TWO NEW RECOMMENDED GUIDELINES FROM ITE

This newly revised recommended practice of the Institute of Transportation Engineers recommends guidelines for the design, layout, and traffic control of subdivision streets. The guidelines address the questions of maximum livability and safe and efficient access. A representative review of existing local subdivision regulations and international recommendations, current practice and experience was used to develop these guidelines. They are directed at "conventional" subdivisions and are intended for adoption as specific elements within local ordinances.

The first part of the report cites the factors to be considered in subdivision street systems planning, while the second part establishes the individual design elements of the street and pedestrian systems.

Guidelines for Urban Major Street Design.

This report is a recommended practice of the Institute of Transportation Engineers. It presents general geometric design standards for use on urban major streets. This publication does not include freeway, expressway, rural highways or local urban street geometric design standards. The guidelines are intended to provide a foundation for rational engineering design decisions on urban major streets. A critical review of the benefits and trade-offs of design components in the various chapters. Chapters include Lane widths, Curves, Tapers, Curbings and Clearances, Grades, Medians, Lane Control, Intersection Design and Channelization, Transit, Parking, Driveways, Sidewalks, Bikeways, Lighting, Border Areas and Rights of Way, location of Underground Utilities and Speed Control.

Both guidelines are available from the Institute of Transportation Engineers: $25 School Street, S.A., Washington, D.C. 20004. Telephone: (202) 684-0860. The price for Subdivision Streets is $10 for Institute members, $25 for non-members plus $2.50 for shipping and handling. The price for Major Street Design is $25 for Institute members; $40 for non-members, plus $3 shipping and handling.

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Official Publication Michigan Section

JUL 31 1984

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STANDING ROOM ONLY — ON VENDORS’ DAY — Page 8

AUSTIN'S STATE OF TRAFFIC SAFETY IN MICHIGAN — 1983

In the preparation of an annual report, the activities of the previous year are generally reviewed. Sometimes it is helpful to have a longer perspective. In this regard, a brief review of the past decade in traffic safety is included.

Pause for a moment and take yourself back to 1973. On the national scene, Richard M. Nixon was President and "Watergate" became a familiar word. Claude Brinager was Secretary of the U.S. D.O.T., and we were encouraging voluntary use of safety belts. Gerald Ford and Martha Griffin, were still in Congress. Brooke Shields was in the third grade, and the war in Viet Nam was officially over.

I’m pleased to say that my wish to see each of you at one of our meetings throughout this year is well on its way to being satisfied. Our attendance at each meeting has been excellent, even at Grand Rapids which was a new meeting site.

A real thanks needs to go to our meeting hosts who have to be unselfish with their time to make meeting arrangements. It also takes diplomacy and saltiness on their part. The meeting price you see is not the first price quoted by the restaurants or hotels that our hosts deal with. Rather our hosts work hard to get lower prices, group rates, etc. Hotels do not give free meeting rooms like they used to for group meals. The job gets more and more difficult each year and our aim of keeping meetings under the $10.00 price tag adds to the difficulty. So if you get a chance, personally thank your meeting hosts. It would be a nice gesture and would mean a lot to them.

I would draw your attention to two important Senate bills. Senate Bill 741 and 742. Senate Bill 741 was introduced by Senators Cruce and Faust and would require front seat vehicle occupants to wear proper restraints. Senate Bill 742 will cause the issue to be placed on the November, 1988 general election ballot for the general population to decide. These bills were introduced since it was thought that perhaps it might be better to get the legislation started on the second term of the Lieutenant Governor. I hope it appears to have a better chance of passing. So, once more write your senators and support it.

I would also like to bring your attention to our July 27 and 28 Family weekend at Mount Pleasant. It's at the Holiday Inn which is an excellent facility for family fun. It has two pools and a beautiful par 3 golf course. Camping facilities are also available. A light technical session is planned and our District 11 Director, Bill Fehrback will be in attendance so I'd like to see a decent turnout.

I would like to personally thank each and every one of you that has taken this time year to unselfishly contribute to our section as a speaker, host, etc. It's much appreciated and surely makes our job as a Board of Directors possible.

From the Desk of...

PRESIDENT'S COLUMN

by Tom Krynicki

In Michigan, William R. Milliken was beginning his fifth year as Governor. John F. Woodford was the director of the Department of Highways and Transportation, and Colonel John C. Baaske of the Michigan State Police. Noel N. Frieze was the executive director of the Office of Highway Safety Planning. In the R.I. M. N.O. Operation C.A.R.E. had arrived in Michigan. James J. Blanchard was an assistant attorney general.

Secretary of State Richard H. Austin was beginning his third year. The original operator's license, which sold for $6.00, was not available at all. Secretary of State branch offices, neither was voter registration. The license plates were dark blue and white, and gasoline was 41 1/2¢ per gallon ("unleaded" was a new word). Secretary Austin was advocating a safety belt law to protect motorists on Michigan's highways. Senate Bill 13.

In the past decade, Michigan has charted growth and progress for traffic safety. A quick look at the 1983 statistics shows just how far we have come: 1,300 traffic...
PEOPLE in the news

OHSP HAS NEW DIRECTOR

Karen Gulliver, a past experimental manager in the State Fire Marshal's office and the current executive director of the Michigan Office of Highway Safety Planning, was appointed as the new executive director of the Michigan Office of Highway Safety Planning, on April 22, 1984. Following the resignation of John W. Massey. Karen will have full responsibility for the state's Federally funded highway safety program which includes coordination of the highway safety activities of federal, state, and local governments. Additionally, she will serve as the executive director of the Michigan State Safety Commission.

GRAMMA & GRAMPA K.

In appreciation for the work and extra effort that Mary Misiak has given for a better Veteran's Day, he was presented with this plaque at the dinner after the Product Technology Night, April 17, 1984. Congratulations to men and dad, Michelle and Tom and to Grandpa Tom and Grandma Annette.

We Get Letters...

AWARD GOES TO MARY MISIAK

The two reprints from Car and Driver in the spring of 1984 Michigan on the subject "The 85 National Speed Limit" were the most interesting and provocative reading I have enjoyed in quite some time. Maybe it was because I could relate to the statement that expresses the comments that were expressed. Several months ago, too much alcohol is a contributing factor to the problem. I was disappointed that we have the little response was given to that challenge. Perhaps it is easier to let go of this as we go, and only try to write a letter that is to the point. The traffic engineering profession take up the issue of a national speed limit, and to make some sense of it rather than rely on emotion. The traffic engineer is a master's degree in civil engineering and is a registered professional engineer. The Michigan Section of the National Safety Council. The Michigan Section of the National Safety Council. The Michigan Section of the National Safety Council.
MARCH TECHNICAL SESSION — LANSING

The March Technical Session, which was held at the Midway Motor Lodge in the city of Lansing, attracted over 70 participants including three student members from Michigan State University. The host, Glen Elenas, provided excellent accommodations for the technical session as well as a buffet lunch.

The first speaker, Mr. Maurice Wittleman, Engineer of Traffic and Safety, Michigan Department of Transportation, introduced the topic of Traffic Control Devices and gave a presentation on the implementation of new devices. The session was well received and many attendees expressed interest in the new technology.

The second speaker was Mr. Robert Maki, an engineer with the Michigan Department of Transportation. Mr. Maki discussed his experiences with traffic control devices and how they are used in various situations. He also shared some interesting case studies.

Mr. Maki then showed a short film of Michigan’s transportation system and how it is managed. The film was followed by a question and answer session where participants had the opportunity to ask questions and share their own experiences.

The final speaker was Mr. Frank Spiczka, an engineer with MDOT who discussed the use of computer models in traffic operations. Mr. Spiczka explained the importance of using computer models to predict traffic patterns and make informed decisions.

The session ended with a buffet lunch where attendees had the opportunity to network and discuss the day’s presentations.

For people who couldn’t attend the session, a summary of the discussions and presentations will be available online.

FHWAl PUBLISHES HANDBOOK ON COMPUTER MODELS FOR TRAFFIC OPERATIONS ANALYSIS

The travel time and energy efficiency that can be realized through well-timed signal systems have been demonstrated to be very significant. Yet, the use of computer models for analyzing traffic operational problems and evaluating proposed improvements is one of the newest areas of the field of traffic engineering. Consequently, many practicing engineers are not familiar with the concept, use, application and/or the availability of these models.

In an attempt to address this problem, FHWA has prepared a report titled "Handbook of Computer Models for Traffic Operations Analysis." This report attempts to inform the practicing traffic engineer of the computer models which are available and provides a practical, day-to-day, transportation management problem. This handbook provides sufficient information to permit the reader to understand the practical applications of ten of the more significant models and to select those models which would be most beneficial considering the capability of available personnel and equipment. The ten models presented in detail are:

-TRIP (Intersection Optimization)
-TRANSO (Intersection Optimization)
-PASSER (Arterial Optimization)
-PASSER III (Diamond Interchange Optimization)
-SCAL (Arterial Busway System Optimization)
-TRANSY (Network Optimization)
-SCOP (Network Optimization)
-PRIME (Freeway System Optimization)
-FREEDOC (Freeway Optimization)

To further assist the potential user, a Technical Appendix to the report has been prepared which describes in lesser detail some 104 traffic models. The Technical Appendix is intended to serve as a guide in selecting other models to assist with unique problems.

Copies of the report are available at a small charge from the Office of Traffic Operations Information. (47-377-1862) of the FHWA Office in Washington, D.C. Additional information may be obtained from:

Morris Hoefel
FHWA Office, Washington, D.C.

IMSA SAGINAW TECH SESSION LARGEST EVER

An outstanding technical session was held by Jim Brown, City of Saginaw, at the Radisson Inn in Saginaw. There were 103 registered members and guests.

The session started out with Jerry Hulele of the City of Saginaw’s Community Information Office, who gave a presentation on "Public Relations and the Government Worker." Jerry, a very dynamic speaker, was introduced by Mr. Roger Waldner, Traffic Engineer for the City of Saginaw. Jerry’s presentation was on "Control or Not to Control." Saginaw has experienced severe traffic congestion and the traffic department needed to address the problem. Jerry Lelten, Office Manager for the City of Saginaw’s Transportation Department, explained the use of computer models and the transportation field.

Lunch was served poolside at the Inn.

The afternoon session consisted of Controllers, Load Switches, Conflict Monitors and Terminal Facilities. Facilities by Bill Murphy of Carrier & Gable, along with Harold Foster, retired.

The sign session consisted of Paul VanHorn of Sign Fast of North America, Inc. on Construction Erection and Cost Advantages. Next was Construction Work Site Safety by Mary Tausky of 3M and Products in Pavement Marking by Tim Deblitt, 3M, Jim Brown, our host, followed as a moderator for Information and Problem Exchange.

By Jack Howling
IMA-ITE Liaison

CANADA SHOWS THE WAY

New Brunswick has become the sixth Canadian province to make a commitment to teaching computer science in its schools. The province is one of the few in the world to make such a commitment, and it comes just a few months after Nova Scotia’s announcement that the province would adopt computer science as a core subject in its schools. The move has been welcomed by many educators, who believe that it will help prepare students for the digital world of the future.

1984 MEETING SCHEDULE

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<th>Date</th>
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<td>June 14</td>
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<td>Ken Shackman</td>
<td>Tech. Session</td>
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<td>Mt. Pleasant</td>
<td>Tim Deblitt</td>
<td>Tech./Family Weekend</td>
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<td>September 14</td>
<td>Lowell</td>
<td>Grand Rapids</td>
<td>Golf Outing</td>
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<td>September 23-27</td>
<td>San Francisco</td>
<td>National</td>
<td>Annual ITE Meeting</td>
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<td>October 11-12</td>
<td>Dayton, Ohio</td>
<td>Bob Wert</td>
<td>Annual IMS Meeting</td>
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<td>November 10</td>
<td>Pontiac</td>
<td>Roger Walther</td>
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<td>Rich Cunard</td>
<td>Annual Meeting</td>
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Volvo’s new car window sticker states, “We did our part... Please do yours.” The picture shows a passenger buckling up. By: Jon Stomme
BIG BROTHER VISITS HONG KONG

In Hong Kong, the government is outfitting 5,000 vehicles it owns with electronic number plates which can be distinguished by a sensor imbedded in the roadway, same way that a computerized grocery checkout can tell a can of beans from a jar of pickles. If the system checks out, they probably will put a number plate on every vehicle, at $50 per, and collect road-user taxes by sending every-one a monthly bill.

By: Donald R. Wirtella

TWO CANDIDATES FOR

Editor's Note: Shortly, District III, Indiana, Ohio, West Virginia and Michigan will vote for a new District Director.

Richard F. Beadlin, P.E., is Transportation Director for the City of Troy, Michigan. Before beginning his employment with Troy in 1975, he was Chief Engineer for the Traffic Engineering consulting firm of Reid, Gaul & Michalski. From 1969 to 1973 he was employed as a Highway Engineer with the Federal Highway Administration with assignments in Denver, California, Washington, D.C., Nevada, and Illinois.

His involvement with ITE includes service as Vice-Chairman of District III in 1983 and District III Technical Chairman in 1991. He is Past-President of the Michigan Section and currently serves as Department One Chairman on the ITE Technical Council.

His educational background includes Bachelor's and Master's Degrees in Civil Engineering from the University of Michigan. He is a registered professional engineer in Michigan, Illinois, and California.

CRASH CUSHIONS

Michigan uses several types of crash cushions dictated by the roadside environment and the type of roadside obstacle requiring protection. The four types shown on the attached pictures are the most commonly used crash cushions in Michigan.

The Inertial barrier system, a group of sand filled barrels, is the most economical installed system, but it can be the most expensive to maintain. This system is usually installed at roadside obstacles too wide to be covered by the more compact units. Because a high-speed impact often destroys 60 percent or more of the system, and results in substantial debris, it is only used where the expected frequency of impacts is low.

The HI-900 Cell cluster system, a series of water-filled polyvinyl tubes wrapped with a flexible "belt", is designed for use at locations with speeds lower than 65 mph. With this type of system the impact energy is dissipated and absorbed through the controlled release of the water expelled from the polyvinyl tube. The initial installation cost is relatively high, but when impacted, there is very little crash cushion debris, and quite often, over 90 percent of the unit is reusable.

A more sophisticated system, the HI-800 cushion sandwich system is similar in operation to the hydronic cluster system. This cushion has molded fiberglass side panels in combination with steel cables string laterally through the unit to provide vehicle redirection capabilities. These units are designed for use on high or low speed roadways, and because of low maintenance costs, are used at locations where frequent impacts are expected to occur.

The GEMET system (guardrail energy absorbing terminal) consists of crushable foam cartridges surrounded by a framework of triple corrugated steel guardrail. The impact energy is absorbed by crushing of the foam cartridges. The system also has vehicle redirection capabilities, can be installed on high or low speed roadways, and reacts favorably to smaller vehicles (less than 2,250 pounds) using our highways. An advantage in extremely cold areas is that the foam cells are not susceptible to freezing.

Prior to 1970, most crash cushions were installed in Michigan primarily on an experimental basis. However, the value of crash cushions has been proven and we now have approximately 245 installations on the trunkline system. Well over 1,000 vehicle crash cushion impacts have been recorded with only two reported fatalities. It is estimated that crash cushions on Michigan highways have prevented more than a hundred fatalities and have eliminated or reduced the severity of hundreds of injuries.
AUTOMOTIVE NAVIGATIONAL SYSTEMS IN THE DEVELOPMENT STAGES

During a recent test-drive in a GM car equipped with operational navigational systems, the Publications Committee found that although the system is high tech in design, it can be as easy to use as placing a cassette in a car stereo. Today's motorists often must confirm his route while traveling by referring to a road map. Without a map, booking a hotel while driving creates a poor traffic safety situation. This situation is even more acute for drivers of emergency vehicles, who need to arrive at their destinations safely and swiftly. The solution to this problem could improve traffic flow, lessen driver fatigue and frustration and shorten the response time of emergency vehicles.

To address this problem, development engineers at the General Motors Technical Center and Delco Electronics division are utilizing advanced electronics and satellites to locate a vehicle's position anywhere on earth. The satellites are the U.S. government's new Navstar Global Positioning System (GPS) which will be fully developed and operational in late 1987. The Navstar satellites revolve around the earth at an altitude of 10,900 nautical miles and transmit precise and continuous navigation signals to any number of users over the entire globe. For high altitude aircrafts, continuous 24-hour coverage with minimum signal distortion. Military tests conducted to date have confirmed accuracy and performance of GPS.

A prototype GPS receiver designed to acquire and sequentially track signals from four satellites is installed in a GM 1982 Buick Park Avenue. By means of geometric triangulation, the vehicle's precise location, longitude, and altitude are determined and displayed on a color cathode ray tube in the instrument panel. As the vehicle moves along the streets, the CRT screen shows the car's location on the map display. As the vehicle moves along the map display in yellow, or on major freeways, marked in purple, the car appears on the screen as a small flashing rectangle. Leaving a blue trail. The edge of the rectangle is tied in blue. The boundaries of different states are multi-colored. The display also has an operator-selectable "trip planning" mode which allows the driver to plan a trip by inserting origin, destination, and intermediate stopping points, all of which are displayed at the touch of a button. Relative bearing and distance to each stopping point are then shown while enroute. Other driver controls include maps to show increasing levels of detail, the streets and highways of a given area. The largest scale is automatically decreased as the destination point is approached within a 1/4 mile radius.

The roadmaps are digitized in the computer and cartridges inserted in a slot in the car's instrument panel. The cartridges are changed as the vehicle travels from one remote area to another. Since a cartridge contains many "map pages," a new map is automatically drawn on the CRT as the vehicle travels from one address to another. The map display is automatically updated with the insertion of a new cartridge.

GPS provides an infinite number of users with accurate, continuous, worldwide 24-hour coverage. The GPS system is organized into three main segments: The Space Segment consisting of the satellites transmitting the navigational system's signals; the Control Segment consisting of ground based monitor and control stations to assure message integrity from earth to space on a daily basis; and the User Segment consisting of the interface and MTSA for both air and transportation receivers. They are the Cassio-Peterson Model 7B and Centaury Models 410D, 410G, 410E, and 4500, WTSA safe. Reprinted from Detroit Engineer

SAFETY SEAT FOR BOTH CARS AND PLANES

The Department of Transportation (DOT) has issued a notice of proposed rulemaking that would enable the parents of small children to use the same child safety seat for both automobiles and planes. The DOT is proposing to extend the use of child restraint systems to include all children up to age four.

Under existing regulations, the Federal Aviation Administration (FAA) does not allow the use of child restraints certified by the National Highway Traffic Safety Administration (NHTSA) on airplanes, except as part of a system. A proposed rule would combine Federal Motor Vehicle Safety Standard (FMVSS) 213, covering child restraints, with the same standard (Federal Motor Vehicle Safety Standard (FMVSS) 210), integrating the two into a single standard.

We believe this action will enhance child safety, both in terms of position to user and protection of child. Secretary of Transportation, in an announcement of the rulemaking, said.

About 1.5 million seats have been approved jointly by the FAA and NHTSA for both air and car transport. They are the Cosco-Peterson Model 76 and Century Models 410D, 410G, 410E, and 4500, WTSA safe. Reprinted from Detroit Engineer

SMALL SAVINGS MAY CAUSE LARGE LOSSES

The city of Duluth (pop. 45,700), in vast northern state of Minnesota, industrial heartland, found out recently that the gas was not worth burning off the old car, so to speak. Energy conservation test conducted over a year-long period involved turning off traffic lights at 13 intersections between the hours of 11 p.m. and 5 a.m. The results were carefully monitored by the city both for cost reductions in energy use and impact on the number of accidents between the intersection perimeter. The surprising findings followed:

- An $16,000 savings in electricity;
- An estimated $16,000 savings in fuel costs; and
- No appreciable impact on or complaints about traffic noise.

However, the number of intersection accidents during the monitoring period increased from 11 to 46 with a concentration of 64700, 1.6 million, traffic accidents killed, 400,000 Reprinted from National Highway Traffic Administration

DISTRICT III DIRECTOR

Maurice E. Witteveen, P.E., is the Director of the Traffic and Safety Section for the Michigan Department of Transportation. He is a 1960 graduate of the University of Michigan with a Bachelor's Degree in Civil Engineering. He has been on the staff for 24 years with MDT serving as Design Engineer, Traffic Engineer, Chief of Traffic Testing, and as Administrator to the MQT Director prior to his appointment to his current assignment in 1985. He is a registered professional engineer which he attained in 1964.

He has been active in several professional organizations including ASCE, WMA, TRSA, ASTHA and ASCE. Current responsibilities with ITE are as associate member of the National Committee for Uniform Traffic Control Devices and a member of the Technical Advisory Committee developing a video-taped transportation engineering public relations program. Witteveen is also active with the ASTHA Traffic Engineering Subcommittee, ASTHA Standing Committee on Highway Traffic Safety, and various TRB activities.

NATIONAL ACCIDENT STATISTICS

SEVERE INJURIES SUSTAINED IN MOTOR VEHICLE COLLISIONS

<table>
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Reprinted from National Highway Traffic Administration

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AUSTIN'S TRAFFIC SAFETY

the number of deaths per 100 million miles traveled was 3.8 in 1973, compared to 1.9 in 1970. Figure 2 shows an all-time low of 3.4. In each state, the seat belt use has risen from 8 percent in 1973 to 20 percent in 1978. When we consider the effects of accidents, the benefits are clear. This progress closely parallels the State Safety Commission's interest in the following issues highlighted in 1983:

SAFETY BELT LEGISLATION

The top legislative priority for the Commission in 1983 was enactment of a law to require safety belt use for front seat occupants. In February, 1983, Representative David C. Holliet introduced House Bill 4203 with this intent. Through the activities of the Michigan Coalition for Safety Belt Use, 1983 marked vast and extensive undertakings to gain public and legislative support. Sixty-nine newspapers throughout the state have endorsed the measure. Public opinion polls continue to indicate public acceptance of a statewide law, so those surveyed indicate they will comply with a law. Based on State Police data, safety belt use increased from 11 percent in 1982 to 17 percent in 1983.

1983 saw the marked added interest in this subject for several reasons. The National Highway Traffic Safety Administration conducted hearings on FMCS 288 providing evidence of an increase in fatalities versus active restraint or seat belt debate. Several officials from Michigan testified at the hearings. The passive restraint issue is a serious one for Michigan's automotive industry. If the federal government mandates an airbag requirement, researchers at the University of Michigan has concluded that 60,000 to 200,000 jobs would be lost, which would essentially bankrupt the entire automotive industry. It is estimated that the price increase of airbag equipped cars could add as much as $4,000 to the sticker price. Michigan's economy, now facing signs of recovery, would be affected more by other states because of its close automotive employment relationship.

Also in 1983, Michigan Congressperson John Dingell introduced H.R. 4775 to offer incentive grants to states seeking passage of seat belt laws. With passage of the State police awards, Michigan would have the potential of receiving $500,000 in grants.

In 1984, Michigan must enact a safety belt use law now or fail the capability to produce sufficient seats to influence the national debate on Standard 208. A greater effort should be made to promote the use of safety belts. State and non-governmental agencies that have employee-use policies also should advocate greater compliance with safety belt use policies.

CHILD RESTRAINTS

The child restraint law, Public Act 117 of 1981, became effective on April 1, 1983, providing for the first time in 35 years, a health code to protect children from the dangers of motor vehicle accidents in the state. The law in protecting America's most precious human resource, the reduced pain and suffering, and resultant medical costs, cannot be overstated. When Public Act 117 became effective, an overcrowding concern was the availability of infant seat bases, particularly for indigent families. By the end of 1983, child restraint rental programs have been initiated in 83 counties with approximately 15,000 rental units available on a loan/rental basis. This is a tremendous source of pride when one recognizes the spirit of cooperation that has been established between Governor Milliken and Michigan civic groups, medical and health care organizations and government agencies to protect our children from a safe ride.

In March, 1983, meeting in Detroit, the Commission observed the first anniversary of the child restraint law. The contributions of six organizations and groups were recognized. The Commission also was provided with data on child restraint rental programs, and promoting public awareness for many in Michigan. The first annual meeting of Facilitators - Michigan Chapter, Automobile Club of Michigan, League General Insurance, Michigan Child Passenger Safety Association, Michigan Jaycee Auxiliary and the Traffic Safety Association of Michigan. The meeting realized that many groups and organizations helped to achieve success with the law. In addition to those receiving formal recognition were the individuals, schools and leadership.

Despite increased use of child restraints, State Police have reported a 44 percent usage rate for the first 12 months of the child restraint law. This information is based on accident reports. There is no telling how many children have suffered injuries and/or are alive today because a restraint protected them from the effects of a collision which would not require an accident report.

ALCOHOL COUNTERMEASURES

1983 marked the second year of greater public awareness to combat drunk driving through citizen activism and legislative reform. This was further reinforced by the implementation of Public Acts 309, 310 and 311 of 1982, which improved enforcement capability by both the Governor's Executive Order designated Governor's Drunk Driving Task Force. The latter added law enforcement officers to the task force. Local communities and private sectors in its quest to review the entire issue of alcohol abuse and alcoholism and to determine the effectiveness of programs.

Despite fewer enforcement personnel, the new legislation was implemented in increasing UOIL arrests. The Lunar New Year Holiday Program has experienced a decrease of 55 percent in the first 12 months of the law. Bar owner's and motorists are becoming aware of the potential for punishment. They are exercising more caution in moderate drinking and initiative to be more responsible.

Despite sobriety checkpoints the new legislation is increased by approximately 18 percent in 1983. A pre- test has shown that the effect of mandatory alcoholor testing is significant. The impact of the new legislation has been to decrease the number of individuals who are arrested for their driving while intoxicated. There has been a decrease of 40 percent in the number of persons arrested for driving while intoxicated.

To some extent, motorists compliance with the 55 mph speed limit is contingent on their motorist observance of acceptable safety laws. State Police enforcement arrests in 1983 were 5.1 percent. Continued compliance with the 55 mph speed limit is important for motorist welfare as well as the potential for jeopardizing Federal funding. In this regard, greater public information efforts to urge compliance are needed, and the campaign for a faster, more economically possible, greater enforcement efforts.

MOTORCYCLE HELMETS

Michigan is one of the few states that has retained its motorcycle helmet law since passage in 1970. This law restricts riders to those persons who are minimum age 18 years of age. According to a study by the Michigan Department of Transportation (MDOT) to protect motorcycle riders on a busy Detroit freeway, not only has it led to a dramatic decrease in reported accidents and injuries, but preliminary figures for the first six months of the law has been in operation, the MDOT has received accident reports on just two hits, which show evidence of several dozen accidents.

The MDOT, in conjunction with the Federal Highway Administration (FHWA), installed the water wall to upgrade roadway safety at the site. Prior to the attenuator's installation, the curve was considered to be carrying a higher-than-average accident rate. The FHWA is closely monitoring the water wall's performance to determine its potential as an effective safety device in other locations where frequent accidents have been recorded. The attenuator is on the southbound lane of I-75 (the拥护), and is located at approximately 130 feet above the freeway, which curves sharply as it enters downtown Detroit and becomes Jefferson Avenue. According to an MDOT official, the curve is much sharper than it appears to be, and is much slower to decelerate from 55 mph to the posted city limit of 35 mph.

The section of highway had been protected by steel beam guardrails throughout the state have been replaced by a series of steel and polymer-based guardrails designed to accommodate change to be replaced after an impact, Wayne County, which performs the work, said Bailey. In addition to the need for providing a safer highway, increased maintenance was a major objective considered by MDOT in its decision to install the water wall. Traffic and Safety Division officials, the FHWA and engineers from Indoor Systems, Inc., Chicago, an attenuator manufacturer, examined data that indicated the likelihood of a water wall. The amount of guardrail would result in low installation costs, but results would be high to add the Wayne County road maintenance budget.

The 386-foot-long water wall, designed for the site by Indoor Systems, uses polymers to absorb the impact of a collision. The water wall is filled with a series of interconnected lightweight, durable vinyl tubing filled, with an antifreeze solution. The entire device is bolted to a concrete backup wall. When a vehicle hits the water wall, the cushion absorbs the energy of the impact by transferring the liquid through orifices that control the release of fluid into the upper, outer part of the water wall. This allows, up to 400 gallons of water to fill the impact vehicle to be safely cushioned and redirected away from the roadway. Since installation, the attenuator has met the safety expectations of MDOT and Traffic Safety Divisions in reducing injuries and fatalities. Wayne County and state police crews can quickly inspect the unit for damage due to unrepeated impacts, many of which happen at night.

CITY TO IMPOUND CARS USED BY DRUNK DRIVERS

The City of Anchorage, Alaska, has adopted an ordinance that would permit judges to impound vehicles driven by people convicted of drunken driving. With a 1983 ordinance the city had allowed judges to order convicted drivers to forfeit their cars permanently if they are considered as too drunk to drive. The city has the option to purchase the vehicle back, at an estimated cost of $2,000 to $3,000. Although the city had not used the provision, the act would give judges the authority to take action if the offense is repeated in the next five years.

The city's statute would also allow judges to order convicted drivers to forfeit their cars permanently if they are convicted of drunken driving. Drivers convicted of drunken driving could lose their license for 30 days. In 1984 the city had the option of removing the ability to make use of the procedure for refusal motor vehicle drivers "drunk drivers," said Bailey. Reprinted from Status Report.
SPLIT, CYCLE LENGTH AND DELAY AT SIGNALS

The delay for a vehicle at a signalized intersection is defined as the extra time required to travel through the intersection over and above the time it would have taken if its progress had not been impeded by the signal or by other traffic. There are a couple of approaches to formulating the delay to through traffic on an approach to an intersection-pre-timed signal with cycle length C and with left turn lanes. The first is for light traffic on the approach (only one or two cars per cycle):

\[
\frac{r^2}{2C} \quad (\text{light traffic})
\]

where \( r \) is the length of the red light for the approach. This is because a fraction \( r/C \) of vehicles are caught by the red and stop, and these must wait an average of \( r/C \) for the light to turn green. The product of \( r/C \) and \( r/C \) is the average delay.

If traffic is heavy, but not oversaturated, on the approach (almost all the green time is taken up by vehicles or traffic is at about 70% of capacity) then

\[
\frac{r^2}{2C} \quad (\text{heavy traffic})
\]

This is because the vehicle that arrives just after the signal turns red must wait a red time \( r \), but a vehicle that arrives moments before enters on the yellow and has no delay at all. Delay to other vehicles, including those that arrive on green, varies linearly between 0 and \( r \), so the average delay is \( r/2 \). (If traffic is heavier than 70% of capacity, random effects will cause delay to increase above this estimate.)

Usually, of course, traffic is neither light nor heavy. The delay for moderate traffic is between the values given by these two equations. More precise estimates for delay in moderate traffic are not as easy to derive but it will be at least as much as for light traffic and less than for heavy traffic. This information should usually be sufficient. These formulas also tell us something about cycle length and delay. Suppose the splits, \( r/C \), is constant, and the cycle length is at least long enough to serve all approaching traffic. Then, if we express delay in terms of the split \( r/C \), and if traffic is light,

\[
\frac{r^2}{2C} \quad \left( \frac{C}{C} \right) = \frac{r^2}{2C} \quad (\text{light traffic})
\]

and if traffic is heavy,

\[
\frac{r^2}{2C} \quad \left( \frac{C}{C} \right) = \frac{r^2}{2C} \quad (\text{heavy traffic})
\]

In both cases, since \( r/C \) is constant, delay increases directly with the cycle length \( C \), above some reasonable minimum cycle length. This is the major reason that cycle lengths should be kept short.

By: Bob Shanteau

MORE NEW CARS WITH WEAKEr BUMPERS

Only about 40 percent of the 1984 cars rolling off assembly lines are equipped with bumpers strong enough to withstand a 5 mph impact, the Center for Auto Safety has reported. This is a 10 percent drop from the previous model year, the Center said.

Although automakers promised $30 to $40 savings in new car prices when the government lowered the bumper standard from 5 to 2.5 mph in mid-1983, more has materialized. But repair costs have soared for newer cars with 2.5 mph bumpers.

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VENDORS' DAY — 7th Annual Product Technical Session

Thanks to you, the members, the vendors and the city of Southfield, the TTCA-MAC-MIP Product Technical Session held on May 17, 1984 at the Southfield DPS Garage was bigger and better than ever before.

As an indication of this, the attendance figures for the past three years are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>1982</th>
<th>1983</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Displays</td>
<td>15</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>Attendance</td>
<td>111</td>
<td>132</td>
<td>171</td>
</tr>
</tbody>
</table>

Special thanks again goes to our Southfield hosts for permitting us to use their fine facility. Vicki Hall handled the registration table superbly and Bob Northrup and Mary Mikael again did everything they could to take care of our needs. For those of us who noticed better lighting this year, we can thank John Yontz of the city of Dearborn for the temporary installation. The hospitality committee headed by Jerry Carrier and Herb Henry made arrangements for dinner afterwards at "Copperfields" in ABC World Headquarters.

TRAFFIC SAFETY

Oakland County recorded the fewest traffic deaths in 21 years in 1983. There were 111 traffic deaths reported last year, a 26.55 reduction compared to the '82 toll of 149.

The last year in which fewer traffic deaths were recorded was in 1961 when the traffic toll in Oakland County stood at 109.

The mileage death rate (number of persons killed for every 100 million vehicle miles traveled) in '83 is remarkably low when one considers that there has been an estimated 80% increase in the annual rate of miles traveled since 1961. As the accompanying chart shows, 19 Oakland County traffic deaths had followed miles traveled since 1966, we would now be reporting 256 fatalities for '83 instead of 111 - 144 people alive and well who wouldn't otherwise be! It's an outstanding example of the results of a total team effort.

In examining traffic accident reports, TIA staff observed a couple of particularly significant changes: Pedestrians and motorcycle fatalities were down considerably - 41% and 55% respectively.

Authorities generally agree that the overall trend toward a decreasing mileage death rate is due to a number of factors such as improvements in vehicle safety engineering, law enforcement, traffic engineering and emergency medical services.

There are a lot of scientific research data which support the safety contributions in each of these areas. Certainly, the traffic engineering improvements which were implemented through the pioneering Highway Risk Management Program of the Oakland County Road Commission (adopted in 1977) have had a measurable impact. Roads under the jurisdiction of the commission had a record low of 44 fatal accidents last year. They've been declining over since a high of 77 fatal accidents in 1978.

Recent statements of leading officials from Washington and Lansing attribute the dramatic reductions of the last year or so primarily to stepped up drunk driving countermeasures. TIA data suggests some validity in these views, for alcohol-related fatalities in designated Oakland County target areas patrolled by special alcohol enforcement teams were down 60% last year as compared to the two year period prior to 1980, when the countywide alcohol enforcement and education project was launched.

Of particular significance is the fact that the number of fatal accidents in '83 which involved alcohol was 33% less than in '82.

The '83 traffic death figures reported here are provisional. Slight increases in the year end total may be anticipated due to reports of death that occurred after 1983 but which result from accidents which happened in that year.

Reprint From TIA Traffic Review

OAKLAND COUNTY 1966 - 1983

PERSONS KILLED

50 55 60 65 70 75 80 85 90 95 00

YEAR

cont. next page
MANUAL TRAFFIC COUNTS

Whether you're planning the traffic control for an intersection, a new superhighway, a shopping center, a drive-in restaurant, or the system for an entire area, accurate traffic counts provide the essential facts for intelligent decision-making.

While many traffic counts can be obtained by mechanical counters, for some types of count there has been no economical substitute developed for a hand count in which the individual assigned goes to the intersection and visually notes each car passing and then in some manner records this information.

The most primitive form of a hand count is to use the so-called "tally-tally," which is the old technique of using four hash marks for the first four objects to be counted and then a slash line across the four lines for the fifth so as to simplify addition when the count is completed. However, since watching traffic and using a pencil on paper is difficult even under the best conditions (and a real trial under windy and rainy conditions), the use of a hand counter is a definite improvement on the pencil and paper technique. Considerable attention has been given to the design of hand counters mounted on counting boards that give a good deal of aid to the use and improve the accuracy of the counts.

Tally counters, each corresponding to one of the traffic movements, are mounted on convenient shaped and sized counting boards. By counting each counter at the end of certain time periods, total volumes per period of time can be determined. The photograph shows a tally counter manufactured by the Demlinog Co. of Woodbury, Connecticut (203 263 3100). This is a particularly convenient counter for field use.

Tally counters can also be ordered with a "totalizer" at the extreme right of each horizontal row of counters, and this can be a worthwhile investment in time-saving. Actually, the possible arrangements of counters are almost limitless, and it becomes a matter of personal preference and counting requirements. Tally manufacturers can sometimes mount the counters to specification at modest cost.

Both the tally-sheet and count-board methods are expensive in man-power because they require the services of several people for about twelve hours in order to get anything close to complete information at an intersection. It is not usually possible for an individual to maintain accurate counts for long periods of time. For reasonable accuracy, each person on counting duty should be relieved for fifteen minutes each hour. At very heavy traffic conditions, the extra time is not necessary to have two or more people counting simultaneously; each recording only a few of the total traffic flows if reasonable accuracy is to be maintained, because it is not possible for one person to count simultaneously more than a few heavy movements of traffic.

In order to detect any large discrepancy in manual counts, it is a good idea to have at least one of the approaches (and preferably more than one) counted by "road tube" counters at the same time. While it is difficult, unless the streets are thoroughly channelized, to get a breakdown on the turns movements with "road tube" counters, a comparison of the respective totals of the "road tube" and hand counts will give a good indication of whether the hand counts are accurate.

By: Don Wiertella
VENDORS' DAY...

SMITH SHOW & SIGNAL: Tom Seaver and Jim Livingston explain Fiber optics to NDDP's Joe Reesarco.


CARTER & CABLE SIGNAL CORPORATION - FRIEND UNIVERSEL: Carrier & Cable's Dave Bacon shows some of the many products on display.

PATH MASTER: Cliff Connolly displays traffic control equipment in front of the Multisonic Motor Home.

PAUL VANDERHILL CO.: Information on Sign-Fix was dispensed by the affable Paul Vanderhill.

PATH MASTER: Inside the Multisonic Motor Home, Jim Comer discusses computerized signal control with Dave Berridge of the City of Lansing.

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How about the morning after?

Everyone knows that drinking and driving don’t mix, but its safe to drive the next day after sleeping it off, right? Wrong.

Hans Laurel and Jan Torrens of Sweden’s National Road and Traffic Institute, found that hangovers significantly reduced driving ability. The researchers threw a party and served 22 volunteers appetizers and dinner accompanied by beer, wine and punch. The volunteers awoke in the lab, and after breakfast their driving ability was measured. They drove on a closed course lined with two rows of pylons. Their ability to drive was based on the number of pylons they knocked over and their ability to stop. Nineteen of the subjects scored worse when hung over than under normal conditions. While hung over, drivers experienced an average 20 percent reduction in driving ability. Impairment in driving lasted three hours, until alcohol blood concentrations reached zero. “The results give clear evidence of the performance degrading effects of alcohol hangovers,” researchers said in their report, published in a recent edition of the Journal of the American Medical Association. The volunteers also were unable to fall to sleep over they were hung over.

Those who felt fine were just as likely to drive poorly as those who felt terrible.

Reprinted from ITEMS (Illinois Section Newsletter)

Set An Example

NEW FORD MODEL BUMPERS SAVE ON REPAIR COSTS

American consumers were taken for a costly ride when the bumper standard was lowered to 2.5 mph, a Senate subcommittee meeting was told recently.

Citing a just-completed Insurance Institute for Highway Safety study, ranking Kelley, senior vice president of the organization said repair costs following a series of low-speed crash tests varied dramatically between an ’84 Ford Tempo with a 5 mph bumper and an ’83 Honda Accord with a 2.5 mph bumper.

“The total estimated repair costs for the Ford Tempo...were $937,” said Kelley. “Repair costs for the Honda Accord in the same series of tests were $3,655, or almost four times as much as the Tempo’s...for owners and prospective purchasers of Ford Tempos or Honda Accords, the message couldn’t be clearer.”

Sen. Daniel K. Inouye (D-Hawaii), chairman of the Subcommittee on Surface Transportation, chastised the National Highway Traffic Safety Administration for lowering the bumper standard from 5 mph to 2.5 mph, which made the greater loss possible.

“As a result of NHTSA’s actions, we’re returned to the days when bumpers were just ornaments...It is clear the price reductions promised by the auto industry never materialized,” said Inouye. “Second, the 2.5 mph bumpers provide virtually no damage protection.”

Inouye also noted that while NHTSA may have had “dozens” about 5 mph bumpers, but at least one other who had to pay the price did not.

“One very important consumer,” said Danforth, “has disagreed with NHTSA’s decision. That consumer is our own federal government. The General Services Administration looked at the evidence and decided that it wanted nothing to do with 2.5 mph bumpers. It has decided that all the cars that it purchases during 1984 must be equipped with 5 mph bumpers.”

Front-and Rear-End Crash Tests Damage Repair Costs

1984 Ford Tempo and 1983 Honda Accord

1984 Tempo

5 mph front-end-barrier $ 300
5 mph front-end-into-angle-barrier $309
10 mph front-end-barrier $1,446
5 mph rear-into-barrier $207
5 mph rear-into-post $ 782

Total $3,036

*Repair costs are based on July 1983 parts prices and a labor rate of $17 per hour. Criteria for bumper facebar damage were adapted from the DOT Part 581 bumper standard requirements in effect September 1, 1979, and July 6, 1982. Reprinted from Status Report
**REMEMBER**

The ITE/INSA Family/Technical Weekend will soon be upon us, so make your reservations soon. This Holiday Inn in Mt. Pleasant is one of the finest locations in Michigan to have a family weekend. The facilities offer swimming, golf, tennis, racquetball, shuffleboard, game room and much more. And, as an added bonus, a continental breakfast will be available each morning before your day and the inn has guaranteed sunshine and loads of fun!

To make your reservations for July 27 & 28, call 1-800-238-8000 or the inn directly at 517-772-2906. A block of rooms is being held for the event but are filling fast. Call now to guarantee your room and enjoy a weekend relaxation and fun in the sun.

By Tim DeBitt

**NEW INTERNATIONAL AFFILIATE MEMBERSHIP GRADE**

In October of 1983 the International Institute's membership approved a constitutional amendment which initiated an Affiliate membership grade. In that regard the following is a direct quote from a notice which I just received concerning this new grade:

"The Constitution as amended defines the requirements for Institute Affiliate as follows:

To be eligible for admission to the grade of Institute Affiliate, the applicant shall be a person who is not otherwise eligible for Institute membership or who may be accumulating experience towards Institute membership and:

(a) is engaged in transportation or traffic engineering work;

(b) is in a related field who by virtue of stature or personal status will contribute to the work of transportation professionals;

(c) is engaged in commerce or industry and comes into frequent contact with transportation and/or traffic engineers and who has an interest in the profession or is in a position to work with and assist transportation professionals;

(d) and has been in one or more of the above for a minimum of three years.

The International Board of Direction Procedures for the processing of Institute Affiliate applications are as follows:

(1) The applicant submits to ITE Headquarters a complete Institute Affiliate application. Headquarters staff review the application to determine if it is filled out in full.

(2) If the entirety of the application is sent to the District Membership Chairperson. Each application will have an attached postcard which the District Membership Chairperson will return to ITE Headquarters within 30 days. If no postcard is received by Headquarters within 30 days, the assumption is that the candidate is approved for Institute Affiliate Membership.

(3) When the District card has been returned noting the District approval or disapproval, the applicant will be notified of acceptance or rejection to membership. Acceptance to membership is effective until payment of applicable fees and dues is received by Headquarters.

The Institute Affiliate, for annual dues of $40, will receive a subscription to the ITE Journal and will be able to obtain member discounts on the Institute's publications, professional development seminars and Annual Meeting registration.

The Institute's goal is to obtain at least 1,000 Institute Affiliates by December 31, 1984. Membership forms are available and you may obtain one by contacting:

Mr. Gary Holmen
Senior Postman/Coordinator
Safety Programs Section
Office of Highway Safety Planning
Michigan Department of State Police
1111 N. Capital Avenue, Lower Level
Lansing, MI 48913

By Thomas R. Kryczynski, P.E., President

**VIRGINIA DOT USES A SPECIAL MOUNTAIN PAVEMENT MARKING**

The Virginia Department of Highways and Transportation uses a special type of center line marking on two-lane highways in mountaneous areas known as Mountain Pavement Marking (MPM). It consists of a single white line supplement with "PASS WITH CAUTION" signs. Pavement marking is not permitted even at intersections with inadequate sight distances. The driver is therefore solely responsible for deciding when to pass.

This practice of marking two lane highways has received some criticism in the past and Virginia, therefore, conducted a study to determine whether this marking system should be replaced by the MUTCD standards marking patterns. They also need to develop guidelines for minimum lengths of passing zones and minimum sight distances for safe passes on these roads.

Passing maneuvers were recorded at five sites using a video camera. Relation data was then extracted and used to develop a regression model for the minimum length of passing zones, based on the passing speed and the speed difference between the passing and impeding vehicles. A minimum passing sight distance was then developed using the concept of a critical position and computed from this distance. The results indicated that the minimum length of 400 feet for a passing zone specified by MUTCD may not be adequate for passing vehicles to safely complete a pass even at a 30 MPH passing speed.

The study was done by Nicholas J. Barber and Mitsu Saito of the University of Virginia Potion, and the results were presented at the January 1984 ITE meeting in Washington.

Reprinted from ITEJ.

By Don Mairesse

**THE PRACTICAL ALTERNATIVE TO METAL SIGNS...**

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STOP

The practical alternative to metal signage...

**CONSTRUCTION TIME**

Bob Hoy and Jack Whittemore discuss parking equipment with Martin Monahan (PHOTO)

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**CINCINNATI TIMES**

Sandy Rea with sign, applicator and maintaining traffic materials

**EDUCATOR CONTROL CORP.**

Ted Morehead dispensing information on pedestrian indicators to FHWA Region V Traffic Engineer Martin Monahan

---The first permanent roadside picnic table in the country was set up on an old US-16 in Ionia County in 1929. Michigan also had the first roadside park, developed along US-23 in Iron County in 1919.
This could save your life, but...

BEST SOLUTION TO AUTO DEATHS AND INJURIES IS THE AIR BAG, SAYS I.I.I.

Death and injury usually accompany the clanging of metal and breaking of glass in a car crash. That's not news.

What is new occurs when the occupants of the cars involved walk away from an accident, impossible, you say. Wrong, says the Insurance Information Institute, an educational, fact-finding and communications organization for the property/casualty insurance business.

If all the cars on the road today were equipped with air bags or air cushions as they are also called, 9,000 lives could be saved -- and more than 50,000 major injuries could be avoided.

Those are figures based on a Department of Transportation study, said Archibald Moore, president of the Institute. "The engineering skills of the U.S. auto industry," Moore said, "and its suppliers have made the air cushion system by far the most effective and thoroughly tested safety technology ever developed."

The Institute points out that there are three kinds of restraint systems -- manual seat belts, automatic seat belts and air cushions -- all of which substantially reduce the likelihood of crash injuries. However, the seat belts must be used and all too often the driver and passengers elect not to use them.

A recent survey conducted by Louis Harris and Associates for the Insurance Information Institute showed that only one out of four Americans report always wearing a seat belt when in the front seat of a car, despite strong agreement that this should be done.

Air bags, on the other hand, work automatically. Completely out of the way and out of sight until a frontal or front-angle crash occurs. Air cushion systems inflate in less than 1/250 of a second and keep car occupants from slamming into steering wheels, instrument panels, windshield and windshield frames.

Air cushions are now more effective during the second collision -- sometimes called the human collision. In a frontal crash, the vehicle is stopped abruptly by another vehicle or fixed object. But unrestrained vehicle occupants continue moving forward at the pre-crash speed. This second collision is the one in which people are killed or injured.

It occurs when moving vehicle occupants slam into the abruptly stopped or nearly stopped vehicle's hard interior surfaces, or are ejected and hit an equally unforgiving outside surface.

Air cushions diffuse the potentially harmful forces of the human body by serving as a pillow between the occupants and the vehicle's interior.

There is a growing number of survivors of car crashes who say that they're here to tell about them only because they had the good fortune to be in a car outfitted with air cushions.

For example, a Utah woman and her 11-year-old mother were driving near Salt Lake City when the mother lost control of her car, and smashed into an oncoming diesel tank truck at a combined speed of 65 miles per hour. It was the kind of crash few people survive.

What she didn't know before the crash was that her used car was one of just 10,000 equipped by General Motors with air bags during the mid-1970s. The air bags saved her and her mother's lives.

A doctor from Kansas City hit the biggest city transport bus in town with both his car and the bus traveling at about 20 to 25 miles an hour. Within seconds after the crash, the doctor could see that he was alive, had no broken bones, headache or whiplash injury and, best of all, could walk away from the crash.

A Schiller Park, Illinois driver was involved in a head-on collision with both his car and the oncoming car traveling about 35 to 35 miles an hour. His windshield shattered, but the driver was perfectly all right, fully mobile and able to go back to work within an hour after the crash.

The most extensive, real-world demonstration that air cushions are lifesavers began in the mid-1970s when Ford, General Motors and Volvo sold or leased more than 12,000 cushion-equipped cars. As of July 1983, these cars had traveled about one billion miles. There had been 307 frontal and front-angle crashes severe enough for the cushions to deploy. The Insurance Institute for Highway Safety, a traffic safety organization supported by automobile insurers, analyzed injury data from most of these crashes, and found that air cushions "substantially reduced the likelihood of death and serious injury to front-seat occupants."

While the evidence is clear that air cushions work, the key question remains: all Americans buy cars that have air cushions installed and are they willing to pay an additional cost?
AUSTIN cont. from page 6

Legislation to repeal the motorcycle helmet law, House Bill 1681, was introduced during the 1983 legislative session. However, no legislative action was undertaken. Continued vigilance will be needed in 1984 to retain the motorcycle helmet law.

TRAFFIC SAFETY WEEK

In an effort to promote greater traffic safety awareness, Governor James J. Blanchard signed HB 2428, effective August 8, 1983, as Michigan Traffic Safety Week. A series of activities focusing on the Link Between Traffic Safety in school were undertaken by the Commission and others. The emphasis was on teaching better what is already known; that is, being careful in school and residential areas with children and other public and private organizations contributed to the success of the week-long activities. This effort should be continued on an annual basis to benefit the people of Michigan.

MAJOR CHALLENGES FOR 1984

What lies ahead for the Michigan State Safety Commission in 1984? Action is needed to accomplish the following:

- enactment of a safety belt law to save Michigan jobs, reduce the economy by traffic accidents and reduce the deaths and injuries and resultant consequences.
- add the Department of Public Health to membership on the State Safety Commission.
- increase motorist compliance with Michigan's child restraint laws.
- find more solutions to the problem of drinking and driving.
- increase motorist compliance with the 55 mph speed limit.
- challenging efforts to repeal Michigan's motorcycle helmet law.
- promote Traffic Safety Week and extend its impact.
- continue and enhance the involvement of citizen participation in traffic safety efforts, through regional committees, the Michigan Traffic Safety Information Council and private sector groups.

Michigan's traffic safety resources are unique and impressive. There are strengths and capabilities in its people, educational institutions, governmental agencies, traffic safety organizations and many others. Working together, we can make the best use of these resources in 1984 and the coming decade.

Richard J. Austin, Secretary of State and Chairman of the Michigan State Safety Commission

In a landmark decision recently, Florida's Supreme Court has refused to declare a special legislation for traffic accident victims if such victims were not wearing seat belts at the time of the crash. Citing the legal doctrine of contributory negligence, the Court reasoned that failure to buckle up makes an accident victim partially responsible for his own injuries. Reprint from Straight Talk

SECRETARY DOLE PRESENTS AAA'S LIFESAVING AWARD TO TEN YOUNG AMERICANS

Secretary of Transportation Elizabeth Hanford Dole recently announced the recipients of AAA's Lifesaving Award for 1983, and forecast ten young Americans who participate in AAA's School Safety Patrol Program.

The awards were presented at the annual AAA convention in Detroit. Dole, in accepting the $5,000 award for the AAA National Safety Patrol Program, said, "Our young American citizens are our nation's most precious resource. It is a fitting reward to give them for this service." The award is given annually for outstanding accomplishments by school safety patrol members.

The awards were given to:
- John M. Ayala, 11, and Pablo O. Lsu, 11, both of Binghamton, N.Y., who rescued a 10-year-old girl who had fallen into a swimming pool.
- Robert Boyd, 12, and Chadwick S. Macle, 12, both of South Dayton, Ohio, who rescued a 12-year-old girl who had fallen into a swimming pool.
- Ilia R. Clemons, 11, of Bona, N.Y., who rescued a 10-year-old boy from a swimming pool.
- Anne L. Kuselis, 12, of Milwaukee, Wis., who rescued a girl from a school bus.
- Deera J. Castion, 12, of Los Angeles, Calif., who rescued a 10-year-old child from a school bus.
- Gary J. Thomas, 10, of Lorain, Ohio, who rescued a 10-year-old boy from a school bus.
- Deena A. King, 12, of Binghamton, N.Y., who rescued a 10-year-old child from a school bus.
- Deana L. King, 13, of Binghamton, N.Y., who rescued a 10-year-old child from a school bus.

San Francisco TIE Meeting

This year's TIE International Meeting is in San Francisco. Don Vierterman and Bill Label recently visited the city on business and were able to get a first-hand look at the city's public transportation system. They had the opportunity to visit with Michigan section members, particularly those who planned on attending the meeting.

San Francisco is unique, not just in America, but in the world. It is a city of many contrasts. When you enter the city it is almost like entering a different country. The city is divided into many parts, with each part having its own distinct character.

The city is divided into many parts, with each part having its own distinct character.

- Downtown is the business and financial center of the city. It is a bustling area with many high-rise buildings and shopping centers.
- The Marina District is a popular area for tourists. It is home to many of San Francisco's famous landmarks, such as the Golden Gate Bridge and the Fisherman's Wharf.

San Francisco offers something for everyone. Whether you are interested in history, culture, or shopping, there is something for you in San Francisco. Whether you are interested in history, culture, or shopping, there is something for you in San Francisco.

San Francisco TIE Meeting

The San Francisco TIE Meeting is being held in San Francisco at the Four Seasons Hotel. The meeting will be held on Saturday, September 30, and Sunday, October 1.

The meeting will feature a keynote address by an expert in the field of telecommunications. The keynote address will be followed by a panel discussion on the latest developments in the field.

The meeting will also feature several breakout sessions, each focusing on a different aspect of telecommunications. These sessions will include presentations by experts in the field, as well as hands-on workshops.

The meeting will conclude with a networking event, providing attendees with an opportunity to connect with other professionals in the field.

DON'T MISS OUT.

Register now to secure your spot at the San Francisco TIE Meeting. Early bird registration is open until September 15. Don't miss out on this opportunity to learn, network, and connect with some of the best in the field.

Register now!