Feature Article

Points of Conflict Discovered!
By Ahnaray Bizjak, City of Janesville

Schools across the country are making big strides in the areas of Science, Technology, Engineering, and Mathematics, otherwise referred to as STEM academics. The school that my children attend is no exception! I have 12-year old twins who are in the 6th grade at Rome Corners Intermediate in Oregon, WI. When I learned that their science curriculum was going to be entering their Models & Designs Unit, I reached out to their classroom teacher to volunteer to lead an Engineering activity during that time. She was very receptive to that idea and immediately took me up on the offer.

But, maybe I should back up. The reason that I was so excited about visiting my children’s school and bringing an Engineering lesson to their classroom is because of the wonderful resources that ITE has developed to help support those educational outreach opportunities. ITE has developed several Transportation Engineering lesson plans that span from Kindergarten through High School. There are a wide range of topics, and different levels of complexity based on the classroom audience that you would be working with. All of these resources are available on the ITE Website under “Transportation Education” within the Technical Resources drop-down menu.

I chose to present the course titled: Points of Conflict. I made a quick PowerPoint to illustrate multiple intersection types within the Village of Oregon; the kids LOVED trying to figure out where the intersection was located within their community. The hands-on activity included teams of 2 mapping out and measuring the various points of conflict in: 1) a Traditional 4-way Intersection and 2) a Roundabout. It was so fun to watch their “AH-HA” moment when they figured out the difference in the number of conflict points...
between the two intersections. Even my own son said to me: “Mom, I never knew what the point of a roundabout was. But now I do!”. Their teacher was also impressed and learned some new things that she didn’t know either! This activity took about 40-45 minutes, and I taught it to 3 classes during the day. I was also able to eat lunch with my children at school. It was a really fun day and I am very excited to do this again! But next time, I plan to bring a Transportation Engineering lesson to a middle school located in the community where I work, the City of Janesville. I would strongly encourage you to check out these resources and bring them to a school near you!

President’s Message
By Allan Pacada

I hope your 2019 has started off on the right track! I look forward to serving as the ITE Wisconsin Section President this coming year and I hope to pick up where our past president, Yang Tao, left off in 2018. When I joined the Wisconsin Section in 2008, my one expectation of the organization was to learn about the transportation industry. Since then, I have not only gained more appreciation for our industry itself but feel that I have become a better engineering professional through the relationships built going to a section meeting; learning about topics like trip generation at the Transportation Planning Forum & Traffic Engineering Workshop; or having a great conversation with a colleague at one of our yearly social events. The value of being a part of ITE is that you develop into a consummate professional, both intellectually and socially, and ITE continues to be a valuable resource to our profession.

So, this is an exciting time to be a member, as ITE has been amid a series of positive changes, focused on both positioning ITE as the leading association for transportation professionals and providing its members an exceptional membership experience. As you may already be aware, ITE is in the process of progressing their OneITE Initiative, which has been geared towards strengthening connections between ITE International, Districts and Sections so that they can provide members with a consistent member experience regardless of their location, deliver more effective member support, and provide a suite of benefits to help our members excel as transportation professionals. I hope you continue to be involved by renewing your international membership or consider joining as an international member (if you are currently an affiliate or new member).

I am privileged to work with another excellent group of professionals on the Wisconsin Section Executive Board this year. For 2019, you will be served by the following board members:

- Kelly Greuel – Vice President
- Jeff Held – Treasurer
- Jess Billmeyer – Secretary
- Andre Ost – Director
- Joyce Murphy – 2nd Year Affiliate
- Diego Silva – 1st Year Affiliate
- Yang Tao – Past President
- John Bruggeman - Administrator
I would like to thank Brian Porter (Past President) and Justin Schueler (2nd Year Affiliate) for their past service on the ITE Executive Board! We also welcome Andre Ost and Diego Silva as our new board members.

We started the year with a few postponements of our first section meeting of 2019 due to inclement weather, but we finally held this public service appreciation lunch meeting in Madison on February 20th and we had over 50 people in attendance. Our guest speaker was John Steiner of WisDOT to speak about the Great Flood of 2018 in the southwest region. It was highly informative presentation on the issues the SW region faced during flooding that year and what methods were used to resolve and maintain major roadways. This was one of many more great meetings to come.

Please be sure to mark your calendars for these upcoming meetings:
- April 5th – Milwaukee Admirals Game Social Event
- April 9th – Traffic Engineering Workshop and Transportation Planning Forum
- May 5th – May Section Meeting in the Fox Valley area (Green Bay)

I look forward to seeing you all at these future events.

Please ask me or any of the Board members if you would like to become involved in any of the many volunteer opportunities within our Wisconsin Section. If you have any questions or comments about the section, please contact me at apacada@hntb.com. Thank you for your continued support!

Allan Pacada
ITE Wisconsin Section President
Recent Meetings, Events, and Awards
February 20, 2019 Section Meeting
By Andre Ost

After being rescheduled twice due to inclement weather, the public service appreciation lunch meeting was held on February 20, 2019 at the Great Dane on the east side of Madison. Our Section president, Allan Pacada, opened the meeting by introducing the new ITE Wisconsin Board Members. The group then went through our customary self-introductions. Kelly Greuel provided the treasurer’s and membership reports prior to the featured presentation.

The presentation for the meeting was given by John Steiner, Wisconsin Department of Transportation, on the Great Flood of 2018 in the Southwest Region. The presentation discusses the flooding that impacted Wisconsin in August 2018. The initial storms took place on August 20th delivering 11-13 inches of rain resulting in the closure of eleven highways. The next week, August 25-28, an additional 5-12 inches of rain fell in the area resulting in additional flooding and record river crests. Many of the river crests were so high that the gauges were washed out, making the records unable to be officially recorded. The flooding had significant impacts to Dane, Fond du Lac, Juneau, La Crosse, Monroe, Vernon and Washington Counties.

Governor Scott Walker provided a State of Emergency Declaration, which allowed for use of the National Guard and federal financial assistance. There were sections of I-90/94 and I-39 that were temporarily closed, and traffic rerouted due to the extreme flooding. The National Guard provided assistance to WisDOT and county forces to help protect the interstates. The protection of the I-39/94/90 interstates involved sandbagging and pumping water 24/7 for a three-week period. The costs of this work exceeded $400,000.

John said that during an emergency event it is important to keep track of staff and documentation of the equipment. Coordination of staff during the flooding event was challenging because there were so many entities involved including multiple WisDOT Regions and Bureaus, Law Enforcement, National Guard, County and local forces. Additionally, material availability was difficult during the flooding events. There was a limited availability of pumps, hoses, generators, and traffic control devices.
March 27, 2019 Section Meeting
By Andre Ost

The UW Milwaukee and Marquette Student Chapter Night was held on March 27th at Wisconsin Traffic Management Center in Milwaukee. Allan Pacada opened with a summary of upcoming events, followed by all attendees introducing themselves. Jeff Held, provided the treasurer’s report. Allan read the membership report on Kelly Greuel’s behalf.

Stacy Pierce presented the 2019 Martin Bruening award. Martin Bruening worked for City of Milwaukee from the 1920’s to the 1970’s. He was a leader in the establishment of the 3Es of engineering. He led the City’s traffic signals program that led to Milwaukee being one of the safest metro areas in the nation. He also championed the importance of a multimodal transportation system. The 2019 Martin Breuning award winners are Andi Bill, Madhav Chitturi, Glenn Vorhes, and Boris Claros from UW Madison for their paper which proposes an alternative approach with seasonal crash estimates to the traditional negative binomial for modeling crashes. The paper’s seasonal crash prediction provides time dependent crash estimates which contribute to safety analysis, managerial decisions, and allocation of resources for the implementation of specific treatments, safety programs, and reduced risk of crashes which contributes to the reduction of costs associated with crashes, property damage, maintenance, and emergency services.

John Davis gave a quick update on the Midwest District and encouraged all students and members to attend the upcoming ITE Midwest District meeting that will be held June 19-21 in St. Louis, MO.

Jackson Kalas provided the UWM Student Chapter update. The student chapter has about 12 active members. Their recent activities have included guest speakers, recruiting events and combined meetings with other student chapters. Jackson said the highlight of 2018 was attending the ITE Student Leadership summit in Minneapolis. Goals for the future of the student chapter include increasing membership and involvement; and staying involved with ITE meetings.

Colin McGovern provided the Marquette University ITE Student Chapter update. The student chapter has about 35 active members. There have been many changes happening at Marquette. Transportation professor Dr. Drakopoulos retired in Spring 2018 and has moved back to Greece and two new professors are taking his place. The section scheduling a panel discussion with WTS themed “Key Career Insights for Young Engineers from Professionals”. The student chapter is also planning a tour of General Mitchell International Airport in April.
The featured presentation on The Hop, was provided by Tim Keefe and Mike Hammond of HNTB. Mike began the presentation with an overview of the Milwaukee Street Car a.k.a. “The Hop”. Some interesting facts about the Milwaukee Streetcar project:

- The Hop streetcar vehicles are all electric and can operate both on-wire and off-wire by using batteries. The vehicles are double-ended, meaning they don’t turn around at the end of the route.
- Phase 1 is named the Main Line (M Line) route, which is 2.1 miles long and runs from the Intermodal Station to Burns Commons. The route opened November 2018.
- The next planned/funded route is the Lakefront Line (L Line). The L Line route is an extension of the M Line will add 1.8 miles of track connecting to the Lakefront and future Couture high-rise building.
- Fares are free for first year through Potawatomi Hotel & Casino sponsorship. Future fares may be $1 per ride.
- In total the City of Milwaukee has 5 streetcars. They currently run 3 streetcars on weekdays and 2 streetcars on weekends.
- On grand opening weekend The Hop had 16,409 riders. In December The Hop averaged 2,453 daily riders, which was about 200 more riders than expected.

Tim provided information on the streetcars’ design and engineering. He explained the multiple parts of infrastructure design, which included utility, track, civil, traction power, station design and V2I infrastructure. Some interesting design facts:

- The streetcar track was designed to minimize utility impacts since all utility relocation were to be paid by the project.
- Some utility companies had concerns that the streetcar power would result in corrosion of their facilities. The rail is insulated with rubber boot to reduce stray electrical current.
- The streetcar is powered from three substations. The engineering team designed the overhead contact system (OCS) which required several unique structural designs including attaching wires to buildings, installing in hallow walks and even attaching to the Historic Third Ward sign structure.
- At specific intersections the streetcars communicate to traffic signals and switch units using Vehicle to Infrastructure (V2I) technologies.
- The operations and maintenance facility is located south of Clybourn under the I-794 bridges. This facility provides room for inspection, repair, and cleaning of the streetcars.

Thanks to Mike and Tim for the interesting and informative presentation. And thanks to all the students and ITE members who attended the great meeting!
2019 Future City Competition

January 20, 2019
By Jeff Roemer

The 2019 Wisconsin Regional Future City Competition took place on Saturday, January 26 at the Milwaukee School of Engineering Kern Center. This year’s theme was “Powering the Future”.

Institute of Transportation Engineers – Wisconsin Section members Phil Bielefeld, Shana Brummond, Alicia Dougherty, Jeremy Iwen, Glenn Gerschke and Jeff Roemer judged the over 55 entries from middle schools for the “Best Transportation Award”. Judging was based on the team’s model and a presentation focusing on transportation.

‘City of Mayon’ from Whitman Middle School in Wauwatosa, Wisconsin took the honors this year.

It was encouraging to see so many young students excited about the future of transportation. We are always looking for volunteers to judge ITE’s award. Contact Shana Brummond (shana.brummond@daarcorp.com) if you are interested in volunteering or looking for information on the event. We look forward to next year’s competition!

Check it out! https://futurecity.org/
2019 TRB Annual Meeting Summary

UW Madison ITE Student Chapter
By Beau Burdett

The UW Madison ITE Student Chapter had the opportunity to attend the 98th Annual Transportation Research Board meeting in Washington, D.C. from January 13th through January 17th. This year, five members of our student chapter were able to attend. We began the week by attending the Wisconsin Reception where we were able to catch up with former members of our student chapter, as well as network with transportation professionals from WisDOT and the private sector, many of whom are members of ITE.

Monday, we began attending posters and lectern sessions. This year, topics of interest to our members were machine learning applications to transportation problems. In addition to attending lectures, this year our five students presented at six different poster presentations ranging from roundabout safety to automated vehicles. Two of the students presented work on their dissertations while at the meeting. Our members attended many committee meetings, including one as a young member on a task force on Transit Safety and Security.

While the bulk of the meeting was spent attending lectern sessions and posters learning about the state-of-the-art, we also engaged in networking opportunities during the evening. Besides the Wisconsin reception we also attended receptions for other universities and University Transportation Centers (UTCs) with whom we work closely. Some of the receptions we attended included the University of Massachusetts-Amherst, PacTrans, UT-Austin, and the University of Iowa. Some members were also able to attend the ITE reception at the ITE headquarters.

The meeting was a very busy few days for our student chapter, but we gained valuable insight into current research taking place, as well as important networking opportunities from Wisconsin and around the world. We hope to use this knowledge and these new connections to better our research for the 99th Annual Meeting.
Upcoming Awards

Ken Voigt Award
The Ken Voigt Young Members Award, sponsored by and funded by the ITE Wisconsin Section, recognizes achievement in transportation by younger transportation professionals who are members of ITE. The award is given annually to a deserving younger member who is making an impact in our industry. The award requires the winner to attend the ITE Annual meeting and submit a paper on their experience at the Annual Meeting for publication in the Section Newsletter.

Award
— Plaque presented at an ITE Section Meeting
— Recognition in an upcoming section newsletter and yearbook
— ITE Annual Meeting Registration and up to $1,000 travel expense reimbursement

Eligibility
Any Wisconsin Section ITE member who is 35 years old or younger on January 1st of the current year is eligible to apply for the award.

Submittal Procedure
The following documents must be included in each submission:
- Completed Application Form
- Two (2) testimonials from a current ITE member (200-word max./each)
- One (1) testimonial from a current or past supervisor (200-word max.)
- Three (3) examples of specific project experience including your role (150-word max./each)

Evaluation Criteria
- Overall quality of Working/Project Experience
- The role discussed on the specific project experience and impact on the success of the project
- Insight and opinions discussed in the various testimonials
- Passion and overall commitment to the advancement of the profession
- Examples of leadership skills
- Examples of applying innovative ideas

Past award winners
2013 — Joseph Ulatowski
2015 — Tristan Hickman
2016 — John Campbell
2017 — Justin Schueler
2018 — Andy Utic

Questions regarding the Ken Voigt Young Members Annual Meeting Award may be directed to:
Justin Schueler
E-mail: Justin.Schueler@raSmith.com
Phone: 262.317.3388
## 2019 Wisconsin Section Budget

### ITE Wisconsin Section

#### 2019 Budget

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>Difference</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dues</td>
<td>$4,600.00</td>
<td>$4,256.15</td>
<td>-$343.85</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Interest / Credit Card Rewards</td>
<td>$500.00</td>
<td>$7.66</td>
<td>-$492.34</td>
<td>$925.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$93.55</td>
</tr>
<tr>
<td>Section Meetings</td>
<td>$4,500.00</td>
<td>$3,049.68</td>
<td>-$1,450.32</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>Section Social Events</td>
<td>$500.00</td>
<td>$0.00</td>
<td>-$500.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Traffic Engineering Workshop</td>
<td>$10,885.54</td>
<td>$10,616.12</td>
<td>-$269.42</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>Transportation Planning Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50/50 Raffle for Student Scholarship</td>
<td>$0.00</td>
<td>$153.00</td>
<td>$153.00</td>
<td>$100.00</td>
</tr>
<tr>
<td>Advertising / Sponsorship</td>
<td>$2,000.00</td>
<td>$3,679.00</td>
<td>$1,679.00</td>
<td>$3,000.00</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td>$22,985.54</td>
<td>$21,761.61</td>
<td>-$1,223.93</td>
<td>$24,118.55</td>
</tr>
<tr>
<td><strong>Expenditures</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martin Bruening Awards</td>
<td>$1,500.00</td>
<td>$750.00</td>
<td>$750.00</td>
<td>$1,500.00</td>
</tr>
<tr>
<td>STEM Forward Sponsorship</td>
<td>$250.00</td>
<td>$250.00</td>
<td>$0.00</td>
<td>$250.00</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$200.00</td>
<td>$154.30</td>
<td>$45.70</td>
<td>$200.00</td>
</tr>
<tr>
<td>Officer Meeting Registration</td>
<td>$2,700.00</td>
<td>$1,630.50</td>
<td>-$1,069.50</td>
<td>$3,500.00</td>
</tr>
<tr>
<td>Harvey Shebesta Scholarship Fund</td>
<td>$2,000.00</td>
<td>$2,000.00</td>
<td>$0.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Ken Voigt Award</td>
<td>$1,700.00</td>
<td>$1,742.96</td>
<td>-$42.96</td>
<td>$1,750.00</td>
</tr>
<tr>
<td>Award plaques</td>
<td>$300.00</td>
<td>$251.75</td>
<td>$48.25</td>
<td>$300.00</td>
</tr>
<tr>
<td>Section Administrator Stipend</td>
<td>$500.00</td>
<td>$500.00</td>
<td>$0.00</td>
<td>$500.00</td>
</tr>
<tr>
<td>Section Meetings</td>
<td>$5,000.00</td>
<td>$3,664.12</td>
<td>-$1,335.88</td>
<td>$4,000.00</td>
</tr>
<tr>
<td>Section Social Events</td>
<td>$1,000.00</td>
<td>$0.00</td>
<td>-$1,000.00</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Student Chapter Support</td>
<td>$1,000.00</td>
<td>$0.00</td>
<td>-$1,000.00</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>Traffic Engineering Workshop</td>
<td>$10,150.00</td>
<td>$10,396.88</td>
<td>-$246.88</td>
<td>$10,880.00</td>
</tr>
<tr>
<td>Transportation Planning Forum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TRB Wisconsin Reception</td>
<td>$250.00</td>
<td>$0.00</td>
<td>-$250.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>Star Chapter Website Maintenance</td>
<td>$1,200.00</td>
<td>$1,200.00</td>
<td>$0.00</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Section Insurance</td>
<td>$500.00</td>
<td>$0.00</td>
<td>-$500.00</td>
<td>$380.00</td>
</tr>
<tr>
<td>ITE Leadership</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td>ITE Annual Meeting Reception Sponsorship</td>
<td>$250.00</td>
<td>$250.00</td>
<td>$0.00</td>
<td>$0.00</td>
</tr>
<tr>
<td><strong>Total Expenditures</strong></td>
<td>$28,500.00</td>
<td>$22,540.51</td>
<td>$5,959.49</td>
<td>$29,460.00</td>
</tr>
<tr>
<td><strong>Net Change</strong></td>
<td>-$5,514.46</td>
<td>-$778.90</td>
<td>-$5,341.45</td>
<td></td>
</tr>
<tr>
<td><strong>Adjustments</strong></td>
<td>$0.00</td>
<td>$0.00</td>
<td>$0.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total Profit (Loss)</strong></td>
<td>$(5,514.46)</td>
<td>$(778.90)</td>
<td>$(5,341.45)</td>
<td></td>
</tr>
</tbody>
</table>
2019 Transportation and Innovation Expo

May 23, 2019 | Alliant Energy Center | Madison, Wisconsin

Don’t miss the Transportation & Innovation Expo 2019! Join co-hosts Alliant Energy, the City of Madison and Wisconsin Clean Cities for a sustainable transportation conference and expo featuring the top leaders in the industry.

- Get behind the wheel of a variety of alternative fuel and electric vehicles
- Attend breakout sessions to hear from industry experts how sustainable transportation choices can reduce emissions and improve your bottom line.
- Visit the exhibit hall to learn more about the latest technologies available and check out the vehicle showcase.

Exhibit space, vehicle displays and sponsorship opportunities are available. For more information, contact Wisconsin Clean Cities at (414) 221-2175 or info@wicleancities.org.
Transportation Funnies

![Signs](image1.jpg)  ![Signs](image2.jpg)  ![Signs](image3.jpg)  ![Signs](image4.jpg)
Upcoming Events

April 5, 2019  Milwaukee Admirals Game Social Event

April 9, 2019  Traffic Engineering Workshop and Transportation Planning Forum
              Pewaukee, WI
              Meeting Brochure

May 1, 2019   Applications due for Ken Voight Young Member Award
              Ken Voight Award

May 5, 2019   ITE Wisconsin Fox Valley / Green Bay Section Meeting

June 19-21, 2019 2019 Midwest District Annual Meeting
                   St. Louis, MO
                   Conference Information

July 10, 2019  Joint Meeting: ITE Wisconsin and ITS Wisconsin
               Milwaukee, WI

August 20-23, 2019 2019 ITE Annual Meeting and Exhibit
                    Austin, TX
                    Conference Information

September 11, 2019 Joint Breakfast Meeting: ITE Wisconsin and WTS
                      Waukesha, WI

October 9, 2019  ITE Wisconsin Section Meeting: UW-Platteville / UW-Madison Night
                 TBD (UW-Platteville / UW-Madison)

November 6, 2019 ITS Wisconsin Transportation Conference
                   Pewaukee, WI

December, 2019  ITE Wisconsin Annual Meeting

Do you have some information or a transportation haiku to share? The ITE Newsletter is an excellent medium for reaching section members. If you would like something published in the upcoming newsletter, please contact the 2019 Wisconsin Section Member Director, Andre Ost at (414) 266-9256 or andre.ost@graef-usa.com
ITE WI Section Sponsors - THANK YOU!

Platinum Sponsors

raSmith  TAPCO
CREATIVITY BEYOND ENGINEERING  Safe travels.

AECOM  HNTB

Gold Sponsors

KL Engineering  AYRES ASSOCIATES
[A] Better Experience

emcs.inc
Transforming Challenges into SOLUTIONS

Silver Sponsors

SUMMIT CREST

Contact Joyce Murphy for information to become a sponsor!