

LADIES NIGHT

By all indications Ladies Night this year appeared to be a night which all members present will remember. The event was well attended and the greatest share of those there had never been to a horse race before in their lives. The event even brought out some members who we were afraid had retired from...the field!

Friday evening started out with cocktails and munchies around the pool at the hotel prior to boarding the chartered buses for the Detroit Race Course.

The vendors did their usual superior job in support of the event and their efforts are much appreciated by the Board.

Once we arrived at the race course, we were treated with the finest of hospitality. We had window seats for the races and we were served an excellent steak dinner with all of the trimmings.


After the races, we returned to the hotel for a nightcap before retiring to our rooms. The next morning some of us got together for a light breakfast around the pool before departure.

The big winners of the night appeared to be Mr. and Mrs. Art Gibson while the big losers appeared to be Mr. and Mrs. David McKervey (Dave too the pictures included with this article). More important both the Gibsons and McKerveys left the track with a smile! I even learned how to place a bet! We had one emergency on the bus which was handled after finding an open door to the hotel upon our return.

The Board received many requests for a repeat next year since it was felt that members have now got a "system" for placing bets. It was an excellent example of how a group as highly technical as ours can still relax and have a really good time. Thanks to all who made it a success.

Thomas R. Krycinski, P.E.
Roving Reporter





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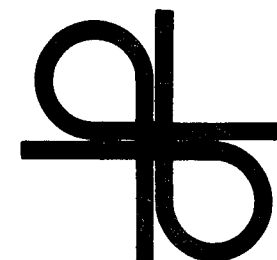
MICHIGANITE

OFFICIAL PUBLICATION

VOLUME 16 NUMBER 2 FALL 1981

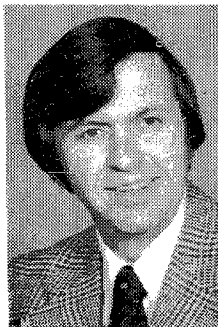
MICHIGAN SECTION

INSTITUTE OF TRANSPORTATION ENGINEERS



PRESIDENT'S COLUMN

At the recent State Safety Conference in Lansing, I sat through several gloom and doom presentations which detailed the many cutbacks in our safety programs resulting from the Reagan administration budget proposals. Surprisingly, I did not detect much bitterness and there was a clear resignation that cutbacks, including those impacting our programs, are essential if the nation is to bring rampant inflation under control. There seemed to be general agreement that inflation poses a much greater threat to our programs than the kinds of cutbacks which are likely to be approved by Congress.



LEBEL

What I found reassuring, however, was the assessment of several speakers that this "belt tightening" should be viewed as a challenge and an opportunity to achieve the present level of safety benefits with less funds. The best comment I heard was "anyone can solve problems with unlimited money; only the best people can realize those benefits with restricted funds."

Let's not pass these comments off as cliches. Let's look deeper into how we can carry out our responsibility and commitment to safety and operations with less "bucks".

Obviously we must focus on lower cost solutions to traffic engineering problems. We should look for operational solutions such as improved pavement markings, parking removal at intersections, left turn prohibitions, signal timing optimization, all red intervals, etc., etc. We should also reorient our accident surveillance procedures to identify with proven low cost solutions to ensure that we are identifying maximum cost/beneficial projects.

Not to be overlooked, particularly

MICHIGAN SECTION I.T.E. 1981 MEETING SCHEDULE

DATE	LOCATION	HOST	COMMENT
Sept. 10	Grand Rapids	Jere Meredith	Golf Outing
Oct.	Ohio	Ohio	District Tech. Meeting
Nov. 19	Troy	Rich Cunard	Section Annual Meeting

UNWARRANTED STOP SIGNS IN CITIES

In our last MICHIGANITE we presented an article detailing the impact

when dealing with congestion problems and associated pollution and fuel consumption issues, are the entire range of Transportation Systems Management (TSM) actions.

This does not necessarily have to mean expensive projects such as expansion of bus systems, construction of designated high occupancy vehicle lanes, bicycle paths, and the like even though these alternatives have a place in solving urban transportation problems.

Cheaper choices include promoting or supporting staggered work schedules, developing van and car pool ride sharing programs, and parking management techniques such as preferential parking rates for high occupancy vehicles.

The point is that money is undoubtedly not going to be available at past levels. Our choice is to "wring" our hands and devote all of our energies to resisting this philosophy (which might be counterproductive even if we were successful) or accept the situation, work within its constraints, and develop through creativity and plain old hard work, new procedures and programs which continue to address the safety and operational problems of our transportation system.

- William T. Lebel

NOTICE TO MEMBERSHIP

If you know of a recent promotion or happening involving one of our members which you feel would warrant inclusion in our newsletter, please feel free to personally contact me. We're interested in what's happening with our members.

of 4-way stop control in high speed rural environment. There was some concern expressed that encouraging use of 4-way stops was counter to present day moves to DISCOURAGE indiscriminate use of stop signs in urban situations. In this issue we offer an article prepared by Kurt L. Kunde, P.E., a traffic engineer in the Traffic and Safety Division of the Michigan Department of Transportation, which places use of stop signs in perspective. The article was based, in part, on research conducted by Section members Richard Beaubien and Gordon Melvin and was used in a report to Governor Milliken and the State Safety Commission.

by

Kurt L. Kunde

The Michigan Department of Transportation, in the interest of motoring safety, saving time and energy, and reducing air pollution, supports various studies aimed at removal of unwarranted stop signs. Although the department installs traffic controls based on traffic studies and in accord with nationally accepted warranting levels, it is often difficult to convince the public that certain controls are not necessary.

Unwarranted stop signs are often at the local level (subdivisions, neighborhood streets, etc.) and therefore many of the related studies have been conducted at that level. Such signs are usually installed under the assumption that they will lower speeds and increase safety on neighborhood streets.

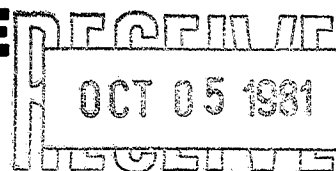
Studies have been conducted where stop signs were installed in residential areas for speed control purposes. These radar studies reveal that speeds tend to be slower within the area 100

(Continued on page 2.)

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UNWARRANTED STOP SIGNS IN CITIES

(Continued from page 1.)

feet before and after each sign, but drivers often increase their speed between signs to make up for time lost at the stop sign. Only 25 percent of the drivers in the studies came to a full stop, 50 percent made rolling stops, and 25 percent did not stop at all. There is not enough documentation to determine if unwarranted stop signs cause an increase in accidents on low volume streets, but an argument can be made that misuse of stop signs promotes lack of respect for all traffic control devices and nonobservance of such devices is potentially hazardous.

In Middleberg Heights, Ohio, a resident requested removal of stop signs, which he felt to be unwarranted, at five intersections. Upon advice of the city council, the city took no action. The resident pursued the matter in court and found the signs were in violation of Ohio law since they had been placed solely for speed control purposes. The court ordered removal of the signs and payment by the city to the plaintiff for legal costs.

Another issue surrounding the existence of unwarranted stop signs involves the excess consumption of energy. Each vehicle that does come to a complete stop consumes an extra 1/100th gallon of gasoline. Assuming a residential street volume of 500 cars per day, and multiplying by 365 days, each stop sign is responsible for the consumption of 1,825 gallons of gas every year.

Unwarranted stop signs encourage speeding, stop sign violations, and a general disrespect for traffic laws, all in opposition to the intended effect. Elimination of unwarranted stop signs not only saves time and energy, it provides an overall potential safety benefit to the motoring public. The FHWA has media materials in the form of a film strip available for showing locally. This strip can be obtained by contacting either the FHWA division office in Lansing or the Michigan Department of Transportation.

The Michigan Department of Transportation encourages all governing units to closely review the need for existing stop signs in accordance with the Michigan Manual of Uniform Traffic Control Devices. This action can help to provide motorists with a street and highway system that is both safe and efficient.

"402" Funding Cut Drastically

As I promised you in our last newsletter, further information is now available on the future of the "402" Highway Safety Program.

The reduction in the funding by the Reagan Administration is as severe as we originally anticipated.

While the 48% reduction is being effected for the National Highway Traffic Administration portion of the program, the engineering portion as administered by the Federal Highway Administration is being eliminated altogether. This means that there will be no new "402" funds for engineering highway safety related activities starting October 1, 1981.


For Michigan it means about a cut of 66% from a total funding level of \$8.6 million this year down to \$2.8 million next year.

There will be no earmarked funds for 55 mph enforcement as well. Additionally the Reagan Administration is restricting eligible programs to four, which will probably be expanded to six areas.


The four currently being considered are *alcohol safety programs, emergency medical services training, police traffic services and traffic records assistance* for local and state governments. In all likelihood two more areas will be added — *occupant restraints and motorcycle safety*.

As further information becomes available, you will be advised. Reductions are in order if our nation's economy is to be turned around and highway safety will see its share. We'll all have to simply make the best of the situation and do with what we have.


Thomas R. Krycinski, P.E.



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MICHIGAN SECTION ITE

TREASURER'S REPORT

July 1, 1981

Balance March 27, 1981 \$4,394.72

Receipts:
Dues 208.00
Michiganite Ads 80.00
Ladies Night 1,410.00
6/18 Meeting 70.00
Interest (Mar, Apr, May, June) 108.39
\$1,876.39

Expenditures:
Bank Service Charge 2.02
(Deposit Slips)
Nametags 3.42
Child Safety Seats (3) 117.82
Ladies Night 1,146.00
Transfer to Hospitality Fund 114.00
(Profit from Ladies Night)
Postage (Michiganite, Mtg. Notices) 190.70
Printing (Michiganite, Mtg. Notices) 281.45
Frame for President's Certificate 2.28
6/18 Meeting 146.80
\$2,004.49

Balance July 1, 1981 \$4,266.62

Raymond O. Severy, P.E.

Experimental Use of Strobe Lights at Railroad-Highway Grade Crossings

The other day an interesting report crossed my desk which was prepared by the Traffic and Safety Division, Department of Transportation and I would like to share some of the findings of that report with you. The intent of this research study was to evaluate the use of an auxiliary strobe lighting system to improve motorist warning at railroad-highway grade crossings by increasing the conspicuity of the standard alternating red flashing warning lights.

Since user familiarity and recognition of a standardized active warning system offers a distinct advantage for any effective motorist warning system, it was emphasized that the tested system supplements and does not compete with or destroy the basic integrity of the traditional red incandescent warning lights. This was an important factor which was kept in mind throughout the study.

The test site selected was the Chesapeake and Ohio Railroad Crossing at the city limits of the north-south business route of the City of Clare. This site was selected on the basis of accident experience and reported *driver visibility* problems with the standard railroad signals.

It was found that northbound drivers experienced considerable background competition for the overhead railroad signals since the signals tended to blend in with the commercial signing of the business district and its immediate background, as well as with the traffic signals 500 feet north of the crossing.

Additionally, buildings on either side of the roadway contributed to site distance limitations of the approaching tracks for northbound drivers.

As background information, the roadway at this crossing has overhead street lighting and is 60 feet wide, having a posted speed limit of 30 mph for 600 feet in advance of the crossing. Average daily traffic at the crossing is about 11,000 vehicles. Rail traffic consists of approximately 6 unscheduled crossings per day at a maximum allowable speed of 30 mph.

The auxiliary strobe system which was installed consisted of 3 strobe lights mounted on each of the background screens of the existing nearside overhead crossing signals. As one of the standard red incandescent railroad lights was lit, the strobe around the other light flashed in sequence one time.

The color of the strobe lights was changed by manually replacing a filter on each light. The operational theory

LANSING GROUP CHILD RESTRAINT BOOTH

In support of other similar ITE efforts to increase the usage of child restraints, a child restraint booth was jointly manned and sponsored by the Office of Highway Safety Planning (OHSP) and ITE. Representatives from OHSP included Bill Siewertsen, Judy Nyberg, Juli Philips and Bob Nelson. ITE members manning the booth included Al Dewey, Frank Spica, Mike Krause, Adrian Sanchez, Mark Wier-tella, Robert Rios, Don and Karen McDonald, Jack Benac, Kurt Kunde, Brenda Parker, Bill Lebel, Gary Holben and Tom Krycinski. The booth was at the Lansing Mall and a child restraint donated by ITE was given away to Maria E. Redman of East Lansing. Some 268 people registered for the free prize. The booth was a big success.

SEE PICTURES ON PAGE FIVE.

We would urge other members to undertake similar efforts in their areas to get broader geographic coverage. Mr. Richard Cunard may be contacted in this regard as follows:

Thomas R. Krycinski, P.E.
Office of Highway Safety Planning
7150 Harris Drive
Lansing, MI 48913
Phone: (517) 322-1942

Mr. Richard Cunard
Child Restraint Special Project Chairman
Traffic Improvement Assoc. of Oakland Co.
2510 South Telegraph Rd.
Bloomfield Hills, MI 48013
Phone: (313) 334-4971

accumulation of an adequate data sample proved difficult. Analysis of the recorded observations of approaching motorists revealed no erratic behavior associated with signal activations.

A review of the accident history for a 6-year period prior to the installation date revealed that 14 accidents had occurred at the study site. Ten of these involved a vehicle/train collision. During the 2-year period following the strobe installation, there was one car/train collision, but this accident took place during a 9-day period that the strobe lights were inoperative due to a corrosion related failure in the power supply printed circuit board. The driver of that crash vehicle stated he did not see the standard red flasher.

It is interesting to note that the Police Chief of the City of Clare stated that prior to the auxiliary strobe system there had been numerous complaints and a petition circulated by local citizens regarding their concern for traffic safety at the site.

A recent letter from him stated that "we have no had any complaints at the crossing unless the strobe lights are not working and then the response is immediate." During the test schedule the study team, itself, received many positive comments from local people supporting the strobe lights with special emphasis on the blue phase.

One conclusion drawn from the report was that due to the relatively short study period it was not possible to show that the strobe lights can effect a statistically significant reduction in the number of accidents occurring.

Given that the before period had an average of 1.7 accidents per year with a standard deviation of 0.52 accidents per year and assuming the same standard deviation for the after period, it would require some three years of zero accidents in the after period to show a significant reduction.

However, it is believed by the department that based on observations and conservations, that the experimental system appeared to be beneficial to the test site under the existing conditions; i.e. low traffic volumes and infrequent and unscheduled train crossings. The blue lighting phase appeared to provide the best conspicuity.

Further information can be obtained by contacting the Engineering Development Unit of the Traffic and Safety Division.

Thomas R. Krycinski, P.E.

ARTICLES OF INTEREST

I've just finished reading Volume 10, Number 4 which is the January-February 1980 bimonthly issue of HSRI Research Review. Although this review is over a year old, it contains three articles entitled, "Uses of Road Liability Law in Improving Road Safety Decision-Making", "Winter Maintenance Problems of Road Authorities", and "Road Authority Decisions on Placing and Maintaining Road Signs" which still may be of interest to you.

In the liability article, it is noted that safety benefits, including legal information into the system, are very significant. It states that knowledge of the fact that subsequent repairs are not legally admissible in court to prove negligence, should encourage road authorities to make such repairs without fear of damaging their litigation position.

Moreover, it notes that the law treats the presence or absence of signs or other traffic control devices in the same way as any other road safety treatment and that should assist the engineer in placing signs to tally on the basis of their effectiveness, not because of some supposed litigation benefit.

Avoiding such misuses of legal knowledge will improve safety by focusing resources on meaningful road improvements rather than activities designed to improve litigation defenses.

In summation, by educating personnel on the basic concepts of road liability law and by integrating that knowledge and procedures in guidelines for decision-making, a road authority can use the body of law as a positive means of making more effective decisions and reducing the potential of liabilities.

This effort takes time and money and requires a careful review of how an agency can improve in the terms of communications, road inspection systems, and record keeping systems, but the benefits appear most worthy of the effort down the road.

The winter maintenance article notes

that if a change of rule in this area came about it would most likely take the form of a return to the basic statutory test of "reasonably safe". Such a change would not necessarily radically increase the road authority's liability exposure. The basic statutory rule is subject to a significant limitation.

The road authority is not liable unless it knew of the condition and had reasonable time to correct it. The concept of reasonable time can be used in moderate the road authority's liability by a more conventional and simple rule.

It takes into account circumstances that affect the road authority's ability to cope with the problem. The purpose of this analysis does not suggest that the natural accumulation's rule is in imminent danger of being overruled.

On the contrary, it is still the general rule and exceptions to it are few so that it still provides considerable protection for the road authority. The cases discussed in this article indicate a trend towards weakening the rule although the trend is still in its early stages.

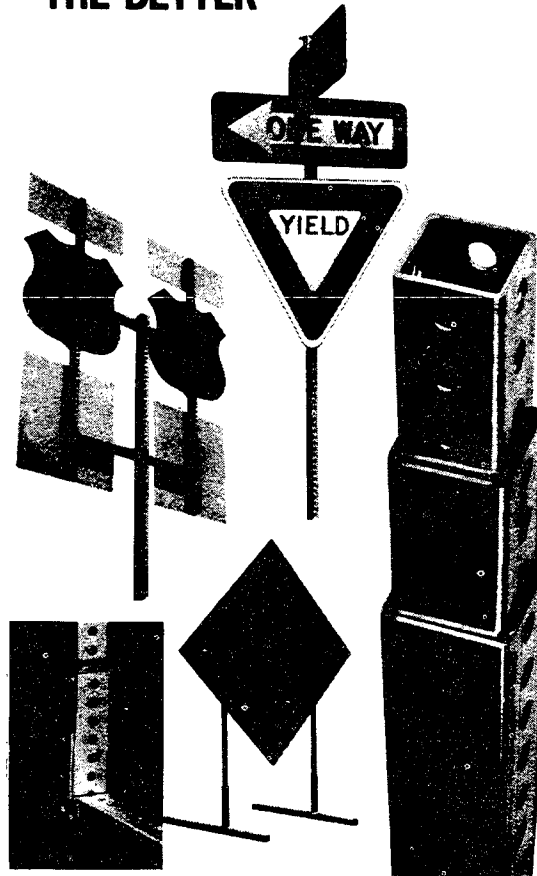
The possibility of future change in the rule should not be dismissed, but the rule remains that a road authority in Michigan is not liable for injuries caused by natural accumulations of snow and ice.

The sign article notes that Michigan law treats signing decisions as it does any other safety-related activity. The fundamental question in any case is whether the road was reasonably safe and the results of signing decisions are relative to that inquiry as are other road conditions.

The law provides a set of guidelines for making signing decisions, but it encourages exercise of judgement in making those decisions. The law does not attach any special legal significance to signing decisions. Rather, the legal significance is derived from the signs' safety significance to the extent that they make a road safer and, in fact, improve the road authority's liability position.

— Thomas R. Krycinski, P.E.

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WEISS REPORTS PROGRESS ON MARS, MIDAS AND MALI

Fostered about three years ago by T. L. Maleck, P.E., Ph. D. of the Michigan Department of Transportation, MARS will provide roadway survey data heretofore unattainable without extensive, and costly, manual labor.

Funded by a grant through the Office of Highway Safety Planning, MDOT issued a Request for Information in 1979 intending to purchase roadway features data. The data would be used to enhance the Michigan Accident Location Index (MALI) and the Michigan Dimensionalized Accident Surveillance (MIDAS) Model.

Basically, MARS will provide data on grades, superelevation, bearing, horizontal and vertical curves, distance, location of intersections and elevation to be integrated with MALI and MIDAS to provide an expanded base for accident analysis. MARS will be introduced to the public in June.

In February, 1981, a contract was signed with TECHWEST Enterprises, Ltd. of Vancouver, B.C., Canada to provide the hardware and software necessary to collect and refine this data. MDOT's main contacts are James Wallis, Marketing Manager and Donald Roth, E.E., TechWest's Project Director.

TechWest Enterprises, Ltd. is a majority owned subsidiary of the British Columbia Research Council, but operates independently of the Council. Their expertise extends over a wide range of products including motion compensating cranes, photologging systems and electronic data display devices as well as computer modelling and design, construction, and testing of special machines and mechanisms.

Their expertise in these fields has established not only a national but also an international array of customers.

The data will be collected through the use of a variety of electronic devices, including an on-board micro-computer system, that will "read" the roadway every 5.28 feet. At the same time, MALI information will be fed through the computer in the same order as the vehicle runs the preselected routing.

This "optimum routing" will be determined by a software program also developed by TechWest and will minimize deadheading. By January 1, 1982, MDOT expects to have data collected on approximately 22,000 miles of state and local roads. Through integration of this data with MALI and MIDAS, we intend to coordinate the effects of roadway features with present accident analysis techniques.

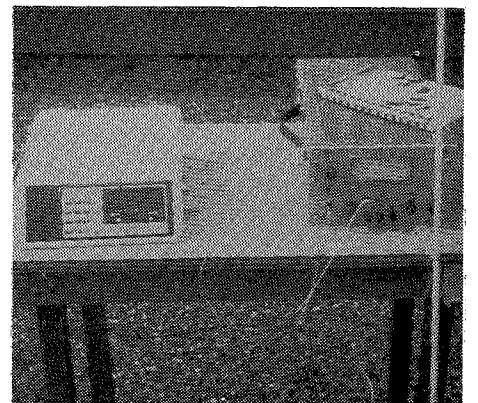
The advent of compact and sub-compact vehicles in ever increasing numbers on our streets and highways has made it necessary to determine how the roadway itself affects the performance and handling of these autos, and do these effects have any bearing on accidents.

For instance, if a number of collisions occur on a segment of road immediately after a segment having both vertical and horizontal curvature; did those geometrics have sufficient effect on vehicles to contribute to accident numbers. Data from MARS will greatly help to determine what changes (and cost-effective changes) can be made to reduce accidents and provide safer travel.

Part of the contract provided for the inspection and preview of the component parts to be used for the survey before assembly at TechWest. At the end of March, Maleck (Project Director) and Tom Weiss (MDOT's Traffic Technician who will be working closely with TechWest during the survey) in company with James Rojas, Program Analyst from the Office of Highway Safety Planning (OHSP), traveled to Vancouver to view the TechWest facilities and review progress to date.

Spending three days in Vancouver, we toured B.C. Research including the workshops, labs and the ship model test tank that provides facilities for ship and marine model testing.

Some of the components for the MARS vehicle were on hand, including the on-board micro-computer, two long range navigation receivers, pressure trans-



ducers, an additional generator to provide separate power to the equipment and a Ford Cargo Van to hold it all. Some problem was encountered in making the test computer tapes we carried compatible with their computer, but have recently learned this problem has been eliminated. Other component parts were ordered but not yet received.

One interesting facet of development of the survey vehicle is that the system is modular. As technological progress is made, so too can the vehicle be updated simply by unplugging obsolete or worn equipment and replacing it with new or updated modules. Another is that operators will not have to be extensively trained in electronics or computer systems to run the survey.

Our stay was not entirely work however. Out hosts showed us some of Vancouver's more interesting areas including Queen Elizabeth Park and "Gastown" which is a restored area of old Vancouver with many boutiques and small shops.

Another is the city market, a thriving business area that was converted from an old factory into many stalls and small shops that sell everything from Albacore to Zinnias.

Unfortunately, we did not see the magnificent mountains that surround Vancouver until noon of our second day. When it rains in Vancouver, as it did the first day and a half, the clouds seem to be on top of the buildings and block most of the mountains out. Of course, had all been seen during our stay, Michigan may have lost three residents. In fact, Weiss was almost lost for awhile, but that's another story.

Thomas M. Weiss
Traffic Technician
MDOT

Drinking Drivers

STIFF DRINKS MEAN stiffer penalties for drinking drivers as the result of several new laws now in effect.

The 1980 Michigan Legislature approved several bills designed to make drunken driving arrests easier and increase fines upon conviction.


Prior laws provided that "warrantless arrests" by police officers only could be made if accidents occurred on a public highway. As of April 1, officers can make such arrests involving accidents on any public road or parking lot if they believe a driver has been drinking.

The new laws expand the principle of "implied consent," meaning that upon receipt of a driver's license, a motorist agrees to take a chemical test if suspected of drinking in "any area open to the general public." The alternative is loss of license.

Also new is a provision which prohibits a person from driving a snowmobile or off-the-road vehicle while under the influence of liquor or drugs.

For the first time in 63 years, lawmakers increased the penalty for drunken driving to a minimum \$100 and maximum \$500 fine, and/or a maximum jail term of 90 days for first offenders. The new fines will replace the current minimum-maximum range of \$50 to \$100.

Reprinted from the May 1981 issue of Michigan Living, published by the Automobile Club of Michigan.



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LUNCHEON TECHNICAL MEETING A SUCCESS

On March 26, a Technical meeting was held in East Lansing at the University Club of Michigan State University. For the first time a technical session was planned around lunch instead of the usual dinner meeting. The session was well attended and more luncheon meetings are being planned for the future.

The highlight of this meeting was the appearance of the Honorable Michigan State Senator, John Kelly, who was the luncheon speaker. Senator Kelly spoke on recently introduced legislation proposing a child restraint law in Michigan.

Senate Bill 115, which was introduced by Senator George Hart and co-sponsored by Senators Demaso, Ross, Kelly, and Sederburg, would require the use of child restraints, or seat belts in some cases, for children through the age of four years old. The Michigan Section of ITE is on record as supporting child restraint legislation and in particular Senate Bill 115.

The Technical Session began with a discussion by Bill Savage of MDOT on the State's Right-Turn-On-Red law. Bill indicated that one of the benefits of RTOR involves energy conservation through reduced fuel usage.

An AASHTO study has shown that as much as 6 seconds can be saved per turn which amounts to a savings of about 2000 gallons of gasoline per year at an average intersection.

Bill indicated that there is still some uncertainty over this law and that public education continues as a necessity if we are to derive all the benefits from the application of this law while keeping related accidents at a minimum.

Dave Litvin of Goodell-Grivas Inc. discussed taking traffic surveys using time-lapse photography. Some of the advantages of time-lapse photography, highlighted by Dave, included the fact the cameras operate on their own, they can be placed 24 hours in advance of the survey, and one man can record the delays.

Following Dave's interesting presentation, Dr. Tom Maleck from MDOT, discussed the Michigan Dimensional Accident Surveillance (MIDAS) model with particular attention focused on the road in July.

The survey system known as the Michigan Automated Recording System (MARS) will provide for the collection and computerization of the necessary roadway geometry and other physical data for all the trunkline road system and the major local road system.

This system will provide data for 40 percent of the total road system which accounts for 90 percent of the accidents. Collection of data by this system will begin in the near future.

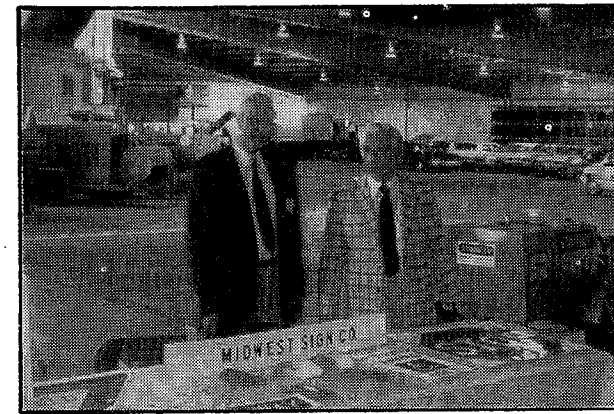
After an enjoyable lunch, John Kanilopoulos from MDOT discussed new revisions to the Michigan Manual of Uniform Traffic Control Devices. He also discussed the procedures required to make future changes to the Manual.

Bob Felter and Phil Luce from the Testing and Research Division of MDOT discussed the calibration of the departments skid testing vehicle. They discussed the process involved to calibrate the pavement friction measuring trailers and the locations which do the calibration.

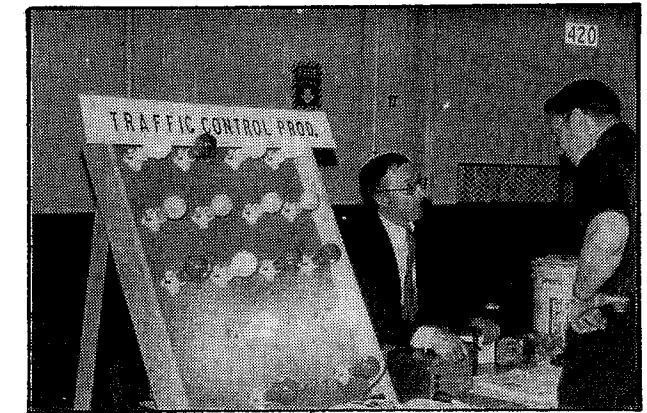
In addition, they discussed the testing of new construction and the routine testing of older pavements which is done in five year intervals.

The final speaker was Bob Lariviere of MDOT who discussed the State's Operation Lifesaver Program. Operation Lifesaver is an educational effort to alert motorists to the potential dangers that exist at railroad grade crossings.

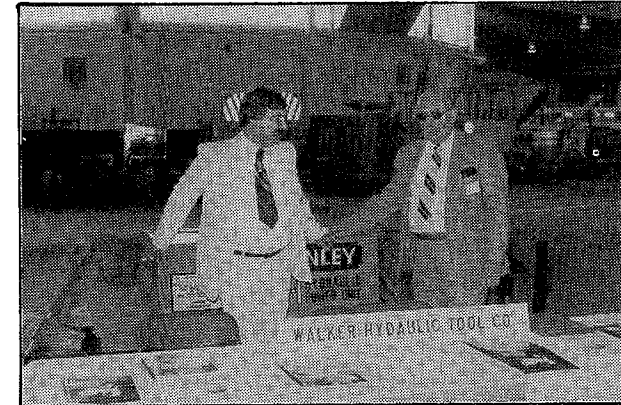
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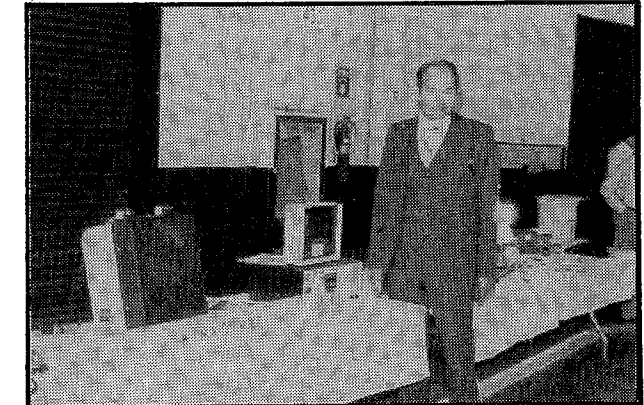
9. Lou Jennings and Bud Whitmore displaying traffic signs materials.



13. Fred Westburg explains detector and emergency controller equipment to program participant.



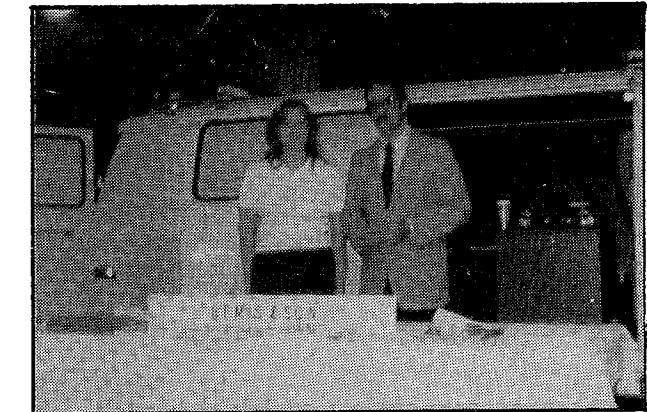
10. Dennis Walker and James Walker show their Stanley Hydraulic equipment.



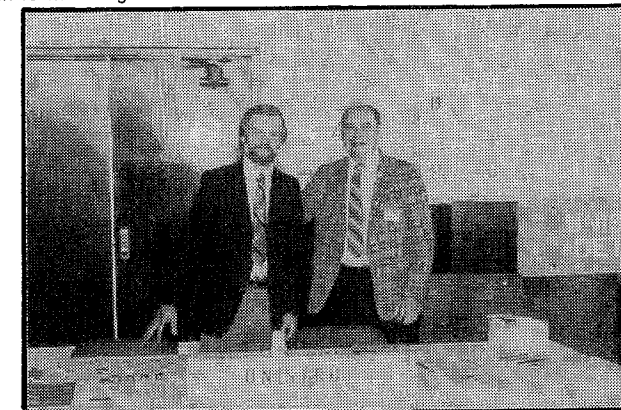
14. Howard Seligson displayed Time Base Coordinating and other equipment.



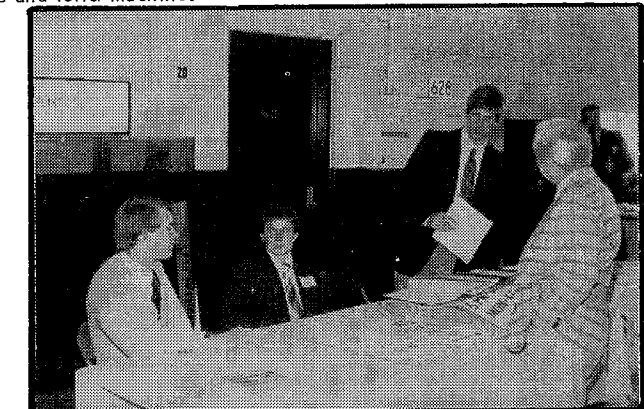
11. Don Beard and Mike Schweickart displayed detector and traffic records tape equipment. Pathmaster computerized van is in background.



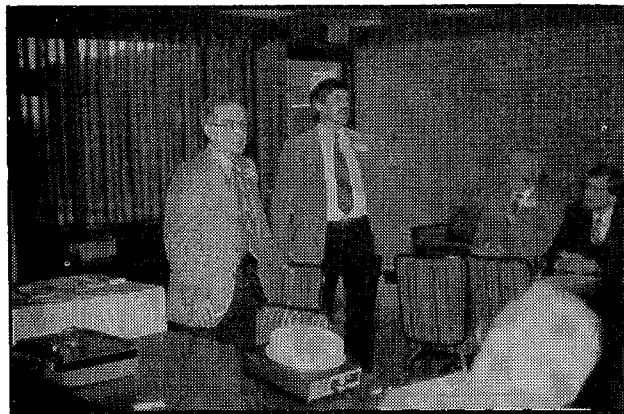
15. Sandra Haines and William Kimmins displayed product literature and answered questions concerning barricades, barrels and letter machine.



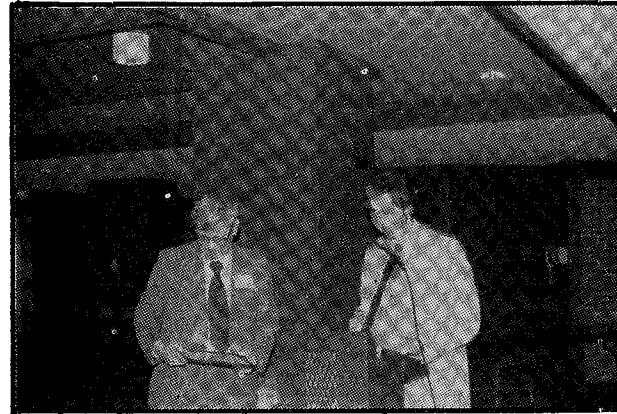
12. Bob Richardson and Donald Fargo displaying literature on square tubing sign supports.



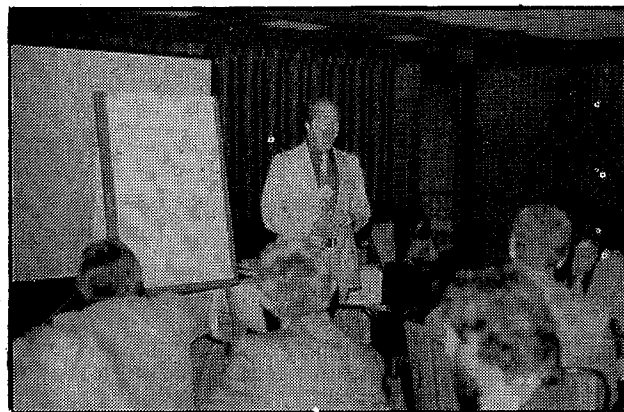
16. Paul Ekstrom, John Oswald and Mike Scattergood of Cadillac Plastic explain advantages of plastic signs.



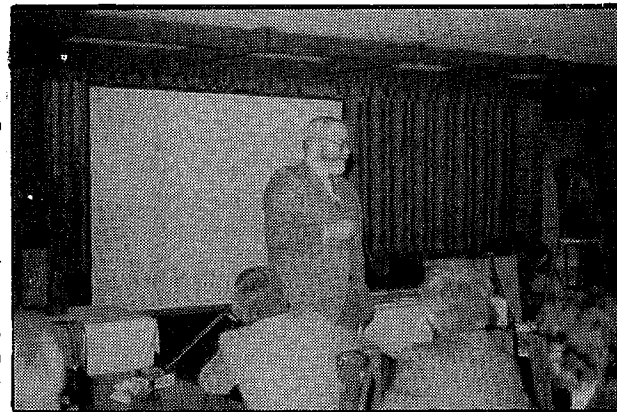
1. Left - Phil Luce, right - Bob Felter. Both from Testing and Research Division MDOT. Discussed calibration of Skid Testing Vehicles.



2. Left - Dave Merchant, right - Bill Lebel. Bill presents Dave with a past presidents award for service to ITE.



3. Bill Savage, MDOT, spoke Michigan Right Turn on Red law.



4. David Litvin, Goodell-Grivas, Inc., spoke on Time Lapse Photography for traffic surveys.

1. Grace and Ned Howard, U.S. Standard Sign Co., displaying fiberglass sign.

4TH ANNUAL

PRODUCT TECHNICAL SESSION

CITY OF SOUTHFIELD DPS GARAGE

5. Marketing Displays had interested viewers of the Windmaster Sign Holder System products.



The public information campaign included the use of radio and television spots, posters, brochures, and filmstrips to convey the campaign's safety message "Trains Can't Stop, You Can."

Bob also showed a filmstrip that has been sent to the elementary schools which shows the dangers of playing on railroad tracks.

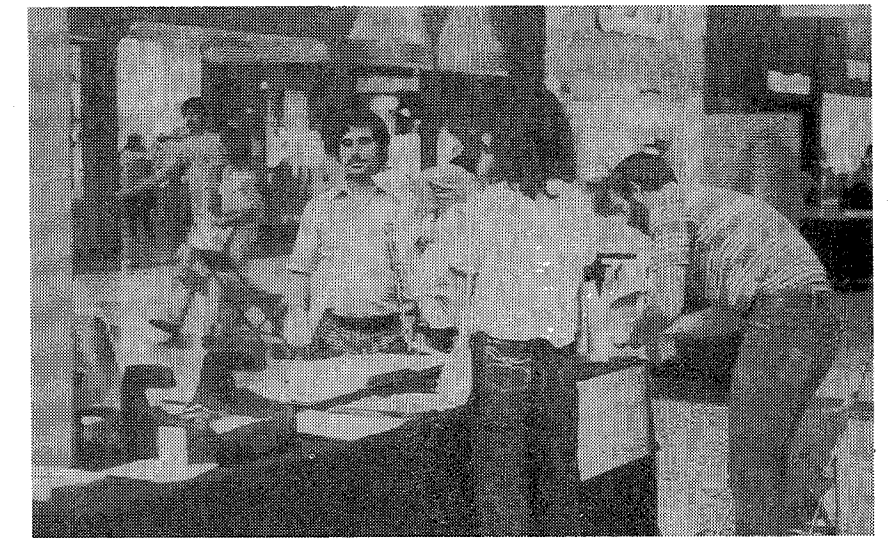
The presentations were all well done and we would like to thank all the speakers for participating. We are looking forward to more luncheon technical sessions in the future.

- Bob Lariviere

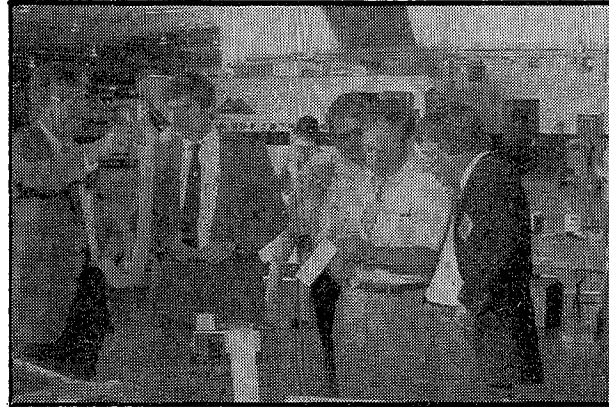
ITE AND OHSP PROMOTE CHILD CAR SEATS

Photos were taken at the Lansing Mall at the Child Restraint Booth. The man behind the booth in the checkered slacks is Frank Spica from the Traffic and Safety Division's Electronic Systems Unit, MDOT.

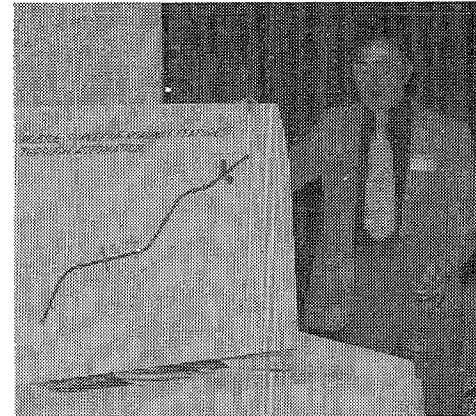
The man behind the camera is Al Dewey from the Safety Programs Unit Traffic & Safety Division. See story on page 11



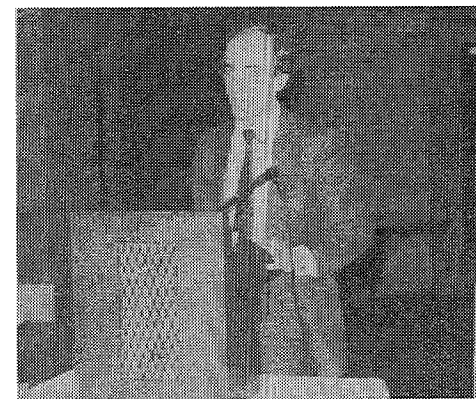
2. Dave Bacon, Carrier and Gable, explaining Eagle Signal equipment to participants.



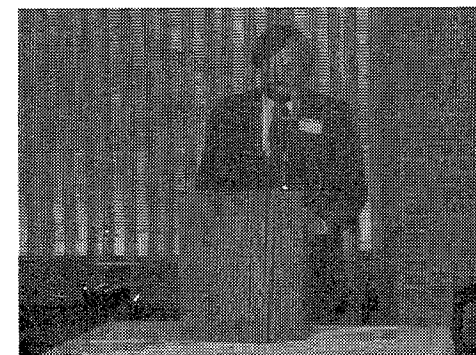
6. Steve Holder, Traffic Control Corporation, discussing Econolite Control products with participants from Wayne County Road Commission.



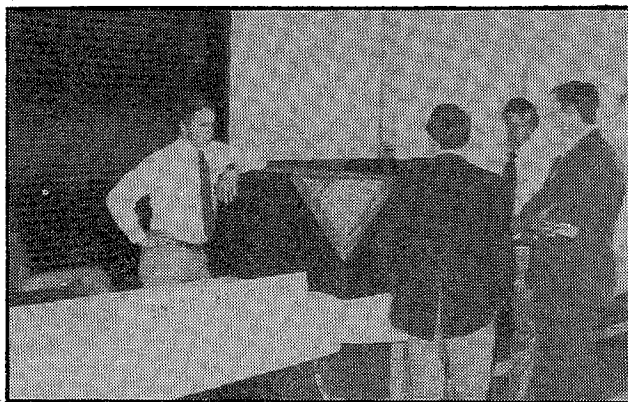
5. Dr. Thomas Maleck, MDOT, spoke on Michigan Automated Recording System (MARS).



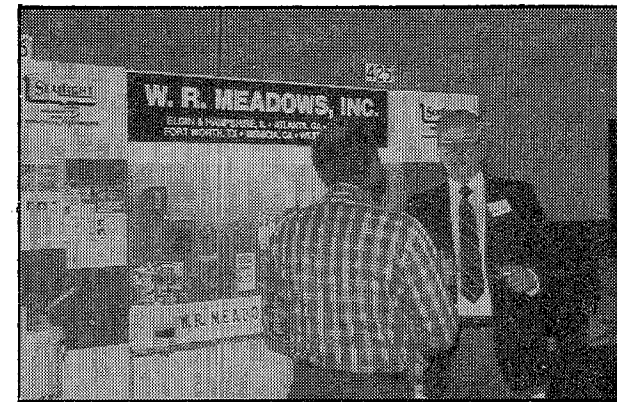
6. Senator John Kelly, luncheon speaker. Supported child restraint legislation and specifically Senate Bill 115.



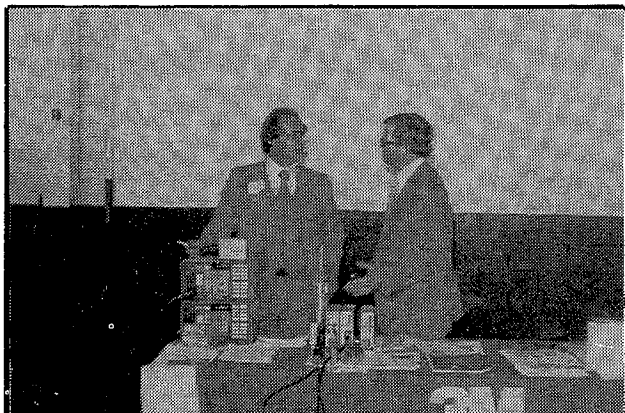
7. Bob Lariviere, MDOT, spoke on Operation Life-saver which is an education and Public Information Railroad Safety Program.



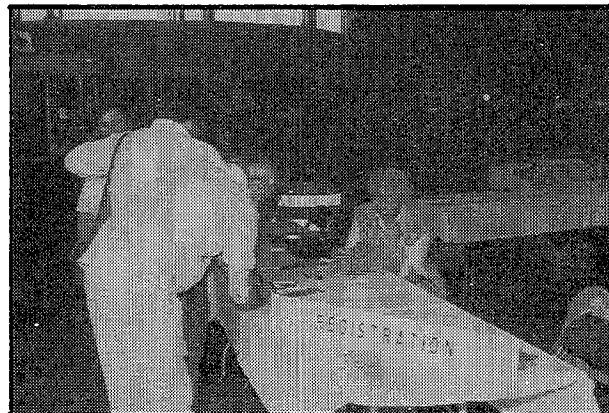
3. Stephen Hollands and Dan McCarthy explaining energy cell to interested participants.



7. Bob Cameron discussing Sealants material with participant.



4. David Hawkins and Robert Chalifoux, 3M, displaying Time Base Coordinator units.



8. The difficult job of registration was handled very graciously by Eleanor May, the secretary for the City of Southfield.

ADVENTURES IN KUWAIT

by Charles S. Michalski

From camels to Cadillacs in one generation is the story of Kuwait, an emirate that sits on the north point of the Arabian Gulf (*Persian Gulf to uninformed Americans*).

Since World War II Kuwait has become a leading producer of petroleum and since the comic-opera war between Iran and Iraq, Kuwait has become the third or fourth largest producer.

Kuwait is an absolute monarchy. The present ruler, Amir Al Jaber Al Sabah, ascended the throne approximately four years ago. One of his first actions was to dissolve the National Assembly.

The Amir has power of life and death over his people which are less than 50 per cent Kuwaiti and over 50 per cent expatriates, including East Indians, Iranians, Arabs from other Arab countries, Europeans from all parts of Europe and 600 Americans.

The total population is about 1½ million and the country is as large as the State of Rhode Island.

While the climate is severe with high temperatures in June, July and August, reaching 120°F with virtually every day, accompanied by no rainfall, life in Kuwait is not unbearable.

Cars and buildings are air-conditioned and the Arab working day is split

by a four-hour lunch break. This may account for much of the pregnancies amongst the Kuwaiti women of child bearing ages.

Charlie Michalski recently returned home from a year's visit to Kuwait as a consultant to Wilbur Smith & Associates.

Justice is severe in Kuwait and the gallows in an old palace court yard are still active. Offenses punishable by hanging include murder, rape and crimes against authority.

Recently, four men were sentenced to death for bombing the office of a newspaper. No one was injured in the bombing. Unlike Saudi Arabia, Kuwait does not chop right hands off thieves.

As in other Muslim countries, Friday is the Sabbath day. The work week is five and one-half days long and in lieu of TGIF, the popular saying is "sure happy it's Thursday" which produces socially unacceptable acronym.

Kuwait is also a conservative Muslim country. Use or possession of alcoholic spirits is strictly prohibited.

However, during our one year stay we partook of three fifths of Scotch smuggled into the country by friends, a fifth of gin smuggled by a related female, two bottles of wine from the Spanish Embassy and home-brewed

wine and beer produced by our British friends who brought kits and makings with them.

On the fourth of July there was a big beer bash at the American Embassy. Coincidentally, there was a national electric power failure on that day.

Kuwait is said to have the highest per capita income in the world, but this statistic is deceiving because Kuwait has very rich people and very poor people. Wages, by our standards, are low. A surveyor makes one *dinar* (\$3.75 U.S.) per hour while a laborer makes about 500 fils (1,000 fils = 1 *dinar*) per hour.

Virtually everything that the Kuwait population eats or uses is imported. Most of the time a *dinar* goes as fast as a dollar U.S. The only bargain in the country is gasoline - 21¢ per gallon of leaded 90 octane stuff. A friend recently bought an Oldsmobile Cutlass for 8,500 *dinars*.

The preceding paragraphs should cover the socio-economic aspects of Kuwait adequately.

Our mission in Kuwait was threefold:

1. Design a new traffic signal system employing computer control and other advanced technology.
2. Design a modern traffic accident reporting system.
3. Recommend measures for improving safety in the streets, including:
 - betterment of the vehicle inspection program.
 - revision of sections of the traffic code.
 - adoption of state-of-the-art enforcement policies and techniques.

There are about ½ million vehicles in Kuwait and most of the thoroughfares are divided. Roadways are frequently nine meters (29½ feet) and 11 meters (56 feet). The nine meter roads were divided into two lanes and the 11 meter roads into three lanes.

Driving in the nine meter roads was a trying experience during the four rush periods of the day. (Most people went home for the four hour lunch break). Arab drivers liked to keep their options open by straddling lane markings. This made it easy to shift into an opening in the lane that might be moving faster at the time.



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ADVENTURES IN KUWAIT - Cont.

Much of the street system of Kuwait City was designed by British planners who love roundabouts at major intersections. Some of these roundabouts were real nightmares. The only saving feature was that Kuwaiti drive on the right side of the road. This must pain some of the early planners.

Unlike other cities in the mid east there are virtually no beasts of burden in Kuwait City's streets, although there are camels, goats and sheep in the desert on the city's outskirts.

Traffic consists of General Motors cars, Chryslers, Mercedes, other European makes, many Japanese cars and Japanese and European trucks. There are practically no American trucks in Kuwait. Ford Motor Company is black-listed as are Coca Cola and other American firms. Colonel Sanders sells a lot of fried chicken, however.

Virtually all of our contacts spoke English and this reduced the incentive to learn to speak Arabic to almost nil. However, we found that Arabs do not use Arabic numerals as we know them but they use Indian numbers instead. Their 6 looks like our 7 and their 5 looks much like our 0. This leads to some amusing disagreements with merchants.

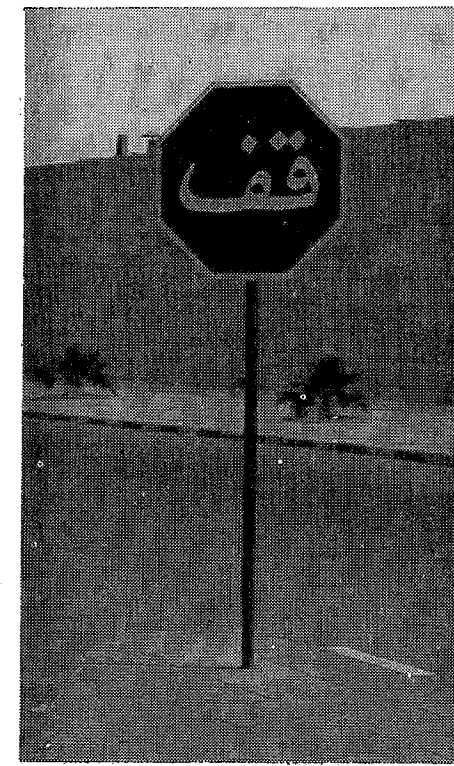
Kuwait has many large villas which my uninitiated wife thought were multiple housing. It took a little while to convince her that the large buildings were single-family houses.

Among Kuwait's few virtues is one that would be cherished in the U.S.A., particularly in light of the "cut-the-taxes" mood of the people. In Kuwait there are no income, real estate, sales, or other taxes. All the country's revenue comes from sale of petroleum.

HASELTINE NEW CHAIRMAN OF NAGHSR

Effective March 2, 1981, Philip W. Haseltine, Executive Director of the OHSP, was appointed to the chair of the National Association of Governors Highway Safety Representatives. This is an organization of all of the states governors representatives across the nation. With his appointment by the Association's Board of Directors, Phil has been spending many hours in Washington, D.C. testifying on behalf of the "402" Program. Our congratulations go to Phil on his appointment and our thanks go to him on the fruitless hours he has spent on behalf of the Highway Safety Program.

HAVE A GOOD BELT FOR THE ROAD



PEDESTRIAN SAFETY BY DESIGN

This is the title of a 17 minute slide program which the Federal Highway Administration is making available aimed at discussing pedestrian traffic accidents and ways to produce the potential for these accidents through engineering improvements.

Emphasis is placed on pedestrian facilities, accommodation for the handicapped and government responsibility. FHWA noted that the program is useful to individuals and agencies interested in the safety of pedestrians such as county road agencies, municipal traffic agencies, urban planning organizations, citizen safety groups, civic organizations, school authorities, and the general public.

You may obtain a free loan copy of the slide-tape package by writing:
National Highway Institute
Federal Highway Administration
HHI-4
Washington, D.C. 20590

May 7, 1981

Honorable George Hart
Michigan State Senator
The Capitol
Lansing, Michigan 48909

Dear Senator Hart:

The Michigan Section of the Institute of Transportation Engineers applauds your introduction of Senate Bill 115 and supports passage of the subsequent substitute bill which mandates use of approved child restraints, and available vehicle restraints, for infants and small children. Our organization represents 300 professional transportation engineers, technicians, police officers, municipal and county highway officials, and others concerned with the safety on our highways in Michigan.

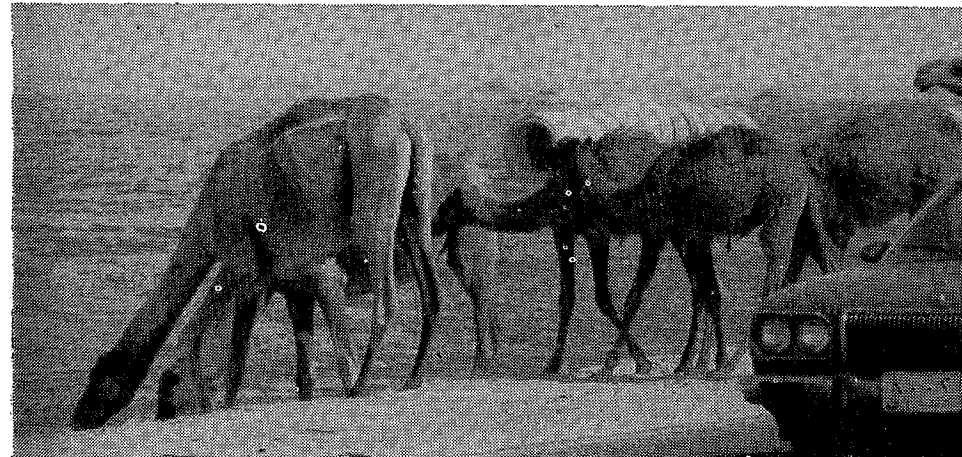
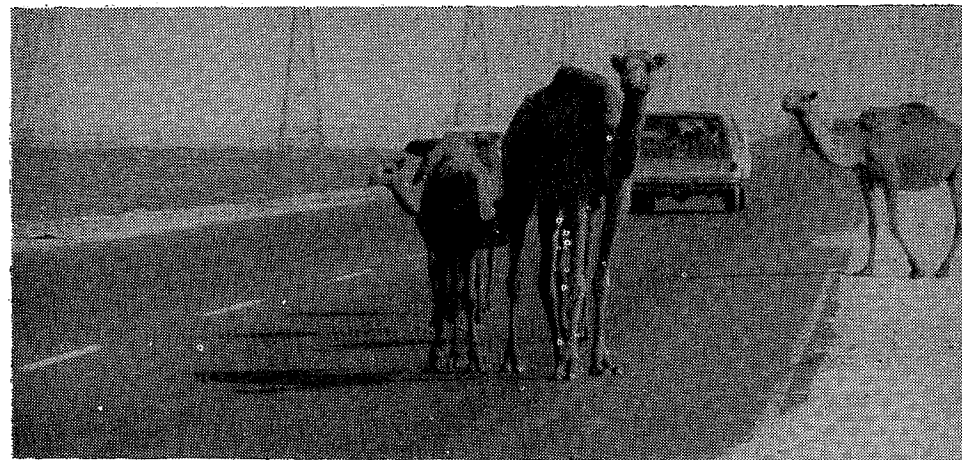
I am sure that you are aware that automobile crashes are the leading killer of young children, more so than all other types of accidents and diseases. In Michigan alone 20 children less than five years old were killed in automobile crashes during 1979 and nearly 4,000 were injured. Most of these casualties could have been avoided or their severity dramatically reduced through use of a restraint system. A state study revealed that only 6 percent of those killed or hurt below the age of 15 during 1979 were properly restrained in the vehicle.

While we recognize and acknowledge "parental rights", we believe that the rights of the child to personal safety, and the small child's inability to ensure that safety, dictate that this law be enacted. Parental rights imply parental responsibilities. We believe that the responsibility of the parent to ensure the safety of his or her child traveling in a motor vehicle is no different than the expected provision of a safe home environment.

Again, we support the enactment of the Senate Bill 115 substitute. If we can assist in the presentation of facts pertinent to this issue, please do not hesitate to call on us.

William T. Lebel, P.E.
President, ITE - Michigan Section
12783 W. Greenfield
Grand Ledge, Michigan 48837

(EDITOR'S NOTE: Senate Bill 115, having passed through both Houses of the Legislature and ordered enrolled, was signed into law by Gov. Milliken last month and became Public Act 117 with an effective date of April 1, 1982.)



Goodell-Grivas, Inc.
17320 West Eight Mile Rd.
Southfield, Michigan 48075
Telephone 313-569-0300

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