the President By Matthew Hill, WSP



Fall is upon us, and with the leaves beginning to change colors I thought I would follow suit and recap the many changes occurring in ITE this year. The “One ITE” initiative was unrolled by ITE International. ITE International realized there was a very different “ITE experience” go-

ing on across the various Districts, Sections, and Chapters and organized the “One ITE” initiative to deliver a **consistent** member experience, provide **effective** member support, and ensure the **long-term viability** of ITE to be the professional association of choice.

What does this mean for the Michigan Section? To start, ITE International will now be collecting Section dues rather than the Michigan Section Board collecting the dues. Hopefully this eases some confusion for members as we were one of very few Sections that still collected our own dues. Now when you renew your dues each year, you will be notified by International to renew your International dues, your Great Lakes District dues, and your Michigan Section dues all in the same notice.

As a member of the Michigan Section, you are part of the Great Lakes District which is composed of Michigan, Indiana, and Ohio (about 575 voting members). Several Districts are being realigned so that Districts have a similar number of voting members and are being restructured such that the geographic area is representative of similar member interests. The Great Lakes District will be reshaping to include eight (8) states with 1400 voting members: Michigan, Indiana,

Ohio, Illinois, Wisconsin, Minnesota, North Dakota, and South Dakota. Much of this restructuring at the District level will take place over the next two years. International is also working on providing updates to District, Section, and Charter bylaws to provide consistency within the ITE community. These bylaw adoptions will take place over 2019 and 2020.

To help provide a consistent membership experience and help Sections and Chapters maintain a strong financial position, International is eliminating the “Affiliate Member” status. In other words, you are either a member or you are not.

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Letter from the President



Many Sections had reduced dues for affiliate members but affiliate members saw all the same benefits as full members, which was causing full members to basically subsidize the affiliate membership. This was not the case in Michigan, but we do have many Section members that are not International members. In the eyes of International, this would also be perceived as an "Affiliate" status since you are not a full International member. There is an "Affiliate Transition Plan" that would allow free ITE International dues for 2019 and 50% off International dues for 2020. At the end of 2020, all affiliate members would have transitioned to full ITE International members or made the decision not to become a full member. At the Section level, the only difference would be if you are not an International member, you would pay the non-member pricing for our various technical sessions and functions.

These were the major change items that were the focus at the ITE International Meeting in Minneapolis

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this past August that I had the privilege to attend and see our very own Carissa McQuiston graduate from the LeadershipITE program. Carissa will also be on the Great Lakes District Transition Committee as we expand in the next two years to include the other five states. With these changes will come new leadership opportunities within ITE at both the District and Section levels. If you would like to get more involved in ITE, do not hesitate to contact me or others on the Board and we would love to plug you in!

In closing, I look forward to seeing you at our Annual Meeting in December and I'll leave you with one of my favorite quotes on change, since I've said the word at least six times:

"I handed in a script last year and the studio didn't change one word. The word they didn't change was on page 87. "

- Steve Martin

Matt Hill can be reached at (313) 310-8239 or matthew.hill@wsp.com.

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LeadershipITE

By Carissa McQuiston, PE, MDOT Michigan Section Vice President

The 2018 Joint International/Midwestern District/ Great Lakes District Annual Meeting was in August in Minneapolis, Minnesota. You may be aware (or likely not) that this was also the third face-to-face meeting for the 2018 LeadershipITE class and our class graduation!

The 2018 LeadershipITE is a class of 27 individuals from all over the country (and a few from Canada) representing various parts of the transportation industry. We are consultants, FHWA employees, local agency and DOT employees (me!), vendors and even someone from Apple Maps! The depth of talent, energy and ambition



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LeadershipITE

was great (as a class focused on leadership tends to be). We were led by Glenn Tecker, who taught us the mechanics, subtleties and nuances of refining our leadership skills.

We first met in January of 2018 in Washington DC where we kicked off our program and spent time at ITE Headquarters. Then in May, we had our second meeting in Jackson Hole, Wyoming, which coincided with the Intermountain Section's Annual Meeting.

Classes with Glenn were held for two days at each of our face-to-face meetings and then various webinars throughout the year. We were divided into groups of 6 to 7 and tasked with coming up with a topic that is relevant to our industry or ITE and we were to provide discussion points and recommendations for how to address that issue. The major deliverable of this program was a group project from each team with a final presentation in Minneapolis before graduation to the ITE International Board. The topic my team chose was 'What's ITE's Role in Preparing for Transformative Technology.' Our group felt that with all the emerging technologies in play and coming on line, we wanted to focus on how ITE could position ourselves to be a resource during these transitions. We proposed ideas on ways to provide assistance to local ITE districts, sections and chapters in the form of information packages with certain technologies



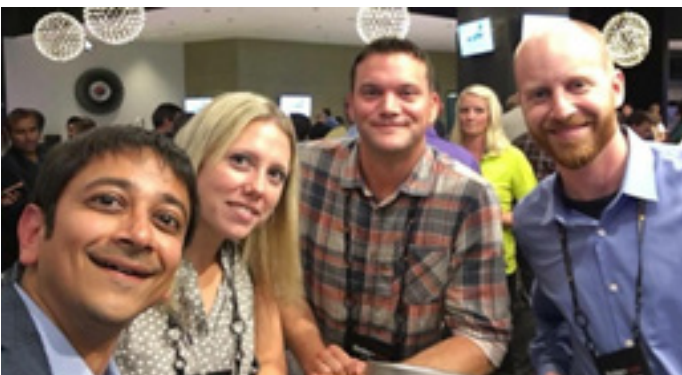
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highlighted including ITE articles, podcasts, evaluations, studies, cautionary/success stories, speakers, etc. We spoke about changing meeting formats and having more technology demonstrations and hackathons.

Overall, the LeadershipITE program was an intense experience that I found to be very beneficial personally as well as professionally and valuable to our MI Section. I thank you all for your support and I hope that you would take a minute and see if this program is a good fit for you!! Please talk to me if you have questions or want to know about how you can get involved!



Carissa McQuiston can be reached at (517) 335-2834 or McQuistonC@michigan.gov.



Click [here](#) for more info on the Leadership ITE program.

ITE Trivia Night By: Gentjan Heqimi, Hubbell Roth & Clark, Inc.

This year's annual ITE Trivia night took place on February 8th, 2018 at three separate locations across the state:

- Jolly Pumpkin, Royal Oak
- HopCat, East Lansing
- Perrin Brewing Company, Grand Rapids

Like past years, this was a fun-filled event that consisted of networking, good food, good company and a mix of trivia topics ranging from everything Michigan (When you're in Michigan, you are never more than how many miles from a Great Lake?) all the way across the Atlantic to the United Kingdom (The Beatles hailed from what city in England?). Some transportation questions were thrown in for good measure (What are the standard dimensions of a freeway speed limit sign?).

This was a live event, where all three locations were connected and competing with each other in real time throughout the entire competition. All teams were able to see the same questions at the same time, with scores being updated live and projected on big screens at each location.

The competition was fierce and full of surprises. By round four, the highest score was a three-way tie by teams in each location. By the final round, everyone was still in the running with each team taking calculated risks in wagering their points. At the end however, Team MSU in Lansing rose above it all by correctly answering that ten raised to the power of a hundred is Google, and not Google.

Despite Team MSU winning, everyone left in good spirit. Here is what Paul Arends from the Grand Rapids location had to say:

"We had an awesome time, and the wait staff even played along with us. Going in to the final round, Perrin Staff was in 4th place. On the line was a \$50 gift



Trivia Winners - Team MSU

Pictured Left to Right: Rajat Verma, Harprinderjot Singh, Fatemeh Fakhrmoosavi, Alex Mullen, Steven Stapleton, Meghna Chakraborty

card, so every team decided to wager it all, except for our server. Her bet paid off, and she ended up getting the highest total score at our location! Due to there being a 3-way tie with a whopping zero points, the teams decided unanimously to offer the gift card to the winning team... Our waitress! Which she gladly accepted, and ended up using it to buy us all a round later in the evening!"

Overall, the event was a success. A big thanks goes to the organizers of this event: Paul Arends from AECOM, Matt Hunter from CDM Smith, Carissa McQuiston from MDOT and Lia Michaels from HRC. Special thanks to the sponsors AECOM, CDM Smith and HRC for securing the rooms and providing the appetizers. We look forward to making this event bigger and better next year! Stay tuned for more info!

Gentjan Heqimi can be reached at (248) 454-6300 or gheqimi@hrc-engr.com

New Members of ITE Michigan Section

Scott Tezak
Prein & Newhof

Emily Pike
AECOM

Kuiling Zhang
MTU

Cole Moody
HNTB

Patrick Eldridge
WSP

Brandon Hayes
Bergmann Mick

TD Dailey
Tech Services

Kenneth Kucel
City of Detroit

Nick Lacroix
Progressive AE

Terry Martin
Carrier & Gable

Mick Schasser
Carrier & Gable

Casey Bonner
HNTB

Student Members

Hafez Irshaid
Western Michigan University

Majid Mastali
Western Michigan University

Dustin Black
Western Michigan University

Ogden Wright
Western Michigan University

Welcome to the Michigan Section of ITE!!

Do you want to become a member of the Michigan Section of ITE? If so, please contact the Section Secretary Matt Hunter at (517) 318-7566 or mhunter@hntb.com.

Award Mentions

The Michigan Section won 3rd place in the 15K Membership drive. See the excerpt from the ITE journal below.

Thank You for Helping ITE Reach 15K!

Congratulations to Our Membership Campaign Winners!

As of January 8, 2018 ITE has surpassed 15,000 members!

This is a 3 percent increase in membership from last year and the largest number of members we've had since the end of 2011.



The Section winners of the 15K Membership Drive are the following:

- 1st place: Met Section of NY & NJ
- 2nd place: Illinois Section
- 3rd place: Michigan Section

ITE Spring Technical Session By Diana Fassett, WSP

The ITE Spring Technical Session was held on March 16th, 2018 at MDOT's Office of Aeronautics in Lansing, Michigan. This session was hosted by Carissa McQuiston from the MDOT Safety Programs Unit.

The morning session started with a presentation by Colin Brooks from Michigan Tech Research Institute (MTRI) on the topic of **UAV applications at MDOT for traffic monitoring and other uses**. A UAV refers to an unmanned aerial vehicle commonly referred to as a drone. Multiple drone platforms have been utilized by MDOT with costs ranging from \$500 to \$1500 for simple models or from \$4500 to \$6500 for more complex models. The drone can fly 80 to 100 feet in the air with a 20 to 30 minute flight time. Ohio has used a drone that is tethered to a power cable that can fly for hours.

FAA rules mandate that if a drone is flown over traffic, the road needs to be closed to traffic. Because of this rule, drones are typically flown in the right-of-way adjacent to traffic.

MDOT has used drones to collect data for bridges and roadway corridors. The drones can be equipped with optical sensors to obtain 3D information, thermal sensors and LIDAR. Traffic data that can be collected includes speed, number of vehicles, flow rates, density and space mean speed. Drones can also be utilized for bridge deck sensing and emergency response. Very small drones can be used for confined space work. High resolution photos and videos can be recorded by the drones.

The second session of the morning was about **leading pedestrian interval (LPI)** presented by David Morena from FHWA. A LPI is a strategy to protect pedestrians from turning vehicles by giving them a head start before the parallel traffic gets the green. This strategy makes the pedestrians more visible in the crosswalk.

A study from New York City showed a 56% reduction in pedestrian crashes by providing a 7 to 11 second LPI. Other interesting findings from the study:

- Left turning vehicles pose more of a hazard

to pedestrians since a vehicle travels faster turning left than one turning right.

- The A-pillar of the vehicle can block a driver's view of pedestrians.
- Pedestrian crashes on one-way streets are an issue.
- Senior citizens are more at risk.
- Left turn restrictions, left turn signals and bike lanes also reduced pedestrian crashes but LPI had more of an impact in crash reduction.

A study sponsored by the Florida DOT developed LPI guidelines and warrants. The guidelines call for enough time for a pedestrian to clear one lane of traffic when crossing before the parallel traffic gets the green.

MDOT's "Best Design Practices for Walking and Bicycling in Michigan" manual includes LPI as one option in optimizing pedestrian and bicycle safety.

The final session of the morning covered **MDOT work zone ADA guidance** and was presented by Chris Brookes, MDOT work zone delivery engineer. The FHWA is updating Part 6 of the MUTCD to provide additional guidance about ADA. MDOT has Special Provisions for these ADA requirements, that include:

- Temporary pedestrian barrier with fence
- Temporary bus stop
- Pedestrian type II barricade
- Pedestrian type II channelizer
- Temporary pedestrian ramp
- Temporary pedestrian path with a slip resistant coating

These items get paid once they get delivered to the job site instead of being paid as furnished and operated. MDOT plans to develop pedestrian typicals in the future.

If a pedestrian detour is provided, the detour route must be as accessible as the original route. MDOT is investigating remove the word 'Detour' from pedestrian detour signs since there has been some confusion with vehicles trying to follow a pedestrian detour.

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ITE Spring Technical Session

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After a buffet lunch, Jeff Bagdad from SNC-Lavalin Atkins presented on **Smart Cities and Data Analytics**. Intelligent mobility is a new way of thinking about how to use technology and data to connect people, places, goods and services and to reimagine infrastructure across all modes of transportation. Some of the concepts presented were:

- **Managed lanes** to supplement DOT budgets. This includes congestion pricing for an express lane while adjacent lanes are free or using active traffic management with hard shoulder running.
- **Pedestrian and bicycle safety** by using thermal imaging cameras for detection or using DSRC roadside units for a collision avoidance warning system. For example, a bus would have an on-board DSRC unit to detect pedestrians in the crosswalk.
- **Speeding** areas along a network can be identified through actual probe speed data from RITIS.
- **Adaptive signal control** for corridors with a lot of variation in traffic flow. This technology has improved significantly and costs are dropping.
- **Driver assistive truck platooning** utilizing a driver in the first truck with up to 2 trucks behind it without drivers.

The final presentation of the day was by Matt Junak of HNTB and Sean Eye of Quantum Signal on the topic of **Michigan and regional truck parking technology**.

Regionally there are 137 sites under construction in 8 mid-western states with numerous types of technology being tested. For data collection, counts can be taken at the driveways as traffic enters and exits or each parking space can be monitored. The data is processed and communicated to trucks via signs, apps or CV technology.

For MDOT's truck parking system, there was no off-the-shelf solution that met the project requirements so a customized system was developed. The system used standard hardware with customized software. In order to determine the accuracy of the truck parking system, videos were collected and watched for errors and readings. One takeaway from this project is that camera placement is critical to accurately collect truck readings. The current MDOT project is being extended along I-94 in the southwest region to Port Huron, along I-75 and I-275 at 8 new rest areas and at park and ride lots on US-23.

A special thanks to Carissa for hosting such an informative event and to all of the presenters for taking time to share their knowledge.

Diana can be reached at diana.fassett@wsp.com or 313-963-3272.

Save the Date!

Annual Meeting

**December 4, 2018
Crystal Gardens, Howell, MI**

More information to follow.

Call for Abstracts

Visit www.itemichigan.org
or [click here](#).

Treasurer's Report - September 2018
By Lia Michaels, Hubbell Roth & Clark, Inc.

Treasurer's Report: September 2018
Lia Michaels

Section Fund Balance (As Of 9/1/2018) \$ 33,180.22

Section Fund Balance \$ 33,180.22

ACTIVITIES for January 1 through September 1, 2018

Income - Section Regular Fund \$ 27,268.00

Dues	\$ 3,633.00
Meetings	\$ 2,110.00
Member Contributions	\$ 325.00
Golf Outing: Golfer Fees	\$ 8,700.00
Golf Outing: Sponsor Fees	\$ 9,750.00
Golf Outing: Miscellaneous	\$ 2,250.00
Other	\$ 500.00

Expenses - Section Regular Fund \$ 17,577.66

Postage & Supplies	\$ 32.53
Website	\$ 139.35
Meetings	\$ 2,344.60
National Mtg (President)	\$ 1,502.60
LeadershipITE	\$ 2,454.43
Plaques/Awards	\$ 50.00
General liability Insurance	\$ 1,403.00
Golf Outing: Gifts/Prizes	\$ 1,500.00
Golf Outing: Course Fee (Golf/Cart/Lunch)	\$ 7,750.89
Bank Charges/PayPal Fees	\$ 400.26

Technical Resources ITE International

Smart Communities was identified in January 2016 as a priority initiative area. ITE's goal is to be a champion for a people-based approach that uses new and emerging technologies, such as the Internet-of-things, big data, and automated and connected vehicles as enablers to support livable, prosperous communities that provide opportunities for all citizens. Former ITE International President Shawn Leight has challenged ITE to "Be Out Front" in influencing and shaping the direction of smart communities, not just waiting and reacting.

The ITE International Board of Direction identified Smart Communities as a priority initiative area in January 2016 and created the ITE Smart Communities Task Force (SCoTF). ITE's goal is to be a champion for a people-based approach that uses new and emerging technologies, such as the Internet-of-things, big data, and automated and connected vehicles as enablers to support livable, prosperous communities that provide opportunities for all citizens.

Quick Bites ITE members are invited to join the Smart Communities community on ITE Community (member login required).

The ITE Smart Communities Task Force is developing a series of informational one-pagers on Smart Communities topics, called Quick Bites. These will be published on www.ite.org, though the ITE Spotlight newsletter, and on ITE Community as they become available.

Other topics that can be found under Technical Resources are:

- Complete Streets
- Connected and Automated Vehicles
- Geometric Design
- Standards
- Traffic Engineering
- Transportation and Health
- Transportation Education
- Transportation Forensics and Risk Management
- Transportation Planning
- Transportation Safety
- Transportation System Management and Operations
- Trip and Parking Generation



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