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Official Publication Michigan Section

P.O. Box 30050
Lansing, Michigan 48909

Richard F. Babich
Transportation Director
Hubbell, Roth & Clark, Inc.
P.O. Box 824, 555 Hutzel
Bloomfield Hills, MI 48302-0824

Michiganite

Winter, 1992

VOLUME XXVI, NUMBER 4

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

PUBLIC SECTOR CREDIBILITY ISSUES

- Unqualified personnel performing engineering studies, preparing design plans, etc.
- Failure to treat the public, elected officials, businesses, developers, etc. in a way consistent with a "service" organization.
- Failure to take appropriate efficiency measures to ensure that the service continues to be provided.

If I am correct about any of the above, it’s no wonder that we do not have a tidal wave of support for our cause. With the considerable amount of money available to our profession through the Federal Surface Transportation Efficiency Act of 1991, transportation activities of all types will be increasing. We should take steps to ensure the qualifications of our professionals through appropriate licensing, certification, experience, etc. Additionally, we should more carefully scrutinize new members (and perhaps existing members). Finally, remember that all of us are expendable and that we perform a service to the public which is requiring more accountability of us.

New Officers and Outgoing President: (from L to R) - Bill Harwig, Director; Sam Lawson, VP; Ken.Tsuchiyama, Outgoing President; Mike Labadie, President; Dave Alyn, Secretary; Joe Mazzarro, Treasurer.
1992 COMMITTEE CHAIRPERSONS

Technical Program:
Ken Jasmin 517/733-9570
Nominating:
Kenneth Tischyama 616/666-3343
Hospitality:
Jerry Carrier 313/477-8700
Herb Henry 313/721-4040
Technical Projects:
TBA

Membership:
Adilee Nwanko 313/961-4256
Legislative:
Matt Delong 517/733-2110
Public Relations:
Mort Ferrier 517/335-2977
Program:
Samuel Lawson 313/833-7294
Awards:
David Bacon 313/477-8700
Student Chapters:
Bill Savage 517/482-0854
Michigan State Editor:
Michael Kobran 313/695-8542
Assistant Editors:
Robert Lariviere 517/733-4923
B.D. Agrawal 517/335-2977
Second Past President:
Roger Walther 517/752-6140
ITE U.S. Legislative:
Thomas Kyczyk 517/733-6287

TREASURER'S REPORT

1. INCOME (as Dec. 31, 1991 Report)

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Dues</td>
<td>$2,419.00</td>
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<tr>
<td>Interest</td>
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<td>November Meeting</td>
<td>15.00</td>
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<td>December Meeting</td>
<td>66.00</td>
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<tr>
<td>February Meeting</td>
<td>1,257.00</td>
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<tr>
<td>Adjustment to Income</td>
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<tr>
<td>Other Income</td>
<td>97.23</td>
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<tr>
<td><strong>Total Income</strong></td>
<td><strong>$3,892.55</strong></td>
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2. EXPENSES (as Dec. 31, 1991 Report)

<table>
<thead>
<tr>
<th>Category</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Postage and printing</td>
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<tr>
<td>Michigane</td>
<td>700.00</td>
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<tr>
<td>Feb. Meals, etc.</td>
<td>1,029.39</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$1,955.00</strong></td>
</tr>
</tbody>
</table>

Balance as of Dec. 31, 1991 | $2,659.67
Balance as of March 13, 1992 | $4,597.22

EDUCATION FUND

Balance as of Dec. 31, 1991 | $3,280.00
Contributions | $37.00
Balance as of March 13, 1992 | $3,817.00
Incident Management Fund Balance | $4,583.65
(from Nov. Cont.)

Respectfully Submitted,
Joseph Meszaros, Treasurer, Michigan Section ITE

MICHIGANITE is published quarterly by the Michigan Section of the Institute of Transportation Engineers. It is distributed to more than 300 ITE members and over 100 cities and counties in Michigan. Address communications regarding the Michiganite to the Editor, Richard F. Kobran, 1312 Kings Coach Circle, Grand Blanc, Michigan 48439; 313/695-8942. Send change of address to: Barton-Aschman Associates, 26261 Evergreen, Suite 480, Southfield, Michigan 48076-4480.

MSU CIVIL ENGINEERING STUDENTS ATTEND TRB ANNUAL MEETING IN WASHINGTON, DC

By William F. Savage, Chapter Advisor

Dr. Tom Maleck was quoted in a Michigan State University publication recently as saying "There is no doubt in my mind that these trips have had a major positive impact upon our national reputation. Walking through the conference hotel lobby with forty students gets noticed. Our students are expected to dress and act properly, stay atop of their studies and attend as many sessions as possible."

This year's Transportation Research Board meeting from January 12-16, 1992 was led by Tom Maleck and I. Last year we had 38 students; our number has been increasing every year. Once again, the MSU delegation was the largest student group at the meeting by far!

The trip wouldn't be possible, however, except for people who donated $1,350 toward the trip. This made it possible for each student to pay only $70 for room, transportation and registration. This meant that all interested students could afford to attend the meeting.

Attending the meeting this year was:

- Roslyn VanGuilder
- Kim Libbidge
- Danielle Denault
- Kathy Jorgensen
- Marie Pullin
- Julie VanDenbosche
- Mohammed Salif
- Brad Wiertelch
- Robert Pratt
- Fred Nazer
- Sam Castronovo
- Gary Poltowicz
- Gil Messer
- Michael Smith
- Khaleed Al-Sallum
- Asian Transportation
- Brad Snyder
- Jeff Brown
- John Watz
- Roamer Marks
- John Lachina

Thank you to all the Michigan Section ITE members who donated to the education fund, and to the following contributors:

- Jerry Carrier of Carrier & Gable, Inc.
- Hardy Henry of Unistrut Corporation
- Ed Swanson of Ed Swanson & Associates
- Jim Livingston of National Sign and Signal
- Dr. Bill Taylor of MSU
- Dr. Don Smith of MSU
- Sam Castronovo of MDOT
- Ken Tiffany of MDOT

In case you have not yet made a voluntary contribution to the Education Fund, another opportunity is provided below.

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Regional Manager
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FAX: (313) 630-9701
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464 East Ave., Tewksbury, MA 01876

YES! I want to contribute $ to the ITE Michigan Section Education Fund to help attract students to the Transportation Engineering profession.

Name:__________________________________________________
Address:________________________________________________
Send to: Joseph Meszaros, Traffic & Safety Division
Michigan Department of Transportation
P.O. Box 300020
Lansing, MI 48909
HIGHWAY SAFETY PROGRAMS OFFERED BY OHSP
By Thomas R. Kryciniski, P.E.
Chief Deputy Director, OHSP

The Michigan Office of Highway Safety Planning (OHSP) is currently offering several highway safety programs to local engineering agencies in Michigan. Following is a description for each:

Risk Management Training
A two-tiered program offered through Wayne State University (WSU) and Michigan State University (MSU) directly in the community requesting it. WSU is providing the first course aimed at agency policy makers and takes one to two hours. MSU is providing the second aimed at supervisors and employees which takes four hours. A risk management notebook is provided and the intent of the training is to put highway safety considerations into the management process. Contact Dr. Tapaj Datta of WSU at 313/577-3803 or James Neve of WSU at 517/353-1790.

Risk Management Follow-up Assistance
Two follow-up programs are being provided to local communities once they commit to adopting a risk management program. The first is conducted by MSU to familiarize agencies with the processes necessary to implement risk management. The second is in the form of hands-on assistance from WSU to begin the actual processes involved. Contact the same two individuals named above for information.

Basic Traffic Engineering Training
The program is available through MSU and provides basic traffic engineering training aimed at non-engineering staff who must handle traffic engineering duties in line with their job responsibilities. The program takes ten days to complete and is offered one day a week for ten weeks. It is offered at various locations across the state. Contact James Neve for more information.

Advanced Traffic Engineering Training
This program is available through WSU and provides specialized traffic engineering tailored to a community's requested needs. Once a community specifies the training needed, WSU designs it and brings it directly to the community. Contact Dr. Tapaj Datta.

Traffic Engineering Assistance to Local Communities
This assistance is available through the Michigan Department of Transportation (MDOT) and the Southeast Michigan Council of Governments (SEMCOG). If a community has need for such assistance as an analysis of high-crash sites, they may contact Kurt Kunde of MDOT at 517/335-2393 for the out-state areas or Adile Wazeki of SEMCOG at 313-981-4266 for Wayne, Oakland, St. Clair, Monroe, Washtenaw, Livingston and Macomb counties.

All of these programs are provided at no cost to local units of government because they are funded by federal highway safety funds. Additionally OHSP is working with Michigan Technological University (MTU) and MDOT on the development of a crash data assistance program through MTU’s Transportation Technology Transfer Center. The program, expected to be available May 1, 1992, will make traffic crash data directly accessible to local communities from the Michigan State Police traffic crash data base.

OHSP also continues to host a Traffic Engineering/Enforcement Coordinating Committee (TTECG) which meets four times a year at the OHSP offices. The current chair is Robert Carroll of the Kalamazoo County Road Commission, vice-chair is William Lebel of MDOT and the secretary is Gary Holben of OHSP. Membership consists of representatives from the County Road Association, the Municipal League, the Michigan Sheriffs’ Association, the Michigan Association of Chiefs of Police, the Traffic Improvement Association of Oakland County, the Traffic Safety Association of Michigan, SEMCOG, WSU, MTU, the Michigan Section of ITE, the International Municipal Signal Association, private traffic engineering consultants, the Federal Highway Administration, MDOT, Michigan State Police, and OHSP.

The intent of the committee is to provide coordination to traffic engineering activities affecting highway safety, gain “grass roots” input into the highway safety planning process, and provide appropriate feedback to the committee on highway safety activities in Michigan. Representatives are expected to provide feedback to the agencies they represent.

POSITION AVAILABLE

ELECTRICAL ENGINEER/TRAFFIC ENGINEER

The Road Commission for Oakland County has an immediate opening for the position of Electrical Engineer, Traffic Engineer. The candidate will be responsible for all design, plans, specifications, and construction of traffic safety improvements and should have three to five years of experience. The salary range is from $38,620-$43,910, plus a full benefits package. Send resume to:

Road Commission for Oakland County
Personnel Department
31001 Lahler Road
Beverly Hills, MI 48025
Attn: Sherman Beeler

The Road Commission for Oakland County is an equal opportunity employer.

Michigan Section - Institute of Transportation Engineers 1992 Meeting Schedule

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>HOST</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 21</td>
<td>Bogle Lake G.C.</td>
<td>R. Walther and others</td>
<td>Benefit Golf Tournament</td>
</tr>
<tr>
<td>July 2</td>
<td>East Lansing</td>
<td>Tom Malek</td>
<td>Dinner/Technical Session</td>
</tr>
<tr>
<td>August 9-12</td>
<td>Washington D.C.</td>
<td>International ITE</td>
<td>Annual Meeting</td>
</tr>
<tr>
<td>Sept. 10</td>
<td>Saskatoon, Alta</td>
<td>Gere Meredith</td>
<td>Golf/Dinner</td>
</tr>
<tr>
<td>Nov. 5</td>
<td>Indianapolis, IN</td>
<td>Indiana Section</td>
<td>District III Annual Meeting</td>
</tr>
<tr>
<td>Nov. 10</td>
<td>Battle Creek</td>
<td>Max Phares/John Start</td>
<td>Lunch/Technical Session</td>
</tr>
<tr>
<td>Dec. 10</td>
<td>Metro Detroit</td>
<td>Open</td>
<td>Lunch/Technical Session</td>
</tr>
</tbody>
</table>

Michigan Section - International Municipal Signal Association

<table>
<thead>
<tr>
<th>DATE</th>
<th>LOCATION</th>
<th>HOST</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 23</td>
<td>Grand Rapids</td>
<td>Ron Dressender/Lowell Baker</td>
<td>Technical Meeting</td>
</tr>
<tr>
<td>June 4</td>
<td>Lansing</td>
<td>Norm Helling/Dean Derks</td>
<td>Technical Meeting</td>
</tr>
<tr>
<td>July 17-19</td>
<td>Mt. Pleasant</td>
<td>Board of Directors</td>
<td>Family Weekend</td>
</tr>
<tr>
<td>August 1-8</td>
<td>Cherry Hill, NJ</td>
<td></td>
<td>International Meeting</td>
</tr>
<tr>
<td>Aug. 15</td>
<td>Coldwater</td>
<td>Fall Conference</td>
<td>Board Meeting</td>
</tr>
<tr>
<td>Oct. 9-9</td>
<td>Cadillac</td>
<td></td>
<td>Vendor Development</td>
</tr>
<tr>
<td>Dec. 3</td>
<td>Ann Arbor</td>
<td>Art Cuendet</td>
<td>Signal Certification</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gary Fitzgerald</td>
<td>Annual Meeting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Herb Henry</td>
<td></td>
</tr>
</tbody>
</table>

BENEFIT GOLF TOURNAMENT ANNOUNCED; MICHIGAN SECTION ITE

The first biannual golf tournament of the Michigan Section of ITE will be held on May 21, 1992 at the Bogle Lake Golf Club in northern Oakland County. The tournament will be a four person scramble and is open to both members and guests. The proceeds of the tournament will go to the section educational fund for:

- Providing free attendance at Section meetings for student members.
- Providing awards for student paper competitions.
- Providing assistance for defraying student costs to attend ITE or TRB national meetings.
- Providing a student scholarship fund.

The cost of $47.50 includes 18 holes of golf and a cart, lunch at the turn, dinner, prizes and awards, and a donation to the educational fund. The committee members are: Jerry Carrier, Dan Carrier, Herb Henry, Joe Marson, Tim DeWitt, Bill Savage, Don Wiertella, Vicki Holland, Lyle Nustad, Roger Walther, Chairman.

Widespread support is anticipated for what promises to be a fun-filled and beneficial event. The golf tournament will be repeated in even-numbered years with the Vendor’s Show scheduled for the odd-numbered years.
ANNUAL MEETING IN NOVI
by Mike Kobran

The Annual Meeting and Technical Session of Michigan Section of ITE was held December 5, 1991 in Novi at the Sheraton Oaks Hotel. The hosts were Joe Marson of Barton-Aschman Associates and Dr. James E. McCarthy and James Cubera of the City of Farmington Hills. A snow storming did not prevent a fairly good turnout for what proved to be an informative meeting. The following is a brief summary of the presentations:

Adams Road Corridor Study

Steve Dearing, Traffic Engineer for the City of Rochester Hills, stated that the purpose of the corridor study was to modify the Rochester Hills master transportation plan which had been first adopted in 1974 and revised in 1984 and 1986. There were several constraints imposed by a citizens' study advisory committee as follows:

• No six-lane roads in the city
• Acceptance of daily congestion
• Diversion of through traffic movements
• Identification of priority projects
• Use of demand management and alternative modes

The committee designed certain roads, including Adams, as those that could not be changed because of environmental sensitivity. The committee finally got to the point of understanding that the increases of movements on main roads was a primary cause of cut-through traffic. They also blamed the City of Auburn Hills for the traffic problems in Rochester Hills and decided they would not widen Adams Road but would solve their problem by having Auburn Hills widen Auburn Road.

An estimate by the consultant of $80,000,000 to do this study was decided to be too expensive and the Mayor decided the city staff could do it in 3 months for $10,000. The work was to just plan for a decision to improve Adams as a boulevard cross-section on a 120 ft. wide right-of-way. The staff decided to use safety as the incident sections of Adams Road showed higher than average accident rates.

The right-of-way required the acquisition of 17 parcels of which 5 were owned by Oakland University. The project cost was estimated to be $20 million for widening 4 miles of Adams Road exclusive of property acquisition cost. There was an estimated cost premium of 40% for the boulevard cross-section. Also driving up the costs were two rivers, possession, access, and an excellent work force because of the rolling terrain. The city council was shocked at the cost estimate. Mr. Dearing commented that two items seemed to stop the community from being more responsive to the citizens and the council. They were the concept of design speed and the use of distorted vertical scale for the cross-sections. The latter seemed to indicate massive cuts and fills.

The end result was that Adams Road, previously considered untouchable, was added to the master plan of thoroughfares as a four-lane artery. Now the challenge is to find the funds to build it.

Air Quality Analysis for Southeast Michigan

Chuck Hersey, Environmental Planner for the Southeast Michigan Council of Governments (SEMCOG) explained what the new Clean Air Act will mean to Southeast Michigan which is a non-attainment area. The goal is a 15% reduction in hydrocarbon emissions from mobile and industrial sources for the time period from 1990-1996. There are two trends that are making this a problem. First is the increased vehicular miles of travel (VMT) leading to more emissions even as the vehicles continue to improve their emissions (a trend which has started to flatten) and the second is the increased amount of VMT on congested roads leading to more time traveled for the same trip, more congestion, and more emissions.

The possible sources of mobile source emission control are:

• Vehicles (improved emissions), auto emissions testing, alternate fuels, high occupancy vehicles, parking costs, improved signal timing, management of VMT through ride share, transit, work-at-home.

The new law requires penalties for failure to make a submittal of the State Implementation Plan (SIP), EPA disapproval of the plan, or failure to implement an approved plan. The penalties include federal highway aid and bumping up the requirements of the existing classification. For example, southeast Michigan, which is classified a moderate non-attainment area for ozone with resultant achievements expected, could be moved up to severe, serious, or emergency levels and thereby more ambitious reductions in achievement expected.

The basic policy issue confronting the region is whether to focus on industry or the individual for the required reductions. Also in December 1990, SEMCOG must decide how a road or developments with low maintenance and emission light diode displays. The central computer communicates a specific set of signs and messages based on the location and situation. An operator review of the system approves the response plan before the messages are sent out to the signs. For incidents of prolonged duration, it is possible to pre-program messages to be displayed.

The operations center staff also operates a traffic and road information system which has incident information entered into a database and automatically fed to the media on a regular and emergency basis.

A study done for the Ministry of Transportation estimates that delay related to non-recurring congestion can be reduced by up to 75% by a freeway management system with an effective incident management response. The benefits of this are a savings in time, money, and reduction in accident potential, driver frustration, pollution emissions, and so on. The program called COMPASS as a non-traditional tool as a catalyst to focus attention on incident management and motorist advisory activities. Future plans for the system include the following:

• Enhancement of changeable message sign system to include general congestion information and graphics.

• Use of the system over most of the Greater Toronto freeway network.

• Use of Highway Advisory Radio in the new upper portion of the AM band.

• A pilot project for cellular telephone users.

The response to and handling of a host of incident management is so as to preserve and protect human life, maintain a reasonable level of safety for all participants, fulfill legislative requirements for public and private use, and minimize property damage. Successful management is facilitated by inter-agency coordination, education, and on-site personnel. The Traffic Operations Centre is the focus of all the freeway management activities since it receives all COMPASS information as well as all road condition, construction, and maintenance activity reports and is open 24 hours a day, 365 days a year.

Clearance is aided by an emergency road patrol service which can respond to route 1 and can also be dispatched. These half-ton pickups are equipped with push bumpers, gasoline, water, booster cables, fire extinguishers, simple tools, traffic cones, and a lighted arrow board. Private towing vehicles also have access to the freeway and a voluntary 24-hour dispatch service has been organized. Dedicated on-call service is used by the Ministry in certain areas such as constricted construction zones. The Ontario Provincial Police (O.P.P.) are also active in incident management with cruisers equipped with push bumpers and auxiliary power boards. A police constable is stationed in the operations center to coordinate with O.P.P. dispatchers and provide police authorization in certain situations.

LAWSON NAMED TO ITE FUTURE DIRECTIONS COMMITTEE

Samuel C. Lawson, Jr., Detroit's City Transportation Engineer and current ITE Michigan Section Vice President was named by Alastair J. Meeks, ITE International President to serve on a special ad-hoc advisory committee to address the future directions of ITE. Mr. Lawson has been asked to serve on the committee. The committee will meet in early April and complete its work before the August, 1992 Annual Meeting in Washington, DC.

The ad-hoc advisory committee will be asked to respond to the following questions:

• How will the transportation profession change as a result of the growing international trend to make transportation decisions in the context of a broader framework of social issues including environmental concerns, growth management, and the global economy, and the recently enacted ISTEA?

• To what extent will "non-traditional" ITE disciplines be providing input to transportation decisions and what disciplines will be emerging in that context?

• What opportunities do these changes offer the Institute and its membership?

• What organizational or programmatic changes are necessary to assure that the Institute stays relevant in these changing times?
Greater Detroit Incident Management Forum

On November 13, 1991, the Michigan Section of ITE co-sponsored an incident management forum at the Engineering Society of Detroit. Other sponsors were the Automobile Club of Michigan; the International Bridge, Tunnel and Turnpike Authority; the American Trucking Association; and the Michigan Department of Transportation (through the Wayne County Traffic Safety Council). Somewhat under two hundred traffic management professionals attended the forum:

Pat Nowak, director of the Michigan Department of Transportation (MDOT), welcomed the group to Michigan and explained that broad-based cooperation is necessary for incident management planning and that the forum would be an opportunity to explain incident management to those who had had little exposure to it. The goal of the conference, according to Nowak, was:

1) Create an awareness of incident management problems and needs.

2) Clearly define the basic elements of an effective, coordinated incident management program and to identify program elements already in place in Michigan.

3) To encourage participants to volunteer to become active in follow-up activities.

Director Nowak pointed out that, in the Detroit area alone, over 4,000 traffic congestion incidents were reported the previous year just during daylight hours on weekdays. It is estimated that the total cost to the area is over $1 billion per year in Greater Detroit. Accordingly, MDOT is developing an incident response plan that will be integrated into their comprehensive transportation management philosophy. This views the roadway, vehicle and driver as components of the total transportation system rather than autonomous systems within themselves. They will work to improve the removal of injured motorists and cleaning up accident sites. In addition they will work to include advanced technology to monitor roadway conditions and vehicle or roadside devices to deliver readily understood information to motorists.

Carlon C. Robinson, Executive Vice President of the Highway Users Federation, spoke on the importance of freeway to economic vitality. He pointed our that traffic congestion is a serious and growing problem and the freeway incident management is one way to reduce that congestion. He also stated that the cause for the congestion was that the work force of 1955 in the United States was double the work force of 1955, when we began building the interstate system. We also have twice as many households as back then and the gross national product is 2.1 times that of 1955, in constant dollars. In the same time period, we cut our annual expenditure needed to support what travel growth from 4.5 cents per vehicle-mile in 1950 to 7 cents per vehicle-mile in 1959, in constant dollars.

Robinson also pointed out some interesting statistics in terms of urban areas by citing the figures for freeway lane-miles per capita. The leader is Kansas City, MO, followed by Atlanta, Dallas, St. Louis, and Cincinnati. Los Angeles, by contrast, is in the bottom 25% of large urban areas in this measurement. This is by way of saying to use Los Angeles as an example of why freeways don't work in urban areas is drawing the wrong conclusion. By looking at freeway use, in terms of freeway vehicular miles per capita per day, high density and transit-oriented cities such as New York City and San Francisco actually use freeways more than Phoenix or Los Angeles.

The Highway 401 COMPASS System was explained by Peter Koral, Head of the Freeway Traffic Management Section of the Ontario Ministry of Transportation. He stated that approximately 50-60% of Toronto area congestion is due to incidents of which 85% are minor short-duration lane blockages or shoulder occurrences. COMPASS, one of three Toronto area freeway traffic management systems, went into operation in early 1991 and covers 16 kilometers (10 miles) of Highway 401 through Toronto's central business district. This freeway has a unique express/collector configuration with a minimum of 12 lanes. Many sections carry over 300,000 vehicles per day.

COMPASS employs three strategies; detection and confirmation, incident management, and motorist advisories. Detection is accomplished by the use of over 700 wire loop detectors embedded in the freeway pavement. Detector stations are located at intervals of approximately 500 meters (0.3 miles) and are connected through a digital traffic operations center. The center's computer constantly analyzes the data detected in the loop. The goal is to detect a lane blockage within three minutes of occurrence. An operator is alerted of a suspected incident and confirms it through a computer display. Stations are placed at 100 meter intervals (0.6 miles) with pan, tilt, and zoom capabilities. Confirmed, an appropriate response plan is brought into play.

A project has been set up in Troy consisting of 28 intersections along Big Beaver and Rochester Roads. The intersection is equipped with AutoSCOPE advanced traffic sensors and SCATS control software into the system computer. The AutoSCOPE beam, located on a pole above the intersection, continuously determines vehicle speed, sending the information to the central computer that then adjusts the traffic signal system depending on the traffic flow at the time. This network is called the Advanced Traffic Management System and the control software, which is a three-way interface, interprets the video images, sets signal timing according to real time demand, coordinates all the signals on the system, and provides system diagnostics.

The second part of the project is the ALL-SCOUT system which assesses traffic flow and two-way infrared communication between beacons placed at major intersections and devices installed initially on a few thousand cars owned by the County, the City of Troy, and such cooperating businesses as General Motors and Siemens AG, the producer of the infrared devices. The devices in the cars will supply the system with travel and queuing times and the system will provide the driver, through a digital message board on the vehicle dashboard, with the current conditions of the highway network. The on-board computer will have units for position, navigation, travel time, and destination memory. A major effort will be needed to integrate the two systems, traffic signal control and dynamic routing.

Mr. Grubba stated that Congress had appropriated $10 million in the 1991 Supplemental Transportation Efficiency Act to assist in the project. He believes the technological spin-off from the project will be important and that the U.S. must move away from the motorized mode to the mass transit mode. He stated that the USDOT has an interest in getting some cost/benefit research on this strategy.

Access Control Trip Generation Study

Dave Geiger, staff member of the Project and Plan Development Division of MDOT's Bureau of Transportation Planning described a three-year Federal Highway Administration grant for trip generation and access management study. The trip generation element started with the establishment of a committee of field operators and local officials. They are to decide what types of generators to evaluate and to participate in the study (with concern for size of development, most sensitive area, size of the urban area); and how to factor in arterial volumes and pass-by traffic.

The access management element will look at the driveway permit process by reviewing the programs in other states, determining the role of roadway function, consider methods of limiting access; the justification required for access; and the legal changes that would be necessary to implement the recommendations.

Site Impact Analysis

Brian Bochner, Executive Vice President of Barton-Aschman Associates in Evanston, IL and the Vice Chairperson of the International ITE Technical Council, reviewed for the audience the guidelines for transportation site impacts. He said the purpose of such studies was as follows:

- provide consistency
- ensure issues are addressed
- provide review guidelines
- promote understanding

There are various issues to be considered. Will the site accommodate the proposed development? Will additional transportation improvements be necessary? What is the site access? How will improvements be funded? Will there be travel demand management requirements? An advisory committee is recommended as these issues are discussed.

There will be benefits to the community by, for example, pointing out the implications for zoning, assessment of transportation site impacts, site design, and prediction of impacts. It will also help the community to keep their plans current and focus on other transportation issues that have to be addressed.

ITE has come up with some warrants for when site impact studies are needed; when volumes in the peak hour direction exceed 10 additional vehicles; or because of local problems, neighborhood sensitivity, driveway locations, or safety reasons. Mr. Bochner suggested that the require-ments for the readers and reviewers include expectations in operations, planning, and safety aspects. He described the process, gave examples, and pointed out the need for evaluation, review, and calibration of the recommendations, and staff recommendation.

Revised Traffic Crash Report Form UD-10

Tom Kryczka, Chief Deputy Director of the Office of Highway Safety Planning in the Department of State Police, told the audience that there were approximately 360,000 total traffic crashes in Michigan each year of which 25% were injury crashes. The UD-10 traffic crash report form was 20 years old, not written for computer use. It was confusing to read and use, was difficult to complete, and machine-scannable, has items that are no longer needed, and is missing items that are needed. All this led to the development of the revised form which was the subject of a separate article in the last issue of the Michiganite.
NEW MEMBERS: Michigan Section I.T.E.
by Mike Kobran

Four new members and two student members were approved at the February 1992 Michigan Section I.T.E. Board meeting following a review of their applications. One new member and one new technical affiliate were similarly approved at the March board meeting. Some information about the new members is listed below as an introduction to the rest of the membership:

Hani Dickow is a graduate of Wayne State University in Civil Engineering. He is a Senior Associate Traffic Engineer for the Detroit Department of Transportation and lives in Detroit. Hani is a registered P.E. in Michigan.

Michael Jones is a Traffic Engineer for the Ottawa County Road Commission in Grand Haven. Michael is a graduate of Michigan State University and Yale University and lives in Grand Rapids. He is also a member of the International I.T.E.

Mohsen Katalai is a Traffic Engineer with the Wayne County Office of Public Services, Roads Department. Mohsen lives in Westland.

Beth London, a Technical Affiliate, is a Principal Traffic Engineer with the City of Lansing Transportation Division. Beth is a graduate of the University of Michigan and lives in Lansing.

Guillaume (Bill) Sehin is a Project Development Engineer with the Local Services Div. of the Michigan Department of Transportation in Lansing. Bill lives in Okemos and is a graduate of the College of Engineering in Heerlen, the Netherlands. He is registered P.E. in Michigan.

Bob Metko is an Associate Engineer with Barton-Aschman Associates, Inc. of Michigan in their Southfield office. He is a graduate of Penn State University, lives in West Bloomfield and is a member of the International I.T.E.

The following are new student members from Michigan State University: Kathryn Jorgensen; Stephen Galindo.

Welcome to I.T.E. and may your profession and your careers bring you much success!

CHANGES ANNOUNCED AT MDOT

Thanks to Joe Meszaros for news of the following appointments at MDOT that should be of interest to Michigan Section members:

Bob Maki has been named Engineer of Traffic and Safety. His division will also include the former Transportation Systems Division which he headed prior to this change.

Larry Brown has been named District Engineer for the Grand Rapids area.

Kunwar Rejenda has been named the Metro District Traffic and Safety Engineer.

Robert Briste has been named the Kalamazoo District Traffic and Safety Engineer.

Rise Risch has been named the Grand Rapids District Traffic and Safety Engineer.

Terry Anderson has been named the Jackson District Operations Engineer.

MICHIGAN SECTION VOLUNTARY FUND DONORS AS OF February, 1992

The ITE Michigan Section Voluntary Fund was created by the Section Board for the purposes of:

- Providing free attendance at Section meetings for student members.
- Providing awards for student paper competition.
- Providing assistance for defraying student costs to attend ITE or TRIS national meetings.
- Providing a student scholarship fund.

The following members have contributed for 1992 to date:


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