Michiganite

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

Letter from the President

What is the first thing that comes to mind when you think of Fall? Well, for us parents in the audience its back to school time! (Okay, football was an acceptable answer for the non-parents in the group). As we prepare our kids with their back to school supplies I believe it is only right for us, as transportation professionals, to also prepare and educate those who we represent. I have not seen lately an owner's manual on how we should educate the public or our clients when dealing with transportation issues. But, just like parenting, I have seen several examples that accomplish the task.



Mark Bott - Michigan Section President

Even in today's fast paced world the old fashioned pamphlet or booklet is an excellent format to educate the public on various issues dear to their heart. One

example is the *What You Need to Know About* series from the Ingham County Road Commission. They produce pamphlets for their customers on speed limits, mailboxes, and brush cutting. Another excellent resource he *What Every Driver Must Know* booklet from Secretary of State. This booklet has a whole chapter on his, Pavement Markings, and Signals explaining in layman terms what these devices are communicating to the motoring public. You can obtain this from any Secretary of State Branch Office or from their Internet site www.sos.state.mi.us. Another organization in the information business is the Office of Highway Safety Planning. They produce documents dealing with speed control, including our own *Speed Control in Residential Areas*, to motorcycle and pedestrian safety. Their publications are distributed by the Michigan Resource Center at (800) 626-4636 or www.WeAreMRC.org.

If you have noticed a trend here it is the Internet. Many organizations, including my own (MDOT) are using it as a vehicle to provide information. Several, in fact have duplicated the documents that produce and placed them on their web page for your use. ITE has numerous pamphlets that may be of interest to you. The Institute of Transportation Engineers' Traffic Engineering Council has produced a series of information and fact sheets that address common questions relating to transportation. The Traffic Information Programs Series (TIPS) answer frequently asked questions about many aspects of transportation planning, traffic operations, and traffic control.

The TIPS are written in lay language so they serve as an information source not only for transportation professionals, but for the general public as well. The TIPS are formatted so that they can be copied on to a single piece of paper and placed in a notebook or folder. The TIPS format also allows for their mailing as a tri-fold self-mailer. To find this information just look for the Traffic Engineering Council page under activities at www.ite.org. ITE also has a page dedicated to traffic calming.

Another site worth visiting is www.fhwa.dot.gov. Just go to the FHWA b Site page to find your area of interest. From here there is a wealth of

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

Tuesday, November 17.

Please send any phone, fax, or address changes to:

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Tr	easurer's Report	July 13, 2000	
Section Fund Balance			\$21,601.96
Section Regular Fund Balar		\$11,724.91	
Education Fund Balance		\$8,792.61	
Incident Management Fund	Balance	\$1,084.44	
Education Fund at National Balance			\$73,304.26
ACTIVITIES March 22, 2000 THRU July 12	<u>2, 2000</u>		
Income - Section			\$4,318.80
Dues		\$2,770.50	
Interest		\$2,770.30 \$21.80	
Technical Sessions		\$619.00	
Michiganite Ads		\$907.50	
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Expense - Section	***************************************		\$12,163.1
Postage		\$97.02	
Supplies for Mailings		\$181.00	
Technical Sessions		\$616.54	
Michiganite		\$11,268.60	
Income - Section Education Fund			\$25,172.50
Contributions		\$1,196.50	
Golf Outing		\$23,976.00	
			
Expense - Section Education Fund		Ι'	\$15,992.48
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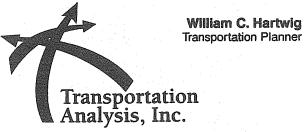
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Michiganite Fall 2000

Continued from page 1

information dealing with research, the Manual of Uniform Traffic Control Devices, Roadside Hardware - NCH Report 350, highway safety, rumble strips, red light running, plus many more than I can list. If you really want your mouse to do the walking click on Transportation and Highway Related Web Sites. If you do that please plan on having a hour or two to explore.

Are you still confused where to go to get information? Perhaps a list of web sites or a resource directory would be helpful to you? Let me know what you think on this topic. Almost sounds like a technical project to me for the section in 2001!

While I am on the topic of providing information I would like to take this opportunity to update you on what is happening in the section. First I want to welcome Art Slabosky and Linda Powell as Technical Program cochairs. They will put their talents to work at the October 26, 2000 technical session in Battle Creek. Art and Linda will be taking turns in preparing our agendas. I am certain they would welcome any suggestions you may have in continuing to make our technical sessions a success. Their phone numbers can be found on page 2 of this issue. As the touch is passed on here I would also like to thank Matt Simon for his hard work during the past two years in preparing those agendas for our technical sessions. Trying to balance home and work life while getting those speakers to commit is very difficult. It takes a tremendous amount of time to put together an agenda that is entertaining and meaningful to a wide range audience that belongs to our section.

Another new member to the team is Scott Shogan. He will be assisting Shirley Wollner and Aimée Giacherio in putting together the MichiganITE. His main duties will be soliciting articles for this publication. He is doing an excellent job as he has kept me in line in meeting the deadline for this issue. For those who don't know this is Shirley's last year as editor. Aimée will take over as editor with Scott as co-editor. Shirley, you have done an outstanding job in making the MichiganITE a success and have set a lofty goal for both Aimée and Scott to

achieve. It will depend on the desire of those two if that

last sentence will be published.

Other news from the section: The Education-Scholarship Committee has recommended to the board to continue with four student scholarships valued at \$2,000 a piece and \$200 and \$100 awards respectively for first and second place winners in the student paper competition.

The 2001 District III meeting will be April 26 and 27, 2000 in Indianapolis. Details involving meeting location and cost will be finalized at the October 3, 2000 district board meeting. As usual the meeting will commence on Thursday, April 26, with registration at noon Indianapolis time. The meeting will conclude on Friday sometime around noon, with a District Board meeting to follow. Look for more details in future issues of the MichiganITE and your mailbox.

I look forward to seeing you in Battle Creek in October!

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Converting Old Traffic Circles to Modern Roundabouts Michigan State University Case Study

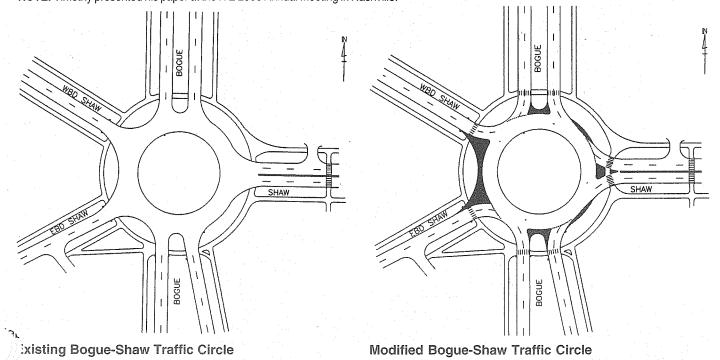
1st Place in Michigan Section 2000 Student Paper Competition *Author: Timothy Gates – Michigan State University*

Modern roundabouts have become an increasingly popular form of intersection control in the United States over the past decade. With hundreds of traffic circles existing in the United States that do not meet the definition of a modern roundabout, a low-cost improvement approach should be developed to modify such traffic circles to appropriate roundabout standards.

The campus of Michigan State University contains three such traffic circles, all of which perform at an acceptable level of service. At one of these traffic circles, safety has become an issue due to increasing vehicular, bicycle and pedestrian volumes on campus. Minor changes are proposed as a cost-effective means of providing greater vehicular, bicycle and pedestrian safety while enhancing capacity. Traffic and pedestrian counts and vehicle speed studies were conducted and used in conjunction with six years of crash records to determine necessary improvements. Since no established roundabout guide currently exists in the United States, British roundabout standards were used to evaluate and design the improvements to this traffic circle.

The primary purpose of this study is to provide methods by which to transform a traffic circle into a facility that more closely meets the definition of a modern roundabout. The ultimate intent of this study, upon mplementation of the proposed countermeasures and review of "after" crash data, is to provide a model for other campuses or municipalities in North America facing similar issues with traffic circles.

NOTE: Timothy presented his paper at the ITE 2000 Annual Meeting in Nashville.



A Review of Electronic Toll Collection

2nd Place (Tied) in Michigan Section 2000 Student Paper Competition Author: Nicholas Mascia, EIT- Michigan State University

Throughout the nation and around the world, each area of expertise is utilizing the technology of the computer revolution. Within civil engineering, Intelligent Transportation Systems (ITS) are being used to reduce congestion, increase flow (throughput) and optimize flow on existing roadways. Electronic Toll Collecting (ETC) is one of the ITS applications used to help reduce congestion and increase traffic flow without expensive construction.

Electronic toll collection is the use of various technologies to allow the manual in-lane toll collection process to be automated in such a way that customers do not have to stop and pay cash at a toll booth. In general, each ETC system involves three elements – an Automatic Vehicle Identification (AVI) component, an Automatic Vehicle Classification (AVC) component and a Video Enforcement System (VES) component. These three elements work together to identify and classify each system user, and to deter unregistered vehicles from using the ETC system.

This paper investigates advantages and disadvantages of the emerging ETC system technology. ETC has been shown to significantly increase tollway throughput by decreasing toll-related delays, thereby reducing vehicle emissions. In addition, the increase in flow can be achieved without additional construction of toll-paying lanes and facilities. However, issues related to variances in system architecture, loss of privacy and personal freedom, social equity and commercial vehicle operations continue to present barriers to more widespread deployment of ETC systems.

Disadvantages aside, numerous successful ETC systems are in place throughout North America and the world today. Case studies are presented to illustrate the current success and trends of existing systems. The conclusions of this study examine the need to address misconceptions and barriers to the use of ETC systems, as they present tremendous potential for enhancing existing and future toll facilities.



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Some Traffic Safety Problems in Downtown Volgograd

2nd Place (Tied) in Michigan Section 2000 Student Paper Competition

Author: Vladimir Oulevski – Volgograd State Academy of Architecture and Building

Russia has experienced high rates of urbanization in the past ten years. Associated with this growth has been a dramatic increase in traffic volumes, resulting from an increase of nearly 1.3 million vehicles to the country annually. In the next five to six years, Russia is projected to reach the level of 50 vehicles per every 100 families.

This tremendous growth in traffic volume has meet with disproportional growth in roadway capacity. This condition has resulted in deteriorating traffic flow and levels of delay, as well as an increase in fuel consumption, social discomfort and other environmental impacts. In addition, the physical aging and lack of maintenance of some facilities and traffic control devices has led to poor levels of service and an increase in traffic accidents. Currently, Russia's urban areas experience accident rates of eight to ten times those of other cities in industrialized countries. Traffic conditions in Downtown Volgograd have followed this nation-wide pattern over the past several years. From 1995 to 1997, overall traffic accidents increased by nearly 80 percent, and 68 percent of all accidents involved pedestrians.

This study details the determination of strategies and measures to mitigate accident potential at several pull accident locations in Downtown Volgograd. Numerous improvements are identified, including improved signalization, pedestrian over-and under-passes, transit pull-outs and parking restriction. The overall purpose of the study, however, is not only to identify improvements at specific locations. The study also describes a broader approach for establishing a data collection plan to identify high-accident locations and accident patterns, and ultimately selecting mitigation measures to improve public safety.



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Or send email to: khurd@wadetrim.com www.wadetrim.com.

EOE/AAP

Correction...

In the Summer 2000 issue, the advertisement for POLARA Engineering incorrectly stated that the Navigator met "--all ADA and FHWA specifications". The ad should have stated, "Meets all ADA and proposed FHWA specifications".





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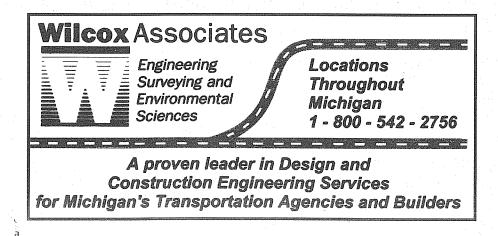
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Membership News

New members:

Ksenia U. Avilova, student
Angelika A. Vasilchinko, student
Sergey A. Vesnin, student
Irina M. Devyatova, student
Irina S. Cherkasina, student
Sergey V. Kubekov, student
Egor V. Kuznetsov, student
Sergey Y. Kulikov, student
Andrey V. Lavrinovich, student
Natalia A. Lavinenko, student
Maxim A. Lesnichy, student
Pavel V. Mironov, student
Eugine A. Popov, student
Vladmir V. Oulevski, student
Maxim S. Klenov, student

Kate A. Stukalenko, student
Svetlana U. Bukina, student
Alexander V. Pronin, student
Yana I. Chudnaya, student
Anastasiya P. Gladisheva, student
Pavel S. Morozov, student
Ludmila A. Tirbach, student
Elena V. Martiyanzeva, student
Alex U. Kravchonko, student
Olessya A. Pirukova, student
Anna A. Vasiljeva, student
Svetlana V. Zhadenova, student
David VanHine, Technical Affiliate
David Stroud, Regular
Sergei N. Artemov, Regular



ITE Annual 2000 Meeting

ITE's 2000 Annual Meeting was held at Opryland in Nashville, Tennessee on August 6-9. Opryland provided a beautiful setting for the meeting although many of us had our navigation skills put to the test. Michigan had a good-sized delegation attending. Many interesting seminars were held. Not everything was all business. The Rollin' Down The Music Highway Party was a good time although some costumes left people wondering who they were supposed to represent. Carrier and Gable provided another fine evening of entertainment for the Michigan crew. Everyone enjoyed a wonderful dinner and swing music show aboard the General Jackson Steamboat courtesy of Carrier & Gable.

Plan on attending next year's Annual Meeting. It will be held close to us in Chicago, Illinois so it would be nice to have a large representation from the Michigan Section. Next years meeting is scheduled for August 19-22, 2001. Check for more information at www.ite.org under the Meetings and Conferences link.



Jim Schultz (Left), Manager of the MITS Center and Tapan Datta (Right), of Wayne State University at the General Jackson Steamboat. Hey guys-Who's your lady friend?

A Note of Thanks...

MICHIGAN STATE

March 9, 2000

Mark W. Bott, President Michigan Section of ITE Traffic and Safety Division Michigan Dept. of Transportation PO Box 30050 Lansing, MI 48909

Jonathan R. Start Traffic Engineer Public Services Department 415 Stockbridge Kalamazoo, MI 49001

Dear Mark and Jon,

Sorry that I took so long in writing this letter of appreciation, but I wanted to be sure to take the opportunity to thank the Executive Board for receipt of the annual Arthur Gibson Award. As I stated at the annual meeting, I surely have had a lot of good things happen to me in the course of my career in transportation engineering, and this award ranks right at the top of the list. Equally as important, I really appreciated the very kind words that both of you said in making the presentation. I will always treasure this award as a constant reminder of the fine professionals and friends I have had the good fortune to meet during my long career in transportation. You and the members of the Executive Board are a warm reassurance that the field of transportation engineering is in very good hands in Michigan. Will you please share this letter with the Executive Board at the next board meeting and, if you would like, include it in our next Michiganite. It would be much appreciated.

Thank you my friends,



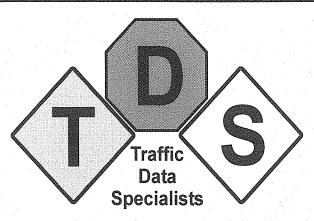


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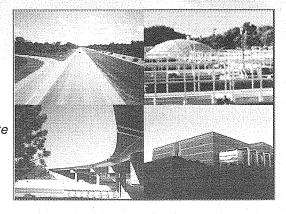
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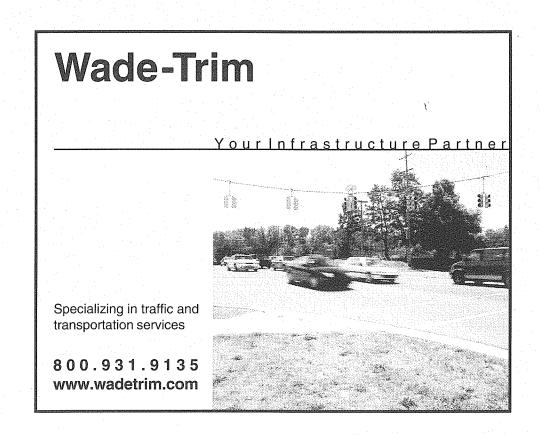
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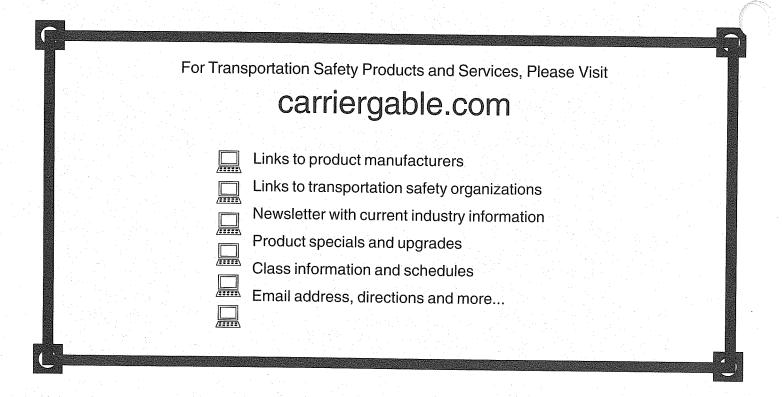


Host Families Needed for Russian Students

Host families are needed for Russian students who will be attending Michigan State University as part of their exchange program with Volograd University. These students are coming to MSU to further their education in transportation engineering. Host Families are needed to provide housing while they are attending MSU. This helps save on cost for the students and provides a better way for them to get familiar with our culture.

If you live in the greater Lansing area and are able to open your home to a student from August 15th to December 15th, please contact Dr. Tom Maleck at Michigan State University (Phone: 517-353-6448, email: maleck@egr.msu.edu). He can answer any questions that you may have. This is a good opportunity to help a young person further their education in transportation as well as giving you an opportunity to learn more about Russian culture.





MichiganITE News

At the July Technical Session some changes were announced regarding the MichiganITE. Aimée Giacherio of Wade-Trim has been assisting on the MichiganITE as co-editor this year. Aimée will take over as editor in 2001. Scott Shogan of URS Greiner has also begun assisting in the production of the MichiganITE by serving as a production assistant. Scott has agreed to take over a lot of the leg work involved in the production of the MichiganITE by tracking down articles and reminding people when their submittals are due.

As editor, I must say that Aimée's and Scott's contributions have been quite helpful this year. I would ask that you provide any assistance you can to them as they begin to take over the production of the MichiganITE. And as always, we are always looking for technical articles to include in our newsletter so if you have some information or insight that you are willing to share please contact Scott at 248-488-1177 or email him at: Scott_Shogan@urscorp.com.

Shirley Wollner, Editor

2000 MICHIGAN SECTION MEETING SCHEDULE

Date	Location	Туре	Host
September 21, 2000	Lowell	GolfOuting	Ron Dressander (616) 249-3470
October 26, 2000	Battle Creek	Technical Session	Max Phares (616) 966-3343
December 14, 2000	Farmington Hills	Annual Meeting/ Technical Session	Kevin McCarthy (248) 473-9590
April 26 & 27, 2001	Indianapolis	District III Meeting	
August 19-22, 2001	Chicago	ITE Annual Meeting	

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