

NEW WARNING LIGHT SPECIFICATIONS PUBLISHED

The National ITE has just published, as a revised standard, the new "Purchase Specification for Flashing and Steady Burn Warning Lights". Accompanying the standard is the American Traffic Services Association (ATSA) "Test Method for Flashing and Steady Burn Barricade Warning Lights". The ITE Board voted to endorse the Test Method as a test procedure.

This is the official specification for Type A, B and C warning lights and is referenced in the Federal Manual on Uniform Traffic Control Devices. All warning lights should be tested and certified by the manufacturer to meet this specification. Copies are available from ATSA or ITE.

AFFILIATE DIRECTOR APPOINTS COMMITTEES

An Affiliate Interest Committee, consisting of the following members, was appointed by Director Jack Hoving: Jim Brown, City of Saginaw, Art Cuendet, City of Ann Arbor, and Wally Riesch, sales rep. for traffic control materials for 3M. This committee was formed to promote affiliate activity in the Michigan Section.

Committee members agree that the first step is to generate topics of interest for the affiliate at technical sessions. Director Hoving is to recommend a number of topics to the Technical Committee for consideration for the next tech session. He would like help from the many affiliates in the organization for any new ideas they may have.

By: Jack Hoving



MICHIGANITE



SUMMER, 1982

VOLUME XVII NUMBER 2

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

TECHNICAL SESSIONS ARE HUGE SUCCESS

MARCH MEETING AND VENDOR'S DAY

PRESIDENT'S COLUMN



DeCorte

Studies have been done and re-done that show conclusively that the wearing of safety belts by motorists and the reduction of drinking drivers on the street will have the greatest impact on traffic accident reduction ever! The Michigan Section of ITE began intensive efforts two years ago to get a child safety restraint law passed. We were successful. This year we can share credit for saving the lives of a dozen children and the reduction of a thousand injuries to kids under four years old. We must not revel in our victory because we have only won a small battle - the war is still raging.

The State legislation has given us two opportunities to win landmark battles. Bills have recently been introduced that would make safety belt usage mandatory and provide for more strict penalties for motorists arrested for driving under the influence of alcohol.

When the mandatory safety belt bill (H.B. 5567) was introduced a few weeks ago, I was present representing the Michigan Section. (A copy of the letter sent to Lansing expressing our support for this bill is included within this issue of the *Michiganite*). Based on the results of a survey of our membership, we were able to take this very positive stand. With the guidance of our Legislative Committee Chairman, Tom Reel, I will continue to follow this bill closely. As it moves through the political channels the Michigan Section will stand up and be heard. That is when I need your assistance. There are people in Lansing who want to know how we feel about this bill. I can write letters and represent the 300 members of the Section, but it is equally effective and even more important for you to write your Legislator.

The second opportunity is the introduction of several bills regarding drinking drivers. This topic is much more complicated than the safety belt issue. This involves degree of alcohol content, first, second and subsequent offenses, mandatory fines and jail sentence. We have not taken an official stand on a particular bill though the Board has discussed the bills with Tom Reel who is keeping us informed (his legislative report is also included inside this issue). Based on his recommendation and your input, we will be heard on this issue too.

Both of these opportunities are before us now and we will make an aggressive, positive effort to see that all of your voices are heard in Lansing. You can help by urging your friends, neighbors and relatives to write their legislator and express their opinion. It is surprising how much weight a single letter has with a legislator. With your help we can win these battles too.

The Harley Hotel in Lansing was the meeting place for the Michigan Section's March 18, 1982 Technical Session, hosted by Glen Etelamaki of the Michigan Department of Transportation.

Stan Cool kicked off the session with a slide presentation on "Technical Council Overview, an Update On New Procedures." Stan explained one way ITE serves its membership is through the assembling and dissemination of technical information of the ITE Technical Council. The backbone of the Technical Council are the 74 individual project committees. Twenty-seven committees completed their work in 1981 and 23 new committees are being formed. The current council chairman is Mel Meyer, Traffic Engineer and Parking Director for Cedar Rapids, Iowa.

"Is Someone Else Controlling Your Engineering Judgement?", was the topic Bill Fognini presented. There are many things that may influence your engineering judgement and Bill discussed such things as world events (oil), politics, the bureaucracy, news media, courts, manufacturers, citizen participation, insurance, and the chain of command at work.

Herb Crane was next with a slide presentation on the "Status of ITE Recommended Practice on Displays for Metered Freeway Entrance Ramps." Herb used an example of Chicago after a football game where a before and after study was conducted showing ramp metering as a success.

Howard Seligson of Wink-O-Matic spoke on the "Design and Performance Criteria for Variable Message Signs." Howard indicated that variable message signs usually give some indication of a problem and tell the motorist some action to take. The signs provide real time information or warnings, highway regulations, and environmental roadway traffic hazards.

Charles Zegeer of Goodell Grivas, discussed a study called "Pedestrian Control at Signalized Intersections." He said the purpose of this study was to determine if pedestrian accidents are significantly affected by the presence of pedestrian signal indications and by different signal timing strategies. The results showed that there is no significant difference in pedestrian accidents between intersections with standard timed pedestrian signals and intersections with no pedestrian signal indications.

The 1979 ITE Technical Council Award Winning document on Guidelines for Urban Major Street Design was discussed by Allen Lampela. The purpose of this document was to present guidelines, rather than rigid standards for geometric design elements on urban area major traffic routes. Al reviewed many of the specific elements and the

Cont. on page 5



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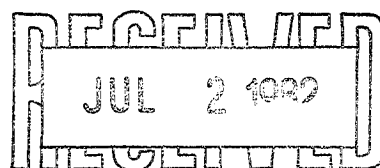
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EDITOR'S NOTE: The following letter was recently sent to State Legislators and news media as an expression of our support for H.B. 5567. The mandatory safety belt bill:

May 19, 1982

Mr. Matthew McNeely, Chairman
House Insurance Committee
House of Representatives
State Capitol
Lansing, MI 48909

Dear Representative McNeely:

In a recent survey of its members, the Michigan Section of the Institute of Transportation Engineers (ITE) voted unanimously in support of mandatory safety belt legislation. The bill currently before your committee, HB 5567, reflects the consensus of our membership. The ITE is a professional organization of over 300 Michigan traffic and transportation engineers and technicians organized for the purpose of improving the safe and efficient movement of persons and goods.

ITE has reviewed all of the available data and arguments regarding the use of safety belts. We have determined that the evidence in favor of safety belt use by motorists is overwhelming. Estimates have been made that 600 lives a year could be saved if motorists would take advantage of seat belts. More important than that is the reduction in injuries that would result from safety belt use. Of the 140,000 persons injured in traffic crashes, many can no longer walk or talk or see because they had their faces pushed through a windshield or their spinal columns crushed or severed. Most of these injured and maimed persons would be productive members of society instead of financial and emotional burdens on the State and their families.

There are those who argue that wearing safety belts should be a matter of choice because people know what is best for their own sake. This should be true, however, it is not. That is why there are several laws that protect our general health such as: the 55 mph speed limit, polio vaccinations for youngsters, prescription laws for potentially dangerous medicines and State Board examinations for doctors, lawyers and engineers. These are a few examples of laws that protect us from illness or injury. A direct result of these laws is the virtual elimination of polio, control of drugs and registration of professionals.

A law requiring motorists to protect themselves in case of a crash not only reduces the number of people killed and maimed but will have a direct impact on reducing the cost of traffic accidents that we all share. Last year that cost to Michigan residents was over 1.2 billion dollars.

In view of the overwhelming evidence that this bill, when made law, will save lives, injuries and money, ITE must encourage you to vote in favor of HB 5567.

Robert V. DeCorte

Robert V. DeCorte, President
Michigan Section, ITE

MICHIGANITE

Official Publication of the
Michigan Section
Institute of Transportation Engineers

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MICHIGAN SECTION ITE, TREASURER'S REPORT

Receipts:	
Dues	\$ 606.00
Michiganite Ad	400.00
Ladies Night	22.00
Interest	19.08
	<u>\$1,047.08</u>
Expenditures:	
Michiganite Printing	\$ 447.20
Child Restraint Seat	36.10
Technical Meeting	100.00
	<u>583.30</u>
Balance: May 12, 1982	\$4,110.47

Treasurer, Thomas R. Krycinski, P.E.

This newsletter is distributed to over 300 members and every county office in Michigan. Address communications regarding the Michiganite to the Editor: Robert V. DeCorte, 7441 Emerson Dr., Canton, MI 48187 313/453-3026.

DOT OFFICIAL PRAISES BREWERS FOR DRUNK DRIVING CAMPAIGN

The U.S. Department of Transportation has endorsed the U.S. Brewers Association's "Think Twice About Drinking & Driving" campaign to remind young adults about their responsibility to stay sober behind the wheel of a car.

The campaign, which includes public service announcements by actress Kristy McNichol, was announced on May 14 at a news conference in Washington, D.C.

According to Raymond A. Peck Jr., head of NHTSA, "Voluntary efforts like this one are a vital part of the national resolve to do something about drunk driving. I applaud the brewing industry for its commitment to improving the public's awareness of the drunk driving menace, particularly the tragic effect it has on young people."

Peck explained that 25,000 people are killed each year in alcohol-related crashes. "Forty percent of those who are killed are young people between the ages of 16 and 24,

their lives abruptly ended at a time when they had the most to look forward to in life."

"Ironically, most accidents are avoidable and most injuries preventable. At least half of the deaths and more than half of the injuries suffered in highway crashes would not have occurred if drinking had been moderated, or if safety belts were in use," Peck said.

"Two of the most encouraging safety trends in the last year have been the increased public perception that using safety belts make sense, and the growing outrage against drunk drivers," he said.

"It is particularly gratifying that the brewing industry recognizes its responsibility and influence in this area and is so actively involved in programs to reduce the incidence of alcoholism and alcohol misuse in society," Peck added.

PROPOSED BYLAW AMENDMENT

The Executive Board has recommended that Section 7.2 of the By-Laws for the Michigan Section of I.T.E. be amended as follows:

"The Executive Board shall authorize and approve all expenditures from the Section Treasury. The Section Executive Board may appropriate annually a sum not to exceed \$200 ROUND TRIP COACH AIR FARE TO THE INTERNATIONAL MEETING CITY to be used by an officer of the Section for expenses in attending the annual meeting of the Institute of Traffic and Transportation Engineers. The officer eligible to attend and receive the above allowance shall be in the following order: President, Vice-President, Secretary, Treasurer, Director, Immediate Past President".

The intent of this amendment is to allow the Executive Board to make annual adjustments in the amount allocated for annual meeting expenses based on inflationary impacts, meeting location, and budget constraints. When the By-Laws were adopted in 1973, the amount was \$100. This was amended to \$200 in 1976. This proposed amendment will give the Executive Board some flexibility within budget constraints, and will eliminate the necessity to amend the By-Laws every 3-4 years.

This proposed amendment will be mailed to the membership for action prior to the annual meeting in November, 1982.

By Ray Severy



If OHSP is really out of money, why did Tom K. hire Glen E. as a bodyguard?



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ATTENTION PLEASURE SEEKERS!

Mark your calendars for July 23rd and 24th. During this weekend you'll find fellowship and friends who are sunning, swimming and swinging (golf clubs that is), at the Mt. Pleasant Holiday Inn for the 2nd Annual Family-Technical Weekend.

This year's meeting will be bigger and better than ever. In addition to the bone-jarring, muscle-wrenching activities of golf, swimming, racquetball, tennis and sunworshipping, we will be graced by the presence of Mr. Jim Gillingham, the world renowned snake handler who will demonstrate his expertise in a show especially for us (provided he lives through his other shows until then!). We do request those who feel they might be allergic to snake venom to sit near the emergency stretchers where the snake bite medicine will be stored.

One slight change for the 1982 program will be as

follows. We will not schedule childrens activities in a formal fashion as we did last year. We will have, however, a variety of games for the children to play besides those activities at the Inn.

Those of you who attended last year know what a great time we had. This year we've reserved more rooms as we anticipate an excellent response to the formal notice which you'll receive in the next few weeks.

While our families start enjoying the weekend upon Fridays arrival, we'll have a fantastic but "short" Technical Meeting which will be followed by our "Reptilian Show" and then it's on to the Hospitality Room to begin the evenings activities. Mark your calendars and get your reservations now and get ready for a great weekend. See you there!

by Tim DeWitt

WHAT'S NEW IN FEDERAL REGULATIONS?

Donald P. Ryan of the Federal Highway Administration spoke at the 1982 ATSA Convention in Port St. Lucie, Florida. Some of the things that Don said we could expect in the way of federal regulations and specifications were:

- * Flashing arrow boards have been shown to be superior and FHWA is considering eliminating the sequential mode. Automatic dimming will be required and they are considering outlawing the arrow shaped board.
 - * Beads on paint will not be allowed as reflectorization for signs.
 - * There will be a new standard on concrete barriers issued within the next 60 days.
 - * FHWA is considering eliminating the Type II barricade and standardizing on a Type I.
 - * FHWA has been testing a new diamond shaped pattern for barricade panels. They want to eliminate the left and right striped configuration and standardize on one, nondirectional pattern. The evaluation of the diamond pattern will be continued in some selected states this summer.
 - * FHWA is now crash testing 5 types of channelizing devices including plastic drums, simulated drums and barricades.
- Reprint from ATSA

LEGISLATIVE UPDATE

This spring, most legislative attention in the area of traffic and safety is being directed at drunk driving and the use of safety belts. There are several bills in both the House and the Senate on the subject of drunk driving and a House bill (H 5567) has been introduced requiring seat belt use.

It is expected that some sort of drunk driving "reform" law will be passed by this fall or perhaps even before the summer recess. On May 20th, three major drunk driving bills (SB 702, 776, 777) were approved by the Senate Transportation Committee and have been sent to the full Senate for further action.

Over 20 persons testified in favor of a mandatory seat belt law on May 20th at a public hearing before the House Insurance Committee. Two of those appearing were Lee Iacocca of Chrysler and John Snow, Minister of Transport in Ontario. The Michigan Section of ITE presented a letter of support for the bill. This measure will probably not be voted on until sometime this fall.

The Michigan Section, in a desire to become more active in the area of legislation, is presently expanding the Legislative Committee and also desires to involve more of the membership in legislative affairs, testifying before committees, letter writing, etc. If you are interested, please contact a board member or call Tom Reel in Lansing (517/487-8811).

By Thomas O. Reel

ITE CHILD RESTRAINT DISPLAY IN KALAMAZOO

On March 27, 1982, Kenneth Shackman and Donald Wiertella of the Michigan Section of ITE, and Sergeant Burl Ghaslin of the Michigan State Police manned a display providing information on child restraints at the Maple Hill Mall in the Kalamazoo Metropolitan Area. This was the second effort of its type in Southwest Michigan. Don Wiertella was the lead person on this project and made all necessary local arrangements. The display provided visitors and employees of the mall with an opportunity to obtain printed information on child restraints, to see and touch several restraints, and to observe films showing crash tests and the use of child restraint systems.

The primary purposes of this effort were:

1. To demonstrate approved child restraints for children between the ages of birth and five (5) years.
2. To dispurse published information on approved child restraints.
3. To answer questions about Public Act 117, Child Passenger Safety Law (effective April 1, 1982)
4. To answer any questions regarding child restraints, i.e., questions on use, purchase or rental.

Secondary purposes included registration for the giving away of a child restraint, and the distribution of information regarding the use of seat belts.

The display was set up at the Maple Hill Mall on Saturday, March 27, 1982, between the hours of 10:00 A.M. and 6:00 P.M. Over 400 people were personally contacted in this eight hour period. This date was selected because it was the last weekend before Public Act 117 went into effect. Similar to earlier efforts, a table equipped with various publications, actual child restraints, and a closed loop internal projector was used. It was found that certain items are necessary to the success of the display. These items included:

1. Bright posters (provided by the Office of Highway Safety Planning) illustrating the use and importance of child restraints and seat belts.
2. Audio-video equipment (provided by OHSP).
3. Child restraints (provided by Borgess Hospital) for various age groups.
4. Registration material for the child restraint (provided by the Michigan Section of ITE) to be given away.



Sgt. Burl Ghaslin, Michigan State Police, and Don Wiertella, MDOT, at the ITE Child Restraint Display in Kalamazoo.

The presence of Sergeant Ghaslin was very important to the success of the display. Many people were interested in how the law enforcement agencies were going to enforce Public Act 117. Sergeant Ghaslin was able to provide this information as well as to answer very specific questions regarding the new law.

Based on our experiences in the Kalamazoo Metropolitan Area, it is felt that this effort was extremely beneficial and is greatly needed. We are grateful for the assistance received from the management of the Maple Hill Mall, and in particular from Ms. Kathryn Harper. Special thanks go to Ms. Judy Nyberg, Office of Highway Safety Planning, and to Borgess Hospital for providing the display materials; to WKZO Channel 3 TV and the Kalamazoo Gazette for their coverage of the event. Without the assistance of these agencies, organizations, and individuals, the effort could not have been as successful as it was.

By: Kenneth Shackman

THEY NEED YOUR HELP!

It has now been a month since the Child Passenger law (PA 117) became effective. It will be several months before we have any data as to injury reduction, but there sure seems to be a lot more car seats in use. The general public, the media and the law enforcement community have all been very supportive. The majority of calls into the Office of Highway Safety Planning have been from citizens wanting to comply with the law, but not knowing quite how. The only real complaints have come from families for whom the purchase of a safe car seat is a true financial burden.

On the positive side, approximately 60 out of the 83 counties have at least one rental program established. That accounts for about 8,000 infant seats and 3,000 toddler seats rented out in the state. Seems like a lot doesn't it? Unfortunately it is only a drop in the bucket. The week that the law went into effect the majority of rental programs were out of seats and yet some of the volunteers running the programs received as many as 100 calls a day.

Those families who can afford to purchase a car seat

should be encouraged to do so; however, that still leaves a large segment of the population who simply cannot afford a seat. Detroit estimates that they need about 15,000 seats to meet the need of the low income families. According to the 1980 Census there are 146,176 children under 1 year of age in Michigan and 538,937 children between the ages of 1 and 4 years. Most of the rental programs are willing to expand their programs but they need local community support in acquiring funds to purchase more seats. I know that ITE has been most helpful in the past and perhaps you could provide further assistance and support for your local volunteer group. Copies of rental groups are available through our office and may be obtained by contacting:

Judy Nyberg
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Michigan Dept. of State Police
7150 Harris Drive
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MDOT BEGINS PRIORITIZED SIGNING SYSTEM

There are approximately 300,000 signs on the 9,475 miles of state trunkline that require periodic maintenance or replacement to conform to national and Michigan standards. Traffic signs require replacement or refurbishing when there is a loss in reflectivity, damage to the sign or sign support, or if a system review indicates a need to change the sign format standard. These types of changes can result in millions of dollars worth of improvements which, due to the present state of the economy, may be beyond the current available funding.

With this in mind, the Michigan Department of Transportation has begun the first phase of a system of prioritization of signing improvements throughout the state. This task was undertaken to determine how to effectively apportion funds in the future for segments of freeway that require sign and sign support upgrading. A 600 mile nighttime field investigation of freeway mainline and crossroad signing was completed. The segments of roadway inventoried varied throughout the lower peninsula of the state with both urban and rural areas investigated. The existing signs were installed prior to 1974. Since the reflective material used on signs during the late 1960's and early 1970's had a useful reflective life of seven to ten years, many of the signs that were investigated needed replacement except for those that had been recently refurbished or replaced.

The field review team gathered information on type of sign material, whether the segment of roadway had been brought up to current roadside safety standards, whether the signs had been overlaid, and whether the signs met current sign format standards. The signs were also rated for reflectivity and cracking. Then the freeway was divided into segments and each route, interchange, and segment was given a specific number for further identification. The average daily traffic and age of the signs for each segment was then added to the data. All of this information was computerized and a prioritization list for signing projects developed.

Prioritization lists can be developed using any combination of the various input parameters. For instance, if funding is not available to upgrade the safety features of the sign supports then this parameter could be eliminated from the data and the list would be prioritized based on the need for sign replacement or refurbishing only. This methodology will allow us to appropriate funds in an effective manner for freeway sign and sign support upgrading.

The night field investigation of freeway and crossroad signing and subsequent prioritization of the data will allow the department to upgrade signs and supports that need immediate replacement and set up a program to complete the remaining segments as resources permit. By constantly upgrading this prioritization process the State of Michigan will maximize safety benefits, providing the motoring public with a safe and efficient freeway system.
By: Joe Meszaros



CRASHES REDUCED ON M-53 SECTION

Traffic accidents on a 3.8 mile stretch of M-53 just south of Romeo in Macomb County dropped more than 42 percent since improvements were completed on that segment in late 1979, according to a recent Michigan Department of Transportation study.

The study found that accidents decreased from 155 in 1978, the year before improvements were made, to 85 in 1980, the year after improvements were completed.

Improvements costing \$727,295 included resurfacing, sign upgrading, shoulder paving, construction of flared passing lanes at three intersections, and guardrail upgrading from 28 Mile Road to the south city limits of Romeo. The two-lane road carries approximately 20,000 vehicles per day. Three persons were killed there in 1977.

The study revealed that the most dramatic drop in accidents were those involving vehicles hitting at right angles. They decreased from 15 in 1978 to 3 in 1980, a drop of 80 percent. Accidents by vehicles hitting fixed objects, such as sign posts, went down from 18 in 1978 to 5 in 1980, a 73 percent decrease, and rear-end accidents decreased from 50 to 19, a 62 percent drop.

Reprint from TSA of Michigan Newsletter.

1982 ITE MEMBERSHIP DIRECTORY

At their March 12 Board of Directors Meeting, National ITE decided not to distribute a Membership Directory in 1982. This was done as a cost-saving measure.

The June issue of the ITE Journal will include an addendum to the 1981 Membership Directory. A 1982 directory will be distributed in January of 1983.

"TOPICS" RETURNS

TOPICS is an acronym (Traffic Operations Program to Increase Capacity and Safety) which describes a very popular program in traffic engineering circles a decade ago. Today, TOPICS is alive and well in the Traffic and Safety Division of the Michigan Department of Transportation.

The new TOPICS program is the traffic engineering element of the department's Transportation Systems Management (TSM) program. In general, TOPICS type actions involve traffic engineering and operational improvements designed to improve traffic flow and reduce accidents on a system-wide basis. These activities emphasize efficient use of existing facilities rather than new construction and stress low capital improvement projects.

Each study will result in a comprehensive report identifying safety and operational deficiencies along with appropriate recommendations for improvements. The report is then reviewed with representatives of the local governmental units involved and an implementation plan is developed. Implementation of low cost improvements are completed in the near future, while high cost improvements are included in the local Transportation Improvement Plan and completed on a priority basis.

In addition to identifying traffic engineering deficiencies and corrective countermeasures, data collection has been structured to assist state and local planners in the development of models capable of projecting existing and future capacity deficiencies in the system. Of course, those projections and other data furnished us by the planners is very helpful in analysis of traffic engineering deficiencies.

The first such study was conducted in the Muskegon area and the resulting report completed in January, 1982. The report outlines 64 recommendations to reduce accidents and operational problems. Only five involve capital outlay construction (Three skid-resistance projects, a directional crossover, and widening of an intersection approach). The remaining 59 recommendations emphasize traffic signal modifications, improved pavement markings, parking and turn prohibitions, and similar low-cost improvements.

The TOPICS program will ultimately involve studies of the 13 urbanized areas including both trunkline and non-trunkline road systems. Studies are currently underway in Jackson, Kalamazoo, and Bay City.

By: Kurt Kunde

1981 TRAFFIC ACCIDENT FACTS AVAILABLE

The 1981 summary of traffic accident facts has been released by the Michigan State Police. The summary shows reductions for the year in total accidents, fatal accidents, injury accidents, and property damage accidents compared to 1980. The most important statistic shows a little over 10 percent less fatalities and almost 6 percent less injuries.

The reductions in fatalities has continued in 1982 as there has been 92 less people killed (20 percent reduction) than in 1981 thru May 9. If this trend continues for the remainder of the year we can expect less than 1,400 fatalities for 1982 which would be the lowest number since 1958.

USE OF CONCRETE BARRIERS QUESTIONED FOR 2-WAY, 2-LANE OPERATIONS

Since FHWA issued an emergency rule that requires concrete barriers be placed at the transition zones where 4-lane operations change to 2-lane and vice versa, there has been some question as to the justification for this requirement.

A recent study, also reported in TRB Record 833, compiled data from 14 rural interstate workites and concluded that the barrier requirement is questionable on low volume roadways. The accident data showed that the occurrences of head-on collisions at transition zones was non-existent at the rural sites reviewed.
Reprint from ATSA

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MDOT COMPLETES WYOMING TRAFFIC STUDY

The Michigan Department of Transportation provides traffic engineering expertise to individual local agencies through the federally funded Community Assistance Program. This activity, administered by the Traffic and Safety Division, identifies high crash sites and focuses upon recommendations that address traffic safety.

The most recent study of the Community Assistance Program involved a traffic engineering analysis of nine high crash intersections in the city of Wyoming. The intersections were located on the three highest volume streets in the city. Low cost operational recommendations included such items as traffic signal timing modifications, signing changes, and revised pavement markings. Construction improvements included left-turn slot reconstruction and intersection widening. We believe these recommendations will have a positive affect on safety and traffic operations in the city of Wyoming. Other studies are now being conducted in cooperation with local officials in Jackson, Kalamazoo, Portage, Hillsdale, Bay City, and Reed City.
By: Bill Opland

RECALLS TOP 7 MILLION

Motor vehicle manufacturers recalled more than nine million vehicles in 1981 because of safety-related defects, the U.S. D.O.T. reported.

Figures compiled by NHTSA show that domestic manufacturers recalled almost 7.4 million vehicles in 128 separate recall campaigns. Foreign manufacturers recalled two million vehicles in 28 campaigns, bringing the total number of cars, trucks, buses, recreational vehicles, motorcycles and mopeds recalled to 9.4 million.

The total is almost double the five million recalled in 1980 and represents the fourth largest number of vehicles recalled since 1966, when NHTSA began keeping such statistics.

The largest recall in 1981 was conducted by General Motors to replace bolts in the rear suspension systems of 5.8 million vehicles.

The largest foreign recall involved 936,000 Hondas because of rust and corrosion of undercarriage components.

RTOR SHOWS MONETARY BENEFIT

Transportation engineers in Milwaukee, Wisconsin, found that right turns on red lights have yielded \$12 in benefits for every \$1 in costs without any increase in accidents. In addition, RTOR has saved Milwaukee motorists an estimated 475,000 hours of idling time at red lights and 310,000 gallons of gasoline annually.

The economic value to the city's economy during the five-year study period was estimated at almost \$6 million, contrasted with the \$500,000 cost of RTOR accidents. Additionally, pollution from idling engines decreased sharply.

Prepared by the city's Bureau of Traffic Engineering and Electrical Services, the study of RTOR effects showed that annual increases in total right turn accidents at signalized intersections represented only 2.6 percent of all accidents at signals. Although right turn accidents increased, evidence indicated reductions in other accident categories at signals.
Reprint from Highway Users Federation REPORTER,

COUPLES NIGHT A SUCCESS

Nearly one hundred ITE and IMSA members and guests attended this year's couples night at the Wolverine Raceway. After refreshments were served around the Farmington Hills Holiday Inn pool, we all boarded chartered buses for the track. Following a great prime rib dinner, the group settled down to an evening of serious evaluation of the "pony's." It was difficult to determine if there were any "losers," although President Bob DeCorte was seen leaving in a barrel. Further refreshments were served at the Holiday Inn after returning from the track.

The annual award to the person having the best time goes to Marilyn Henry for the sixth consecutive year for her entertaining renditions of the "tunes of yesteryear."
By: Bill Lebel

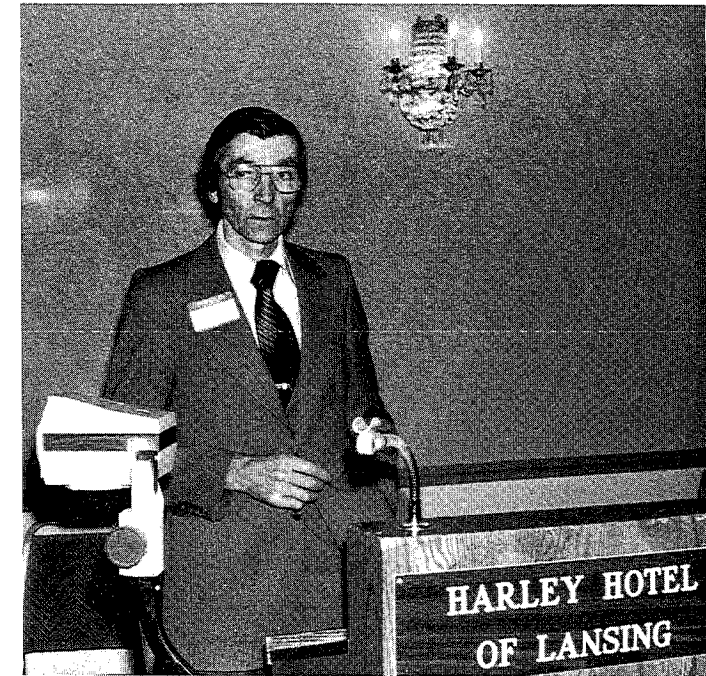
MARCH TECHNICAL MEETING *Cont. from page 1*

recommended design treatments that were addressed in this publication.

Dr. Marie Emery of Michigan State University discussed the Michigan Women For Highway Safety (MWFHS) and some of their activities. Dr. Emery is Executive Director of the MWFHS which is sponsored by 43 women's organizations throughout Michigan. MWFHS receives financial and advisory aid from the Michigan Office of Highway Safety Planning, the Michigan Association for Traffic Safety and MSU. MWFHS attempts to improve driver behavior and reduce accidents through group education; informs and educates women leaders in the improvement of highway traffic safety skills, knowledge and attitudes; and cooperates with community leaders, and state and public officials concerned with highway traffic safety.

Our final speaker, Dr. David Fisher, spoke on Police Traffic Radar which is a subject of interest to all of us. Dr. Fisher, who tests radar devices for other states, explained the principles of radar operation and gave some examples of "speed traps" and how they violate proper use of radar. He said both the radar devices and the operators have limitations that have to be recognized. A proper tracking history which includes visual observation by operator; constant display reading of speed; and a long enough time period to stabilize read-out is necessary for an accurate interpretation of speed.

We would like to thank all the speakers for their time and effort in participating in this Technical Session. Special thanks goes to Glen Etelamaki for making all the arrangements which contributed to the success of this program.
By: Ken Underwood



Al Lampela explains his award-winning document on 'Guidelines for Urban Major Street Design'.

NEW HIGHWAY DEVICES PROTECT ERRANT DRIVERS

Designed to absorb crash impact and prevent errant vehicles from hitting concrete and steel objects, approximately 200 impact attenuators have been installed along Michigan's 9,500-mile highway system since 1971. They shield objects which cannot be moved, such as bridge piers, median barrier ends and concrete sign truss foundations.

Most drivers don't notice them, for their dull, grey exteriors blend in with the objects they shield. When hit, however, they appear to be working near-miracles.

A recent study of the 130 attenuators in the four-county metropolitan Detroit area shows they have been struck at least 655 times from 1971 to 1980. Not a single fatality resulting from vehicles hitting the attenuators has been reported anywhere in the state.

"They really work," said Maurice Witteveen, head of MDOT's Traffic & Safety division. "We rarely know if a driver hits them until later because people can drive away from them."

There are several types of attenuators. They are filled with a non-freezing liquid, a light weight concrete mixture or sand and absorb shock in several ways. Those filled with liquid are comprised of a series of light

vinyl containers enclosed in more rigid vinyl tubes about three feet high. When a vehicle hits the unit, it squeezes together like an accordion and the liquid spurts over the top of each container, absorbing the impact.

Those filled with light weight concrete contain a series of small packets filled with concrete which are tightly bound together. When hit, the packets break, absorbing shock.

Attenuators filled with sand are large plastic barrels which break when hit, forcing sand and the lids from the barrels.

All are designed for vehicles weighing 4,500 pounds traveling a maximum of 60 mph. New attenuators are being designed for lighter, down-sized cars, and will consist of a honeycomb network of a foam material.

All attenuators placed along state freeways are paid for 90 percent by federal funds as part of an ongoing program to bring freeways up to federally-mandated safety standards. Since the program began eight years ago, the number of persons killed in accidents involving vehicles hitting fixed objects along the freeways has been reduced by 38 percent even though the number of fixed object-vehicle accidents has remained steady during that period.
Reprint from MATS



Howard Seligson of Winko-Matic describes variable message signs.



Charles Zeeger of G and G discusses pedestrians at signalized intersections.

We need you, PLEASE BUCKLE-UP!

UPDATING MICHIGAN'S VEHICLE CODE

During the past year, a committee comprised of persons from Michigan Department of Transportation, Michigan Department of State and Michigan Department of State Police have been meeting to discuss the Michigan Vehicle Code. The discussion has centered on the Uniform Vehicle Code (UVC) which serves as a model for the state's traffic laws. Michigan is not in conformity with the UVC in a number of areas. However, we, as a committee, are looking at how we may better conform with the UVC while taking into consideration the uniqueness of Michigan's topography and geography. Thus, we are not seeking changes just to be in conformity.

Work has been completed on one section of the code by utilizing work done by the Traffic and Safety section of Michigan Department of Transportation. This section deals with traffic control signals. Additionally, preliminary work is being done on a section dealing with pedestrian rights and duties.

The Governor in his annual "State of the State" message indicated his support for the recodification of the MVC which led to this multi-agency committee being formed. The committee will continue to work on this project a section at a time, concentrating on those areas which are of most significant impact. Your comments, suggestions and input as professional traffic engineers are welcomed and may be forwarded to:

Robert W. Moody, Chairman
Office of Highway Safety Planning
Michigan Dept. of State Police
7150 Harris Drive
General Office Building
Lansing, Michigan 48913
Phone: (517) 322-1942

ADDITIONAL COMMITTEE MEMBERS NEEDED

The ITE Technical Council Committee 6F28 is in need of additional committee members to complete its analysis of the impact of telecommunications on transportation. More specifically, Committee 6F28, Telecommunications, which was formed in August of 1981, has the following project statement: "to examine existing and potential telecommunication use and equipment to determine its effect upon and ability to influence travel demand."

Anyone with a background or interest in telecommunications should contact committee chairman George W. Bloemme at: Supervisor Regional Aviation Planning, Port Authority of New York and New Jersey, One World Trade Center, Room 65E, New York, New York, 10048 Telephone No.: (212) 466-7565.

RECESSED REFLECTIVE MARKERS A SUCCESS

During 1980 and 1981 Ingham County Road Commission selected ten curves to place recessed reflective pavement markers on. All were on bituminous surface, with nine on two-lane roads and one on a four-lane facility. All had a high accident history of single car, run-off-road type incidents.

The 1980 installations had markers placed along the centerline and the edgelines on the two-way roads, and along the centerline and lane lines on the four-lane facility. Though the 1981 installations had reflective markers only along the centerline, we used the same size and groove spacing for both installations. As a result of these two types of installations, it is my feeling that a very helpful and cost-effective type installation would be to place one-way reflectors along the edge of the roadway on the outside of the curve and the full length along the centerline.

All of the installations were made by cutting a groove in the bituminous road surface, which measured forty inches long, four inches wide and five-eighths of an inch deep with a reflector placed at each end of the groove along the centerline of the roadway. These reflectors were placed between the standard double-yellow painted lines. On the edgeline, or lane line, the groove was made to taper in depth from zero to five-eighths inch. The spacing was every twenty feet from P.C. to P.T., then every forty feet along the tangents for 200 feet.

During the winter when there is hard packed snow or ice on the road, the edgeline markers had been rendered ineffective. However, there does seem to be enough vehicle overrun on the centerlines, especially on sharp curves, that the wheel action keeps the grooves relatively free from water and dirt. This makes them visible during the time when drivers are traveling too fast and running off the road the most. Further, the reflectors seem to have a very beneficial effect when fog is present at night.

It is very critical to have the tops of the markers as close to the surface as possible, but not above the roadway. By doing this, the snow plows and underbody blades do not destroy them, yet maximum benefit of the reflected headlights is achieved. The pattern layout is very critical. Be sure that the markers are within the normal skip area of painting, as these markers do not replace the painting of the roadway. Another area of caution is when the markers are placed along the edgeline, they should be one foot inside of the edge of the bituminous surface and at least two inches from the painted edgeline.

While it is my belief that no good, firm comparisons will be able to be made for at least two more years, looking at one year before and after the installations made in 1980, it does show a 38% reduction in total accidents.

Through the use of the local media, I requested comment for or against these installations. To date, there has been no adverse comment from the public, even though these methods were highly publicized.

by: Harold Judd, Ingham County Road Commission

PEOPLE in the news

NEW FHWA SAFETY CHIEF

Marshall Jacks, Jr., was recently sworn in as the new FHWA Associate Administrator for Safety. In this position Jacks works directly under the Federal Highway Administrator to direct all the safety activities of FHWA.

Marshall has been with the FHWA since 1968. Prior to that he served with the city of Detroit for 16 years as Traffic Engineer. He has served as Director of Traffic Operations; Chief, Program Development Division Office of Highway Safety; Division Administrator for the District of Columbia and Chief of the Signals and Communications Branch.

Reprint from ATSA

... AND HE WENT WEST

Gary Smith apparently heard someone say "Go west, young man, go west", because he's gone. Gary recently left SEMCOG to take on the duties of Assistant Traffic Engineer in Lakewood, Colorado, a suburb of Denver. We'll miss Gary, but wish him well.

C.E.U.'s TO BE OFFERED

The Michigan Section Board has taken initial steps to offer Continuing Education Units (C.E.U.'s) to attendees of its major technical programs. The idea was presented to Stan Cool by our new member, Dr. Marie Emery.

A letter of intent has been sent by our secretary, Ray Severy, to Michigan State University, whose facilities we intend to utilize. Preliminary information indicates that MSU must approve our technical program content and award 0.1 C.E.U. for each hour of program, with a five hour minimum. There will be a slight extra charge per attendee for bookkeeping by MSU.

With the emphasis on additional education, the Board thought this to be an excellent opportunity for Section members to get credit for attending technical programs.

PHILLIP MICHAEL LARIVIERE

Congratulations to Bob and Cheryl Lariviere on their new son, Phillip. He was born on Thursday, May 20, 1982 at 4:30 a.m. He weighed 7 1/2 lbs. and was 1 foot 8 inches long. Phillip is home now being spoiled by his two brothers and two sisters. Mom and dad are reported doing well.



Bob Lariviere, our Michigan Section Director, is also a proud papa.

MDOT PROMOTES TRAFFIC ENGINEERS

The Michigan Department of Transportation recently promoted two Section members to administrative positions. Robert Maki was promoted from the Electronic Systems Unit to Supervising Engineer of Technical Services. Tom Myers was promoted from a lead worker position in Geometrics Coordination to the Assistant Supervising Engineer of the Geometrics Coordination Unit. Congratulations and best wishes for the future are extended from ITE to both Bob and Tom.

WELCOME

We are happy to announce the following new members of the Michigan Section of ITE:

Ronald Dressander - City of Wyoming
Ted Morehead - Indicator Controls Corporation
Walter Partyka - Marketing Displays, Inc.
Teri Gillis - Oakland County Road Commission
Larry A. Miller - MDOT
Christopher R. Mann - TIA of Oakland County
James C. Barbaresso - Oakland County Road Commission
Carmine Palombo - SEMCOG



Dr. Marie Emery

1982 MEETING SCHEDULE

Date	Location	Host	Event
June 17	Marshall	Ken Shackman	Dinner Mtg.
July 30-31	Mt. Pleasant	Tim DeWitt, 3M	Tech.-Family Weekend
Aug. 22-26	Chicago	Illinois Section	National Meeting
Sept. 16	Grand Rapids	Meredith	Golf Outing
Oct. 21-22	Ft. Wayne, Ind.	Indiana Section	Dist. Tech. Mtg.
Nov. 18	Pontiac	Rich Cunard	Section Annual Mtg.

MDOT SIGNAL STUDY

A recent report by MDOT pertains to the common misconception by motoring public that traffic signals are safety devices that reduce accidents at intersections. The study of intersections that were recently signalized on the state trunkline system analyzed the impacts that the installation of traffic signals have on safety.

Results of the study show the following:

1. Total accidents increased 25 percent
2. Right-angle accidents decreased 27 percent
3. Rear-end accidents increased 126 percent
4. Head-on left-turn accidents increased 86 percent
5. Injuries increased 16 percent

Engineering studies show that a traffic signal may be necessary when an accident pattern develops that is considered susceptible to correction by such an installation. This accident pattern normally involves right-angle type collisions. From the above data it is clear that right-angle accidents can be reduced by the installation of signals and, therefore, should be one of the major criteria evaluated when considering the need for signal installation. Certain types of accidents, such as the head-on left-turn and rear-end types usually increase, the study results substantiate this fact. It is also interesting to note that the number of injuries increased during the "after" period.

The MDOT has found that properly designed and engineered traffic signals may reduce certain types of accidents, provide gaps in the traffic stream, and lend organization to

the traffic flow by alternating the right-of-way assignment to crossing streams of traffic. As traffic volumes at an intersection increase, there comes a time when delay for motorists can become intolerable without signalization. Poorly designed, ineffectively placed, or improperly operated signals, however, perform just the opposite of what is expected. Intersections become clogged with cars and motorist delay and accident potential is increased. Entire street systems can become creeping parking lots, particularly during rush hours.

To assist the public in their understanding of the application of traffic signals to the traffic engineering process, MDOT prepared a booklet called, "Traffic Signals, A Guide For Their Proper Use." The booklet should clear up many popular misconceptions involving the application of traffic signals and emphasize the importance of having traffic signal decisions based on nationally recognized engineering criteria.

It is imperative that those responsible for traffic operation weigh all pertinent factors before a decision is made to approve such installations. It is also important for people to be aware that a traffic signal installation may not reduce accidents and that the overall goal in viewing locations for signalization is always for the safety of the public.

Mr. Witteveen noted that these booklets are given to local governmental agencies for their information, however, the Traffic Safety Division of MDOT will distribute a copy to anyone requesting it. The telephone number is: 517/373-2326.

TRAINING OPPORTUNITIES AVAILABLE

Each year the Federal Highway Administration develops national training programs which are designed to reflect, address and emphasize the most significant needs nationwide. These programs are selected to respond both to its own organizational needs and the needs identified by the various State and local transportation agencies.

While the budget for "in house" training has been significantly reduced in recent years, many of the training opportunities remain available to other agencies. The FHWA continues to provide a significant number of training courses in such areas as 1) Design and Traffic Operations; 2) Construction and Maintenance; 3) Legal; 4) Right of Way; 5) Environment; 6) Planning; 7) Urban Transportation; 8) Safety; and a variety of other categories.

In the Safety and Traffic Operation area, in particular, there are courses dealing with a myriad of subjects. Some of the courses that are available deal with the following subjects:

Basic Traffic Engineering; Safety Design and Operational Practices for Streets and Highways; Evaluation; AASHTO Barrier Guide; Construction Zone Traffic Control; MUTCD: Traffic Signals; Safety Engineering Studies; Railroad Grade Crossings; Design of Urban Streets; Lighting; Capacity; Computerized Signal Systems; Accident Investigation; Process Reviews; and Highway Safety Program Management.

Each of these courses is available for local presentation. If you would like more information on sponsoring a training course, or a more detailed description of the course content (e.g., length, for whom designed, objectives and description, or prerequisites) you may contact Morrie Hoevel (377-1842) or Ron Jones (377-1838) at the Federal Highway Administration Division Office in Lansing.

By M. A. Hoevel

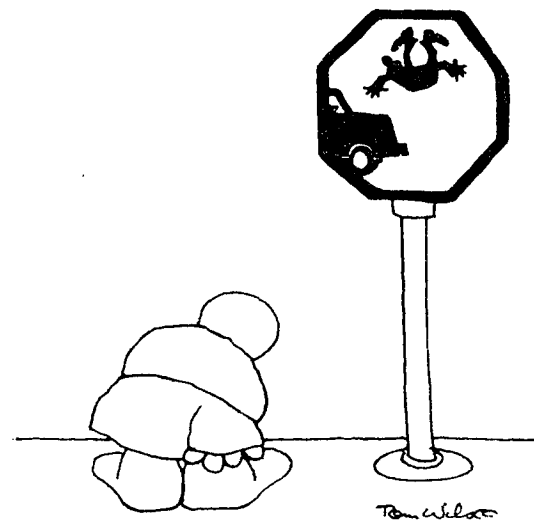


NEW TECHNICAL COUNCIL COMMITTEES LISTED

The Technical Council initiated 23 new research committees during 1981. A listing of these committees and their members is included in the "Technical Council Update" column of the May 1982 ITE Journal.

Sixteen Technical Council committees are now soliciting new members. A listing of these and who to contact is also included in the May ITE Journal.

ZIGGY



VENDORS' DAY 5th ANNUAL PRODUCT TECHNICAL SESSION

As can be attested by the adjoining pictures, another successful Product Display Session was held on May 20th in the city of Southfield's Department of Public Service garage.

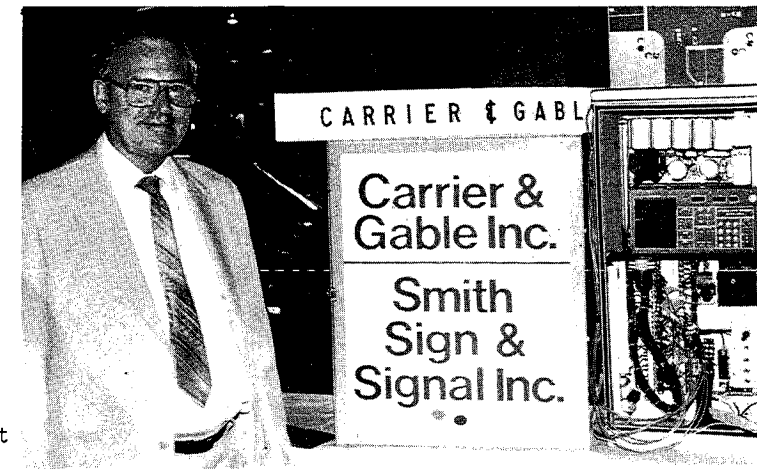
Over 15 companies participated in the display and over 100 members and guests viewed the products and discussed their application with the displayers.

The extra effort of inviting purchasing agents, City Administrators and Michigan Parking Association members and vendors showed results as several from each of these groups joined in the festivities.

Special thanks again go to Southfield's Eleanor May, who by her self, ably registered all of us who attended. Our Southfield host, in particular, Bob Northrup and Marv Misiak again went overboard in taking care of our needs.

Plans are being formulated for next year. Anyone aware of companies wishing to participate contact Jerry Carrier, Herb Henry, Bob Northrup, or Bill Savage.

By: Bill Savage



Paul Carrier of Carrier & Gable at the Eagle Equipment Display.

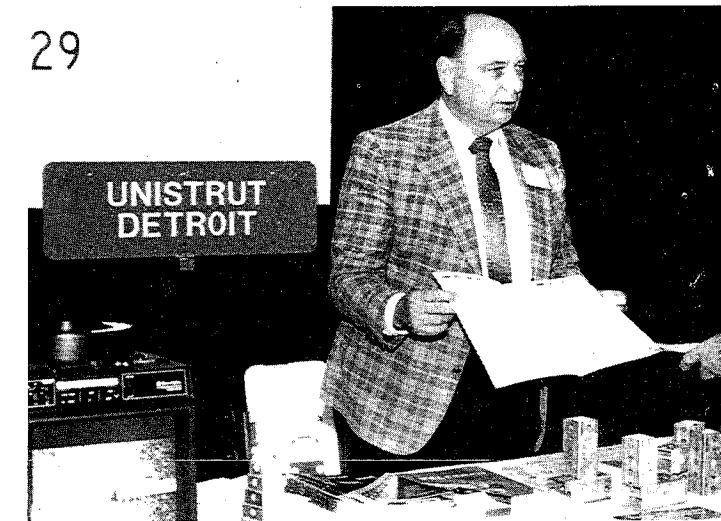


PATHMASTER

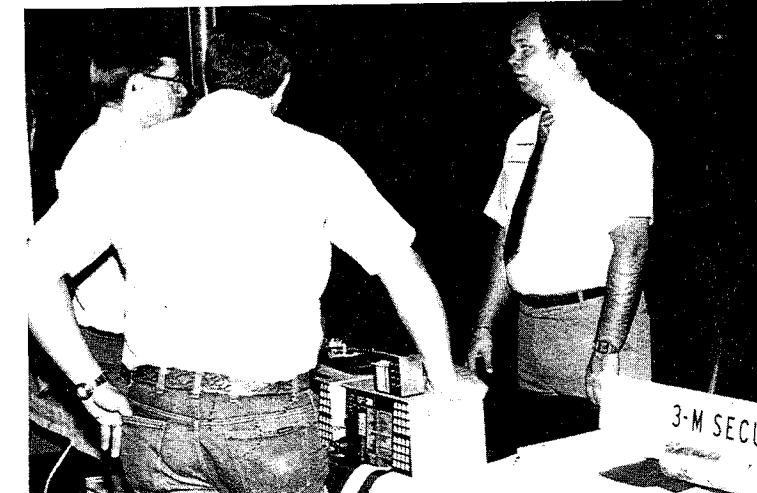
Cliff Connelly, Don Beard, Randall Van Scoy and Mike Schweickart displayed electronic equipment by Pathmaster.



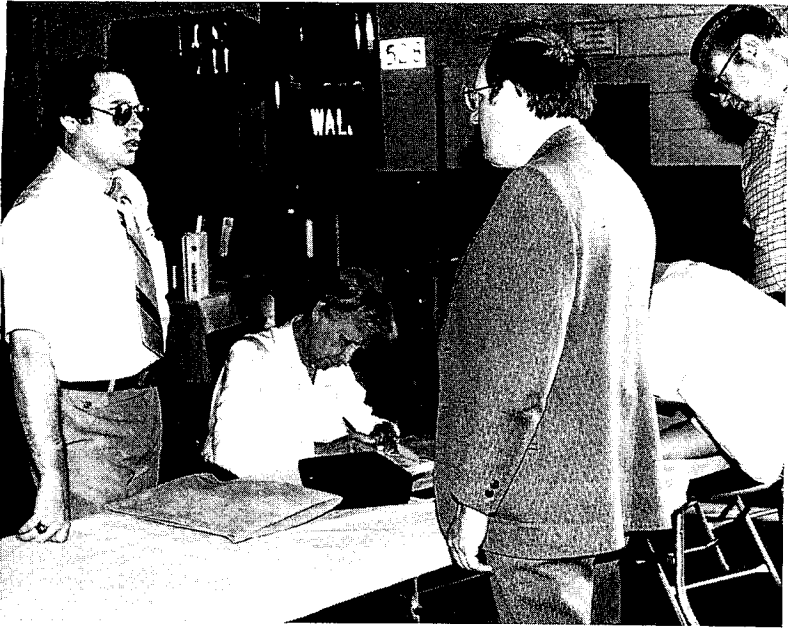
Jerry Waloman of Surface Systems, Inc., discusses the application of their product.



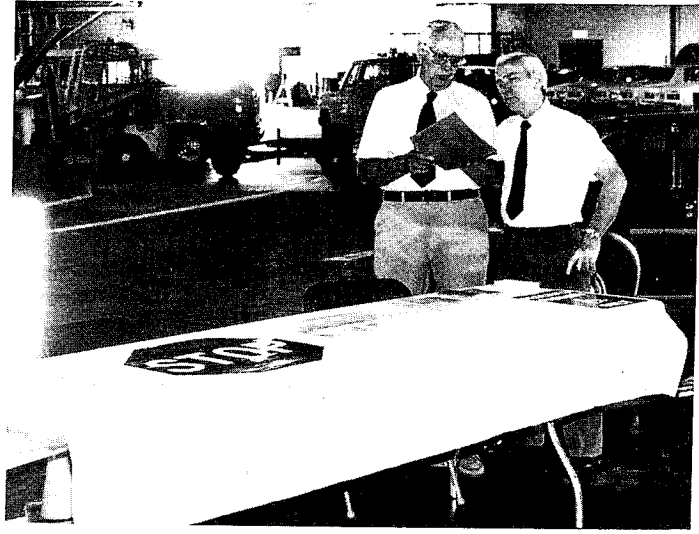
Bob Richardson of Unistrut displaying literature on square tubing sign supports.



Dave Hawkins of 3-M discusses Time Base Coordinator Units.



Bob Northrup, our host from the City of Southfield, answers questions at the registration table which was handled very capably again this year by Eleanor May.



Luther "Bud" Whitmore and Lou Jennings display products from Mid West Signs.



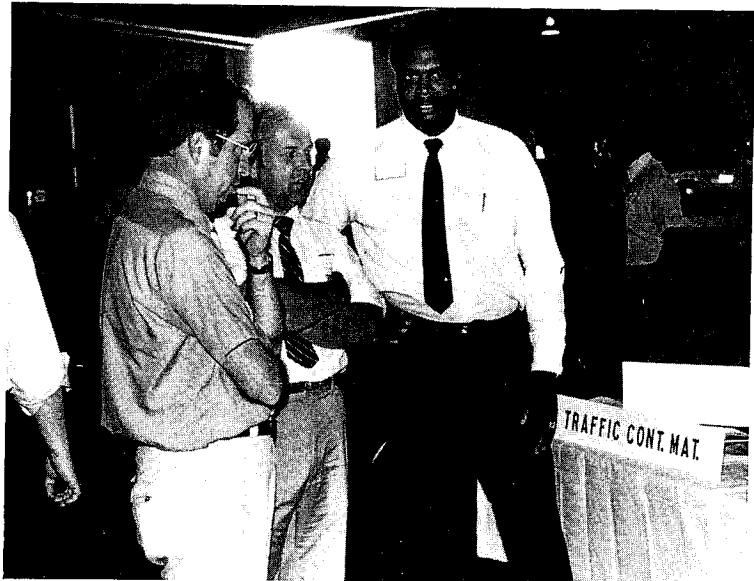
Don McCarthy of Energy Absorption.



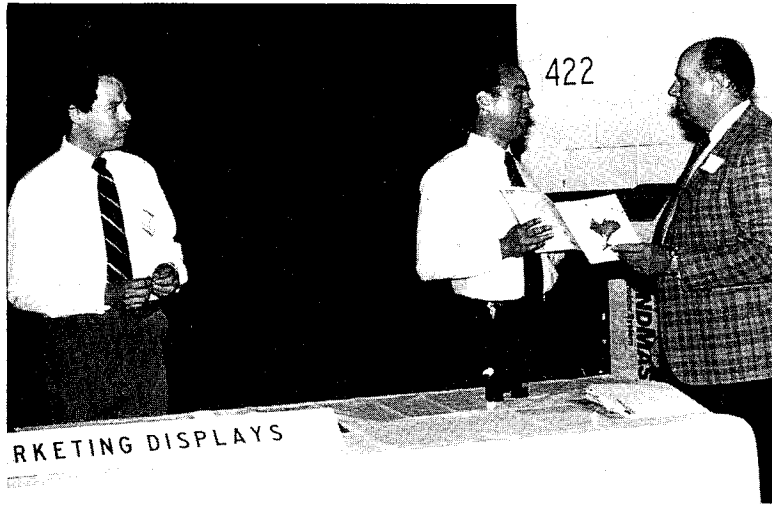
Digger and Aerial representatives Cindy Lawler, Tom Miller and Jim Robertson discuss hydraulic lift equipment.



Dave Walker of Walker Hydraulic Tool explains the operation of one of their products.



Merv Teague and Jack Mathiasen of 3-M discuss traffic construction materials.



Walter Partyma and Cecil Ursprung of Marketing Displays.



Howard Seligson of Winko-Matic displayed electrical message equipment.



Tim DeWitt and the 3-M Safety and Security Systems display.



Bob Durgin and Rick Murray of Traffic Control Products displayed detector and controller equipment.



Jack Wiitala and Kieth Hay representing Traffic and Safety Control Systems, Inc.

A special THANKS goes to Bill Savage and the City of Southfield for a very successful day.

signed: The Vendors