Michiganite

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Michiganite

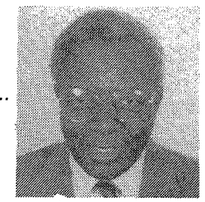
Fall, 1993 VOLUME XXVIII, NUMBER 3

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

PRESIDENT'S COLUMN

FROM THE DESK OF .....

Sam Lawson



The trip was great!

This year's International ITE Annual meeting was held in the Netherlands, a small kingdom on the North Sea in Europe which is one of the most densely populated countries in the world. It is about 1 1/2 as large as the State of Maryland with about 3 2/3's the number of people.

Much of the economy of the Netherlands is based on its position as a distributor of goods for Europe. Eight percent of its gross national product is derived from the transport industry, about 20% of the European Community's imports and 23% of its exports pass through the Netherlands.

Over the next 20 years, auto traffic is estimated to grow by 70%. The Netherlands has adopted a traffic and transport policy that seeks to deal with potential congestion issues that could seriously effect its economy and overall quality of life. One of the principle aims of this policy is to reduce auto traffic by35% by the year 2010. At the same time, access to business centers must be adequate and alternatives to private auto transportation such as bicycles, public transit, and carpools will be emphasized.

Here are some other things the Dutch are doing to cope with growing transportation demands:

Improving existing transportation facilities and stressing intermodal transportation

The plan is to shift an amount of the highway shipping of goods to rail or waterways. Special goods railways and terminals have been built and others are planned.

Accommodating the bike

Practically everyone owns a bicycle in the Netherlands *(see the summary of Bill Savage's excellent presentation on this in the write-up of the December technical meeting on page 10 in this issue).*

Improving the speed, comfort and convenience of public transit

In eighty towns and cities there is a service called taxi-train. Taxis take train passengers to and from the station for a modest fee. The Dutch believe trains, trams, buses, and taxis must combine to provide door-to-door service if public transit is to compete with the private auto.

Improving the efficiency of existing and future vehicles

Along with park and ride, high occupancy vehicle carpool lanes, ramp metering, special traffic lanes for buses and trucks, night-time road maintenance, incident detection and management, Holland is moving forward with Intelligent Vehicle Highway System applications. IVHS components are already in place.

The Dutch understand their transportation problems, it seems, and have developed plans to cope with them. We wish them much success.

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MICHIGANITE

Official Publication of the
MICHIGAN SECTION
Institute of Transportation Engineers

1993 EXECUTIVE BOARD

TREASURER'S REPORT

1. INCOME *(Sept. 1 - Oct. 31, 1993)*		
Dues	$	19.00
Interest		15.61
Meetings		1,513.00
Total Income	**$**	**1,547.61**
2. EXPENSES *(Sept. 1 - Oct. 31, 1993)*		
Postage		15.66
Meetings		1,551.23
Plaques, awards, prizes		56.19
Total Expenses	**$**	**1,623.08**
Section Fund Balance as of Oct. 31, 1993	$	4,245.18
EDUCATION FUND		
Balance as of Aug. 31, 1993	$	7,074.68
1. Income *(Sept. 1 - Oct. 31, 1993)*		
Interest		35.88
Total Income	**$**	**35.88**
2. Expenses *(Sept. 1 - Oct. 31, 1993)*		
Student Section Meeting Cost	$	72.00
Student Paper Competition		150.00
Total Expenses	**$**	**222.00**
Balance as of Oct. 31, 1993	$	6,888.56

Respectfully Submitted, *David F. Allyn, Treasurer*
Michigan Section, ITE

1993 COMMITTEE CHAIRPERSONS

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1994 Michigan Section Board of Directors

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 Michael F. Kobran, 1312 Kings Coach Circle, Grand Blanc, Michigan 48439; 313/695-8942. Send change of address to: Joe Marson, Barton-Aschman Associates,30800 Telegraph Rd., Suite 3858, Birmingham, MI 48025.

ranges of trips and parking space demand, they believed that their businesses did not fit that mold and asked Barton-Aschman to check businesses they thought were more like them, like Branson, MO. What they found was that such "different" attractions did indeed fit into the range of expected traffic generation and parking space demand. Indeed Frankenmuth's zoning required more parking than tourist cities like Branson.

There is a potential new development, the Old Carling Brewery sight, that will probably have sufficient parking to take care of the demand generated. The traffic generated by that development will have to be evaluated but since it is on the south side of the downtown, it will probably not cause a significant problem as those destined to it will mainly come from the south and park there. When they go to other destinations they will walk and leave their cars behind.

The Frankenmuth business community was united in its goal of increasing tourism in Frankenmuth but they could not seem to cooperate in such ways as coordinating their privately-owned parking lots so they could be striped more efficiently. They were able to agree on asking the City to purchase, through a Downtown Development Authority, a large parcel of church property downtown (the church had relocated) to be used for additional parking. The cost of these additional spaces was very high, primarily because of the high acquisition costs. All in all, the project was a learning experience for both consultant and client.

MCNAMEE, PORTER & SEELEY ANNOUNCES NEW DIRECTOR OF TRANSPORTATION

McNamee, Porter & Seeley, Inc. is pleased to announce that Michael J. Labadie, PE., has joined the firm as Director of Transportation. With 17 years of experience, Mr. Labadie will be responsible for directing a staff of thirteen professionals offering complete transportation services.

His broad range of experience encompasses teaching at Lawrence Institute of Technology, public service at the Oakland County Road Commission and consulting engineering at several metropolitan Detroit consulting firms. His representative capabilities include traffic impact studies, environmental impact statements, roadway design, transportation master planning, and computer traffic information systems. Mr. Labadie was also the 1992 President of the ITE Michigan Section.

McNamee Porter & Seeley, Inc., is a 200-person engineering firm which specializes in wastewater, water, stormwater, transportation, facilities and environmental services. The firm is headquartered in Ann Arbor with branch offices in Detroit, Lansing, Grand Rapids and Escanaba.

Incident Management Program for Southeast Michigan

Kunwar Rajendra, Transportation Systems Engineer for MDOT, presented the most recent update on this program, which has been reported in recent issues of the *Michiganite.* What is new is that the final recommendations of the Task Force, *A Blueprint for Action,* were published in October 1993. Forty preliminary recommendations were reduced to ten and priorities, time frame, cost estimate and lead agencies were identified. The Blueprint has been submitted to the Director of MDOT, Michigan State Police, and SEMCOG and to member agencies for comments and approval by January 1994.

The final recommendations and costs are as follows:

NOTE: The cost of these sub-projects is included in the total project cost.

Recommendation	Time Frame (months)	Lead Agency	Est. Cost ($1,000)
Create Incident Mgt. Center	60	MDOT/MSP	1,000
Driver Information	18	MDOT/MSP	*
Establish Task Groups	18	MSP	*
Combine MTC/MSP 24 hr. operation	18	MDOT/MSP	*
Communication Network	72	MDOT/MSP	*
Central Clearing House	60	MDOT	*
Revise abandoned vehicle limit to 4 hr.	60	MDOT	NC
Develop agreements for agency control	60	MDOT/MSP	NC
Prepare Standard Boundary maps	60	SEMCOG	15
Install Intermediate Location Markers	18	MDOT	100
Notify Jurisdiction Road Agency	18	MDOT	NC
Expand Coverage of Det. Fwy Operations	72	MDOT	90,000
Encourage Towing Courtesy Patrol	18	MDOT/MSP/PRIVATE	235
Improve Police/Fire Coordination	18	MDOT/LOCAL	NC
Move Cars Off Road Legl/Education	18	MDOT/MSP/AAA	25
Develop Alternate Route Plans	72	MDOT/LOCAL	8,000
Formalize Jurisdictional Agmts	60	SEMCOG/LOCAL	40

Dec. Meeting ....Cont. from P. 9

Biking in the Netherlands

Bill Savage, and inveterate Michigan biker, was an interested observer of the biking scene in the Netherlands when he attended the 1993 ITE International Conference in September. Along with some interesting slides, Bill had some interesting statistics. With a population of 15 million and a climate that does not interfere with year-round biking, the following is the estimate of kilometers traveled by mode:

Car	74%	Walking	3%
Bike	8%	Train	7%

Thus, biking is the second most important travel mode with 29% of all trips made by bike and about 50% of all commuting trips of less than 5 kilometers. This saves space, as a parked car is equivalent to 12 parked bikes and a moving car is equivalent to 25 moving bikes. It also saves money, fuel emissions and creates less noise. Infrastructure costs for bikes are 10-20% less than for cars and parking costs for cars are 15 times greater than those for bikes.

The national government encourages biking for all the above reasons and hopes to see 50% of all trips less than 7.5 kilometers made by bike. A 30% increase in bikeways is planned by the year 2010. There is a bicycle master plan for the Netherlands with one focus being an improvement of bike links to public transit. There is also a goal of decreasing bike fatalities and injuries. Bill noted, however, that the wearing of helmets is not common. He also mentioned that bike theft is a problem but that the security for bikes is not as good as ours.

Integrated Database for ISTEA Management Systems

Jim Brush, Manager of the Travel Demand Forecasting Section for MDOT's Bureau of Planning brought us up to date on MDOT's efforts to comply with the current Federal transportation law, ISTEA, which mandates six management systems by 1995 to protect the nation's transportation infrastructure. Those mandated are; Pavement, Bridge, Safety, Congestion, Public Transportation, Intermodal Transportation. Besides these six mandated systems, MDOT has decided to add Real Estate and Construction to the list.

Cambridge Technology Partners of Cambridge, MA, was hired to assist MDOT in this monumental effort. The purpose of the effort is to help the State make better transportation decisions. The impacts are expected to be on programs and policies, project selection and performance feedback. The schedule called for scoping during June 1993, three week workshops per system in November, design in December, development following that, and a project roll-out in October 1994, followed by support focusing on continuous improvement.

MDOT has teams working on each system composed of staff, consultant s, MPO staff, etc. The management system objectives are as follows:

1) Operational capability

2) Coordinated set of performance criteria and design standards

3) Outcome based development philosophy

4) Commodity of data collection and inventory variables, structures and procedures

5) Produce information for assessing existing and future needs and management issues

6) Analysis and testing

The end result should be fully implemented ISTEA systems by the Federal deadline, more efficient managing and monitoring of Michigan's transportation system, and increased effectiveness of decision makers and increased user satisfaction.

Frankenmuth Parking and Traffic Circulation Study

Mike Labadie, Past President of ITE and Director of Transportation for McNamee, Porter and Seeley, Inc., talked about the study he directed in Frankenmuth while with Barton-Aschman to get at some parking and traffic congestion problems perceived by the business community in Frankenmuth, Michigan's number one tourist attraction in terms of the number of annual visitors. Traffic and parking counts taken during the 1992 Octoberfest, one of the year's biggest events, indicated that the level of service at the main intersections in town were all more than satisfactory (LOS "A" and "B") and that there were parking shortages in certain parts of downtown. The parking deficit in other areas was taken care of by the large Zehnder's lot on the south side of the downtown area.

The problem became how to get the people involved in the study to understand what was happening and why. The solution was to organize a study committee and educate them as to traffic engineering concepts such as the idea of how business generates traffic and how many parking spaces that requires. The parking spaces they had were approximately the same number as the existing businesses needed, only they were not right where they were needed. Basically the business community wanted to increase their total business by attracting more customers to downtown, and Barton-Aschman had to get them to understand that without new development, they really didn't need any new parking spaces nor would they generate more traffic. Once they understood how business, by type and size, generates

MICHIGAN SECTION ITE
1994 MEETING SCHEDULE

DATE	LOCATION	HOST
Feb.	Ann Arbor	N. Gibson
Mar	Midway Motor Inn Lansing	K. Johnson
May 19	Bogie Lake Golf Club Education Fund Golf Outing	V. Holland
July	Lansing	T. Maleck
Sept.	Saskatoon Golf Club Alto	J. Meredith
Sept	District 3 Meeting Ypsilanti	
Nov	Kalamazoo/Battle Creek	
Dec	Annual Meeting Detroit	

INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION OF MICHIGAN
MEETING SCHEDULE

DATE	LOCATION/HOSTS	TYPE
Feb 24	Wyoming/Ron Dressander Wyoming/Lowell Baker, Muskegon Co.	Technical
Apr 21	Lansing/Jim Charles Gary Endres-MDOT	Technical and Certification
Aug-12	Seattle	International
Oct 4-7	Cadillac	Certification Training
Dec 1	Detroit/Norm Hettinger Dean Derks-MDOT Tim DeWitt-C&G	Annual

IN MEMORIAM **Ho-Lum Wong** **1933-1993**

Ho Lum Wong, retired in 1992 as Engineer of Design for the Michigan Department of Transportation, died suddenly on November 20, 1993. The funeral was held November 27, 1993 at Edgewood United Church of Christ in East Lansing. Although Ho-Lum was not a member of ITE, many of our members knew him and worked with him. His last employment was as a consulting engineer for Parsons Brinckerhoff of Michigan.

Ho-Lum, born in Canton, China, was a graduate of the University of Michigan. He was an avid sportsman enjoying golf, tennis, skiing, and walking. He was well-liked by all who knew him and will be missed by his wife and family, all of MDOT, and the transportation engineering profession.

NEW MEMBERS

MICHIGAN SECTION I.T.E.

Two new regular members, a technical affiliate, a commercial affiliate and four student members were approved at the November, 1993 board meeting. Some information about the new members is listed below as an introduction to the rest of the membership.

Shirley Webster is a transportation analyst with Ed Swanson & Associates in Grand Rapids. Shirley also lives in Grand Rapids and is in the Master's program at Michigan State. She is a member of the International ITE.

Patrick Johnson is a transportation engineer with Ed Swanson & Associates in Grand Rapids. He is a graduate of Michigan State and lives in Grand Rapids. Patrick is in the process of becoming a member of the International ITE.

Ivan Bartha, formerly with MDOT's Traffic & Safety Division, is the managing engineer for TEA Inc. in Haslett, where he also lives. Ivan is a graduate of Michigan Technological University and is a technical affiliate.

Colleen Northcott is a sales representative with 3M Company and lives in W. Bloomfield. She is a graduate of Eastern Michigan and is a commercial affiliate.

New student members approved from Michigan State University were the following:

Matthew J. Thornton **Mary E. Helner**

Colleen Gailitis **Martin Kate**

Welcome to ITE and may your profession and your careers benefit!

DECEMBER ANNUAL MEETING IN DETROIT

The December 9, 1993, the Annual Meeting and Technical Session was held at the headquarters of the Engineering Society of Detroit in the Cultural Center of Detroit. Adiele Nwanko,the meeting host, gathered a group of very informative speakers in an excellent setting. The luncheon meal was also very good and over fifty members attended the meeting.

Crash Reconstruction and the Traffic Engineer

Weldon Greiger, a former State Police Crash Investigator and now President of Crash Technology, opened the session by giving his advice to traffic engineers, based on his experience in the field of crash reconstruction, on how to deal with the inevitable lawsuits the road agencies face. His first bit of advice was to defend only those that you have a change of winning, but then you do defend, do so vigorously. Before that decision is made, he suggested taking the following steps:

1. Establish priorities, perhaps all fatalities and serious injuries.
2. Plan ahead, contact local police so they know your needs and ask for copies of reports, don't wait for the UD-10.
3. Hire talent to do the job right if you don't have the expertise on staff.
4. Do the job and share the results. You may cut some lawsuits short when the plaintiff's attorney sees the facts you have assembled.
5. Remember that police investigate only for criminal purposes; don't depend on their investigation for civil suits.
6. Throw away the Polaroid and get a good camera and use a professional or accomplished amateur photographer to take pictures from all different angles (16 recommended for a crashed vehicle).
7. Interview drivers and witnesses on the spot if possible.

In summary, Weldon suggested that you have a plan and implement it when a serious collision occurs on your roadway.

The Role of the Office of Highway Safety Planning

Betty Mercer, Director of the Michigan Office of Highway Safety Planning, stated that the MOHSP mission was to foster highway safety and grant funds from the National Highway Traffic Safety Administration (NHTSA). The assumptions on grant applications are as follows:

- specific highway safety problems will be identified and countermeasures will be proposed.
- a method of evaluating the countermeasures will be proposed.
- cost assumptions will be defined based on pilot testing using grants as seed money with the countermeasures to be carried on as part of normal operations if successful.

NHTSA sets priorities each year. IN FY 1993, those were safety belts, alcohol, and traffic records. FY 1994 priorities have not been set yet. Cooperative grants for high crash rate counties have been established with the cooperation involving the engineering community as well as enforcement and others. Nine of the counties will be funded.

Ms. Mercer announced that OHSP will sponsor a regional conference in Ann Arbor from April 13-15 covering a five state area. The theme is "Safer Highways through Collaboration". Representative Bob Carr has been asked to be the featured speaker. Also the Michigan State Safety Commission has announced a traffic record strategic initiative to develop a focus to encourage collaborative efforts in data collection.

In dealing with the current OHSP programs, the biggest change has been the revision of the UD-10 in 1992 and 1993. Eighty percent of the input is scanned into the system and the problem has been in rejection of data by the computer and consequent rejection of the forms with noting in the system to allow for reprocessing those forms rejected (6-10% of the total). OHSP was able in 1993 to patch the system to reprocess the rejected forms manually for fatals and there has been good feedback on the 1993 data. The complete 1992 data will be released in early January, 1994, with the 1993 data released as early as April, 1994.

Future directions include automated collection of data and electronic identification of location, further training of police officers, cosmetic changes to the UD-10 and establishment of a Definitions Committee.....*(Cont. on P. 10)*

Michigan Section Past President (from R to L); Tom Krycinski, Dick Beaubian, Sam Lawson, Mike Labadie, Dave Merchant

Nov Tech Session....Cont from P. 6

A facilitator for all three groups was also present.

The Charrette was charged with the task of redesigning Grand River so that it could accommodate the 40,000 vehicles per day while reducing lanes, adding a bike path and landscaping.

Dr. Tom Malek from MSU, another Charrette members, said he was enlightened by four days of intense debates, which he said continued well into the early morning hours each day. After two days, he said, the landscape architects had presented designs that could not be accepted by MDOT, and in effect the wheel had to be reinvented. One of his opinions was that the congestion should be moved to somewhere else where there are not 20,000 pedestrians per day. As that option was not available, the group had to juggle the exiting volumes with the needs of pedestrians, bicyclists, visually and physically impaired, local businesses and the politicians.

Mr. Hank Lotoczynski, Charrette member from MDOT, said that the project started out with minimum budget as a resurfacing project and grew from there. He thought the public involvement was good, but probably did not address all the design issues. An MDOT committee has subsequently worked over eight months in refining the project so that it is now ready to present to City Council. In the end MSU gave MDOT some additional right-of-way plus a little bit of median area for left turn lanes. They also dedicated the right-of-way to MDOT, as previously westbound Grand River was built on an easement. Bus bays will be provided an on-street loading on the business side of the street will continue to be allowed. Lane widths will be 10' and 11'. Construction is planned for 1995.

MARK YOUR CALENDARS!!

2nd biennial

Michigan Section
ITE

BENEFIT
GOLF
TOURNAMENT

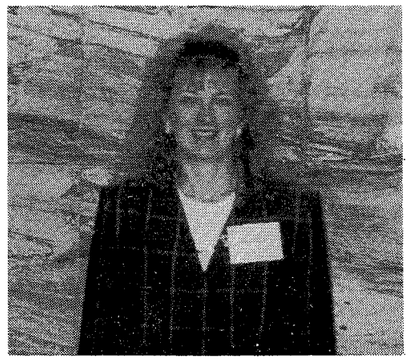
MAY 19, 1994
BOGIE LAKE GOLF CLUB

(same place as last time)

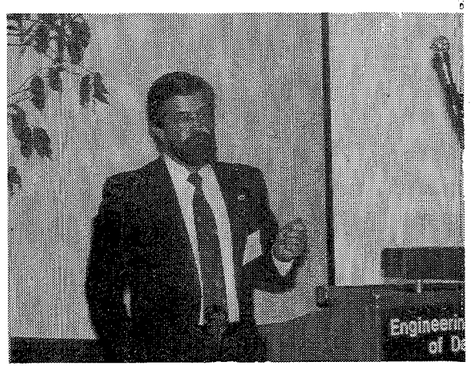
Golf, lunch, dinner, prizes, awards

Proceeds to benefit
Michigan Section Educational Fund

Mike Labadie
Director of Transportation
McNamee, Porter & Seeley



Betty Mercer
Director, OHSP



Jim Brush
MDOT Bureau of
Transportation Planning

SECTION SCHOLARSHIP AWARDED

Paul Dorothy, a graduate student at Michigan State University was awarded a Michigan Section ITE scholarship in the amount of $500 at the annual meeting by President Sam Lawson. Paul was a speaker at our July, 1993 meeting, attended the 1993 TRB Annual Meeting with the rest of the MSU contingent, and was a member of the MSU concrete canoe team in the ASCE competition which received second prize nationally (Paul did the presentations). He is a research assistant at MSU, supervises 10 graduate and undergraduate students and teaches two engineering economics courses. Paul is to be congratulated on his award as an outstanding transportation engineering student.

GOOD-BYE MICHIGAN!

by Michael F. Kobran, Michiganite Editor

I came to Michigan in June, 1960, from New Jersey fresh out of college and eager to begin a career in freeway design. After thirty years with the City of Detroit in highway engineering, planning, programming and transportation and traffic engineering, I retired and moved to Grand Blanc where I started my own consultant business and hooked up with Barton-Aschman Associates. The past three years in the consulting field have been a most rewarding and interesting time for me.

My wife, who is presently Vice-President of Instruction and Learning Services at Delta College, northwest of Saginaw, has recently accepted a position as Vice President for Educational Services at Brookdale Community College in Monmouth County, New Jersey. She will start there on January 10, 1994. We have placed our home in Grand Blanc on the market and rented a condominium in Middletown, NJ. Until our home is sold, I will be living in both New Jersey and Michigan and finishing up some projects here.

It is inevitable, however, that my time in Michigan will diminish and I want to take this opportunity to thank all the friends I have made in the profession for a really enriching experience for over 33 1/2 years. Michigan will always be a special place for me. It is where I met my wife, raised four kids, and learned a profession. It is time to move on, however, and I look forward to the challenges and opportunities that this will bring. Not the least of the new blessings will be to reduce the miles between my wife and me and our four children and four grandchildren with another grandchild due in June, 1994. Three of our children live in the Washington, D.C. area and the fourth is in Vermont so we plan to see a lot more of them.

There will be a need for a new editor of the *Michiganite* and I hope that one of our younger members will take this opportunity to expand their horizons and breath some new life into this newsletter. I am sure that the Board of Directors will be a supportive and helpful as they have been for me.

So, thanks Michigan and I hope to return to your pleasant peninsula many times!

NOVEMBER TECHNICAL SESSION IN GRAND RAPIDS

by Victoria Holland

For those members who were not able to attend the November 4, 1993 technical session in Grand Rapids, you missed a good meeting. Our technical program committee chairperson, Adiele Nwanko, gathered a group of very interesting and dynamic speakers for the meeting, which was attended by over 60 members.

Mr. Dean Derks from the Michigan Department of Transportation began the morning portion of the program with a presentation on the updates in the Michigan Manual of Uniform Traffic Control Devices. The new manual, which may be published in January 1994, will contain several changes. One of the most important alterations will be the use of synonyms for, or the elimination of, the words "hazard," "hazardous," "danger" and "dangerous." There are also some additions and deletions of signs in the future manual. Dean stated one very interesting statistic: of the 1,000 printed volumes of the 1981 MMUTCD, half were distributed to government agencies. The other volumes were primarily purchased by attorneys.

Mr. Ron Blake, the Traffic Engineer for the City of Jackson then gave a very dynamic presentation about the city's installation of a photo/radar camera at the intersection of Jackson at Washington to record red light violations. Detector loops are present beyond the stop bar on one leg of Jackson. A camera at the intersection photographs when an activation is received after the Jackson red phase begins. Letters of violation are then sent to the registered owners of the vehicle informing them of their violation and also that, had they been observed by a traffic officer, they would have been ticketed.

Mr. Michael Bolton, the Executive Director of the Ann Arbor Transit Authority (not the popular singer) addressed the group about mass transit and why it is still not able to sway the majority into using the systems as opposed to single passenger car usership. He touched on various specific topics such as "on time" arrivals, bus pre-emption at signalized intersections, conveying information about route scheduling to the users and mass transit uses for major public events.

After a wonderful lunch arranged by the meeting host, Ms. Rise Rasch from MDOT's Grand Rapids District Office, the afternoon program started with a presentation from Mr. Ibed Itani about the year 2015 transportation plan which is being developed for the City of Grand Rapids. His analysis for this plan encompassed proposed projects from the state and local road systems. The end product displayed the vehicle miles traveled on the Grand Rapids network and how many miles will be deficient on the network in 2015. The final product was a map and plan showing proposed construction projects which will address the future transportation needs of Grand Rapids.

Paul Hamilton, Chief Transportation Planner for Tri-County Planning and Pete LaMourie of the W.B.D.C. group, jointly presented the next topic on the Traffic Impact Study Ordinance. This ordinance has evolved mainly because engineers and planners are now having to deal with designing their way out of traffic congestion as opposed to building their way out, as construction is no longer an available option in some areas. Targeted from small Michigan communities, guidelines have been developed to hold community review impact studies now required for planning activities. Topics covered will include:

- Why are traffic studies needed?
- What are the threshold values that require specific kinds of studies?
- How to select a qualified consultant to perform a traffic impact study.
- How to work with road agencies in planning developments.

The publication may be available as soon as January 1994. Future productions will be a slide show and a package of information for community presentations.

The final topic of the afternoon taught the group what a "Charrette" is and how this design by committee approach was used for Grand River in East Lansing. In November 1993, a plan for the redesign of Grand River - which separates the MSU Campus and the East Lansing business district, was overwhelmingly rejected by the community because the community felt the plan did not address the needs of the several special interest groups using the corridor. Subsequently, the Charrette was proposed. Mr. John Matuszak, the Director of Engineering for the City of East Lansing, was one of the Charrette participants. John explained that a Charrette is a group assembled to solve a specific problem with the help of specialists. In this case, the Charrette had members from the following groups:

- Study group, appointed by City Council
- Focus groups of people with specific interests in the Grand River corridor
- Design team members (planners, graphic designers, foresters, engineers).

Cont. on P. 8

MAINTENANCE OF TRAFFIC AND USERS' COSTS: LET'S LOOK AT THE WHOLE PICTURE

by John C. Niehaus

A couple years ago when I was giving maintenance of traffic workshops for the Ohio Department of Transportation, district operations engineers would tell me how motorists' reactions were becoming increasingly negative with each passing year. More recently, the public information manager for the local MPO, which works with the states of Ohio and Kentucky on keeping the traveling public informed of construction activity, reported that the situation is deteriorating markedly this year. Motorists are not only sitting in their cars steaming and beating their hands in frustration on their steering wheels, they are getting out of their cars and throwing things at construction workers and are driving down shoulders in order to get out of the traffic stoppages. Local police, unable to control the situation are calling the MPO for help.

The question was raised, "What are we going to do about it?" While the short-term answer will undoubtedly lie in the area of public relations and information, the long-term implications are much more extensive.

Motorists' user costs, namely those attributable to congestion and delay, have been quantified over the years and are used in benefit cost analyses and similar studies. However, they tend to be disregarded when we put together construction projects.

They are very real and the people paying those costs are the same ones who are paying for the projects, namely the transportation users. Isn't it time that we began recognizing the many of these users' costs could be significantly reduced by increasing some of the maintenance of traffic and construction costs of the projects? Since the same person, namely the transportation user, is paying for both, they can end up paying a lot less and enjoying it a lot more.

The comment was made in the recent MPO meeting that many motorists are driving in frustration on the shoulders. If in fact there shoulders are traversable, whey weren't they made part of the maintenance of traffic plan in the first place? The usual answer is that to do so increases the cost. So what is the cost of not doing it, including not only those quantifiable and tangible users' costs such as delay vehicle operating costs, fuel consumption, congestion, accidents, etc., but also those intangible costs associated with the high levels of frustration and motorist dissatisfaction?

It may cost a little bit more money but isn't it time that we started looking at maintaining capacity through some temporary construction rather than automatically shutting down lanes and creating massive congestion? Isn't it time we began looking at the problem from the viewpoint of the highway user rather than solely as a designer?

And in terms of what we've constructed, it is time to look at a higher standard of construction rather than simply the traditional 20 year design life. One of the facilities causing the most problems now is an older portion of the interstate system which was completely rebuilt with great congestion in the 1970's and is undergoing it again; again with considerable congestion. We need to look at total life cycle costs which take into account the much higher costs to rebuild existing facilities under traffic - costs which include not only increased construction costs but also tremendous motorist user costs. When we do, we might decide that a longer design life and a higher initial cost of construction would be offset by the maintenance and reconstruction costs which cause so many problems and grief.

Research work being conducted under the direction of Drs. Issam Minkarah and Andrew Bodocsi at the University of Cincinnati indicates that the reconstruction costs and miseries could well be reduced by means of a better initial design and construction. Dr. Minkarah said, "Roads can last 40 to 50 years. You could easily double the life."

One of the attributes that makes our profession so interesting and challenging is the fact that the response of human beings is essential to the success of our efforts. It can also be frustrating. In this case, we need to recognize that the human element is an essential part of our problem and that the frustration will not go away until we find a better way of solving the problem.

John Niehaus is the present director of ITE District III and a member of both the Ohio and Michigan Sections.