



michiganite

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From the 1996 ITE President; Bill Hartwig

The newest buzzword in the transportation field for the next year will be "reauthorization." Yup, it is time for the ice tea (Intermodal Surface Transportation Efficiency) act glass to run dry and it needs to be refilled or maybe switched to some other heady concoction. It does not seem possible that ISTEA became law in 1991 and, before we are even familiar with all its nuances, it will cease to exist after 1997. You can be certain the interests which greatly influenced the funding and structural changes of transportation in the 1991 ISTEA are already busy at work trying to consolidate and continue the change in direction started in the 1991 law.

There was much discussion and dissatisfaction that the current transportation law was mostly written by non-transportation special interests. If you as a transportation professional, are happy with the current law and new direction it defined, then you probably need to do nothing because the special non-transportation interests have already begun work to advance their cause. If on the other hand, you are not happy and would like to see some changes, you need to start now.

Some of the issues that you may want to become informed on are:

1. Should Michigan continue to be a "doner" state supporting and subsidizing transportation in other states to the economic disadvantaged of Michigan?
2. What should the role of the Federal, State and Local transportation and non-transportation agencies and government be in deciding funding allocation and making project decisions?
3. Is sub-allocation through the Federal government done effectively or should the allocation be based on the area of need?
4. Is it time to put the "trust" back in the Trust Fund by taking transportation funding off-budget and return the dollars collected for transportation to transportation?
5. Should the Federal government continue to mandate expenditure of funds on specific programs or should that be up to the discretion of state or local officials?

These are only a sampling of issues that will be debated. Will your views be expressed in the debate or will others control the agenda? You can have an impact individually and in concert with others but you cannot sit on the sidelines and let others take the field. Become informed on the issues and let others in the transportation industry, especially your legislator, know your views.

A good source for information is the ITE. Contact the Washington office for information either by phone (202) 554-8050, by fax (202) 863-5486 or the internet (<http://www.io.com/~itehq/>).

Now (as in this summer), before the Fall elections, is the best time to approach those running for office to make your views known and try to get a positive commitment from each candidate. The Washington Capitol switchboard number is (202) 225-3121. Investing just a few hours this summer will pay big dividends in determining how that ISTEA glass will be filled in 1997.

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MICHIGAN SECTION ITE 1996 MEETING SCHEDULE

DATE	LOCATION	TYPE	HOST
July 11	East Lansing	Tech Session	Tom Mallek 517-353-6448
Sept. 5	Belding	Golf Outing	Ron Dressander 616-530-7263
Nov. 14	Grand Rapids	Tech Session	Tim Haagsma 616-242-6923
Dec. 12 <i>tentative date</i>	Farmington Hills	Annual Meeting	Kevin McCarthy 810-473-9590

Letter from the Editor:

This will probably be Bill Savage's last article as District III director. I would like to thank Bill for his many fine contributions to the MICHIGAN-ITE.

Shirley Wollner of Ed Swanson & Associates is now co-editor of the MICHIGANITE and has provided the writeup of the March meeting for this issue. Welcome Aboard Shirley!

The advertisers in this issue are reflected by our treasurer as being paid up. If your ad is missing, please contact Tim Haagsma at the Kent County Road Commission.

We plan to publish a membership directory in the September issue. Please make sure that we your latest and correct information. Send all corrections to Joe Marson by August 15, 1996. This also the deadline for materials to appear in that issue.

As always, I am interested in hearing from you. We will have four issues of The MICHIGANITE this year. The deadline for the Fall issue will be November 15, 1996.

Lee Liston

ITE DISTRICT III TAKE NOTE!

MARK YOUR CALENDARS FOR THE DISTRICT III ANNUAL MEETING

*To be held in Cleveland, Ohio
October 17 & 18, 1996*

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DOWNTOWN CLEVELAND

This year's gathering of transportation professionals from Ohio, West Virginia, Indiana and Michigan will provide a two (2) day technical program on current transportation issues. Registration brochures with complete details will be distributed to all District III members in a few weeks.

Plan to extend your stay in Cleveland through the weekend to include some site seeing. Cleveland is celebrating its Bicentennial in 1996 and is having special events all year. Attractions include the Rock and Roll Hall of Fame and Museum, Rain Forest at the Cleveland Zoo, Downtown shopping at The Avenue, Galleria and the Arcade, Great Lakes Science Museum, Sailors and Soldiers Monument, Omnimax Theater, William G. Mather Museum, special lighting of Cuyahoga River Bridges, the Flats entertainment, and more. Further information on these sites will be available at the conference.

The Sheraton will offer conference room rates to annual meeting participants from October 14, 1996 through October 20, 1996.

HOPE YOU CAN JOIN US IN OCTOBER!



Education Fund Update

So far this year, \$987.00 has been contributed to the Michigan Section Education Fund by Michigan Section Members. Thank you to the following members for your contributions:

**INSTITUTE OF TRANSPORTATION ENGINEERS
MICHIGAN SECTION
BENEFIT GOLF TOURNAMENT
MAY 16, 1996**



The Michigan Section of the Institute of Transportation Engineers would like to acknowledge the following for their generosity in monetary contributions to the benefit golf tournament:

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Call for Papers

The Third International Symposium on Intersections Without Traffic Signals will be held in Portland, OR from July 21 - July 23, 1997. You are invited to submit an abstract for presentation at the symposium.

*Call Mike Kyte for more information
at (208) 885-0576.*

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**Meeting the Traffic and Transportation
Needs for Business and Government**

June 6, 1996

The Fourth Michigan Section ITE Education Fund Benefit Golf Outing was held May 16, 1996 at Marion Oaks Golf Club. About 160 golfers participated in this event. The event raised over \$8,500 to benefit the Michigan Section Scholarship Fund. The Scholarship Fund gives scholarships to students at universities with student chapters of ITE. In addition, the fund gives awards in the student paper competition and assists students in attending TRB and subsidizes students' attendance at Michigan Section technical meetings.

The winners of the event were Dave Sonnenberg, Keith Zollweg, Mike Cochran and Dave Feher. They shot an 8 under 62. The last place winners were Lyle Nustad, Harold Jentzen, Sam Lawson and John Grey.

The Golf Committee would like to thank the student helpers Eric Penfield, Sarah Noff, Tammy Hein, and Tony Sapolus for their help in this event. Without their help, the event could not have taken place. Next year the golf outing is planned for May 15, 1997.



Mark your calendars now!

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News from the District 3 Director

Bill Savage

ITE's 66th Annual Meeting is coming soon: September 15-18, 1996 in Minneapolis, MN. The program looks very good and you can get a nearby hotel for a little as \$48 a night. Combine all this with its location right next door to us, I hope that District 3 will have an excellent turnout this year.

We are now in the midst of an exciting election for a vice president of ITE. Once again, two fine candidates have been selected, so the ITE membership cannot lose. Dave Richardson is from Canada and Brian Bochner is from Chicago. Both have promised that they will attend at least one Section meeting in our District. Dave will be attending the July meeting in Michigan and Brian is looking for a meeting in Indiana or Ohio. I hope that you have a chance to meet these fine gentlemen.

As you might guess, funding for transportation is being reviewed in Congress (now doesn't that scare you). Congress is considering reducing the Federal role in transportation, which would be devastating. Therefore, ITE staff has appeared on Capital Hill to stress the need for renewing ISTEA. There will be changes in ISTEA 2, but we are working hard to ensure that there will be adequate transportation funding.

The following programs are proposed to receive reductions:

The National Highway System	\$314 million
The Bridge Program	\$242 million
Interstate Maintenance	\$255 million
Congestion Mitigation (CMAQ)	\$ 90 million
Emergency Relief	\$191 million
Demonstration Projects	\$493 million

*Contacting your congressmen NOW
with your thoughts will be beneficial!*

And mark your calendars for **Oct. 17 & 18, 1996** for the **District 3 Annual Meeting in Cleveland, OH**. President Dennis Christiansen will join us and will speak on funding in general and ISTEA in particular. A great program is in store, including the presentation of the winning papers from the 2nd Annual District 3 Student Paper Competition.

February Technical Session Notes

by Mark Bott, MDOT

The February Technical Meeting, which was well attended, was held at the Clarion Hotel in Ann Arbor, Michigan on February 8, 1996. Our host, Nancy Greenleaf Gibson and Technical Programs Chair, Art Slabosky presented a full technical session covering a wide variety of topics from construction zones to occupant restraints. Overall, the meeting was a success. Hats off to Nancy and Art!

Joe Meszaros from MDOT's Traffic and Safety Division gave us an "Update on Construction Zone Activities" for the State of Michigan. As a member of MDOT's construction zone advisory committee Joe indicated the committee is trying to provide more safety for construction workers while continuing to maintain through traffic. The choices are not easy because construction workers want traffic to go through the zone at near zero speeds while the public wants to maintain their existing speed before entering the zone. What can we do? There are two things Joe is sure of:

- Be honest when signing construction zones. Mark the zone when it is active and leave it unmarked when inactive.
- Require flagger training. Two flaggers were killed recently on Michigan roadways, both because of mistakes they made.

Joe ended his presentation by asking for our help. Whenever we see a construction zone that is improperly marked please call the roadway agency that has jurisdiction and make a complaint.

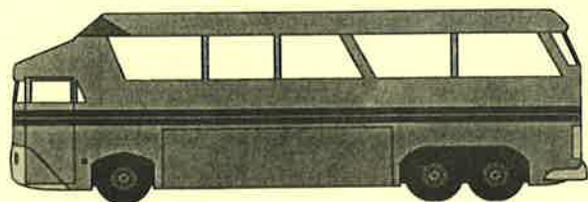
Our second presentation, which was given by Les Sipowski, City of Ann Arbor Transportation Engineer, was on the Fuller/Oakway Relocation Project in the City of Ann Arbor. Recently, the City of Ann Arbor rebuilt the roads around the VA Hospital in the Fuller Road Corridor. Les concentrated his presentation on the decision process surrounding whether to allow left-turns into a particular local access street. A group of concerned citizens wanted left-turns restricted at one point in order to reduce through traffic. Using the Berkeley method of crash estimation, Les determined that this restriction would not be in everyone's best interest. This is because drivers would be required to travel an extra distance only to experience just as many left-turn related crashes at another location where left-turns are permitted. Les concluded that on such projects it is best to adhere to engineering principles and references.



Adiele Nwankwo from SEMCOG gave us our next presentation, "The Change in Personal Travel Patterns From the 50's to the 90's." In 1994, a household travel survey was conducted in Southeast Michigan covering seven counties. This study involved over 18,000 people in over 7000 households. As part of the survey people were asked to keep a one-day diary tracking where, how, what, and the cost of going to anywhere that day. The results indicated there were 4.4 trips per person and 9.4 trips per household. The number of trips were similar between the sexes with 4.5 for women versus 4.2 for men.

What was found from the study is that in the 90's the flow of traffic is from county to county. This is because the counties are more connected than ever before. Although the number of trips per person, by employment, has not change much, the purpose has. Trip length has increased from 16.2 minutes in the 50's to 27.7 minutes in the 90's. But, most important is the change in the age of population. In the 50's we did not have significant concentrations of people over 65 in Southeast Michigan. Now we do! The fastest growing age groups are 55 and older. Since the 50's there has been a 81% increase for the 55-64 age group, a 68% increase for the 65-74 age group, and a 59% increase of people 75 and older. With this change comes older drivers. From 1983 to 1992 there has been a 60% increase in drivers over the age of 70. Because of this change, Adiele concluded we must keep in mind the aging of American society in the many areas of traffic and safety.

Moving away from roadways to facilities, Ken Henry of the Indian Trail Corporation, made a presentation on "Designing Facilities for Motorcoach Use." Ken contended that, although the state is heavily involved in the design of facilities for buses, that we all must remember who the users are going to be, particularly the charter bus industry, when we are designing urban facilities. With 119 bus companies in the State of Michigan, buses are going to places never intended for their use. Motorcoaches today are designed for highway use. However, this design of a long and tall vehicle can be cumbersome when used in an urban environment. Ken cited that one-half of the crashes his buses were in involved fixed-objects. This is now becoming a greater concern with the industry going to 45 foot buses.



Ken concluded his presentation with the following factors that should be considered when designing a facility that will be used by motorcoaches:

Provide parking lanes to allow loading and unloading of passengers.

When providing a canopy for weather protection, ensure that a bus will fit under it.

Provide a driveway that a long vehicle can use without getting stranded on.

Provide offsite parking for buses.

Review the possibility of relocating fixed-objects that may be struck by a vehicle with a large turning radius.

“Traffic Signals That Talk to You!” was our next presentation. It was given by John Robbins of Michigan ITE and Peter Hochstein from the Relume Corporation. To supply a signal that transmits a message LED technology is being used by the Relume Corporation. By pulsating the LED, a carrier to transmits information is now provided. John and Peter demonstrated a pedestrian signal which transmitted local tourist/business information to a hand held receiver. Available at a low cost of \$20 the receiver works within a 8 degree cone of the signal at distances up to 75 feet. Not only is this device handy to promote local events to pedestrians but would provide information to the visually impaired.

Other advantages of using LED signals were noted. Power consumption is reduced by 90% when compared to conventional lighting. The cycle for relamping is increased from 1 1/2 to 5-7 years when using LEDs. Although more costly, LEDs have a payback of approximately three years due to the reduction of call outs on signals. In addition, a battery backup is provided. There is one disadvantage, however, with LEDs. It is the relationship of the life of the LED to the temperature of operation. But, by pulsating the LED along with venting the signal housing, operation temperatures can be reduced enough to extend the service life of the LED. Pulsating also increases the brightness of a signal. For example, red is increased by 30% while blue is increased by 20%.

Although originally advertised as "The Use and Abuse of Traffic Signals," Don Mercer, MDOT Traffic and Safety Division, gave us an enlightening presentation on the "Use and Abuse of Traffic Statistics." Don informed us of the many pitfalls when comparing crash data and what we should be aware of when we are making comparisons. He found that there is a nine year cycle for the ups and downs of total

crashes. When conducting before and after studies we must take this into consideration. Also we must reserve our judgement when a crash statistic of interest fluctuates from what we think is the norm. A good example is the fatal crash rate for 1994. At 1.68 fatalities/100 MVM we were all up in arms that something dramatic was happening on our roadways. However, when reviewing the established trend for the past few years we found that the rate for 1992 was actually low and the rate for 1994 was not out of line. Therefore, we must be careful when citing crash statistics.

The use of crash rates is another cause of concern when making comparisons. When using rates please remember what values went into the calculations. The mixture of intersection crashes with midblock crashes when cross street volumes are unavailable can throw off the rate greatly.

A crash statistic of interest Don cited was that the average distance a crash is coded from an intersection is 580 feet. When reviewing a distribution of distances from an intersection we noted crash spikes at 1/4 and 1/2 mile. Are these the common points where crashes occur? Probably not. However, these are common distances used by police officers when completing a UD-10.

Our last presentation of the day was the "Latest Research Findings on Occupant Restraints" by Ken Campbell of UMTRI. He concentrated on the hot topic of the day in this area; airbags. Right off Ken stated that children, either in a car seat or buckled up, should be in the rear seat of the vehicle. The reason for this is that airbags are designed for the average size adult, not a child. Also, we should be concerned about our elderly passengers. The impact of a deployed airbag can be great which an average adult can withstand. But, an elderly person may not.

When making comparisons, the number of total injuries in airbag only crashes is higher than in crashes when only a seatbelt was used. However, the difference was the severity of the injury. For an airbag to be efficient, a three-point belt must also be used. This does seem reasonable but it was interesting to note that in the United States the standard for airbag design is an unrestrained passenger. In Europe, where the deployment of the airbag is less aggressive, the standard is a restrained passenger. *Just some food for thought!*





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