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Michiganite

OFFICIAL PUBLICATION OF THE MICHIGAN SECTION OF THE INSTITUTE OF TRANSPORTATION ENGINEERS

Letter from the President

Since this is my first letter, I would like to thank you very much for your vote and support. As I said at the meeting, as President I would like to lead our Section in the same direction, and at the same time be open to suggestions how to improve our activities.

This issue of the MichiganITE is one of the Board's efforts to get back on track by providing timely issues in our magazine. This and a transition to electronic distribution are the biggest changes to our communication with membership.

The annual District 3 meeting was held in April in Dayton / Fairborn Ohio. As usual, it was an opportunity to meet with the ITE President Tim Harpst who briefly summarized recent and planned activities of ITE. Shelley Row from ITE described a recent project: the National Signal Report Card. Both ITE International Vice-President candidates, Albert A. Guebert and Earl Newman, made short presentations in which they stated their goals and priorities for the organization. Many of us met with the President and both candidates, and presented our Section and discussed the ITE issues. Please check www.ite.org and read more about the candidates.

The District Meeting had very well prepared technical presentations, many of them by the Michigan Section members. However, the meeting was not just technical and organizational issues. Thursday's dinner was served at the National Museum of the U.S. Air Force, which was opened exclusively for us until 10pm. It was great to see the history of the aviation from Wright brothers to Stealth bombers. Many of our members were involved in aeronautics in the past, and they were very popular answering many questions. I tried to follow Bill Murphy who answered many of mine.

I would like to encourage broader participation in District meetings. It is a great opportunity to learn, exchange ideas and to compare our Sections. Next year the District meeting will be in Michigan, so I hope many of you will participate.



*Les Sipowski
Michigan Section
President*

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Deadline for article submission for the next issue of MichiganITE is:

Friday, November 4, 2005.

Message from the Editor

There are a few things going on with the MichiganITE newsletter.

There is one more issue due out for the 2004 advertising year, the next issue will be the last hard copy that is mailed to every member. The issues of MichiganITE for 2006 will be **e-mailed** to each member. Any member wishing to receive hard copies of upcoming newsletters should contact me at (248) 454-6571 or chill@hrc-engr.com.

Transferring the MichiganITE to electronic format will allow more detail, shorter turnaround time on articles and full color ads without additional publishing cost.



-Colleen Hill
Editor

MICHITE's CALL HOME!!! Michigan Section's E-mail Address

The Michigan Section of ITE has established an e-mail address that will allow us to contact all of our members with no cost activity notices and announcements, last minute scheduling changes, meeting reminders, a quicker way to make address changes and share general ITE news. This will not replace our standard mailing of meeting and dues notices but be used to supplement those. The first step is to build a database of our e-mail addresses. If you are interested in being part of this just send an e-mail to: Michite@ci.farmington-hills.mi.us. You will receive an automatic acknowledgement and you will also be automatically added to the database error free and untouched by human hands. What a deal!

Continued from page 7

students and Michigan Tech is working to set up the first AREMA student chapter. The students want more railroad courses.

Railroad recruiters can't just walk on campus and find students who are interested, so the program is providing a special niche for Michigan Tech and a good source of employees for the rail industry at a time when they need them most. Because there are not many universities with a railroad engineering course, some could say that Tech is now among the top railroad engineering schools in the nation. Railroad engineering is back at Michigan Tech.

Students from other universities are welcomed to apply for next summer. For more information contact Pasi Lautala (ptlautala@mtu.edu) or Bill Sproule (wsproule@mtu.edu) or visit the Michigan Tech civil and environmental engineering web site at www.cee.mtu.edu.

1. Richards, Dallas. *Railway Engineering in the 21st Century*, in HDR Inc. Rail Line newsletter, May 2005.

NEW Michigan MUTCD!

MDOT and Michigan State Police (MSP) have announced the release of the 2005 Michigan Manual of Uniform Traffic Control Devices (MMUTCD), effective August 15, 2005, for all sections except Part 6, Temporary Traffic Control. Part 6, Temporary Traffic Control, will go into effect October 1, 2005.

The MMUTCD is available from two sources; the MDOT Web site (www.michigan.gov/mdot) and Michigan's Local Technical Assistance Program at Michigan Technological University (www.michiganlta.org).

Membership News

Gary Endres, a longtime employee of the Michigan Department of Transportation, died December 30, 2004 from cancer. He was active in both IMSA and ITE. His gracious manner and encyclopedic knowledge will be missed.

Jeffrey B. Heald, P.E., has joined Metro Transportation Group of Michigan, Inc., as an Operations Manager in their new Ann Arbor, Michigan, office. Jeff has over 17 years of experience in transportation planning and traffic engineering.



Results of the latest PTOE exam are in! Michigan Section members **Mia Silver**, **Deb McAvoy** and **Colleen Hill** are now PTOE's.

Congratulations Mia, Deb and Colleen!! There are now 26 certified PTOEs in Michigan.

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Detroit Metropolitan Area Selected for Special Grant Initiative

SEMCOG, the Southeast Michigan Council of Governments, was awarded a \$250,000 grant from the Federal Highway Administration to develop and demonstrate a Regional Concept for Transportation Operations in the Detroit Metropolitan Area.

Effective transportation systems management and operation are crucial to the safety, security, and reliability of our transportation systems. Achieving effective management and operation of our transportation systems on a regional level means that agencies responsible for transportation operations and safety must collaborate in a deliberate and sustained fashion. The need for regional collaboration and coordination is especially evident when the metro area is a large one and when there are numerous jurisdictions and agencies that are responsible for providing a wide variety of services on the road network.

Regional improvements occur when agencies actively collaborate on transportation management and operations in a much more deliberate and sustained manner. Guided by a common operations

vision of what needs to be achieved and how to work together to achieve it can produce significant results.

The SEMCOG project to develop a Regional Concept for Transportation Operations is supported by the Michigan Department of Transportation and the Michigan State Police. These two agencies are the local leaders in coordinated regional transportation operations. At the Michigan ITS Center in Detroit, the Michigan State Police Second Regional Dispatch Center and MDOT's freeway operations staff are co-located and are the best example of systems integration in the Metro Detroit area. The merging of MSP dispatch and MDOT freeway operations has been an enormous benefit to the state police as they have the ability to view traffic conditions on 200 miles of Detroit area freeways from a single location. Numerous institutional issues were worked out by the two agencies to facilitate this co-location. As a result, the strict separation of work between the two agencies has softened. For example, the police are allowed to pan, tilt, and zoom the CCTV cameras as needed and the MDOT staff now has access to a

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Computer Aided Dispatch station with a list of traffic incidents.

SEMCOG held a kick-off meeting on May 16, 2005 which was well attended by both the private and public sector and led by Federal Highway Administration staff. Interest in and enthusiasm for a Regional Concept for Transportation Operations were evident. SEMCOG has developed a preliminary list of goals to improve regional cooperation. This list is being distributed to stakeholders for their information and feedback.

- assess the resources and existing operations activities in the region and to minimize the overlap and quantify mutual benefits and prioritize projects.
- evaluate which operations model is best for the metro Detroit region.
- develop a robust communications protocol between traffic management centers, a regional plan for sharing data, and a recommended architecture for a possible central traffic management center.

- expand the list of stakeholders committed to regional operations and management.
- foster a closer relationship and more commitment between the stakeholders by holding a one-day conference that will bring all the stakeholders together to discuss a regional vision, identify the architecture that can implement the vision and obtain commitments.
- develop a regional traffic operations committee to oversee all activities designed to increase the efficiency and safety of the road network through regular participation from other agencies and/or firms to share data, and to help resolve regional issues.

SEMCOG and its partners will be interviewing stakeholders to determine their operations goals, objectives and performance measures. For additional information about this initiative, contact Tom Bruff at SEMCOG at (313) 961-4266 or bruff@semcog.org.

Michigan Section 2005 ITE Meeting Schedule

Date	Location	Type	Host
October 13, 2005	Kalamazoo	Technical Session	Alan Galicia (269) 381-3170
December 8, 2005	Farmington Hills	Annual Meeting/ Technical Session	Kevin McCarthy (248) 473-9590

Technical Sessions:

Speakers Wanted!!

The Michigan Section of ITE is looking for speakers and topic ideas for upcoming meetings. Please contact Linda Powell with ideas and speaker volunteers.

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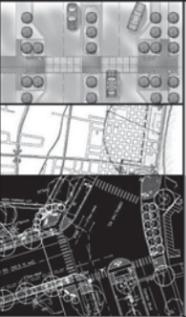
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As an added bonus the FHWA has made significant changes to funding eligibility for ITS Operations and Management during the last ten-plus years. Before the development of the USDOT ITS program in 1991,

support for operations and management was very strictly limited. With changes in ISTEA, the NHS Act and TEA-21, most traffic signal operations and management activities are now eligible for federal funding.

Under new language in TEA-21 "Operational improvements" may be funded with Surface Transportation Program (STP), National Highways System (NHS), and Congestion Mitigation and Air Quality (CMAQ) funds.

For more facts on this new flexibility available since 1998 visit <http://www.fhwa.dot.gov/tea21/factsheets/trafsop.htm> or contact Dave Morena (517-702-1836) or Morrie Hoevel (517-702-1834) in the FHWA Michigan Office.

What is the State of Traffic Signal Operations in your City or Region?

As members of ITE, we all know recommended practices and guidelines for operating and maintaining signals. While we intended to follow the recommended practices, it is difficult to operate and maintain systems when budgets are reduced or money is needed for other priorities. We may have trouble explaining our needs and the benefits of better signal operations as money and resources get pulled away to fund other activities.

The National Transportation Operations Coalition – NTOC, an association of ITE, FHWA, AASHTO, ITSA, APWA and the University of Maryland, has resolved to identify, promote and implement activities that will improve traffic operations in the United States. The NTOC sees the operations of traffic signal systems as a key piece of the national effort. The consensus of the group is that traffic signal systems operation and management are regressing at the very same time we are looking to expand our transportation system and implement more advanced technologies into traffic management initiatives.

The NTOC has embarked on an initial task to help DOTs and Public Works Agencies evaluate their

current operations and deficiencies, and build up strategies for improving and upgrading their operation. They did this because they believe that traffic signal systems can provide significant congestion reduction and safety benefits if they are operated to their capabilities and kept in peak condition, but have historically been under-funded. The coalition has created a very useful Traffic Signal Self-Assessment for traffic operations for agencies. The Traffic Signal Self-Assessment is available for download and use at www.ite.org/selfassessment. MDOT is interested in compiling a summary for the state of Michigan as well. You can fax or e-mail your survey results to Jim Schultz at MDOT to be included in the statewide assessment. Jim's contact information is: phone 248-483-5131; fax 248-569-3103; and e-mail schultzj3@michigan.gov.

Do you believe that your agency is measuring up very well, or do you think you have significant room for improvement? Either way, it may be time for you to visit the ITE website, download the survey and arranged for a self-assessment of **your operations**. **I think you will find this effort very beneficial** and most important it will help you create a plan to improve and upgrade your signal operations program.

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RAILROAD ENGINEERING RETURNS TO MICHIGAN TECH

Replacing the aging workforce is quickly becoming one of the most significant challenges for the American rail industry and some estimate that almost half of the current railroad engineers are within five to ten years of retirement. The task of finding graduate engineers for an expanding industry is not an easy one. At one time, railroad engineering was a common course in civil engineering programs and many graduates moved into the rail industry, but these courses have virtually disappeared and today few universities have a separate course and many do not even mention rail in their introduction to transportation engineering course. It has been years since railroads have been on campuses actively recruiting and most students do not think about a potential career in the rail industry. With this in mind, the American Railway Engineering and Maintenance-of-Way Association (AREMA), Committee 24 – Education and Training, has taken the lead to reinvigorate an interest in railroad engineering. They are organizing seminars, preparing course materials and a new book, "Practical Guide to Railway Engineering", and are spreading the word about railroad engineering. The committee has set several goals for the rail industry and one of the goals is the "10 by 10" initiative to re-establish railway engineering programs at 10 major U.S. universities by 2010 (1).

Michigan Technological University responded to the challenge and through the efforts of Pasi Lautala and Professor Bill Sproule an introductory course in railroad engineering with a study aboard component was developed. It is an intensive five-week program in which students spend one week on the Michigan Tech campus, one-half week in Chicago, and three and a half weeks in Tampere, Finland studying railroad engineering and Finnish language and culture. The program has been offered past two summers and the planning has started for summer 2006. Finland was chosen as the study abroad partner because of the Finnish heritage in the Houghton-Hancock area and an existing partnership with Tampere University of Technology. Pasi Lautala, a Ph.D. student in civil and environmental engineering at Tech, is the coordinator of the program and primary instructor in the railroad engineering course. He has several years of railroad and rail consulting experience and was born and raised in Tampere, Finland.

The program was developed as a study abroad experience to provide the opportunities to incorporate field visits to rail facilities in the United States and Europe and it was also easier to overcome some of the administrative issues if it was offered as a summer program. Michigan Tech used the experience gained from working with Michigan State University in an instructor-escorted program in transportation engineering in Volgograd, Russia, that began

several years ago. Students would take a technical course in the transportation engineering area and a course in Russian language and culture. The Michigan State program has been offered for several years and it has continued to grow annually with additional course offerings.

The students in the Michigan Tech program take two courses – Introduction to Railroad Engineering (3 credits) and Finnish Language and Culture (3 credits). The railroad engineering course is a technical elective and the Finnish course can be used as a general education elective. The railroad engineering course covers a wide range of topics including history, rail organizations, freight and passenger rail transportation, urban rail transit, operations and train characteristics, safety, track layout and design, signals and communications, and construction and maintenance. In the Finnish course students develop some conversational proficiency in Finnish and learn about the history and culture of Finland and its people. Field tours and visits are a very important part of the program to see rail operations and construction and experience Finnish



culture and events. The program runs from early-May to mid-June and the students have been juniors, seniors, and graduate students primarily in civil engineering.

The cost of the program for students is \$2200 for tuition (6 credits), fees, course materials, lodging in Chicago and Finland, some meals, all field trips and tours, and study abroad fees. The air fare (about \$850) and other expenses, such as additional meals, entertainment, and personal expenses are not included. The experience is "priceless".

Based on the student evaluations and feedback, the program has been a tremendous success. In the first year 16 students enrolled and this year 13 students enrolled. One student from the University of Kentucky also attended this year. There is a renewed interest in railroads and they are recruiting on campus again. Five of the six largest railroads in the United States (CSX, BNSF, Union Pacific, Canadian National, and Canadian Pacific) interviewed on campus and of the 16 students that participated in the 2004 program, 14 graduated in 2004-05, and 7 accepted permanent employment with a railroad. A summer internship program was developed for this year's students and of the 13 students that participated in the 2005 program, 6 accepted positions with a railroad when they returned from Finland. One student actually accepted a position with the VR Track, Limited (the Finnish national railroad). A scholarship fund has been established for

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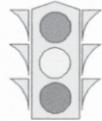
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