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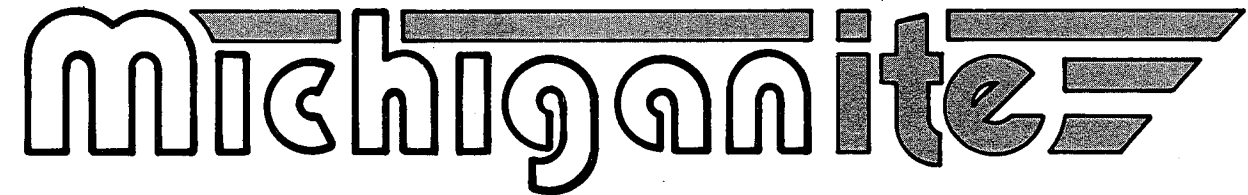
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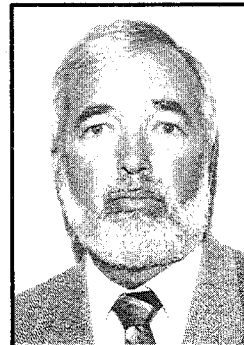


WINTER 1989

VOLUME XXIII, NUMBER 3

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

Richard Beaubien Elected Vice President



PRESIDENT'S COLUMN

FROM THE DESK OF...

DAVID C. BACON

This is my third column as president of the Michigan Section, and we are three-quarters of the way through the year. We re-introduced a summer meeting in Lansing and all of us on the Board were very surprised at the large turnout. I must say, many of our "old timers" showed up! Therefore, the Board has decided to have another Lansing summer meeting next year.

In review of the other meetings held up to this point, the turnout at the Mt. Pleasant family weekend was very small and, as a result, this event has been dropped from the 1989 schedule. Our fall golf outing was well attended and we may have to have a shotgun start to take any more golfers. (Not that all those who did golf were golfers, but we try, and with Bill Savage's system some of us even win something!)

Vancouver was a great trip and meeting. There were 34 members, 12 vendors, and 21 spouses who made up the 67 who attended the Annual Michigan Section/Carrier & Gable dinner. I must say that no other section or state does anything to compare to this, and this is what makes the Michigan Section so special.

The weather was good except for one day, and almost all of the meetings that I visited were standing room only. Michigan made itself known at this meeting by first having a spot at the opening luncheon where we received the award (for the second year in a row) for the best newsletter with mailings of 250-500, your MICHIGANITE. Great job, Joe! Thanks also to all the members who took time to supply articles.

See **PRESIDENT ... page 3**

September 27, 1988
 Vancouver, British Columbia

For me, this is a dream come true. Many of you know that I was born in Western Canada, so it seems somehow appropriate that my dream would come true here in Vancouver -- in Western Canada.

No one can win an election like this one without the support and encouragement of many other people. I would like to thank my supporters, particularly the Michigan Section, and my wife for her patience and understanding. I would also like to express my respect for Allan Davis, who was a most gracious competitor in this election.

I feel like the Jennifer Beals character at the end of the movie - *Flashdance*.

*"What a feeling! Keep believing
 I can have it all, now I'm dancing for my life
 Take your passion, make it happen
 You just come alive
 You can dance right through your life."*

You've just given me permission to "dance" right through the next three years with the ITE Executive Committee. I promise to bring both my passion and my reason to the ITE Board's decision making as we set the course for the Institute.

See **BEAUBIEN ... page 4**

OHSP CORNER 6
LEGISLATIVE TRUCK SAFETY ... 8
INTRO. TO TRAFFIC ENGINEERING 10
1988 ANNUAL MEETING 12
MICHIGAN WINS AGAIN 13
PEOPLE IN THE NEWS 15

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*Official Publication of the
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 Institute of Transportation Engineers*

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TREASURER'S REPORT

| | |
|---|------------------|
| Balance as of September 30, 1988: \$5,342.13 | |
| Receipts: | |
| Dues | \$ 42.00 |
| Michiganite Ads | -0- |
| Interest | 50.93 |
| Meetings | -0- |
| Late Dues and Fines | 12.00 |
| Other | 741.00 |
| | <u>\$ 845.96</u> |
| Expenses: | |
| Postage | \$ 261.19 |
| Supplies | 8.00 |
| Michiganite | 840.00 |
| Printing | 237.88 |
| Meetings | -0- |
| New Programs | -0- |
| National Meeting Expense | 407.88 |
| Plaques/Awards | 117.15 |
| National Donation | 30.00 |
| District Contribution | -0- |
| Other | 379.00 |
| | <u>\$2281.10</u> |
| Balance as of November 30, 1988: \$3,906.99 | |
| Respectfully Submitted, Roger K. Walther, Treasurer | |

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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, Joseph Meszaros, 11310 Flintrock, Grand Ledge, Michigan 48837; telephone: 517/627-6308.

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PEOPLE in the news



Rich Cunard

RICH CUNARD MOVES TO TRB

On January 9, 1989, Richard Cunard who was the transportation engineer for Rochester Hills, began a new position with the Transportation Research Board (TRB). Rich's new responsibilities involve directing traffic engineering and traffic operations research activities coordinated by TRB. Before his 6-month stay at Rochester Hills, Rich spent 11 years with the Traffic Improvement Association of Oakland County where he was director of Engineering and Data Services.

Rich had been very active in the Michigan Section participating in the activities of the Executive Board which included presiding over the Section as president in 1986. He was always willing to share his time and talent by providing articles for the Michiganite, accepting special committee assignment, and by making presentations at Technical Sessions. Fortunately, we will still have contact with Rich in his new position, since his responsibilities involve participation in the Institute at the national level.

We wish Rich much success in his new position. We appreciate his commitment to the profession and his involvement in our Section. Rich, we look forward to working with you in your new duties at TRB, and in seeing you at Institute activities. You are always welcome to join us in any of our Section activities. ■



Dave Merchant

MERCHANT RETIRES FROM FHWA

On December 31, 1988, David A. Merchant retired from his position as division administrator of the Federal Highway Administration's Michigan Division Office. Mr. Merchant's professional career spanned 37 years, beginning in 1952 immediately after his graduation from the University of New Hampshire with a bachelor of science degree in civil engineering. As an FHWA employee in 1959, he added to his education, earning a masters degree in engineering from the University of California.

During Dave's professional ascent within FHWA, he worked for 6 years in the North Carolina Division office as programming and planning engineer, engineering coordinator, and assistant division engineer. He then spent 5 years in Washington, D.C. as chief of the Traffic Program Branch, and then chief of the Traffic Programs Division of the Office of Traffic Operations. Finally, in 1972 Dave was promoted to Michigan as division administrator. While in Washington in 1969, he was awarded the Bureau of Public Roads Special Achievement Award. This was followed in 1979 by the Administrator's Award for Superior Achievement.

Dave and his wife Mary Ann plan to maintain their residence in the area. His future career plans are indefinite at this time, but may include some consulting. ■

DON WIERTELLA ELECTED

The National Institute for Certification in Engineering Technologies (NICET) has announced that Don Wiertella has been elected as president of the Board of Governors for the 1988-89 fiscal year. NICET policy is effected through the seven member Board of Governors.

NICET was founded in 1961 by NSPE (National Society of Professional Engineers) to serve the career needs of technician members of the engineering team. NICET is headquartered in Alexandria, Virginia.

Don works for MDOT in the Traffic and Safety Division of the Kalamazoo District Office. ■

JOB OPENINGS

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MORE FEMALES INVOLVED IN FATAL CRASHES

According to the National Highway Traffic Safety Administration (NHTSA), the number of female drivers involved in fatal crashes between 1982 and 1985 rose by 14%, largely because women aged 21-24 are drinking and driving more often.

The Insurance Institute for Highway Safety reports that analyses of late-night, single-vehicle fatal crashes, which are most often associated with alcohol impairment, indicated that alcohol involvement for female drivers was almost as high as for male drivers. James Fell of NHTSA recommends "alcohol countermeasure efforts, public information programs, and sobriety checkpoints" be applied to the 21-30 segment of the female population, "in addition to the traditional male focus." ■

JOE FINCH ASSISTANT DISTRICT TRAFFIC ENGINEER KALAMAZOO

Joseph K. Finch was promoted to assistant district Traffic and Safety engineer for the Kalamazoo District of the Michigan Department of Transportation on October 31, 1988.

Joe is a Michigan Tech graduate with a degree in civil engineering. Before his appointment to assistant district Traffic and Safety engineer, he worked in Construction for MDOT and the Indiana Department of Highways. ■

ITE 1989 MEETING SCHEDULE

| <u>Date</u> | <u>Location</u> | <u>Host</u> | <u>Event</u> |
|--------------------------------|-----------------------------------|-------------------------------------|--|
| February 9 (TH) | Flint (SHERATON) | Berry | Lunch/Technical Session |
| March 17 (FR) | Lansing (MIDWAY MOTOR LODGE) | Etelamaki | Lunch/Technical Session |
| April 27 (TH) | Southfield (CIVIC CENTER) | Northrup/Meszaros Endres/Van Lew | Vendor's Day |
| May 19 - 20 (FR - S) | Lansing (SHERATON) | Carrier/Henry | Annual Dinner/Dance Family Weekend |
| July 13 (TH) | East Lansing (UNIVERSITY CLUB) | Maleck | Lunch/Technical Session |
| September 7 (TH) | Grand Rapids | Meredith | Golf/Dinner |
| September 17 - 21 (SU - TH) | San Diego, CA | | National Meeting |
| October 19 - 21 (TH - S) | Indianapolis, IN | Indiana Section | District III Annual Meeting |
| November 2 (TH) | Marshall | Karns | Lunch/Technical Session |
| December 7 (TH) | Detroit | Kobran/DeWitt | Section Annual Meeting/ Technical Session |

PRESIDENT . . . continued from page 1

At the annual meeting we once again took honors when our own Richard Beaubien of Troy was elected Vice President of the International. It is about time that the rest of the nation finally recognized what we in Michigan have known for a long time. Congratulations to Vice President Richard Beaubien from all of us in the Section!

By the time this issues goes to print, we will have been host to the District 3 meeting in Dearborn, and ballots will have been mailed to all voting members for next year's officers. It is a long road from director to president, and a lot of extra time has to be spent to get the job done. As you vote, remember that the top officers have worked hard to get there and select with care those who are starting up the ladder. Our job is to represent YOU -- and only with your input and support can this be accomplished. ■

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For the last 13 years I have been a city traffic engineer. I have had the opportunity to receive, first hand, the comments and, yes, even complaints of citizens and elected officials on urban traffic congestion as it affects their daily lives. Because of this first-hand exposure or shock treatment, I have been especially pleased to see the Institute take a leadership role in bringing the issue of urban traffic congestion to the forefront of public discussion. This is our issue, and we're uniquely qualified to handle it. ITE must now provide the vision and leadership needed to solve the problem.

When I visited the Southern Section meeting in Baton Rouge, Louisiana, this year, I learned something about myself and about other traffic engineers that I hadn't known before. Elizabeth Treadway from the city of Greensboro, North Carolina, conducted a session entitled, "Brains, Beauty, and the Beast." Participants were asked to answer a questionnaire and compute a score prior to the session. We didn't find out what the score meant until the session. The scores indicated whether you favored the right brain or the left brain in decision making. That is, do you favor an approach based primarily on logic or based primarily on emotion and intuition? Knowing that she was speaking to a group of engineers, Elizabeth expected most of the audience to favor the left brain -- the logical approach. However, to her surprise, most of the audience scored in the middle -- neither extremely logical nor extremely intuitive. This group of traffic engineers and, I expect, most traffic engineers, appreciate both the logical and intuitive approaches. This ability to understand both the logical and intuitive approaches gives us a unique perspective as we communicate the problems and solutions of transportation to the public -- and communicate we must.

The broad definition of transportation engineering is "to promote the safe and efficient movement of people and goods." We need to emphasize the promotion part of our jobs more than we have in the past. We must communicate - help to identify the problems in terms the public can understand; help to identify alternative solutions in understandable terms, and help the public make the choices needed for improved transportation.

We have the special talents and abilities needed to alleviate traffic congestion and save lives. Let's make these problems our servants. ■



Vice-President
Richard Beaubien

WELCOME NEW MEMBERS


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data elements used in the development of the plan, the structure of the plan, and the resultant recommendations. The key elements of the plan were identified as transit center development, elderly/handicapped service improvements, cross-town express bus routes, services in conjunction with private providers, People Mover, Michigan corridor commuter rail, low capital Woodward/Gratiot LRT, and general bus stops, signs, and terminals. The plan recommendations also included items regarding the pursuit of LRT along the Woodward and Gratiot Avenue corridors.

Special thanks go to Mike Kobran and his staff for the excellent meeting and lunch accommodations, to Joe Marson, Jon Start, and Sam Lawson for putting together a diverse and interesting technical program, and to the speakers who not only kept their interest throughout the day, but also devote a great deal of time and effort in preparation of their presentations. ■

—By Ken Tsuchiyama, City of Battle Creek

THE MONUMENT

**GOD,
BEFORE HE SENT HIS CHILDREN TO EARTH
GAVE EACH OF THEM
A VERY CAREFULLY SELECTED PACKAGE
OF PROBLEMS.
THESE,
HE PROMISED SMILING,
ARE YOURS ALONE. NO ONE
ELSE MAY HAVE THE BLESSINGS
THESE PROBLEMS WILL BRING YOU.
AND ONLY YOU
HAVE THE SPECIAL TALENTS AND ABILITIES
THAT WILL BE NEEDED
TO MAKE THESE PROBLEMS
YOUR SERVANTS.
NOW GO DOWN TO YOUR BIRTH
AND LIVE YOUR LIFE. KNOW THAT
I LOVE YOU BEYOND MEASURE.
THESE PROBLEMS THAT I GIVE YOU
ARE A SYMBOL OF THAT LOVE.
THE MONUMENT YOU MAKE OF YOUR LIFE
WITH THE HELP OF YOUR PROBLEMS
WILL BE A SYMBOL OF YOUR
LOVE FOR ME,
YOUR FATHER.**

— BLAINE M. YORGASON

*The Challenge from Vice President Dick Beaubien
during the Annual Meeting
for all Transportation people*



Michiganite Editor
Joe Meszaros

MICHIGAN WINS AGAIN!

Michiganite editor, Joe Meszaros, was notified that our quarterly publication had been selected as the recipient of the 1988 ITE District/Section Newsletter Award (250-500 circulation). Our Section President, David C. Bacon, accepted the award on behalf of the Michiganite during the 58th annual meeting in September held in Vancouver, British Columbia.

Vice President Dick Beaubien presented the award to Joe at the annual Michigan Section meeting in Dearborn, Michigan, in early December. Congratulations and thanks to Joe and all who contributed articles and personal time in producing the Michiganite. We can continue to produce a high quality newsletter, but the membership needs to be involved. Please feel free to submit articles and ideas to Joe or the other two associate editors, Bob Lariviere of MDOT and Bob DeCorte of TIA, Oakland County. ■



1988 ANNUAL MEETING AND TECHNICAL SESSION

The 1988 Michigan Section Annual Meeting was held on December 1, 1988, at the Fairlane Holiday Inn. Once again, Michael Kobran of the City of Detroit served as host, and excellent accommodations were provided.

Gian Aggarwal was the first speaker on a diverse and interesting technical program. Gian presented the City of Detroit's experiences in managing traffic for the 1988 Grand Prix. He provided some background on the history and a description of the event, followed by a description of the City's efforts to prepare the course for the event. Surface treatments (such as repaving and structure treatments), traffic barriers (including traditional and special treatments), and pavement markings were all detailed as part of the course preparation.

Barricading plans, detour routes, and temporary signing plans that served as the basis for the traffic management for the event were detailed. Freeway ramp closures and partial closure of the John C. Lodge Freeway were implemented to accommodate non-event traffic, particularly traffic to and from the Detroit-Windsor tunnel. Three (3) prefabricated pedestrian bridges were used to assist with the movement of pedestrian traffic at the event and special handicapped spectator provisions were made. An extensive public information campaign was also implemented before and during the event to promote efficient traffic movement throughout the event area.

Our second speaker was Paul Olson of the University of Michigan Transportation Research Institute (UMTRI). Paul presented the findings of an UMTRI study entitled, "Minimum Photometric Properties to Insure Adequate Nighttime Conspicuity." The study objective was to provide objective information to determine when a traffic sign loses its target value and should be replaced based on conspicuity.

The UMTRI study used an experimental plan involving four variables: photometric properties (SLA), six different sign colors, three levels of surround complexities, and observer age. Yellow signs were the primary color for the study using three types of sign materials. Surround complexity was found to have a great effect on conspicuity, as was observer age. Although the experimental plan was not intended to identify the effect of sign color, the results appeared to indicate that red signs had a 50 percent greater nighttime conspicuity level than yellow signs, based on distance. Several charts were developed from the study which identify minimum SLA values for various type signs based on speed, stopping/reaction distance

and surround complexity.

After lunch, President Dave Bacon conducted the Section Annual Meeting. The Treasurer's Report was received and the Teller Committee presented the results of the election of next year's Executive Board members. Announcements were made regarding the National Newsletter Award to Michiganite Editor Joe Meszaros, and the new ITE International Vice President-Elect Dick Beaubien of the City of Troy. Section President-Elect Joe Marson presented outgoing President Dave Bacon with a plaque commemorating his years of service to the Section.

The technical session resumed with a presentation on the "Mid-Michigan Transportation Microcomputers Users Group (MTMUG)." Paul Hershkowitz and Brad Hagerty of MDOT and Steve Noble of the Tri-County Regional Planning Commission gave an overview of a recently formed and growing organization of transportation professionals interested in the use of microcomputer applications in the transportation field. The purpose of MTMUG is to provide transportation professional in mid-Michigan with a means of sharing information on microcomputer applications and keep them up-to-date on current hardware and software advances. The group presently has an active membership of approximately 40 and a mailing list of about 400 individuals and organizations.

The next presentation was given by Dr. Paul Wasielewski of General Motors Research Lab on GM's Pathfinder Project. The Pathfinder Project is being pursued as an experiment in real-time motorist information systems under the joint sponsorship of the FHWA, Caltrans, and GM. Dr. Wasielewski gave an overview of technological developments that have led to the identification of possible components to a central traffic control/cooperative highway system concept.

The Pathfinder experiment will be conducted in three (3) phases: 1) systems integration, 2) experimentation, and 3) analysis. The experiment is being conducted in California utilizing Caltran's existing traffic monitoring systems. The test will be conducted on a small scale, with about 25 test vehicles equipped with on-board computers intended to provide the motorists with limited information regarding location and roadway incidents. Dr. Wasielewski also demonstrated a sample in-vehicle computer to interested parties during the afternoon break.

The final presentation of the day was given by James Maslanka of the Southeast Michigan Transportation Authority (SEMATA). The topic of his presentation was SEMATA's Regional Transit Plan. Jim's presentation included a description of the plan, including the identification of the need for the plan, the

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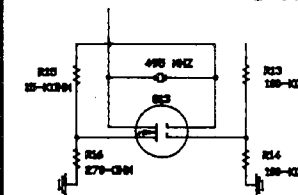
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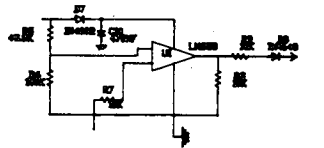
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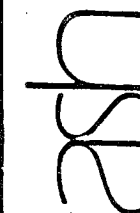
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**HIGHWAY SAFETY
A NATIONAL ITE PRIORITY**

At the September national meeting in Vancouver, Thomas Brahm announced that ITE will be recognizing highway safety as a top priority in the years ahead. In doing so, Tom said that the Institute recognized highway crashes and their resultant casualties as major societal and health concerns. He said that the Institute is committed to attacking this serious problem. Actually, the trend to do so started about three years ago when a National Safety Coordinating Committee was formed. There has been an increased emphasis on highway safety at national meetings since the Michigan Office of Highway Safety Planning commends ITE for its efforts.

Michigan's own Richard Beaubien, our new national vice-president, prepared a paper entitled, "A Program for National Mobility and Safety - Building the Framework." You should obtain a copy and read it. Comments were requested at the national ITE meeting by Mark Norman, and you may obtain a copy by contacting Norm. His address is: 525 School Street, S.W., Suite 410, Washington, DC 20024-2729 USA. His telephone number is (202) 554-8050.

OHSP PROGRAMS

In the last issue of the *Michiganite*, we discussed a change in OHSP funding. This article is a follow-up to that article, as promised.

Risk Management Training: Risk management (the OHSP prefers to call it proactive management) training will be available through both Wayne State University (WSU) and Michigan State University (MSU) this fiscal year. WSU is developing a workshop aimed at management and elected officials while MSU is developing a workshop aimed at the operational level (such as maintenance crews). The OHSP believes that both are needed and that it is necessary for both management and operations to agree to the need for risk management if it is going to succeed. These courses should be available after the start of the new year.

Traffic Engineering Training: Any effective approach to traffic engineering training must consider the different levels of expertise and education among persons functioning in traffic engineering positions. The target population includes: technicians within public works departments, police officers, engineers with no formal traffic engineering education, and trained traffic engineers who need to keep their skills current. During FY 1989, OHSP will be support-

ing two different programs which will cover a range of traffic engineering training needs.

- a. First will be the basic traffic engineering short course which will be offered by both Michigan State University and Wayne State University. This training program is designed to address the problem of inadequately trained personnel performing traffic engineering services at all levels throughout the state. For more information on the Michigan State University program contact: Anne Woodard, 553 Communication Arts Building, Civil & Environmental Engineering, Highway Traffic Safety Programs, Michigan State University, East Lansing, Michigan 48824-1212; Phone (517) 355-3270. For more information on the Wayne State University program contact: Tapan K. Datta, Ph.D., P.E., Department of Civil Engineering, 2100 Engineering Building, Wayne State University, Detroit, Michigan 48202; Phone (313) 577-3789.
- b. The other type of training will be offered again by Wayne State University. This program is designed to bring specialized training to the community. The workshops are one or two days in length, and are designed to fit the specific needs of the local jurisdiction. For more information on the program contact: Tapan K. Datta, Ph.D., P.E., Department of Civil Engineering, 2100 Engineering Building, Wayne State University, Detroit, Michigan 48202; Phone: (313) 577-3789.

Traffic Engineering Coordinating Committee: The OHSP plans to start a Traffic Engineering Coordinating Committee shortly after the first of January. There are currently two task forces in existence which will be merged into this committee. One is Risk Management and the other is Traffic Engineering Training. It is a resurgence of an earlier committee which existed for nine years, but which ended some five years ago.

Traffic Engineering Public Communications Campaign: The OHSP will be developing a public communication campaign designed to stress the importance of traffic engineering. The campaign will also focus on reminding the public of the meaning of certain traffic control devices, such as a flashing red light or a yellow line. This traffic engineering message will be developed in various forms such as PSAs, brochures, and/or videos. It is also planned to conduct a one-day seminar aimed at helping the traffic engineer sell the importance of not only their position, but the work that they do.

Traffic Engineering Services for Cities and Counties: Many local units of government do not have adequate traffic engineering expertise available. In order to better meet the needs of these local units of government, especially the smaller units, the OHSP has provided funding to the Community Assistance Program of the Michigan Department of Transporta-

HIGHWAY TRAFFIC SAFETY PROGRAMS

**DEPARTMENT OF CIVIL &
ENVIRONMENTAL ENGINEERING
MICHIGAN STATE UNIVERSITY**

Michigan State University's Highway Traffic Safety Programs had its origin in late 1955. At that time, Michigan was faced with the prospect of having its worst highway traffic fatality record in history. In an effort to address this situation, Governor G. Mennen Williams called the Michigan legislature into special session to consider 14 highway traffic safety proposals. The legislature, in a week of intensive work, passed legislation to implement seven of the Governor's proposals.

One of the legislative bills established the Highway Traffic Safety Center at Michigan State University. Organizing and staffing of the Center followed a model contained in the report "*What Can Colleges Do About the Traffic Problem?*". This report was published in 1953, and resulted from an effort of the Association of Land Grant Colleges and Universities to determine the function of land grant educational institutions in dealing with the highway traffic problem.

In 1964, the Highway Traffic Safety Center was organizationally assigned to the University's Lifelong Education Programs. The Center's name was modified to Programs in 1981. In July 1987 with the dissolution of LEP as an organizational entity, Highway Traffic Safety Programs became part of the Department of Civil and Environmental Engineering. During these 33 years, the mission of HTSP has remained substantially unchanged.

The mission of HTSP is to bring together persons from various disciplines and professional backgrounds to reduce highway traffic deaths, injuries, and economic loss and to increase the safe, efficient, and smooth flow of traffic on highway transportation systems. HTSP's goal is to fulfill its mission, consistent with University policies and procedures, through credit and non-credit instruction, public service, and research activities.

Nine different programs within HTSP are focused on this goal. They are: Traffic Accident Investigation, Police Alcohol Enforcement, Driver Education, Driver Performance Measurement, Motorcycle Safety, Motor Fleet Safety, Traffic Radar Instruction, Tactical Driving, and Traffic Engineering. Forty-two courses, mostly in non-credit continuing education, are currently offered through these programs. During the past year, 144 offerings of HTSP courses have been made with over 3,300 participants. Currently, the most active research is in driver performance measurement.

Two more courses, one in traffic accident investigation and one in traffic engineering, are under

development. Several other courses are planned and the opportunity exists to open whole new traffic safety programs. HTSP instruction, public service, and research activity is supported by legislative appropriation and contracts and grants with federal and state agencies, business, industry, foundations, and other educational institutions.

Demand for HTSP courses and highway traffic studies and research continue to be strong. Recently, lifelong education at Michigan State University was elevated to equal status with research and traditional instruction. These factors promise to make the future of HTSP a challenging one.

—By James P. Neve, jr., MSU

REGISTRATION FORM
(Register early; attendance is limited.)

PLEASE PRINT OR TYPE.

Full Name _____

Job Title _____

Organization _____

Address _____

City _____ Zip _____

Telephone: Office () _____

Home () _____

Location: 1st Choice _____

2nd Choice _____

Please enclose check, money order, or purchase order payable to:

MICHIGAN STATE UNIVERSITY

INTRODUCTION TO TRAFFIC ENGINEERING

Michigan State University's Department of Civil and Environmental Engineering is offering a traffic course to provide basic knowledge in the fundamentals of traffic engineering and highway safety concepts, principles, and technology, as well as their application.

This five-day course explores the contribution that traffic engineering makes to traffic operational efficiency and effectiveness for the benefit of motorist and pedestrian comfort, convenience, and safety through the application of traffic and safety technology.

Content of the course covers the scope of traffic engineering and its interaction with other disciplines, traffic data acquisition and application, sight distance, speed and parking regulation, traffic volume analysis and highway capacity, traffic accident analysis and countermeasures, signs, and markings and their application, electronic traffic control devices and application, road and street geometric design and traffic and pedestrian flow. Participants will have the opportunity to discuss and work through typical traffic problems.

This course is designed for governmental administrators, supervisors, engineers, urban planners, technicians, and police officers who have responsibility for highway safety and operation programs, traffic engineering, planning, maintenance, traffic law enforcement and tort liability functions, and the solving of traffic operational and safety problems.

All class sessions will be from 8:30 a.m. to 4:30 p.m. except at Gaylord where class will start at 1:00 p.m. on Tuesdays. There will be a break period in the morning and afternoon. Lunch break will be from noon to 1:00 p.m. A pre-test and post-test on course content will be given. Certificates suitable for framing will be presented to those who complete the course.

In addition to any personal items, participants should bring writing materials and a hand-held calculator. A copy of the current *Michigan Manual of Uniform Traffic Control Devices* is optional. A course manual for in-class use and take-home will be provided, as well as selected handouts.

Instructors: Michigan State University faculty members, Dr. William C. Taylor, Dr. Thomas L. Maleck, and James P. Neve, Jr., and consultants Donald M. Holmes and William F. Savage.

Accommodations: Arrangements for meals and overnight lodging, if needed, will be the responsibility of the participant. Refreshments will be provided during the morning and afternoon break periods.

Course Fee: There is a \$35 course fee to help defray course material costs. The remaining cost of the course will be paid by a grant from the Michi-

gan Office of Highway Safety Planning and the U.S. Department of Transportation, Federal Highway Administration.

Registration: EARLY REGISTRATION IS ENCOURAGED. Class size at each location is limited, and past experience has been that many who wanted to attend have not been able to be accommodated.

To register, complete the registration form attached to the enclosed return envelope, insert a check, money order, or purchase order for the \$35 course fee, seal the envelope, and mail. Registrants will be sent a confirmation letter along with a course site map.

Registrations will be accepted and course fees refunded up to 10 days before the beginning date of each course offering. Course fees will not be refunded after that time. Substitute registrants are welcome at any time.

These courses are to be offered at the following locations:

| | |
|--------------|---------------------------|
| East Lansing | January 30 - 31, 1989 |
| | February 1 - 3, 1989 |
| Troy | February 13-17, 1989 |
| Taylor | February 21, 23, 27, 1989 |
| | March 1, 3, 1989 |
| Kalamazoo | March 13-17, 1989 |
| Saginaw | April 3-7, 1989 |
| Gaylord | April 18-20, 1989 |
| | April 25-27, 1989 |

For information or assistance contact:

Laura J. Taylor
Highway Traffic Safety Programs
Department of Civil and
Environmental Engineering
Michigan State University
355 Communication Arts Building
East Lansing, MI 48824-1212
Telephone: (517) 353-1790

—By James P. Neve, jr., MSU

WILLIAM F. SAVAGE P.E.
Traffic Engineering Consultant

2224 Tulane Dr.
Lansing, MI 48912
(517) 482-0854

Expert Testimony
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tion. Under the program, personnel identify and analyze problem traffic crash locations at the local level. Recommendations are then made which offer operational, geometric, or other traffic engineering improvements aimed at correcting the situation, including traffic signal installation and intersection reconstruction. For more information contact: Kurt Kunde, Michigan Department of Transportation, Traffic and Safety Division, Transportation Building, First Floor, 425 West Ottawa, Lansing, Michigan 48909; Phone (517) 335-2993.

Southeast Michigan Council of Governments (SEMCOG): SEMCOG, the Southeast Michigan Council of Governments, is a voluntary association of governmental units in Livingston, Macomb, Monroe, Oakland, St. Clair, Washtenaw, and Wayne Counties. Its goal is to foster intergovernmental cooperation by providing a public forum in which local elected officials may coordinate planning and decision-making on issues which cross over local jurisdictional boundaries.

In FY 1989, the OHSP will provide funding to SEMCOG to develop projects in three interrelated areas. The first is to encourage the use of traffic accident data in studying and solving traffic accident problems at the local level. This will be done through SEMCOG's simplified local level accident data system and an integrated Traffic Record System database which will cover all the major streets and will be accessible to the local traffic agencies.

Secondly, SEMCOG will provide assistance to the local units of government in utilizing accident data to analyze traffic safety locations and make recommendations for improvement.

The third effort that SEMCOG will be working on is to develop a methodology to identify all safety organizations within their region by local jurisdictions. Once these organizations are identified, a procedure will be developed for coordinating and more effectively administering traffic safety services. This will provide an effective networking and utilization of resources devoted to traffic safety at all levels.

If you would like any further information on any of these programs, you may contact Bonnie Powell of the OHSP at (517) 334-7900.



65 MPH EVALUATION

It has been almost a year since the 65 mph speed limit went into effect, and this article is intended to give an overview of the evaluation of the speed limit change.

Background: In April 1987, U.S. Senate Bill HR-2 passed, enabling states to raise the maximum speed limit to 65 mph on rural interstates. Michigan's Governor signed Public Act 154 of 1987 on October 29, 1987, increasing speed limits on Michigan's rural interstates from 55 mph to 65 mph. New speed limit signs were put in place, and the speed limit was officially increased to 65 mph on Michigan's rural interstate system on November 27, 1987.

As part of the massive budget reconciliation package passed late in December 1987, the U.S. Congress authorized a 4-year demonstration project in which the first 20 states would be permitted to increase maximum speed limits from 55 to 65 mph on noninterstate highways built to interstate standards. Michigan is participating in this effort and new 65 mph signs were in place on all affected sections of rural noninterstate highways by the end of January 1988.

Evaluation of Speed Increases: As it was apparent that the 65 mph speed limit was going to pass in Michigan, the Office of Highway Safety Planning (OHSP) prepared for its passage by undertaking two projects with the University of Michigan Transportation Research Institute (UMTRI). The first was a study of increased speeds by Paul Olson. This study was carried out in two stages. Stage one was conducted in the summer and fall of 1987, prior to the speed limit being changed. Stage two consisted of two surveys of post measurements which were carried out in the spring and in late summer/early fall of 1988. A draft report is currently in the OHSP summarizing the results. It is anticipated that the final report will be available for distribution by the end of the year.

Results of the speed evaluation show that speeds on rural interstate roads increased when the speed limit was raised to 65 mph. There are two points which the report stresses. First, the increase was not universal and second, the speed increase was quite small through 1988. Mean speeds increased about 1 to 2 mph.

The report offers two explanations for the small change. One is that most people on the rural interstate system were already driving in excess of the speed limit at a level close to 65 mph. In line with this, they felt it was a comfortable speed, and thus experienced no desire to drive faster. The other explanation offered is that the change represents

See 65 MPH EVALUATION . . . page 9

LEGISLATIVE TRUCK SAFETY PACKAGE

A major package of legislation dealing with the ever-growing problem of truck accidents has been passed by the Michigan Legislature and signed into law by Governor Blanchard. The bipartisan package of 11 bills makes major revisions to most aspects of truck regulations in the state.

The following is a brief summary of each of the bills as signed by the Governor.

HB 4524 (Johnson) - Michigan Vehicle Code: Covered Loads

This bill requires that loose loads on commercial trucks be covered. Certain exemptions are allowed, such as for logs, tubular products, hay, straw, or metal objects unlikely to fall off from the trailer due to their size, weight, or density. Construction vehicles in designated work zones are exempt as are farm trucks carrying agricultural products. This law takes effect April 1, 1989.

HB 5674 (Hoekman) - Michigan Vehicle Code: Operating Brakes on All Wheels

This bill requires operating brakes on all wheels of commercial vehicles and buses. Trucks or truck tractors manufactured before July 30, 1980, with three or more axles will not have to have brakes on the front wheels. This law will take effect April 1, 1989.

HB 5678 (Spaniola) - Fire Code: Inspections for Vehicles Hauling Flammable Materials

This bill requires annual inspections of all vehicles hauling flammable materials. The inspection would be conducted the State Police. Vehicles with a capacity of less than 300 gallons and engaged in agricultural or horticultural work are exempt. This law takes effect April 1, 1989.

HB 5679 (Hoffman) - Motor Carrier Safety Act: Accident Reporting

This bill requires the Truck Safety Commission (created in SB 703) to make recommendations by December 31, 1989, on how to improve the accident state reporting forms. This law has immediate effect.

HB 5680 (Kosteva) - Motor Carrier Safety Act: Log Audits

This bill allows the State Police to conduct a log audit on a driver who has committed three log violations in a 12-month period. The bill also exempts municipal vehicles from the Act except as provided in the Michigan Vehicle Code. This bill has immediate effect.

HB 5681 (DeBeaussaert) - Motor Carrier Act: MPSC Penalties

This bill allows the Michigan Public Service Commission (MPSC) to impose up to a \$500 fine for violations of the Motor Carrier Act, rules promulgated pursuant to the Act, or MPSC orders issued pursuant to the Act or rules. The revenue from these fines

would be deposited in the Truck Safety Fund (created in SB 703). This law takes effect April 1, 1989.

HB 5682 (Bartnik) - Michigan Vehicle Code: Under-ride Protection

This bill requires trucks to conform to a 22-inch standard for underride protection if the 22-inch standard is adopted by the federal government. The bill also allows the Michigan Department of Transportation to permit 65-foot trucks on certain roads. This law takes immediate effect.

HB 5683 (Porreca) - Michigan Vehicle Code: Compliance with the Motor Carrier Safety Act

This bill amends each affected section of the Michigan Vehicle Code with respect to motor carriers to incorporate present regulations based on federal requirements of the Commercial Motor Carrier Safety Act. It also requires that municipal vehicles and drivers conform to the rules relating to driver qualifications and equipment requirements promulgated under the Motor Carrier Safety Act. This law takes effect April 1, 1989.

HB 5686 (Docherty) - Motor Carrier Safety Act: Penalties for Serious Safety Defects

This bill allows the imposition of a fine of not more than \$300 for violations of the Motor Carrier Safety Act involving serious safety defects. This fine would be assessed for known safety defects. Serious safety defects include: brakes, tires, steering, coupling devices, headlights, tail lights, brake lights, and turn signals which are not up to standard and would result in the vehicle being put out of service. This law takes effect April 1, 1989.

SB 700 (Faust) - Vehicle Code: Implementation of Federal Commercial Motor Carrier Safety Act of 1986

This bill implements the driver licensure, testing requirements, and penalty provisions of the federal Commercial Motor Vehicle Safety Act. It also restricts commercial vehicles to the two right-hand lanes of highways with three or more lanes in one direction, increases overweight truck fines by 50%, increases the civil infraction fine to \$250, requires identification on all commercial vehicles, and increases the

weight based commercial vehicle registration fee by \$10 to fund the Truck Safety Fund (created in SB 703).

SB 702 (Faust) - Motor Carrier Act: Reciprocity Fees

This bill establishes a reciprocity fee system for foreign interstate trucks. Foreign trucks will be required to register with the MPSC and pay a fee equal to the registration fee charged to a Michigan carrier in that state. All fees collected will be deposited in the Truck Safety Fund (created in SB 703). This law takes effect January 1, 1989.

SB 703 (Fessler) - Truck Safety Fund

This bill creates the Truck Safety Fund and establishes the Michigan Truck Safety Commission in the Office of Highway Safety Planning in the Department of State Police. The Commission will utilize the Fund to enhance truck safety in the state.

The Truck Safety Commission shall be comprised of the following members: Director of the Office of Highway Safety Planning; Chair of the Michigan Transportation Commission; Secretary of State; Commander of the Motor Carrier Division of the Department of State Police; and the following six members appointed by the Governor with the advice and consent of the Senate (one member representing each of the groups): community colleges, four-year colleges, the Michigan Trucking Association, private carrier fleets, organized labor, and the general public.

The Fund shall be expended for the following purposes: not less than 30%, but not less than \$1,000,000, shall be used for truck driver safety education; not less than \$750,000 of the balance shall be used for establishing and supporting a Special Transportation Enforcement Team (STET) to conduct spot vehicle inspections; the balance, if any, may be expended for research on truck accidents, accident reporting, and improved truck-safety enforcement procedures for local units of government. ■

—By Matt DeLong, Senate

65 MPH EVALUATION . . . continued from page 7

only the start of a long-term modification of speed behavior that will ultimately lead to significantly higher speeds some years from now.

Evaluation of Traffic Crashes and/or Severity: The second study is being undertaken by Alex Wagenaar. Its purpose is to answer the following question: "Did the increase in the maximum speed limit from 55 to 65 mph on rural interstates and rural highways built to interstate standards in Michigan cause a change in motor vehicle crash involvement and/or severity?" A time series model is being used for this evaluation. An interim report is currently in the office for the first year of this effort.

The interim report shows the following accomplishments:

- * Baseline data on a census of traffic crashes from 1978 through 1986 has been captured.
- * Detailed time-series files of multiple outcome indicators have been constructed.
- * A computerized method of identifying road segments with a 65 mph speed limit has been developed.
- * A study design has been developed, although the constraints of available resources and data were stressed.

This report does not provide insight into changes in the traffic crash picture due to 65 mph since more time is required before crash data for all of 1987 and 1988 is available.

Objectives for the second year of this evaluation are:

- * The data base and time-series files with data for calendar years 1987 and 1988 will be updated.
- * Observed effects across road segments stratified by posted speed limit will be compared to assess whether observed changes can be logically attributed to the new 65 mph limit.
- * The magnitude of observed effects by various factors including severity of the crash will be compared.

The next report will include 13 months of post-law experience on which to base inferences on whether or not the 65 mph speed limit had an effect on crash involvement and severity. It will be ready for distribution by December 31, 1989. ■

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