



MICHIGANITE



WINTER 1982

VOLUME XVII

NUMBER 4

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

NEW BOARD ELECTED

PRESIDENT'S COLUMN



DeCorte

The past year has been very fulfilling, representing the Michigan Section at meetings including the Safety Belt Coalition in Lansing and the Annual ITE Meeting in Chicago. The best feedback came at the Annual ITE Meeting. It was quite obvious how well respected the Michigan Section is at the National level. Other Section and District officers were always asking me for our secrets. They wanted to know how our budget is always in the black, how we always get the membership actively involved in Statewide projects like the Safety Belt bill, how we always have a large turnout for meetings and always find help in hosting meetings. I attribute it to the plan-ahead attitude of the Board and the enthusiasm of the membership.

When I took office last year, I asked for help from the members. I want to thank each one of you. Because all of you helped in one way or another. That is why we have a successful, and progressive Section. The support that I have received from the members and the Board is the primary reason we, as a Section, had a very productive year. As I write this, plans are underway for 1983. Committees are being formed, meeting dates are being set and projects formulated.

One of the primary reasons our Section has been successful is that the members are always heard. It has always been a Section policy to do what the members want, even if its only one member. For example: one member wanted a meeting to serve the northern members. We now have a regular meeting each year in Mt. Pleasant. Another member wanted a meeting in his area. We now have a meeting each year in Marshall. As far as I know, there has never been a member's suggestion that has been turned down.

Your continued support is necessary if the Section is to continue to serve you. Even though the Safety Belt Bill has been officially withdrawn, there is much work to be done before its re-introduction early next year. A new public relations program will be announced by the Board shortly (see article in this issue) for use by our members, the quality of technical programs must be kept high by our own members speaking on their favorite topic or on a new concept that is being tried. The Michiganite is a great medium for you to be heard on any transportation topic. So you see there is something for everyone.

Thank you for all the assistance each of you have given me during the past year and I wish our new Board well in the coming year.

The new Michigan Section Board was elected and sworn in at the Annual Meeting at the Ponchartrain Hotel on November 18. Richard Beaubien, the Transportation Engineer from the City of Troy was elected President. Tom Krycinski, Chief Planner for the Office of Highway Safety Planning was elected Vice-President and Bob Lariviere, of MDOT will assume the duties of Treasurer.

Three new names on the Board include Rich Cunard of TIA, Secretary; Don Wartella, MDOT, will be the new Director and Tim DeWitt of 3M Company will be our new Offiliate Director.

Two board Members who will be leaving the Board are Ray Severy of Lansing and Jack Hoving of Grand Rapids. Both have served their Section well for two years and will remain active to continue to lend their expertise and experience to the Board and Section. We thank both for their two years of service.

The proposed amendment to the by-laws was approved by an overwhelming majority. This change will allow the Board to provide financial assistance to the Section President up to the amount of a two-way flight to the International ITE Meeting. It also officially changed the name of Traffic to Transportation within the by-laws.



The new Section Board for 1983 (left to right): Don Wartella, Director; Tim DeWitt, Affiliate Director; Richard Beaubien, President; Bob DeCorte, Past President; Tom Krycinski, Vice-President; Bob Lariviere, Treasurer. (Rich Cunard, Secretary, not shown)

Official Publication of the
Michigan Section
Institute of Transportation Engineers

1982 EXECUTIVE BOARD

President, Robert V. DeCorte, P.E.
Traffic Engineer, Automobile Club of Michigan
(313) 336-1407.

Vice-President, Richard F. Beaubien, P.E.
Transportation Engineer, City of Troy
(313) 524-3379

Secretary, Raymond O. Severy, P.E.
Ass't. Director of Public Service, City of Lansing
(517) 487-1313

Treasurer, Tom Krycinski, P.E.
Office of Highway Safety Planning
111 S. Capitol Avenue, Lower Level
Lansing, MI 48913
(517) 373-8011

Director, Bob Lariviere, P.E.
Traffic and Safety Division, MDOT
(517) 373-2957

Affiliate Director, Jack Hoving
Transportation Department, City of Grand Rapids
(616) 456-3066

Past-President, William T. Lebel, P.E.
Traffic and Safety Division, MDOT
(517) 373-2310

1982 COMMITTEE CHAIRMEN:

Technical Program - Joe Marson
Nominating - Bill Lebel
Hospitality - Herb Henry & Jerry Carrier
Technical Projects - Jon Crane
IMSMA Liason - Jack Hoving
Professional Advisory Panel - Bill Lebel
Membership - Mike Labadie
Legislative - Tom Reel
Public Relations - Ken Underwood
Program - Dick Beaubien

MICHIGAN SECTION ITE, TREASURER'S REPORT

Balance:	August 30, 1982	\$3,298.63
Receipts:		
	Bank Interest	\$ 33.27
	Dues	606.00
	Sub Total	\$ 639.27
Expenditures:		
	Printing	\$ 122.77
	District III Dues	67.00
	Michiganite	36.00
	Plaque	49.69
	Presidents Expenses	200.00
	Annual Meeting	25.00
	September Meeting	372.06
	Sub Total	\$ 872.52
Balance:		\$3,065.38

Treasurer, Thomas R. Krycinski, P.E.

I am most pleased to be able to serve the membership over the next year in the position of vice-president. As vice-president, I am in charge of setting up membership meetings and selecting hosts. I will be in contact with some of you over the next month in that regard. I would be most interested in any member's comments (negative or positive) or ideas regarding membership meetings for next year. I'm especially interested in ideas for Ladies Night. That is, should we once more return to the Detroit Race Track or try something different. My "gut" feeling is that we're probably ready for a change, but I could use some ideas in that regard. Secondly, I'm interested in your ideas on the annual meeting. I feel that the tech meeting/lunch approach utilized this year with CEU's was a good one, but I'd like your ideas on whether an evening activity (such as the Piston's games or the Strohouse tour) is desirable and if not what would you suggest. Also, where would be the most appropriate location.

You can forward your ideas to me at the following address:

Thomas R. Krycinski, P.E.
Chief, Planning and Analysis
Office of Highway Safety Planning
Michigan Department of State Police
111 S. Capitol Avenue, Lower Level
Lansing, Michigan 48913

I know that you won't disappoint me on input.
By Thomas R. Krycinski, P.E.
Vice-President Elect

DISTRICT III NEWS

Our old District Director, Bill Fehribach, has agreed to finish the term of our elected Director, Jim Musick, who had to resign for personal reasons. As you may recall, Bill is also our past-Director. He served our District from 1979-1981.

We appreciate the devotion and willingness of Mr. Fehribach to serve again. His present term will continue through 1984 at which time a new Director will be elected - hopefully from Michigan.

JANUARY MEETING

January's Section meeting will be at Oakland County Community College on January 27th. It will be a noon meeting with lunch at the College and an after-lunch speaker. The topic will be regarding the use of cadavers and dummies in crash tests. Meeting notices with details will be mailed shortly.

"SAY YES TO SEAT BELTS"

In an effort to get more Michigan motorists to use seat belts, the Traffic Safety Association of Michigan (TSAM) has adopted a modified version of the current "Say Yes to Michigan" campaign sponsored by the state Department of Commerce. The TSAM theme encourages people to "Say Yes to Seat Belts".

Promotional items include attractive blue and silver bumper stickers, dashboard stickers, and lapel buttons. TSAM member organizations are being asked to use these materials in helping to get employees who regularly drive company vehicles to buckle up. Members of the Michigan Coalition for Safety Belt Use will also be provided with a supply of each item. The overall aim of this newest effort is to increase present low usage rates (10-12%).
Reprint from TSA of Michigan Newsletter

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: Robert V. DeCorte, 7441 Emerson Drive, Canton, MI 48187

1982 ANNUAL MEETING AND TECHNICAL SESSION

On November 18, the Michigan Section's Annual Meeting and Technical Session was held at the Ponchartrain Hotel. This year's program was unique because for the first time attendees of the entire technical meeting were awarded one-half (0.5) of a Continuing Education Unit which is being offered through the Lifelong Education Programs Office of Michigan State University. In addition, this year's meeting included a luncheon because of the technical program length which was longer to satisfy the requirements for obtaining continuing education credits.



Martin Parker discusses rural road safety.

Martin Parker of Progressive Consultants, Inc. began the Technical Session with a discussion of rural highway safety. Martin reviewed the history of the rural road system which includes 80 percent of the roads and only 30 percent of the traffic. The local road system has a higher percentage of single vehicle crashes and the accidents on this system result in more serious injuries. Martin identified the following major problems which refer to the local road system:

1. 41% of the accidents occur at night
2. 50% of the passing accidents occur at intersections
3. There are deficiencies in the accident data
4. Accidents are scattered over many miles
5. 12% of the accidents involve trees
6. 2% of the accidents involve running off the end of a T intersection with 81% of these occurring at night, 94% involving single vehicles, and 49% involving drinking

Martin indicated that traffic engineers are not giving much attention to rural locations because the solutions do not appear to be cost effective.

The next speaker was Stan Gross, Superintendent of Traffic Engineering Operations for the City of Detroit who discussed traffic control in snow emergencies. Stan discussed the history of the snow removal plan for the City of Detroit. The Detroit plan includes ordinances to keep people from parking by the curb and a priority list of streets to be plowed based on average daily traffic. Stan indicated that the success or failure of a snow removal program is apparent within 24 hours. A good snow removal program includes appropriate ordinances for parking restrictions, prioritized routes for snow removal, timely declaration of snow emergencies, and adequate enforcement. Stan showed a slide presentation on the Region 9 (Metro) Steering Committee's uniform code of Emergency Procedures for severe weather warnings.

Following Stan's discussion Ed Swanson, Traffic Engineer for the City of Grand Rapids, talked about traffic signal systems and their relationship with Cable T.V. Grand Rapids will be using Cable T.V. for

cont. on page 4

Could You Use A Snow and Ice Control Spreader That ?

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- Doesn't tie up a truck
- Is self-storing
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- Never sprays cars, lawns or trees
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- Spreads any granular material — year 'round utility
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- Permits SAFE one-man plow and spread operation with NO WASTED SALT — as little as 100 LBS PER LANE MILE
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The New Era in Snow and Ice Control



Ed Swanson talks about traffic signal systems on Cable TV lines



Stan Gross discusses parking vs. snow removal

traffic signal system communications because of the high cost and unreliability of leased telephone lines. The Grand Rapids system was designed by JHK and Associates using a mini-computer and coaxial G. E. cable. The first intersections were recently brought on line with completion of the project anticipated to be February 1.

After an excellent lunch Bob DeCorte conducted the annual business meeting. Reports were given by the officers and the election results for the new officers was given. In addition, Bob was presented with an award from the Section for his hard work as a member of the Board for the last four years.

After lunch Ted Rieck from SEMTA discussed the business of buses. Ted pointed out that mass transit is a business in which marketing, advertizing, and promotion are very important. SEMTA has 1000 buses in operation used mainly for the purpose of getting riders to and from work. Park and ride facilities have been very valuable in encouraging people to ride buses. In

addition, newspapers, radio, and special promotions have been used to increase ridership.

Stephen Dearing, Special Projects Engineer with the Oakland County Road Commission, spoke next on computerized traffic volume records systems. The most important element in collecting volume data is the portable counter. New equipment has micro-processors associated with the roadside counters. The weakest part of the volume counting equipment is the sensors. The state of the art today involves storing volume data at the roadside counter with solid state equipment, and using computer programs to retrieve the data for processing. Stephen went through the hardware and software required to computerize the collection of traffic volume data.

George Swede, who is Director of Engineering for SEMTA, discussed the prospects for increased transportation funding in Michigan. He discussed a package of bills called the 1982 State Transportation Survival Package that is currently being debated in the Michigan Legislature. George discussed some of the consequences of this survival package failing to pass. One example he discussed involved a 60 percent reduction in SEMTA bus service. Inflation and decreasing tax revenues have caused the reductions in our transportation programs. He discussed the elements of the proposed package that would increase the revenues available to transportation interests.



Steve Deering, OCRC, points out pros and cons of computers and traffic counters



Dave Bacon gives us a history of the traffic controller.

Dave Bacon of Carrier and Gable discussed pretimed solid state controllers which is today's state of the art. Dave indicated that many road agencies are changing from electro-mechanical equipment to solid state. Maintenance is the big reason as men, equipment, and money are needed yearly to maintain electro-mechanical equipment. Dave had an interesting presentation on the history of the types of controllers using an example location and some controllers he brought with him.

George Swede completed our technical session with a very interesting and informative presentation on the downtown people mover. A Canadian firm Urban Transportation Development Corporation was selected to complete the project which began in 1977. The people mover will be three miles long with 13 stations. It will take about 14 minutes to travel the circuit at a speed of 25 miles per hour. The project which will cost \$134 million will be in service January 1, of 1985.

The Annual Meeting closed with many members attending dinner and a tour at the Stroh Brewery. Comments during the day from the membership indicated that this Technical Session was one of our very best. Many thanks go to Joe Marson for the excellent Technical Session and to Alan Richardson for the first class meeting arrangements.

By Bob Lariviere

313-348-0570

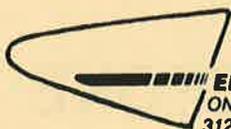
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Tom Maleck (center) explains his new M.S.U. student chapter activities.

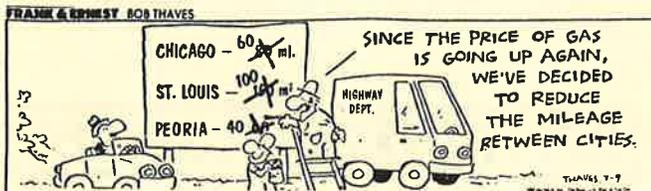
PEDESTRIAN AND BICYCLE SAFETY

The FHWA Washington Office of Highway Safety has compiled a synopsis of recently completed (since 1980) and current studies and publications on Pedestrian and Bicycle Safety. Each of the individual reports can be obtained for a small fee from various sources. The report numbers, cost, and titles are as follows:

- Report FHWA/RD-80/190; (\$18.00) Pedestrian Safety Programs - A Review of the Literature and Operational Experiences (January 1981)
- Report No. IM 78-6; (\$8.00) Model Pedestrian Safety Program Users' Manual (June 1978)
- NCHRP Report 240; (\$7.20) A Manual to Determine Benefits of Separating Pedestrians and Vehicles (November 1981)
- TRR Report 743; (\$4.00) Pedestrian Behavior and Bicycle Traffic (1980)
- Report No. VHTRC 81-R44; Pedestrian Safety in Virginia: Accident Characteristics and Suggested Revisions to Virginia's Pedestrian Laws (April 1981)
- Report FHWA/RD-78/142; (\$10.50) Effective Treatments of Over and Undercrossings for Use by Bicyclists, Pedestrians and Handicapped; A Literature Review (October 1980)
- Report FHWA/RD-79/146; (\$12.00) The Feasibility of Accommodating Physically Handicapped Individuals on Pedestrian Over and Undercrossing Structures (September 1980)
- Report DOT-HS-805-850; (Free) Pedestrian Accident Reduction Guide (November 1981)
- Pamphlet; (Free) A Checklist for Improving Pedestrian Safety in Your Community (December 1981)
- Report HS-806-182; (\$10.50) The Effect of Right-Turn-On-Red on Pedestrian and Bicyclist Accidents (October 1981)

For an overview of what the individual reports address, and for further information on where the reports can be obtained, you should contact Morrie Hoevel (377-1842) of the Lansing Office of Federal Highway Administration.

By Morrie Hoevel



MICHIGAN'S "BUCKLE-UP" BILL DIES WITHOUT VOTE

The bill requiring Michigan motorists to buckle-up died without a House vote. Rep. David Hollister said he couldn't muster the required 56 supporters, so no vote was taken. The bill fell more than 20 votes short of passage in an unrecorded vote before the Thanksgiving recess.

Hollister said he will reintroduce the legislation next year.

It would remain in effect for three years and, with few exceptions, require the driver and front seat vehicle occupants to wear safety belts or risk \$10 fines.

State officials, auto companies, insurance firms, police organizations as well as ITE supported the bill, which Hollister estimated would save 900 lives over three years. Opposition to mandatory seat belts was usually on the grounds of restricting individual freedom.

The Michigan Section of ITE has pledged to continue the fight to get the bill passed in 1983.

TRAFFIC ENGINEER'S DELEMMA

All are aware of ecology and energy conservation, and who hasn't encountered neighborhood organizations or historical preservation areas. These groups with their votes have quite an effect on the governing bodies. Often they can stop a project dead in its tracks after final plans have been approved and they can initiate projects that serve no special function, but may be aesthetically pleasing.

Because of these changing times, it seems that there is a new breed of ecologist also. They have figured out how many billion gallons of gasoline that can be saved if all traffic signals were timed to eliminate stops.

It would appear that the ecologist, homeowners organizations and historical groups are somewhat at odds with each other. Consider the neighborhood watch signs that are sprouting everywhere on the right-of-way that was at one time considered *scared* for traffic control. What happens when everyone gets watch signs and the thief has no place to go? The police won't have anything to do!

And, what about the trail blazer signs all over city streets and highways directing motorists to areas of special interest both public and private? What happened to the street address as a means of finding your way around a City?
Reprint from MOVITE Journal

COURT SAYS RADAR DETECTORS LEGAL NOW

The state Supreme Court ruled last month that police radar detection devices can now legally be used by Michigan motorists hoping to avoid a speeding citation. Despite the issuance of a number of tickets, use of the devices in the state was reported to be fairly common even prior to the high court's ruling.

Police had been using language from a 1929 section in the Vehicle Code which basically prohibits any vehicle to be equipped with a radio receiver capable of monitoring police conversations. But the court said this earlier law was not meant to apply to the radar detection devices introduced on the market several years ago, especially following the advent of the 55 MPH speed limit.

Specifically, the justices upheld the dismissal of charges against a former Troy resident who received a ticket in 1976 for having a radar detector in his car.

There has been no official word from the police community on whether legislation to ban the devices outright would be introduced this fall or during the 1983 session.

Reprint from TSA of Michigan Newsletter

EMERGENCY PROCEDURES FOR SEVERE WEATHER WARNINGS

On November 9, the Region 9 (Metro) Steering Committee presented a slide presentation on Emergency Procedures for Severe Weather Warnings to all media representatives in southeastern Michigan, the State Safety Commission, and other representatives from the safety community. The Region 9 Steering Committee is one of 9 committees established by the State Safety Commission to provide liaison and coordination between the Region and the Safety Commission on safety related activities.

The guide on severe weather warnings was developed to dispel widespread confusion, misleading information, and unofficial bulletins about severe weather driving conditions. Development of this guide, which applies to freeways, trunklines and other state-owned roads, began in April with definitions established through the Departments of Transportation and State Police.

The central authority for the issuance of severe weather bulletins will be the Michigan State Police, Operations Division in East Lansing. Severe weather bulletins will alert drivers to hazardous conditions, report impassable routes, suggest alternate routes of travel, and discourage all but essential driving. The guide addresses the following two types of weather alerts:

Condition Yellow: Hazardous driving conditions exist with heavy snow, drifting, and limited visibility (and/or freezing rain). Traffic is moving at reduced speeds. Major highways are being maintained in fair condition, but local roads are becoming impassable.

Motorists are urged to use extreme caution.

Condition Red: Severely hazardous driving conditions exist on major highways, with heavy snow, severe drifting and extremely limited visibility (and/or freezing rain). The majority of local roads are impassable. Traffic is stalling in some areas with the storm worsening. It is expected that the entire road system in the area will ultimately be blocked. Motorists are urged to curtail driving in the affected area.

This guide was developed with the cooperation of all agencies in the Metro area. Some of the individuals who assisted in the development of the program included Howard Cox, Lt. Thomas Garvale (Michigan State Police Northville), Richard Cunard, Bruce Bordner (Michigan Department of Transportation - Southfield), Bob DeCorte, Joel Ozment (Department of State), and Fay Knapp (Safety Council of Southeastern Michigan).
By Bob Lariviere

WHY DIDN'T I THINK OF THAT?

An Australian firm has pioneered a concrete engraving process that is now being used in communities in New South Wales to improve the identification of streets and house numbers at lower cost than conventional street signs. Street names and block numbers are engraved on the raised curb stones and luminous letters and numbers are affixed to the engraved spaces. The developers state that the process is cheaper than conventional signposting and an independent survey has confirmed that street identification from vehicles is made easier, especially at night. The signs are said to last practically indefinitely under all weather and road conditions, but since the process is quite new the judgment of time will have to be awaited.
Reprint from Urban Innovation Abroad

CAR-DEER ACCIDENTS INCREASE

Over the past few years motor vehicle/deer accidents have shown a disproportionate increase over other types of highway mishaps. Although the severity in terms of vehicle damage and human injury resulting from this type of accident is usually minimal, the potential for disastrous results in any one accident is always present. Car-deer accidents accounted for seven percent of the 303,000 total statewide accidents in 1981 compared with only two percent of the 299,000 total accidents in 1967. Last year, 21,200 such accidents occurred resulting in two deaths, 1,160 injuries, and an estimated \$20.08 million in property damage, or an average of \$980 per accident. As in past years, the Department's Public Information Office has recently issued a press release reminding motorists of the above facts and that the November-December period is the peak time of deer-car accidents in Michigan. Motorists are advised to be alert to the situation, particularly at night.

In response to the increase in motor vehicle/deer accidents, a special committee has been established to explore means of combatting the accident problem. The Committee is comprised of members from the Michigan Department of State Police, the Department of Natural Resources, and the Michigan Department of Transportation. The Committee is now investigating possible accident reduction measures which might conceivably have some bearing on controlling this type of accident. Some of the potential accident deterrents being discussed by the committee include red reflectors to divert deer from roadway areas, roadside browse (vegetation) which is distasteful to deer, high fencing in selected areas, and so on. In addition, the Michigan Department of Transportation is currently evaluating the effectiveness of standard deer crossing signs.

Although warning signs to alert motorists to deer crossing have been widely used in Michigan and most other states for many years, no extensive studies have been performed to measure the effectiveness of such signs. Their use, evidently, has grown out of public concern and insistence that something be done--signs of course are visible evidence that something is being done. In an attempt to establish the effectiveness of deer crossing signs, a study is now being conducted by the Traffic and Safety Division's Reflective Systems Unit. In the study to date, locations of existing deer crossing signs throughout the state have been identified, and specific highway sections influenced by the signs have been plotted. Motor vehicle/deer accident data over the past 11 years is being compiled from the Department of Transportation's records for these highway sections, and we expect to develop accident rates both before and after sign installations were made. Unsigned highway sections will also be studied to serve as a study control.

We are aware, of course, that many other factors such as variations in deer herd size and changing migratory habits, will affect the frequency of motor vehicle/deer accident occurrence. With the assistance of Department of Natural Resources personnel we plan to make proper allowances for such variances. A report on the effectiveness of deer crossing signs will be issued in 1983.

In summary, it is our goal to provide safer roadways for the motoring public by lessening the probability of motor/vehicle/deer accidents. To accomplish this, we will determine if the current practice of informing motorists (deer crossing signs) of known deer crossing locations is effective. If not, we must determine if a cost-effective and practical method exists, or can be found to deter deer from crossing selected roadway areas. In the meantime, motorists are advised to drive with added caution. Most car-deer accidents occur at night during the months of November and December.
Reprinted from John Woodford's November report to the State Safety Commission

GET IT  TOGETHER

THE TRAFFIC ENGINEER AND PUBLIC RELATIONS

In response to the Michigan Section meeting in February, 1982, "The Future of the Urban Traffic Engineer", several members expressed an interest in improving the public's perception of the Traffic Engineer. The Michigan Section Board of Directors considered a proposal from a public relations firm to develop a Public Information program, but concluded that the expense of such a program was more than we could accommodate within our budget. Representatives of the 3M Company suggested that 3M could help the Michigan Section to develop a program to increase the Traffic Engineer's effectiveness.

The first step was taken November 1st, when seven Michigan Section members met with 3M representatives to discuss problems and possible solutions. Some of the problems identified by this group were: (1) the need for credibility with the public and elected officials; (2) a feeling by some professionals that traffic engineering is not needed and that solutions are simple; (3) lack of adequate professional staff; (4) a need to remove unnecessary traffic control devices; (5) deteriorating capital plant, both roadways and equipment; (6) liability; (7) need for higher salaries.

To begin to address these problems, the main responsibilities to a typical Traffic Engineer's job were analyzed. The group felt that a good understanding of the Traffic Engineer's job was needed so that he could improve his effectiveness. The Traffic Engineer's job was summarized as responsibility for the safe, convenient, and efficient movement of people and goods. The main responsibility of his job were: (1) promote and improve traffic safety; (2) promote efficient movement of people and goods - traffic control; (3) select, hire, and train staff; (4) budget preparation, monitoring and evaluation; (5) data base development; (6) communications with public and elected officials; (7) self-development (training); (8) relate to other departments and agencies.

Ideally, the Traffic Engineer should prepare detailed objectives for each of these job responsibilities. On November 1st, the group prepared detailed objectives for the communications part of the job responsibilities. The plan of action for this group calls for the participants to add any additional duties they have to this job description and develop objectives and action plans for their own particular jobs. The participants are to report on their experiences using their new objectives and action plans by March 1st so that we can determine whether there have been any improvements in their effectiveness. The group should be preparing a report on their activities so that it could be distributed to Michigan Section members in April, 1983. We believe this report may form the basis for a Section technical project to be submitted in the national competition.

Details on the Traffic Engineer job analysis, objectives, and action plan can be obtained from W. Merv Teague, 3M Company, P. O. Box 2600, Farmington Hills, MI 48018
By Richard F. Beaubien, P.E.

MAINTAINING TRAFFIC IN CONSTRUCTION ZONES

The Michigan Department of Transportation has recently published a booklet for traffic control in construction and maintenance areas. The 68-page publication is an excerpt (Part VI) from the 1981 edition of the Michigan Manual of Uniform Traffic Control Devices. It reflects the revisions made to the Manual earlier this year.

The booklet is available, free of charge, to contractors, utility companies and officials in charge of maintenance and construction along highways and streets. Call (517/373-2957) or write to Mr. Robert G. Lariviere, Traffic and Safety Division, Michigan Department of Transportation, P.O. Box 30050, Lansing, MI 48909.
By Nejad Enustun

SUCCESS AT LAST!

There was an aura of excitement the third week in November when with some fanfare the Michigan Department of Transportation turned on six ramp signals to begin a modest program of ramp metering on Detroit freeways. The six entrance ramps to the eastbound Ford Freeway (I-94) between Mt. Elliott and Outer Drive were activated on November 17, 1982, to help smooth traffic flow during the afternoon peak travel period. Early indications show favorable results with improvements to freeway flow noted by the media, including some of our early detractors. This event was a milestone for the people who have been intimately involved in the Surveillance, Control, and Driver Information (SCANDI) system. The key personnel to whom most of the credit is directed are Herb Crane, Gordon Paesani, and Wendell Blikken. Herb had a supporting cast of engineers, technicians, analysts, secretaries, and many others in the Traffic and Safety Division through the years as this project was developed and came to fruition. There were lean times and depressing moments, but the excitement of "knowing it works" was felt by a lot of people in the department.

I was privileged to become an actor in the SCANDI project in the last two years, during which the motorist-aid telephone system was formally dedicated by Governor Milliken and the ramp metering system announced to the Detroit media via a press briefing involving the major television, radio, and newspaper interests. There has been a great deal of cooperation displayed between the city, county, state, and federal governments to get where we are today on this project. Hopefully that same cooperative attitude will continue to prevail as we operate and fine-tune the SCANDI system in the days ahead. Reports on the SCANDI system will be made in future ITE Newsletters so that section members can be kept up to date on developments.

As a side note, I was privileged to accompany Joel Alexander, WJR Helicopter Traffic Reporter, the day after ramp metering began. We did a tour of the city a couple times that afternoon including several checks on the eastbound Ford Freeway where ramp metering was in effect. He was convinced, as was I, that there was noticeable improvement in freeway flow even though traffic volumes were not as high as sometimes found on this section. It was exciting for me to realize that so many years of hard work had culminated in a successful project. Thanks go to Herb Crane and his Freeway Operations staff!
By Maurice Witteveen

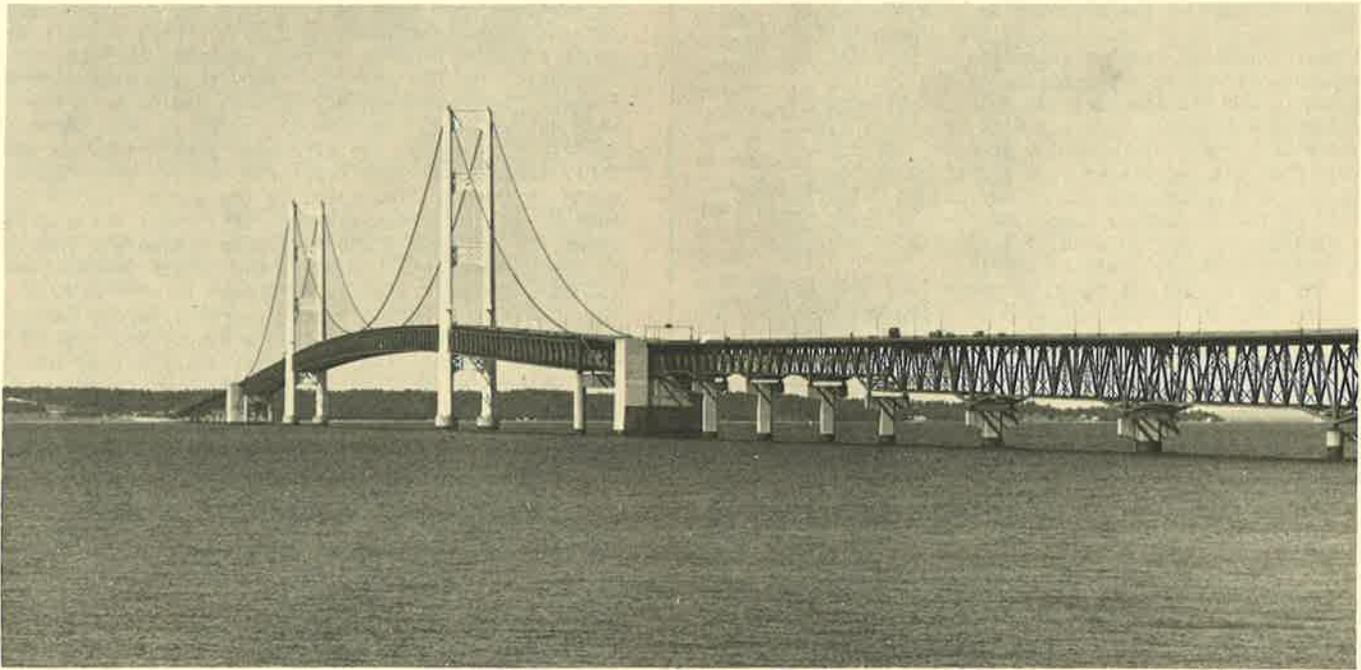


JACKSON TOPICS STUDY

MDOT's Traffic and Safety Division, in cooperation with Thomas Phare, Jackson Traffic Engineer, and members of the Jackson Area Comprehensive Transportation Study (JACTS) Technical Committee, completed its second TOPICS report (Traffic Operations Program to Increase Capacity and Safety) covering the Jackson urban area. Thirty-seven trunkline and 13 non-trunkline locations were studied and 56 improvements were recommended. Most of these were relatively low cost improvements such as modifications in pavement markings, signing, and signal operation (i.e. all-red intervals and longer yellow intervals). One left-turn phase and two left-turn prohibitions were also recommended. Three of the recommendations involved construction while two involved skid resistance projects and one a re-alignment project requiring modification of the curb line. Further work in progress in the Jackson area includes an analysis of unwarranted signals and a system-wide review of signal timing.

By Peter Briglia

HOLY MACKINAC! *The story of the Mackinac Bridge*



EDITOR'S NOTE: The 25th anniversary of the Mackinac Bridge occurred on November 1, 1982. The following account of the bridge's history appeared in the October issue of the MDOT HI-LIGHTER and was written by Lawrence A. Rubin, executive secretary of the Mackinac Bridge Authority since it was established in 1950. The account will be printed in two parts because of its length with the second part appearing in the March MICHIGANITE.

The Chippewa and Huron Indians who first inhabited the Straits of Mackinac area of Michigan certainly must have looked longingly at opposite shores and perhaps prayed that the Great Manitou would grow a tree so tall that, when it was felled, its trunk would reach from one shore to the other. Such was the primitive method of building bridges.

Explorers, fur traders and, finally, settlers in St. Ignace and Mackinaw City must have thought of a connecting link. What man worth his salt did not look longingly at a distant shore and dream of a roadway that would allow a traveler to cross easily from one of the Michigan peninsulas to the other?

One answer lies in a microfilm print of a faded news page of the Lansing Republican, dated February 5, 1884. Under the "Miscellaneous" column there is an item from the Grand Traverse Herald stating that "the experiment to provide all-year service across the Straits by boat failed and that if a great east-west route were ever to be established through Michigan, a bridge or tunnel would be required". The editor, Tom Bates, considered both practicable. The only question in his mind was that of cost.

This conclusion might well have been inspired by the dedication of the Brooklyn Bridge in New York in 1883. A St. Ignace merchant, William Saulson, used a line drawing of the bridge in his newspaper advertising and on his wrapping paper. Above the artist's sketch of the famous New York structure was the inscription, "A glimpse of the future", and below it the caption, "Proposed bridge across the Straits of Mackinac".

Commodore Cornelius Vanderbilt, presiding over the first meeting of the board of directors of the newly opened Grand Hotel on July 1, 1888, is reported to have made the following observation: "We now have the largest, well-equipped hotel of its kind in the world for a short-season business. Now what we need is a bridge across the Straits."

AMBITIOUS PLAN

C. E. Fowler, a New York City engineer, submitted an ambitious plan. He proposed a series of bridges and

causeways that would commence in Cheboygan, some 17 miles southeast of Mackinaw City, span the waterways to Bois Blanc and Round Island, touch the southern tip of Mackinac Island, and leap across the deep channel to St. Ignace.

The few vehicles seeking transportation across the Straits in the early 20s were transported on the railroad ferry, which provided the only connection between Michigan's two peninsulas. Then, in 1923, the Legislature ordered the State Highway Department to establish its own ferry service. A relatively small boat, the Ariel, which had been transporting vehicles across the Detroit River between Windsor and Detroit, was purchased and placed into service at the Straits.

Within five years, the demand for crossings became so strong that Governor Fred Green ordered a bridge feasibility study. The results favored a bridge to be constructed at an estimated cost of \$30 million. Some efforts were made to get the project under way.

In 1929, State Senator Seymour Person introduced a bill authorizing the Highway Department to construct the previously proposed series of causeways and bridges from Cheboygan to St. Ignace, using prison labor and state highway funds and equipment.

The bill died in committee, but the idea of a Straits bridge did not. Less than five years later, backers considered the bridge project a most suitable one for the federal Progress Works Administration, an agency created to combat unemployment during the Great Depression. The Mackinac Straits Bridge Authority was created during the extra session of the 1934 Legislature. It was empowered to determine the feasibility of a bridge and finance construction by issuing revenue bonds.

GO SEE THE SULTAN

The Authority concluded that it was feasible to construct a bridge directly across the Straits at an estimated cost of \$32.4 million for a two-lane highway and one-track railway structure.

The Authority made two attempts between 1934 and 1936 to obtain loans and grants from the government. Both were unsuccessful even though the U.S. Army Corps of Engineers and President Franklin Roosevelt were in favor of the project.

There is an amusing and possibly apocryphal story about Chase S. Osborn, a former Governor, the publisher of the Sault Ste. Marie Evening News, and a strong bridge proponent. When it became necessary to approach important people in Washington, he is said to have remarked that if something needs to be done "don't bother with the servants, go see the sultan." So he went directly to President Roosevelt, who is reported to have

MDOT INSTALLS WATERWALL

The worlds largest waterwall was installed in September, 1982 on a curve section of SB I-375 just before Jefferson Avenue in the city of Detroit at a cost of \$160,000.

The waterwall, designed and built by Energy Absorption Systems, Inc. of West Sacramento, California is an extension of the same principals used for the Hi-Dro cell attenuator. It was designed to attach to a concrete barrier wall and consists of a series of water cells, four cells deep, which are connected by diaphragms and fender panels similar to those of the Hi-Dro cell attenuator. This makes the waterwall a single continous attenuation device over its total length of 400 feet.

The watercells in the waterwall are designed as a self restoring system. Each cell consists of a bottom cell and a top cell which are sealed together as one piece. The bottom cell is filled with liquid while the top cell is empty. When the wall is impacted the liquid from the bottom cell is forced up into the empty top cell cushioning the impact and lessening the chances of serious injury. The liquid then drains back into the bottom cell after impact, eliminating the need to maintain and refill the system as is necessary in the Hi-Dro cell attenuator.

The bridge columns at this location were previously protected by guardrail. However, with the sharpness of the curve, the accidents that occurred frequently resulted in injuries to the vehicle occupants. Thus far the waterwall has been impacted several times but no reported injuries have occurred.

By Dave Mc Kervey

thought the Straits were about 20 miles wide, five times the actual distance. It is within the realm of possibility that the President's support for the project was the price of silence about his geographical misconception.

During the late 30s, a feeling persisted among state highway officials that a bridge was inevitable. The Chief Deputy highway Commissioner, G. Donald Kennedy, became chairman of the Mackinac Straits Bridge Authority. Thus, the Highway Department, with the backing of Governor and former Highway Commissioner Murray D. VanWagoner, lent its full support to the project and managed to have considerable work completed that was ultimately of great value.

CAUSEWAY SOUTH

Borings were made, a new direct route selected, and traffic, geologic, ice and water current studies were completed. An earthen mole, a causeway jutting 4,200 feet south into the Straits from St. Ignace, was constructed. A consulting engineer was retained and plans were proposed for a double suspension span, one of which would have been 4,800 feet between towers. The possibility of a bridge became very real. But in 1939, the armies of Europe began to march. The United States was attacked in 1941, and bridge progress ground to a halt.

When hostilities ended, road and bridge builders worked overtime to make up for the construction that had lagged during the war years. The Straits bridge became a "back-burner" item and the Authority was dissolved by the Legislature in 1947. This was an affront to bridge backers.

YOUNG GOVERNOR

W. Stewart Woodfill, then owner of the Grand Hotel on Mackinac Island, established a citizens' committee to promote legislation creating a new bridge authority. Youthful G. Mennen Williams, campaigning for Governor in the eastern Upper Peninsula, made the bridge proposition a plank in his campaign platform. As often happens in politics, when the standard bearer of one party promotes a proposition, some members of the opposite party automatically reject it. This made it more difficult than it should have been to re-establish the Authority, but Woodfill's imaginative, dramatic and daring persuasiveness and Governor Williams' newly appointed Inter Peninsula Communications Commission, chaired by John McCarthy, prevailed. In 1950 a bill was enacted creating the present Mackinac Bridge Authority. However, its role was limited to determining feasibility of a bridge.

To his everlasting credit, Governor Williams appointed a blue ribbon Authority of leading citizens. Though it was comprised by law of three Democrats and three Republicans, one would have been hard pressed to determine their political affiliation from their actions on the Authority.

Former U.S. Senator Prentiss M. Brown of St. Ignace was elected Chairman. President of the National Bank of Detroit, Charles T. Fisher, Jr., was elected Vice Chairman. Other members were William T. Cochran, General Motors dealer, Iron Mountain; George A. Osborn, publisher, Sault Evening News; Fred M. Zeder, Vice Chairman, Chrysler Motors Corp.; and former Gov. Murray D. VanWagoner, from Birmingham. They selected Lawrence A. Rubin as Executive Secretary.

The law required the Authority to consult with three of America's foremost long-span bridge engineers for advice on physical feasibility and with traffic and revenue analysts to determine financial feasibility.

Six months later, in January, 1951, the consultants filed preliminary reports with the Authority, concluding that a bridge could be built and financed with revenue bonds totaling \$86 million. Unfortunately, the nation's "police action" in Korea put a claim on critical materials, especially steel. The Authority consequently delayed efforts to obtain legislation to finance and build the bridge.

The conclusion of this account will include Dr. Steinman's Risk; Finding the Financing, Breaking Ground, Overcoming Hardships, and Authority Successful.

LEGISLATIVE REPORT

Undoubtedly, the most important highway safety legislation adopted during the 1982 session was the "package" of three bills which, beginning in April, will materially strengthen Michigan's laws relating to drunk driving. At the same time, the failure of the "experimental" mandatory safety belt use proposal (HB 5567) was, in the view of many safety officials, the major disappointment of the year.

It became obvious very early that there was substantial public support, and really a clear demand from groups such as "MADD" (Mothers Against Drunk Driving), for major changes in the way drunk drivers were and are being "treated." These recently-created organizations, and the MADD group in particular here in Michigan, are deserving of a lion's share of the credit in securing the tougher new laws. However, the safety community (the non-volunteer sector) also put in many long hours and days in helping to sort out and analyze the many bills which were initially introduced on this subject.

Changes in the present Vehicle Code relating to drunk driving-related offenses become effective on or about April 1, 1983 (90 days following adjournment of the legislature). For a brief summary of the major parts of the new laws, contact the Traffic Safety Association in Detroit (313/567-3202) or Lansing (517/487-8811).

Although the seat belt bill failed to pick up enough votes for passage during the "lame duck" session, it was apparent that many House members were in favor of at least a trial (sunset) period for a measure of this type. Several last minute amendments (and the threat of others) also probably cost a few votes. Unfortunately, the 56 votes needed for passage were really never secured, although at one time close to 50 "yes" commitments had been obtained.

Representative David Hollister, sponsor of HB 5567, has indicated that he will re-introduce the measure sometime during the 1983 session. In the meantime, the Michigan Coalition for Safety Belt Use (of which the Michigan Section is a member), will continue its educational and informational efforts. (Our hats are off to all ITE members who made a personal effort to contact legislators. We hope we can count on you next time as well.)

By Tom Reel

GUIDELINES FOR PROHIBITION OF TURNS ON RED - AN INTERIM REPORT BY ITE COMMITTEE 4A-17

This ITE committee, composed of sixteen people from around the country, was asked to prepare qualitative guidelines for the prohibition of turns on red. The guidelines are to encourage more engineering judgment into analyzing where turns on red should be prohibited.

The committee has now submitted their report to International ITE for their review, revision, and possible approval.

The guidelines and recommendations as submitted to International ITE are as follows:

GUIDELINES AND RECOMMENDATIONS FOR PROHIBITION OF TURNS ON RED

1. Engineering judgment is the basis for each potential turn on red prohibition. Prohibition should be considered only after the need has been fully established and less restrictive methods have been considered.
2. Part-time prohibitions should be discouraged; however, they are preferable to full-time prohibitions when the need occurs for only short periods of time. It is not good engineering practice to prohibit right turns on red on the grounds that it is of little benefit during some hours of the day. The use of disappearing legend signs for part-time prohibitions and where desired in the vicinity of railroad crossing are recommended.
3. Less restrictive alternatives should be considered in lieu of prohibiting turns on red. Some examples of less restrictive measures are signs such as "No Turns on Red to Henry Street" or "Right Turn on Red Right Lane Only." Such devices can provide the intended prohibitions without inconveniencing all right-turning traffic.
4. Although many authorities do not perceive the need to prohibit turns on red at multiphased signals, others find there is a need. Where

such prohibitions are considered necessary, consideration should be given to the providing of right turn indications for the main street during the cross street left-turn phases.

5. The definition of specific right turn on red accident criteria may be inappropriate. The accident history of the intersection should be analyzed with prohibition of turns on red as one possible remedy. Experience may indicate that severe sight distance restrictions or deceptive geometrics can be related to turn on red accidents.
6. Universal prohibition at "school crossings" should not be made but rather restrictions should be sensitive to special problems of pedestrian and/or bicycle conflict, such as the unpredictable behavior of children or the problems of the elderly and handicapped, or failure of motorists to yield to pedestrians and/or bicycles within a crosswalk. Pedestrian volumes, as such, should not be the only criteria for prohibiting turns on red.
7. Education and enforcement play a significant role in the benefits and safety of right turns on red. The public needs to be educated concerning the benefits of right turns on red and their responsibilities when making this maneuver. Enforcement is important to ensure that the turns are made after stopping and that the necessary prohibitions are being observed.

The purpose of the above guidelines and recommendations is to promote the objective of safe movement of vehicular traffic and pedestrians while providing, for, at the same time, the efficient movement of traffic. Since very specific guidelines encourage local authorities to apply them universally, the above guidelines are qualitative, or nonspecific, to encourage local authorities to evaluate intersections on an individual basis.
By Bill Savage

SIGN OF THE TIME?

Heavens to traffic surveys, what's going on here? It seems as though the city fathers of Irvin, California, have tired of those speed demons ripping down their semi-rural streets at such breakneck speeds as 20 mph. In a continuing effort to combat such scofflaws, Irvin has taken to marking turns and roadways more precisely than most California cities, hence this treacherous curve rated at 16 mph just wouldn't do, since a sharp bustee could research the traffic surveys and discover that he was cheated, and possibly escape the Long Arm of the Law. And of course, 20 mph just wouldn't be safe, so, when in Irvin, drive 16 - it's keen.

From: PICKUP, VAN & 4WD



Why do we drive on parkways and park on driveways. . .
by H. Cox

DOWN THE ROAD

Bear with me a moment. I am about to save your life. Use seat belts when you drive.

See? Wasn't so hard, was it? Oh, it's not a sure thing that the advice will save your life, but it's likely that it will if you intend on having a serious auto accident, and who isn't.

I wouldn't bother telling you about seat belts, but apparently not many people know about them. They're those strap-like things that hang right inside the door.

I read the other day that only one out of every 10 Americans use seat belts. It used to be one out of eight, but new drivers don't seem to be picking up the habit.

That's curious in a culture where living seems so highly prized. I mean, we have people getting all excited about abortion and others who can't stomach the death penalty and still others who favor feeding starving people. And if you tell someone he's got a terrible illness and is going to die, you ruin his day.

But tell him or her that, if they don't use seat belts they increase their chance of dying and they yawn with lack of interest. What's all this talk about the sanctity of life if it isn't worth the effort it takes to snap a seat belt into place when you get in a car?

Let me give you some facts: Studies show that people who are belted in are half as likely to die in an auto accident as those who aren't. In a Swedish study of 28,780 people involved in car crashes, unbelted occupants died in collisions with closing speeds as low as 12 miles an hour. No person wearing a shoulder-lap belt was fatally injured in any crash under 60 miles an hour.

I know you don't want to hear any of this, but I thought that if I could save your life, I should.

But if you reject my advice and happen to get killed, don't come running to me for sympathy. I told you so.

PEOPLE in the news

Who's Who?

The Michigan Section of I.T.E. can feel very proud, two of its members, Tappan Datta and Bob DeCorte, were chosen to be included in the 1982 Edition of Who's Who in Engineering.

Tappan K. Datta is Professor and Chairman of the Civil Engineering Department at Wayne State University. He holds a Ph.D in C.E. from Michigan State University, a MS in C.E. from Wayne State and a BE in C.E. from Bengal Engineering College. He has spent five years as a civil engineer for Kujian Corporation in Calcutta; he is Chief Transportation Engineer for Goodall-Grivas, Inc. and since 1973 has been at W.S.U. He is a member of the ASCE, APWA and ITE.

Robert V. DeCorte is a traffic engineer for the Automobile Club of Michigan. He received his BS degree in C.E. from the Detroit Institute of Technology, a Surveying and Drafting Degree from Ferris State College and a certificate in Business Administration from the University of Detroit. He received his professional engineering registration in 1974. He has worked in the Road Design Department of the Wayne County Road Commission, as Assistant City Engineer in Mt. Clemens before joining the Auto Club. He is a member of the IMSA, MSPE, NSPE and ITE.

We congratulate both of these members for their achievements in engineering.

Personnel Changes at FHWA Headquarters

Several key personnel changes have taken place at FHWA headquarters recently. As reported in the last issue of the Signal **Marshall Jacks** was appointed as FHWA Associate Administrator for Safety and Traffic Operations. More recently, **John P. Eicher** was appointed to succeed Marshall as Director of the Office of Traffic Operations (OTO). John has been with DOT for almost 25 years and immediately preceding this appointment he was Chief of the Accident Investigation Division of the National Highway Traffic Safety Administration.

Bob Connor has retired as Chief of the Traffic Control Systems Division of OTO and **R. Clarke Bennett** has been appointed to succeed him. Clarke was formally Chief of the Program Evaluation Division of the Office of Highway Safety and has been with FHWA since 1967. Also retiring was **Donald P. Ryan** who was the Chief of the Signs and Markings Branch of OTO. Don had been with FHWA since 1968 and in his current position since 1974.

Lester P. Lamm, Executive Director of the Federal Highway Administration since 1973 was sworn in on September 17th as Deputy Federal Highway Administrator. Les has been Acting Deputy Administrator since Ray Barnhart became the Administrator in 1981. **Richard D. Morgan**, who was Associate Administrator for Engineering and Traffic Operations, was sworn in to succeed Mr. Lamm as Executive Director.

Reprint from ATSA

Congratulations New P.E.'s

A tip of the congratulatory hat goes out to two ITE members who recently passed their professional engineering exams. They are **Richard Gould, P.E.** and **Larry Zastrow, P.E.**, both of MDOT, and incidentally are also 1969 graduates of Michigan Technical University in Houghton, MI.

Dick Gould, P.E. has worked in Testing and Research for MDOT and **Larry Zastrow, P.E.**, previously worked in Construction. Currently both work in the Traffic and Safety Division of the Metro District. Congratulations to both professional engineers.

IN MEMORIAM

Mr. Paul Van Roekel, 25-year Oakland County Highway Engineer, died at St. Joseph's Mercy Hospital in Pontiac on October 20, 1982. He was 57 years old.

As Oakland County Highway Engineer since 1957, Mr. Van Roekel was the Chief Operating Officer of the Oakland County Road Commission, a 500-employee agency responsible for construction and maintenance on 2,557 miles of public roads.

Highly respected locally and nationally for his public works leadership, Mr. Van Roekel was President of the Transportation Officials Division of the American Road and Transportation Builders Association in 1981. In 1972, he was elected President of the National Association of County Highway Engineers. In 1974-78 he served as the only County Highway Engineer member ever on the Board of National Association of Counties. He led the County Highway Engineers Workshop of the County Road Association of Michigan.

Mr. Van Roekel's associates at the Oakland County Road Commission respected his leadership, his objectiveness, his analytical ability and his forthrightness. "His ability to prove and document helped make him the most respected county highway engineer in the state," said one. "He would listen and let discussion flow freely, but if a decision needed to be made, he would make it.

He is survived by his wife, Ann, and their three adult children. He was a resident of Waterford Township, serving on the Township Planning Commission since 1961 and was its chairman 1969-70.

MSU Student Chapter

MSU has a new addition for 1983. The student chapter of ITE is just getting started, and will be ready to start the new year with a membership drive. Several graduate, and undergraduate students both in and out of the Civil Engineering field have shown a remarkable amount of interest in participating in ITE. Dr. Thomas Maleck, MSU Assistant Professor will be serving as faculty advisor, along with transportation engineering graduate student, Amy Bohucki, as president.

Once our membership has been established, we have a few initial goals to work on. We would like to invite various speakers, in the field of transportation, to MSU with presentations open to both members and guests. We also have some excellent material and support available to us here at MSU for student paper competitions. There has been an indication of political support and enthusiasm in general from the Michigan Section of ITE.

We have several students who have shown an interest in summer internships and employment possibilities. Please feel free to notify us with any information regarding any of the above comments, or just to introduce yourself. By Amy Bohucki

WELCOME

William Drongowski, MDOT
Richard Shanes, Michigan Center
John Meister, Sterling Heights P.D.

HOW TO PREVENT SIGN VANDALISM

According to a recent unpublished study, sign vandalism has become a tremendously costly and often deadly national problem. FHWA estimates that the total annual direct costs to the states, counties and cities is \$50 million. Indirect costs for injuries and tort liability claims are estimated to be another \$50 million.

Law makers, enforcement officials and traffic engineering professionals are recognizing the need to curb this deadly stupidity. Sign vandalism is a crime and vandals should be charged with a criminal offense. Unfortunately prosecution and conviction for sign vandalism is difficult; there is normally a lack of evidence unless a witness reports the incidence or vandal are caught in the act. There are some local jurisdictions and states that has taken action to counter this growing problem.

* Wisconsin has enacted a law detailing penalties for damaging and stealing signs. A state campaign of publicizing the revised statute has resulted in a reduction in the sign vandalism.

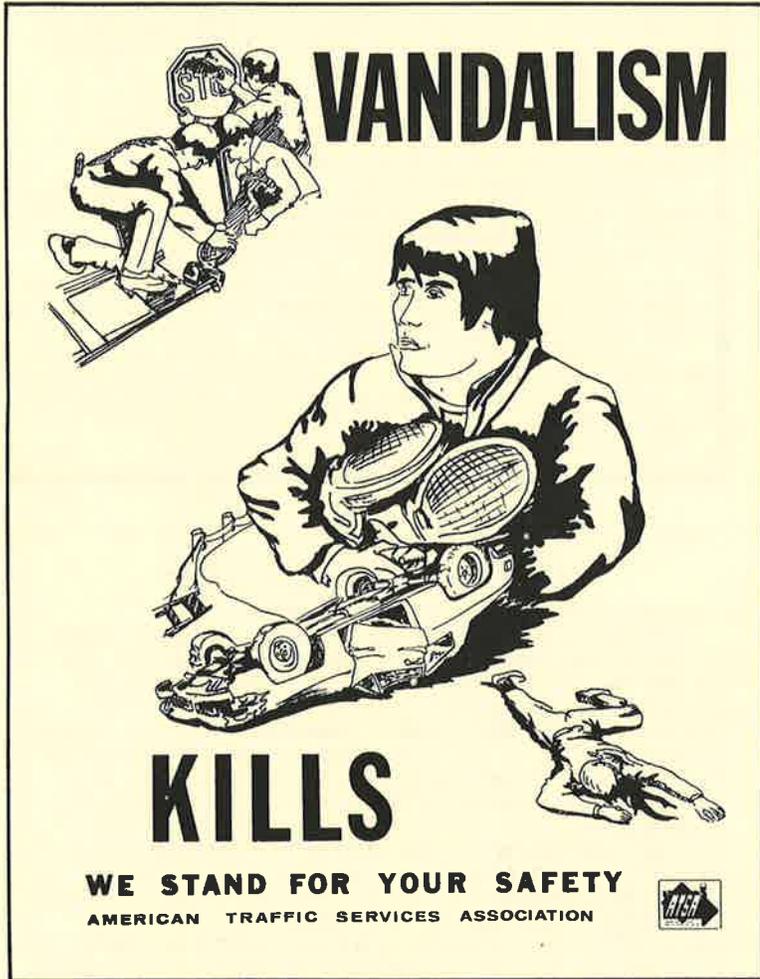
* New Jersey passed a bill imposing penalties of up to 10 years in prison for theft of a traffic sign.

* Arkansas treats it as a criminal offense which is punishable by a fine of up to \$1,000 and 1-year in prison.

* South Carolina, Virginia, Texas and Mississippi have also enacted similar laws to discourage sign vandalism.

* Virginia has also developed a series of radio spots with an anti-vandalism message.

* Campaigns in Clark and King Counties, Washington have shown reductions in vandalism ranging up to 49.6%.



VANDALISM POSTER

The theft and vandalizing of both permanent and temporary traffic control devices annually costs the taxpayers millions and contributes to numerous accidents resulting in injury and death.

A new poster which graphically depicts the tragic potential results of vandalizing traffic control devices is available from the American Traffic Services Association (ATSA).

The poster is designed to get the message across to young people and adults and may be posted in schools, libraries, stores or near construction sites.

Posters may be ordered from ATSA by sending this form with a check for the appropriate amount.

Prices:

10-19 posters	= \$.85 each*
20-49 posters	= \$.75 each*
50 & over	= \$.65 each*

Please send _____ vandalism posters @ \$ _____ = \$ _____
 ATSA Members deduct 10% \$ _____ = \$ _____
 Total amount enclosed = \$ _____

Send form to:

American Traffic Services Association
 Stafford Executive Building
 Rt. 4 - Box 18
 Stafford, Virginia 22554

Reprint from ATSA

OCCUPANT RESTRAINT PUBLIC OPINION SURVEY

The Michigan Office of Highway Safety Planning recently received a federal contract to participate in a national campaign to increase the use of safety belts and child restraints. Our involvement will be in the conducting of a maximum of three (3) public opinion surveys to determine public perceptions of safety belts and in the collection and tabulation of traffic accident data by injury severity for occupant restraint users and non-users.

As a part of that contract, our office awarded a sub-contract to McGinley Marketing Research Co., Inc. of Upper Darby, Pennsylvania to conduct a statewide phone survey involving 1200 interviews with licensed Michigan drivers, including an oversampling in Midland and Grand Traverse Counties. The distribution of the interviews was based on population. There were 800 interviews conducted statewide with an oversampling of 200 interviews in each of the two selected counties. The County of Midland was selected for special emphasis as it traditionally reflects a high level of safety belt usage rate. The County of Grand Traverse was selected as a comparison site based on various demographics and restraint usage.

Two of the questions included in the questionnaire, which we thought might be of interest to the general membership, concerned public feelings on a mandatory seat belt law and compliance with the law if there was one. The results from these questions showed that a majority of licensed Michigan drivers are ready and willing to accept a mandatory seat belt law.

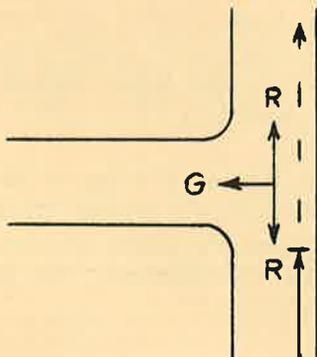
"THRU ON RED" IN INDIANA

Motorists in Indiana are now permitted to drive straight thru a red light after a complete stop at a "T" type intersection under a new state law which took effect September 1.

Before a motorist is allowed to proceed thru on the red light, the following conditions must exist -- the driver approaches the intersection at the top of the "T", the intersecting highway is on his/her left, there is no conflicting traffic (such as pedestrians), and the motorist is facing a steady red traffic signal.

This "thru on red" movement will be prohibited at some "T" intersections such as locations where it may be difficult to see oncoming traffic or at marked school crossings. Those intersections will be posted with a "No Thru on Red" sign.

In analyzing this legislation, we believe it is a logical extension of Michigan's "Right Turn on Red" legislation. As can be seen on the drawing, the thru movement is allowed only from one direction. It is similar to and, perhaps, as safe as permitting right turns on red.



PERMITTED MOVEMENT ON RED

Where this will lead we do not know, but it is very probable that we will see more of this type of legislation.

By Bill Savage

The statewide sampling showed that 61.8% favored a law and that 83.6% were willing to comply with the law if there was one. The oversampling in Grand Traverse County showed 63.0% favoring a law with 83.5% willing to comply. The oversampling in Midland County was more favorable with 70.0% favoring a law and 81.0% willing to comply.

The results of this first public opinion survey helps reinforce the advocacy of mandatory seat belt legislation and the belief that the people of Michigan will accept such a law. Our office intends to work closely with Representative David Hollister and other co-sponsors of seat belt legislation, and the Michigan Coalition for Safety Belt Use to secure enactment of a mandatory seat belt law which we feel is in the best interests of the citizens of Michigan.

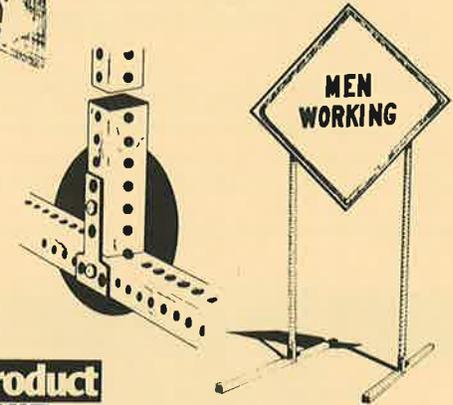
By Philip W. Haseltine
Executive Director

Michigan Office of Highway Safety Planning



TELESPAR PERFORATED-TELESCOPIC SIGN SUPPORT SYSTEMS

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WHAT POTHOLES SAY ABOUT US

George F. Will

In 1980, Republicans rebelled against the iniquity of the 55 mph national speed limit and denounced it in their platform. Democrats laughed. Republicans swept the West, where folks don't take kindly to the feds slowing down a fella's pickup.

But today there are stretches of the Interstate Highway System where traffic creeps at 30 mph because of potholes and crumbling pavement. What is the Republican administration going to do about these and similar problems? If Drew Lewis, the secretary of transportation

has his way, taxes will be raised. I mean, revenues will be enhanced. That is, costs will be recovered by, er, augmenting "user fees." Principally, Lewis wants a 4-cent increase in the federal tax on a gallon of gasoline.

Only the gallantry I learned at my father's knee keeps me from hooting when Republicans devise euphemisms to avoid saying "tax increases." But Lewis has a point about the gas tax being a user fee. He proposes raising \$4 billion annually from the 4-cent increase, and another \$1 billion from other user fees, primarily on heavy trucks. About \$1 billion would be dedicated to mass transit capital investments.

This last provision, although perhaps justifiable, muddies Lewis' argument. The lofty morality of user fees - what makes them noble, whereas tax increases are yucky - is that users of a service should pay for it. But, if so, mass-transit users should pay for mass transit with their fares. Lewis is nothing if not nimble, and he argues that highway users will benefit from more adequate highway capacity when more folks are using mass transit.

Oh, well. Lewis is not only secretary of sophistry, he is also secretary of transportation. And the transportation system has problems that are more serious than Lewis' casuistry about user fees.

It has been well said that maintenance, as much as original construction, is a measure of a society's vitality. It also is a measure of maturity, of the willingness to make timely provision for the future. By this measure, America is increasingly deficient.

The Interstate Highway System is not yet completed but 10 percent needs resurfacing immediately and almost half will need major repairs by 1995. Even a three-year deferral of repairs can triple the cost - not even counting inflation. In the next 15 years, 216,000 miles of other roads in rural areas will need at least resurfacing. (An Arizona county recently tore up 250 miles of paved roads and put down gravel because that was cheaper repairing the potholes.)

The design life of a bridge is 50 years. Seventy-five percent of America's bridges are more than 45 years old. Forty percent are judged deficient. It would take \$60 billion just to eliminate the backlog of needed bridge repairs.

It would take \$6 billion just to replace transit buses that are more than 15 years old. New York City would need \$110 billion over the next decade just to rehabilitate its transit system. It also must resurface much of its 6,000 miles of streets (and must repair most of its 2,400 miles of water system and 6,100 miles of sewer system).

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Gasoline cost 31 cents a gallon in 1959, when the tax was last raised (to 4 cents). The price of gasoline has quadrupled, highway construction costs have risen 300 percent, and the four cents are worth less than one cent. A gas tax proportional to four cents on a 31-cent gallon would today be 16 cents on a \$1.24 gallon, double what Lewis wants it to be.

Conservatives rightly describe indexing of tax brackets as a cure for "surreptitious, unlegislated" tax increases. They should, therefore, describe what has happened to the gasoline tax since 1959 as a "surreptitious, unlegislated" tax cut.

There are today many varieties of liberalism and conservatism, with interesting similarities and incongruities, rather like the Synoptic Gospels. Keeping track of them requires an intellectual micrometer. But unless I have missed something, there is not yet an ideological difference between conservatives and liberals regarding potholes. Whites and blacks, Jews and gentiles, WASPs and ethnics - we are all against bridges falling down.

But many conservatives have not come to terms with this fact: private life, including private enterprise, depends on a publicly provided physical infrastructure. It is not optional; neither is it inexpensive. It illustrates this fact: a substantial portion - perhaps 80 percent - of public spending is not really a subject of serious disagreement.

Reprint from SSITE



DRUNK DRIVERS GO TO JAIL... IT COULD BE WORSE...

'Drunk drivers go to jail' is a familiar phrase in the U.S. but in other countries they take drunk driving seriously...

- * In Australia the name of the drunk driver appears in the local paper under the headline "He's Drunk and in Jail".
- * In Turkey the drunk driver is driven 20 miles out of town and must walk back.
- * In Malaya the convicted drunk driver is sent to jail...with his wife!
- * South African drunk drivers are fined \$10,000 and spend 10 years in jail.
- * In Bulgaria a second conviction of drunk driving results in execution.
- * In San Salvador they don't wait for two convictions to execute, they do it on the first conviction.

Timothy D. DeWitt
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AUTO ACCIDENTS AND HUMAN ERROR

Government has earned a reputation for spending money on the wrong things. Nowhere is this more obvious than in automobile safety.

Harold H. Kehr1, vice-chairman of General Motors, recently noted that the most thorough studies show that human error is responsible for most auto accidents. A 1977 study conducted at Indiana University attributed 70.7 percent of all accidents to driver error.

Environmental factors, including weather, accounted for 12.4 percent of all accidents in the study, and the cause could not be determined in another 12.4 percent. Mechanical faults or failures accounted for approximately 4.5 percent of the accidents surveyed.

Strange, isn't it, that Washington has spent the bulk of its injury-prevention resources on the car, not on the driver, when the vehicle is responsible for less than 5 percent of the accident toll?

During the past eight years, GM has spent \$8 billion to meet government-imposed safety regulations, an enormous sum which must be passed on to car buyers.

If drivers cause 70 percent of the accidents, it seems reasonable that Washington's safety program should spend at least 70 percent of its effort and resources on the human element. But, of course, it doesn't.

Present driver-education courses teach the rudiments of traffic law, with little time devoted to the physics of driving. It would be unthinkable to qualify an airplane pilot without ground school sessions on theory of flight, but there simply is no equivalent for motorists.

Lax law enforcement is also a factor. Police ranks have been thinned, and remaining manpower is concentrated on serious crime, rather than moving traffic violations.

Who gets a ticket in Detroit these days for rolling through a stop sign? Or plunging a car into a crosswalk filled with pedestrians?

Doing battle with the human side of the accident equation is a lot more difficult than whipping the corporate sector. But people, not cars, have always been the prime culprits.



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