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NATIONAL 55 MPH SPEED LIMIT, TIME FOR A CHANGE?



PRESIDENT'S COLUMN

THE VIEW FROM LONDON

by Dick Beaubien

The theme of the 53rd Annual Meeting of the Institute of Transportation Engineers was "Transportation - An International Overview", and the meeting was certainly a success in terms of international participation. The meeting drew 900 registrants from 38 countries. The meeting was co-sponsored by the Institution for Highways and Transportation, an organization based in the United Kingdom. Approximately half of the speakers on the Technical Program were from outside the United States of America.

One example of the benefits of an international conference came during a discussion of computerized signal systems the afternoon of the first day. After short presentations of technical papers from the United States, United Kingdom, and Japan, a lively discussion of signal control strategies ensued. During this discussion we heard strongly held opinions on the question of when to use actuated signal controllers from delegates representing the United States, United Kingdom, South Africa, Australia, Netherlands, and Germany.

At a meeting of District and Section officers held on Tuesday morning of the conference, Executive Director Thomas Brahm outlined the progress which had been made in solving the Institute's financial problems. As a result of improved financial conditions, the Institute plans to enlarge the ITE Journal, distribute a public relations program describing the work of Traffic Engineers, and prepare a report with recommendations on staffing and funding levels for traffic engineering functions within state and local governments.

A conference such as this one impresses you with the fact that there is more than one way to solve a problem. Although Traffic Engineers around the world have similar problems - traffic congestion, accidents, and limited funding - the solutions to these problems are varied. Exposure to these different solutions provides the Traffic Engineer with additional tools to solve the problems he encounters. It may be that some of these tools will never have an application in the United States, but at least some of the techniques used abroad can be applied or adapted for use in the United States.

By Richard F. Beaubien, P.E.

The nation's drivers are now reaching a point in time, ten years after the January 1974 enactment of the national 55 mph speed limit, where they are questioning the wisdom of retaining the 55 mph speed limit on all roads. Witness the speed survey statistics, recently released by the Federal Highway Administration, wherein the average speed continues to increase and enforcement becomes more difficult. In fact, on freeways, motorists think the 55 mph is a joke!

In Michigan, the latest information shows that 48.8 percent of all motorists exceed the 55 mph speed limit. This causes much concern to the highway industry because of the threat of federal sanctions. A loss of 10 percent federal funds is probable if the percentage of motorists exceeding 55 mph reaches 50 percent or more. The biggest problem is on the higher type roadways which were designed for speeds up to 80 mph. The traffic engineer's basic philosophy in establishing maximum speeds for a given roadway is being violated when an arbitrary speed limit is established. The "85 percentile traveling at or below a given speed" is being gravely violated. Especially on the rural freeway system where over 90 percent of the drivers exceed 55 mph.

The Congress, as part of the 1982 Surface Transportation Act, mandated that the National Academy of Sciences conduct a study to assess the safety, energy, and economic effects of the national 55 mph speed limit. On July 27, 1983, the United States Department of Transportation announced that a 19 member panel had been appointed to perform this task. The panel is made up of prominent people from public administration, academia, enforcement, transportation engineering, trucking, manufacturing, insurance, medicine, and research. About one-third of the members are engineering oriented. The report from this group is to be finalized in August, 1984. There is however no certainty that final recommendations will be made to retain or change the 55 mph speed limit because the charge to this panel does not specifically address that point.

It is my belief that the determination of a national speed limit is not an engineering decision, but a political decision. The impetus for lower speeds came from the oil embargo and was an important energy conservation measure. Much has been made of the fact that in the first year of the 55 mph law there was a significant drop in fatalities nationwide. There were many economic market forces at work simultaneously with enactment of the speed law which probably influenced that statistic. Therefore, it is very difficult to assign the fatality reduction solely to the speed limit. One of the more interesting phenomena occurring in recent years is the continuing reduction in fatalities at the same time that speeds are increasing. This is being reported by many states.

All of this discussion leads up to the point that I believe it is time to begin an active dialogue on the merits of keeping the national 55 mph speed limit or to revise it in accordance with engineering principles. The

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TIME FOR A CHANGE?

middleground, of course, is to weigh the many factors in this issue and to reach a consensus which is in the best interest of all road users. Certainly safety, energy, and economic factors must be given due consideration along with traffic operational or engineering considerations. From my perspective, serious thought must be given to having a higher speed, such as 65 mph, on free-ways and retaining the 55 mph on other roads. I believe input from the Michigan Section ITE is timely and should be pursued. The International ITE would also do well to initiate discussions to provide the necessary engineering perspective on the national 55 mph speed limit. That is my point of view. What is yours?
By Maurice Witteveen

DON'T LEAVE SAFETY TO MERE CHANCE,
THAT'S WHY BELTS ARE SOLD WITH PANTS.



UPCOMING MEETINGS

September Golf Meeting

By the time the membership receives this newsletter a large number of you will already have been teed off. Now, if you're teed off because you were at the golf outing (a better choice!) or because you weren't there, plan on joining us next September. The site is beautiful, the price is right, the food's excellent and where can you hear any greater "cock & bull" stories than those which Lebel and DeCorte can concoct.

October Annual District Meeting

Hopefully, by the time you read this you will have registered for this meeting. It promises to be a good one and you should have received your notice in the mail in advance of reading this.

Special Attention - November 3 Lunch Meeting

Please note this meeting since it has been added to the schedule and this is the first notice of it. Roger Walther will be hosting this fine lunch meeting which will be held at the famous Zenner's Inn in Frankenmuth. A light, technical speaker is in order and the meeting will be followed by a visit to a covered bridge in the area as well as a wine/cheese tour. As a first, spouses/friends will be invited to this lunch meeting because of the setting. So mark your calendars and watch for the meeting notice which will be out around the time you read this newsletter.

December/Annual Section Meeting

As noted in last month's newsletter, the Engineering Society of Detroit will be the scene of our section's annual meeting. A fine tech session is currently being planned by Mike Labadie, our Technical Program Chairperson. CEU's will once more be offered since membership at our last tech session requested so on their evaluation forms. It's also your chance to meet your new officers and is undoubtedly the most important section meeting of the year. Stan Cool, meeting host, promises a good meeting - so, support your organization by being there. See you then.

By Thomas R. Krycinski, Vice President

MICHIGANITE

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Michigan Section
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MICHIGAN SECTION ITE, TREASURER'S REPORT

Balance: May 19, 1983	\$3,594.61
Receipts:	
Dues and Bank Interest	231.55
Vendors Day	1,450.00
Michiganite Ads	820.00
May Meeting	762.00
	\$3,263.55
Expenditures:	
Postage, Printing and Supplies	\$ 240.12
Michiganite	705.60
Section Contributions (Dist. & National)	159.00
CEU'S - MSU	157.50
May and July Meetings	887.36
Hospitality-Family Weekend	401.44
Dist. III Annual Meeting Deposit	200.00
	\$2,751.02
Balance: September 1, 1983	\$4,107.14
Treasurer, Bob Lariviere	

MICHIGANITE is published quarterly by the Michigan Section of the Institute of Transportation Engineers. It is distributed to more than 300 ITE members and over 100 cities and counties in Michigan. Address communications regarding the Michiganite to the Editor: Robert V. DeCorte, 7441 Emerson Drive, Canton, MI 48187

PORTABLE CONSTRUCTION BARRIER CAN PROTECT HIGHWAY WORK CREWS

The number of injuries and fatalities among Texas highway construction and maintenance personnel has increased significantly in recent years. Investigation of the problem revealed that much of this increase resulted from accidents at very short duration construction and maintenance zones and that the only practical solution was to employ positive barriers at these sites.

There are currently no construction zone barriers which can be installed and removed quickly enough for use at very short duration construction sites. Therefore a truly portable positive construction zone barrier has been developed that is 1) portable enough for use in maintenance zones that are to be in place only a few hours; 2) crash-worthy for use in construction zones; and 3) relatively inexpensive to construct and maintain.

It is described in Research Report 2623, "A Portable Traffic Barrier for Work Zones," by Dean L. Sicking, H.E. Ross, Jr., D. L. Ivey, and T. J. Hirsch.

The research was sponsored by the State Department of Highways and Public Transportation and the Federal Highway Administration.

The used car barrier consists of a line of used cars with three beam guardrail attached to each side. Telescoping tube members provide moment capacity in the joints and hinged three beam gates provide a smooth re-directing surface between barrier vehicles. The leading vehicle is maintained operational and can be used to tow the barrier.

The barrier was successfully crash tested with a 4500 lb vehicle at an impact speed of 48.3 mph at an angle of 15 deg. Barrier deflection for this test was 8.4 in. Computer simulation of an impact at 60 mph and 25 deg. with a 4500 lb vehicle predicted only 26 in. of barrier deflection.

The used car barrier was constructed for testing at a cost of approximately \$70 per foot of barrier. No barrier repairs were required subsequent to the two crash tests conducted. Therefore the barrier should be both inexpensive to construct and maintain, the researchers say. The barrier can be placed on either a tangent or in a transition zone.

The used car barrier can be used to protect highway construction and maintenance personnel at work sites where conventional positive construction zone barriers are impractical. This barrier can be set up and removed quickly enough to allow its use when maintenance is to be started and completed within a few hours. The used car barrier should therefore reduce injury and fatality rates among highway construction and maintenance personnel, the researchers believe.

Reprint from Texas Transportation Institute

RTOR YIELDS MONETARY BENEFIT

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

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

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

Endorsement of RTOR by the Highway Users Federation and many other national organizations led to the adoption of the traffic regulation by all states during the 1970's. Reprint from The Hoosier Newsletter

NEW RESEARCH FINDINGS TO REDUCE NIGHT ACCIDENTS

Research carried out recently in the German Democratic Republic (East Germany) concluded that 30% of all traffic accidents involve pedestrians. The study also established that one-third of all serious pedestrian traffic accidents occur at night. Taking into account the low level of traffic at night, this makes the relative probability of such an accident much higher at night than during the daytime hours. A further direct relationship has been observed between the wetness of the road surface at night and the number of pedestrian accidents.

On rural roads, better pedestrian visibility can be achieved by wearing reflectors or light-colored clothing. However, under the stationary illumination of an urban streetlamp, a pedestrian is illuminated mainly from above and does not contrast strongly enough with the background of the street to be easily spotted by drivers.

Two conclusions were derived from the research study. First, pedestrian crossings should not be situated directly under the street lamp, but rather in between two light sources. Secondly, a special kind of illumination should be used where possible. The research team recommends a lamp equipped with a 250-watt hydrogen discharge tube placed into the focus line of an uncovered cylindrical concave mirror, which can concentrate the undispersed light of the discharge tube into a relatively narrow band, illuminating the pedestrian crossing. Such a lamp should be installed on a pole situated before the crossing at a distance equal to about 70% of the elevation of the light source above the road surface. Experiments with this new lighting system in East German cities have provided better visibility of pedestrians and it is believed that wider use of such lighting may lower considerably the probability of nighttime traffic accidents at pedestrian crossings.

Reprinted from Urban Transportation Abroad

AUDIO TRAFFIC SIGNALS FOR THE SIGHTLESS

The latest audible pedestrian crossing signal has attracted attention because it seems to have overcome problems associated with earlier efforts. It is a demonstration unit built and installed by the Saitama, Japan, prefectural police. The mechanism combines an ordinary signal and a microchip-based sound synthesizer of the type used for "talking" vending machines and video games. Located along a main artery that usually allows unimpeded traffic flow, the signal is triggered by a waist-high button on the traffic pole. When pushed by a pedestrian, the traffic light switches to the yellow mode, a chime sounds and a female voice is heard to say (in Japanese of course): "Please do not cross yet." The light turns green in several seconds and this time a chime is followed by the announcement that it is now safe to walk the pedestrian crossing.

The non-standardization of the sounds used to denote a safe crossing by other audio signals in Japan and elsewhere has been a problem. There is also no standard way to indicate the direction of safe crossing for the sightless. Signals synthesizing bird calls with different sounds for different directions are used in many Japanese cities and have also started to make their appearance in the U.S. However, some groups of the blind have objected to these signals because their meaning is not clear without prior knowledge. Their cost as well as the extra noise they add to the crossing has also been a bar to widespread adoption.

Interest in safe street-crossing methods for the visually impaired continues to build in line with general efforts to create greater mobility for the handicapped. Some jurisdictions even have moves afoot to mandate these audio systems for the sightless or sight-impaired as the next logical step beyond lowered curbs and wheelchair ramps.

Reprinted from Urban Transportation Board

NATIONAL MUTCD GUIDE FOR PLACEMENT OF WARNING SIGNS

A more precise guide for the locating of advance warning signs was recently incorporated into the National "Manual on Uniform Traffic Control Devices." Michigan DOT district traffic and safety engineers have already been instructed to start applying provisions of the guide. The Michigan manual will be provided with revised pages covering this change as part of the next general revision.

Following is the new text as it will appear in Section 2C-3 of the national MUTCD:

2C-3 PLACEMENT OF WARNING SIGNS

Warning signs shall be erected in accordance with the general requirements for sign position as described in Section 2A-21 to 29.

Since warning signs are primarily for the benefit of



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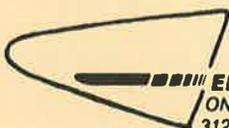
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TABLE II-1--A GUIDE FOR ADVANCE WARNING SIGN PLACEMENT DISTANCE¹

Posted or 85 percentile speed MPH	Condi- tion A high judg- ment need- ed ² (10 secs. PIEV)	General warning signs (Distances shown in feet)					
		Condi- tion B-- Stop condi- tion	Condition C--Deceleration condition to listed advisory speed--MPH (or desired speed at condition)				
			10	20	30	40	50
20	175	(4)	(4)				
25	250	(4)	100				
30	325	100	150	100			
35	400	150	200	175			
40	475	225	275	250	175		
45	550	300	350	300	250		
50	625	375	425	400	325	225	
55	700	450	500	475	400	300	
60	775	550	575	550	500	400	300

¹Distances shown are for level roadways. Corrections should be made for grades.

²In urban areas, a supplementary plate underneath the warning sign should be used specifying the distance to the condition if there is an in-between intersection which might confuse the motorist.

³Distance provides for 3-second PIEV, 125 feet Sign Legibility Distance, Braking Distance for Condition B and Comfortable Braking Distance for Condition C as indicated in "A Policy on Geometric Design of Rural Highways," 1965, AASHTO, Figure VII-15B.

⁴No suggested minimum distance provided. At these speeds, sign location depends on physical conditions at site.

If 48-inch signs are used, the legibility distance may be increased to 200 feet. This would allow reducing the above distances by 75 feet.

Typical Signs for the Listed Conditions in Table II-1; Condition A--Merge, Right Lane Ends, etc.; Condition B--Cross Road, Stop Ahead, Signal Ahead, Ped-Xing, etc.; Condition C--Turn, Curve, Divided Road, Hill, Dip, etc.

the driver who is unacquainted with the road, it is very important that care be given to the placement of such signs. Warning signs should provide adequate time for the driver to perceive, identify, decide, and perform any necessary maneuver. This total time to perceive and complete a reaction to a sign is the sum of the times necessary for Perception, Identification/understanding, Emotion/decision-making, and Volition/execution of decision, and is here referred to as the PIEV time. The PIEV time can vary from about 3 seconds for general warning signs to 10 seconds for high driver judgment condition warning signs. Table II-1 lists suggested minimum sign placement distances that may be used for three conditions.

Condition A - A higher driver judgement condition which requires the driver to use extra time in making and executing a decision because of a complex driving situation; i.e., lane changing, passing, or merging. Condition B - a condition in which the driver will likely be required to stop; and Condition C - a condition in which the driver will likely be required to decelerate to a specific speed. The table is provided as an aid for determining warning sign location. The values contained in the table are for guidance purposes and should be applied with engineering judgment. The placement of temporary warning signs used at highway construction and maintenance sites is covered in Part VI of this Manual and the suggested minimum sign placement distances given in Table II-1 may not apply to that group of signs.

Other miscellaneous warning signs that advise of potential hazards not related to a specific location may be installed in the most appropriate locations since they are not covered in Table II-1. These include DEER CROSSING and SOFT SHOULDER signs. Minimum spacing between warning signs with different messages normally should be based on the PIEV times for driver comprehension and reaction.

The effectiveness of the placement of any warning sign should be tested periodically under both day and night conditions. Figure 2-5 (page 2A-16) shows typical installations of standard warning signs.

By Weldon Borton

THE HIGH COST OF REPAIRING PEOPLE

Both Michigan and the nation can be proud of the significant drops in traffic injuries and deaths recorded during 1982. But along with the good news comes some bad: The cost of caring for the injuries resulting from those accidents, especially for those permanently disabled, keeps rising at an alarming rate.

Michigan's traffic death toll last year dropped to 1,393, the lowest in 24 years, 13 percent below 1981. Injuries also fell to 130,061, a 5 percent drop from a year ago. nationally, traffic deaths fell nearly 9 percent; injuries were off 11 percent.

National Safety Council estimates place the total cost of motor vehicle accidents in 1981 at an astounding \$40.6 billion, nearly half the total cost of all mishaps, including those in the home and on the job. Although final figures aren't available for 1982, estimates put that auto accident total last year at nearly \$45 billion. Only 11 years ago, it stood at \$20.2 billion.

Why do these costs, which inevitably show up as ever-higher premiums on your car insurance bill, keep increasing?

According to the experts, the culprits are inflation, lack of cost containment by some medical care facilities, and the two-edge sword of technology, which provides better ways of caring for the injured but always, it seems, with a higher price tag.

Average medical care costs per claim have nearly doubled in the last four years, from \$1,450 in 1978 to \$2,832 in 1982.

Last year, the Auto Club Insurance Association (AAA) paid out \$31,400,000 in medical care costs, up 14 percent from 1981. It also set aside millions more to pay for future treatment of the injured, and much of that increase is due to inflation, according to Rene Monforton, the Association's Bodily Injury Claim manager.

"Even though inflation has cooled in the general economy in the last year, the problem (of inflation) remains in the medical care industry," Monforton said.

For example, the Detroit area Consumer Price Index (CPI) rose 4 percent last year, while the cost of medical care rose 8.6 percent.

Those rates parallel national CPI figures, which show the cost of goods and services rose 6.1 percent in 1982; medical care jumped more than 11 percent.

"Much of those increases are reflected in room rates for Michigan's hospitals," Monforton said.

The price of a bed in Detroit Mt. Carmel Mercy Hospital's intensive care unit (ICU) rose in January to \$853 per day, more than 40 percent above a year ago. At Ford Hospital, an ICU bed now costs \$1,040 daily, 6.7 percent more than a year ago.

The ICU rate in Lansing's Sparrow Hospital is up nearly 20 percent from a year ago, to \$595 a day, while Bay Medical Center in Bay City raised its ICU rates to \$434 daily, nearly 14 percent jump.

Overall, semi-private room rates at hospitals surveyed by the Auto Club Insurance Association also are up, by an average 14 percent in the Detroit area and 13 percent outstate. An those fees do not include drugs, doctors' fees or special rehabilitation procedures.

"Probably the biggest expense of all in automobile accident cases is long-term medical care for severely injured persons," Monforton said.

The Insurance Association at the Auto Club has set aside more than \$140 million to pay for care of 515 of these catastrophic loss cases.

In a half-dozen of those cases, the Association has reserved more than \$1 million for each case to cover care and rehabilitation expenses for the lifetimes of these individuals.

It now costs the Association an average of \$12,500 a month to maintain a patient in a rehabilitation center after an accident, compared with \$10,000 a month only a year ago.

"If a person were in a rehabilitation facility requiring eight hours of practical nursing care daily, that care alone would cost \$34,000 a year. If we add a 5 percent inflation factor and use a 30-year life expectancy,

the cost of that patient's nursing care alone would be \$2.2 million," Monforton said.

Nursing homes also are expanding the range of services to include care for severely injured, such as respirator-dependent persons. "Associated with that better care, costs now can be as much as \$4,600 a month, up almost 81 percent from 1981, for that group of patients," he said.

"Most medical care facilities are actively seeking ways to control rising expenses through advisory boards and determining costs that are reasonable, ordinary and proper," he continued.

"However there are other facilities which maintain patients while not having adequate staff. They must use outside help which can increase the daily room rate and patient charges by as much as \$300," he said.

Because Michigan's No-Fault Law stipulates that persons injured in auto accidents are entitled to unlimited medical benefits, many insurance companies, including the Insurance Association at the Auto Club, are working hard to keep their costs, and member's premiums, from rising any faster.

That was the major reason the Association developed its pioneering medical management unit, which Monforton headed from its inception four years ago.

The unit works closely with doctors, nurses, hospitals and rehabilitation centers to obtain appropriate treatment for the injured member in a humane manner and which results in long-term savings.

One of the unit's initial cases clearly demonstrates how it is both saving money and providing better care for individuals.

"There was an 18-year old who was sustained a brain injury in an auto accident, and, after three months of acute care, it was recommended that he be put in a nursing home. At that time, doctors thought he had permanent brain damages," Monforton said.

"The cost of the nursing home at that time was \$1,500 per month. We went looking for a doctor who specialized in brain injury rehabilitation. We found one in Chicago and, after seeing the patient, he felt he could help. We transferred this boy to Chicago and five months later he went home in a wheelchair.

"He has been totally independent since 1979, lives alone and manages his own affairs. Living alone in society is unquestionably better than in a nursing home and we are saving \$1,500 each month. The cost of the rehabilitation program was \$30,000," he said.

Increasing costs also have been the result of new technologies which help the severely injured, he continued.

"Besides standard wheelchairs, there are those which can recline, ones used for sports and lightweight models. These can cost from \$900 to \$10,500, depending on whether it's a manual or a custom-built electric model," he said.

"Environmental control and communication systems which enable the severely handicapped to live independently can cost as much as \$20,000. Communication devices alone, which allow those who've sustained injuries resulting in the inability to communicate verbally, can cost from \$150 to \$7,000," he said.

Just the modifications to cars or vans to accommodate the handicapped can cost \$22,000. Other expenses could include artificial limbs, speech and occupational therapy, costs of out-patient nursing or medical care and home modifications to allow wheelchair access.

"The only thing which will change the long-term cost is research," Monforton concluded. "When medical professionals are able to reverse or correct the effects of spinal cord injury, brain injury and other severe injuries, we will begin to see a reduction in long-term costs."

Until then, automobile insurance, and ultimately, the policyholder, will continue to absorb the majority of the financial burden for treatment of those horrendous injuries.

By Bill Semion
Associate Editor, Michigan Living Magazine

MERGER OF THE CITY OF BATTLE CREEK AND BATTLE CREEK TOWNSHIP/PART 1

I. INTRODUCTION

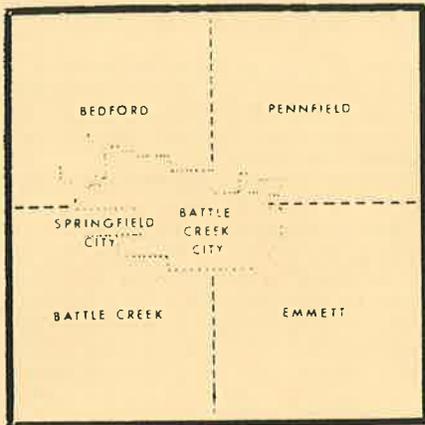
This will be the first of a series of articles regarding the recent merger of the City of Battle Creek and Battle Creek Township. The purpose of this series will be to answer the following questions:

1. How and why did the merger proposal develop?
2. What occurred to make the merger a reality?
3. What will be the impact of the merger on the metropolitan area?
4. What will be the impact of the merger on the transportation system of the metropolitan area?

The Battle Creek Metropolitan Area was comprised of the following six (6) units of government (Figure 1):

GOVERNMENT	POPULATION
Battle Creek	35,724
Battle Creek Township	20,615
Bedford Township	10,157
Emmett Township	11,155
Pennfield Township	8,743
Springfield	5,917

FIGURE 1



AREA MAP

Courtesy of the Battle Creek Area Transportation Study

Unification attempts within the Battle Creek Metropolitan Area can be traced as far back as 1926. Although a number of minor annexation efforts were successful, the major ones were not. Attempts to annex all or major parts of Battle Creek Township have repeatedly failed. In the years 1928, 1936, and 1952 attempts to annex the urbanized area of Battle Creek Township were made. In 1961, an effort was made to annex the entire township. Two (2) attempts were made at unification in 1966. In August of that year, there was a vote to unify the two (2) cities and the four (4) townships; in November of that year, there was a vote to unify the two (2) cities and Battle Creek Township. The last recorded attempt to annex Battle Creek Township occurred in 1970.

In 1982, a new force entered the local political arena -- the Kellogg Company. It is the author's opinion that the Kellogg Company probably would have taken a more active role earlier, except for its preoccupation with its Federal Trade Commission shared-monopoly suit. This lawsuit, which demanded con-

siderable time of the upper level executive staff for a 10 year period was dismissed in January, 1982. The Kellogg Company attempt to consolidate the units of government was aimed at creating a healthier and more dynamic city in which its corporate headquarters would be located. Due to the existing governmental structure in the metropolitan area, it was the impression of the Kellogg Company that the existing economic and social problems of the area would remain unsolved. This was viewed as undesirable, as it affected recruitment of talented professional and technical people for its staff.

In 1982, a corporate decision proved to be the catalyst for the unification of the two (2) largest units of government. As recently as the late 1970's, the Kellogg Company had intended to construct its headquarters building (estimated to cost \$30 million in 1982) for its corporate and U.S. Food Products Division staffs on seven (7) acres of land located in the Central Business District (C.B.D.) of Battle Creek. By 1982, this decision was being reconsidered. It was decided that the location of the corporate headquarters would be selected by May 1, 1983. The possible locations being considered were: 1) the site in the C.B.D., 2) elsewhere in the metropolitan area, and 3) another city. The consequences of the Kellogg Company relocating its headquarters outside the metropolitan area included the loss of 700 executive and support staff positions. Outside economists estimated in June, 1982 that the loss of these positions could result in the loss of between 500 and 3,000 support/service jobs in the immediate area.

II. THE KELLOGG COMPANY PROPOSAL

On May 27, 1982, Kellogg Company Chairman, William E. LaMothe made public the "Merger of Equals" proposal. In his address, he noted the inability of the existing local units of government, due to their fragmentation, to solve the pressing economic and social problems of the area. As a result of this conclusion, he could not recommend to the Board of Directors that the corporate headquarters be constructed within the Battle Creek Metropolitan Area. In his statement, Mr. LaMothe noted that the "Merger of Equals" proposal would be looked upon as blackmail by many local residents. However, in defense of the proposal, he noted that the Kellogg Company was giving the community an opportunity to influence a major corporate decision by its actions.

The "Merger of Equals" proposal was prepared by two (2) Michigan law firms at the request of the Kellogg Company. In general, the City of Battle Creek would, according to the proposal, annex Battle Creek Township utilizing a procedure reflecting the "Merger of Equals" concept. To achieve this, the existing seven (7) member City Commission would be expanded to 14 members to accommodate the seven (7) member Township Board of Trustees (a City Charter amendment

BATTLE CREEK *Cont.*

would be required). The seven (7) new Commission positions would be filled by the seven (7) former Township Trustees for a two (2) year period. Residents of the City would have two (2) opportunities to vote on this issue (the August 10, 1982 Charter Amendment vote, and the November 2, 1982 Referendum vote). The township residents would have one (1) opportunity to vote on the issue (the November 2nd Referendum vote). Also included in the "Merger of Equals" proposal was a statement that the League of Women Voters of the Battle Creek Area would have the University of Michigan study the "Merger of Equals" concept and provide information regarding the impact of the merger on services and taxes to the residents of the city and the township.

Mr. LaMothe's May 27th presentation included a proposed schedule of events. The following is an abbreviated version of that schedule:

1. May 27th -- the Kellogg Company publicly announces its proposal;
2. By June 4th -- Battle Creek Township adopts a resolution requesting that the City of Battle Creek begin the merger process; and the City of Battle Creek adopts a resolution proposing to annex the township and amend the City Charter.
3. June 5th -- Battle Creek files its resolution with the State Boundary Commission;
4. June 15th -- the State Boundary Commission certifies the resolution and sets a public hearing for August 15, 1982;
5. August 10th -- the city residents vote on the Charter Amendment;
6. August 15th -- the State Boundary Commission public hearing is held;
7. October 1st -- the State Boundary Commission orders that the annexation become effective on January 1, 1983, unless defeated in the November 2nd Referendum Election;
8. November 2nd -- the residents of the city and township vote on the annexation;
9. January 1st -- the merger takes effect unless defeated in the November 2nd vote.

The actual timetable loosely approximated this suggested one.

III. THE COMMUNITY REACTION TO THE MERGER OF EQUALS PROPOSAL

As a group, the existing seven (7) City Commissioners looked upon the proposal quite favorably. A portion of their counterparts in the township were at least initially, generally less enthusiastic. This was partially due to Mr. LaMothe not saying that the Kellogg Company corporate headquarters would definitely remain in the city if the merger was approved. (The Kellogg Company later stated that the corporate headquarters would remain in Battle Creek if the merger was approved.)

The responses of the residents of the city and the township to the proposal were quite varied. However, most people recognized the serious economic consequences of the potential corporate headquarters relocation out of the metropolitan area. In order to make the reader aware of the local economic

situation at the time, the following facts are offered:

1. In May, 1982, the local unemployment level was 15.8% of the work force;
2. Prior to the November 2nd vote, the local unemployment level peaked at 17.8% of the work force;
3. The work forces at both the Clark Equipment Company and the Eaton Corporation were already greatly reduced and plant closings were a strong possibility.

As a group, the residents of the city generally expressed positive feelings toward the merger even though they were put into what some felt was an ultimatum position. Reasons for this included:

1. A belief that such an achievement would stimulate progress;
2. A concern for the local economy;
3. A decrease in property taxes; and
4. A lack of change in services to be provided.

The residents of the township were greatly divided in their feelings on the issue. Although they were equally concerned with their City counterparts about community progress and the local economy, they would be paying higher property and income taxes. In addition, they were very concerned about a perceived deterioration of services in the Township area.

The officials and residents of the City of Battle Creek and Battle Creek Township were not the only ones concerned about the "Merger of Equals" proposal. As a group, the officials of Springfield and the three (3) other townships within the metropolitan area were disappointed that they were not included in the early meetings with the Kellogg Company officials. Many of these officials felt that significant progress had been made consolidating services by means of the Area Metropolitan Services Agency (AMSA) and that additional progress would be made in the near future. Many of the residents of the metropolitan area who were not eligible to vote on the merger issue were also disappointed. This group believed that the relocation of the Kellogg Company corporate headquarters would significantly affect their lives, yet they were unable to participate in the decision-making process.
By Kenneth A. Shackman

FORD BOASTS TOPAZ HAS 5 MPH BUMPERS

While a few auto makers rushed to weaken their bumpers when NHTSA degraded the standard, Ford Motor Co. is boasting of its 5 mph bumpers on the new Mercury Topaz.

Ford leads a list of 33 engineering features of its new model in an advertising brochure with an item on the car being equipped with 5 mph front and rear bumper systems. Also, in a nationwide advertising campaign, Ford points out that the Topaz features 5 mph bumpers "that can withstand twice the impact speed that's required by the government."

Reprinted from Status Report.

TEMPORARY TRAFFIC CONTROL, THE GROWTH OF AN INDUSTRY

Although it's not known when we first began to use channelizing devices to guide traffic around construction zones, probably the first device used was the carpenters sawhorse. This evolved into what we now call a Type I or Type II barricade which, by the 1940's, was used extensively. Around the mid 40's we began to use kerosene or diesel fuel torches (flare pots) to warn drivers and pedestrians at night of hazardous conditions caused by construction.

About 1948 the first electric flasher light was used in California. This light used a mechanical flasher unit, borrowed from the electric fence charger used by farmers, and a neon tube. The device was not very reliable and, in wet weather, could give you quite a shock if you stood very close to it.

About this same time some people saw a real potential in this product and the first barricade and light rental companies were started in California. This was the birth of a brand new industry which has grown and flourished since that time.

About 1958 the development of the transistor circuit allowed the replacement of the old neon tube with an incandescent bulb, and the industry started matching circuit components to provide the first truly reliable light. It wasn't long before the inexpensive and durable plastic light case was introduced.

From the late 1940's until the early 60's, the barricade and light rental industry had grown significantly and companies were appearing throughout the Midwest and East. In 1966 a few of these barricade rental operators got together in Chicago to discuss ways in which they could cooperate to upgrade the industry and improve their own business.

Out of this grew a somewhat informal association of barricade rental companies which in 1967 became the Rental Division of the American Traffic Safety Control Devices Association. In 1969 it was decided to form the American Traffic Services Association (ATSA) and the first general meeting was held in Chicago in the spring of 1970. The first ATSA Convention was held in New Orleans in 1971.

In the fall of 1972 ATSA became affiliated with American Road Builders Association, and in the next eight years the membership grew from 35 to over 150 companies. During that time the activities also expanded to encompass all areas of the temporary traffic control industry.

The continued growth and greater sophistication of the traffic control industry, and the need for more trade association services, soon made it imperative that the ATSA members be represented by a full-time staff. In the fall of 1980 the formal affiliation with ARTBA was discontinued and a separate ATSA office was set up in Stafford, Virginia, just outside of the Washington, D.C. area. While the primary thrust of ATSA activities continues to be in the area of work zone traffic control, in early 1981 the membership eligibility was opened to all areas of traffic control and safety. ATSA is now the only National Association which represents the entire traffic control industry.

The primary objective of ATSA is to provide the

traveling public with the ultimate in safety and convenience. In this connection ATSA strives to furnish its members with the means to accomplish this end in the form of adequate specifications, educational programs, technical committee activities, certification, publications, staff services, meetings, conventions, and trade shows.

Recognizing the need for training the people who supervise the installation, operation, maintenance and servicing of devices, in 1978 ATSA developed a 3-day, 20-hour training program for Traffic Control Supervisors. This very intensive training course concentrates on practical concepts and techniques for installing, monitoring and maintaining work site traffic control devices. Since 1978 the course has been successfully completed by about 500 people.

At the same time, ATSA realized that there was a need to recognize those persons who have demonstrated their competence in performing these specialized traffic control services. Consequently, the "Work Site Traffic Supervisors Certification Program" was developed. Since 1978 291 persons from 87 companies in 36 states have been certified. Requirements for certification include passing an examination, meeting experience requirements and completion of the training course. The certification program is a joint effort of ATSA, ITE and FHWA; and the Certification Board, which approves all applicants, has representation from all three of these organizations.

Last year ATSA published the "ATSA Guide for Work Area Traffic Control" which is a pocket-sized handbook illustrating typical traffic control setups for various work zone situations. The 48-page, full-color book contains 27 illustrations and is in complete conformance with the MUTCD. The Guide is already in its second printing of 10,000.

The Annual ATSA Trade Show has grown over the years to become the largest exhibit of traffic control devices presented in this country. The next show "Traffic Expo 84" will be held March 14-17, 1984, in New Orleans and will include over 12,000 square feet of exhibits.

ATSA publishes a monthly newsletter "The ATSA Flash" for its members and a quarterly publication called the "ATSA Signal" which goes to over 1500 public officials throughout the U.S., including many Michigan ITE members. The "Signal" is an excellent publication which gives some good information on the latest specification changes, research, new products, etc. in the area of traffic control in construction areas. If you don't already receive the ATSA "Signal" it is free to public officials. Simply write to ATSA headquarters and ask to be added to the mailing list. The address is American Traffic Services Association, Stafford Executive Building, Rt. 4-Box 18, Stafford, Virginia 22554.

It is estimated that the 180 plus ATSA member companies provide over 80 percent of the temporary traffic control devices rented by private contractors and public agencies throughout the U.S. ATSA members in Michigan include Bemis and Son, Marketing Displays, Michigan Barricading, Plastic Safety Systems, V.I.P. Products, and Visi-Flash of Michigan, Inc.

By Robert M. Garrett, Executive Director ATSA

1983 MEETING SCHEDULE

<u>Date</u>	<u>Location</u>	<u>Host</u>	<u>Event</u>
September 29-30	Dearborn	Joe Marson	District III Meeting
November 3	Frankenmuth	Roger Walther	Luncheon meeting
December 1	Engineering Society of Detroit	Cool/Richardson	Annual Meeting/ Tech. Session

FHWA DEMONSTRATES NEW PAVEMENT MARKING MATERIAL

On April 20 this year, the Federal Highway Administration (FHWA) launched Demonstration Project No. 60 to promote the benefits and applications of Epoxy Thermoplastic--commonly known as ETP or Epoflex--a versatile, durable, new road marking material jointly developed by the Southwest Research Institute (SWRI) of San Antonio, TX, and FHWA research staff.

ETP is the latest breakthrough in thermoplastic pavement marking material technology. Similar in some respects to both traffic paint and other marking materials, ETP offers an unusual combination of low cost, durability, low profile, and application versatility. It contains no toxic solvents and offers excellent adhesion and visibility over long periods of time. A generic material consisting of two epoxy resins, pigment, filler and glass beads, it has been thoroughly tested and is now commercially available.

Like traffic paint, ETP can be sprayed, and both are deposited in a very thin layer--15 to 20 mils for ETP, 9 mils for paint, once dried--making both materials suitable for use in snowplow regions. Here the similarities end. Unlike traffic paint, ETP is a 100% solid material which contains no solvents or other volatile components. And, while traffic paint may not survive the winter, one application of ETP has successfully survived two Minnesota winters without need of replacement or touch-up work.

ETP is a durable pavement marking substance which exhibits longevity. Sometimes confused with epoxy paints, it is actually quite different. While both materials employ epoxy resins, the resins systems differ in that ETP is manufactured in a homogeneous block, although it must be heated to 450°F prior to application. This means it can be applied to the road using equipment available to contractors and some governmental agencies for other hot-applied thermoplastic material with a few modifications.

ETP is also fast drying. It dries so quickly--within five to ten seconds--that in one test a car following closely behind the pavement marking vehicle, running over the freshly laid stripes, left no streaks whatsoever. This means that contractors and government agencies can save money by eliminating the use of cones, temporary road signs, and backup vehicles for diverting traffic during application. In comparison, most traffic paints dry in 20 seconds to 30 minutes; epoxy striping compounds from 60 seconds to 30 minutes; and other thermoplastic materials from one to 15 minutes. ETP can be applied at temperatures down to freezing.

The demonstration for each state--normally one demonstration per state--will last two to three days once the truck and demonstration team arrive. Following a preliminary check of the road to be tested, a presentation on ETP will be given with a question and answer period to ascertain questions state and municipal officials might have. The ETP equipment will then be demonstrated.

The Michigan Department of Transportation (MDOT) will be hosts of the FHWA demonstration in October 1983. MDOT will be using the eastbound roadway of I-496 freeway from I-96, through Lansing, to Trowbridge Road as a test site. The westbound roadway has been lined with STM 108 Epoxy marking materials and regular fast dry paint to complete the testing. In addition, four other pavement marking products were applied to the CD roadway at Cedar/Larch Streets (Prismo, Stamark, Cata-Tile, and Hot-applied Thermoplastic). FHWA and MDOT hope to adopt the use of ETP as a superior pavement marking material. For demonstration information, write or call John J. Kanilopoolos, Michigan Department of Transportation, Traffic and Safety Division, Reflective Systems Unit, 425 West Ottawa Street, Lansing, Michigan 48933, phone (517) 373-2320.

Reprinted in part from Better Roads

HEAVY TRUCKS CAUSE STATE-FEDERAL BATTLES

Despite FHWA's plea for tolerance and patience on and after April 6, when new truck sizes and weights became legal all across the country on Interstates and designated Primary routes, a number of states went to war with the federal government over the issue. Many expected truckers to push rapidly for access to more highway miles for the bigger rigs once they were declared legal under the Surface Transportation Assistance Act of 1982. But actually, it was the states which initiated most litigation opposing the federal law on grounds of safety.

At least four states have obtained injunctions to prevent the big vehicles from utilizing more highway miles--Connecticut, Vermont, Pennsylvania and Georgia. Others have taken a wait-and-see stance. Meanwhile, USDOT is moving ahead with two studies relating to the situation, one determining the long-range safety effects of the introduction of larger vehicles into the traffic stream, and another developing a report to Congress on alternates to the heavy truck use tax structure which will go into effect in 1984 and later.

Both reports were mandated by the STAA. Researchers are also seeking ways and means of improving collection of the taxes and stiffer enforcement. State motor vehicle authorities are already concerned about the greater polarization of traffic on high-speed arteries, namely the friction between smaller passenger cars and larger trucks.

Reprinted from Highways and Heavy Construction

SADD STATISTICS

Facts About Teenage Drunk Driving

- * In 1980, teenage drivers were involved in 1 out of every 5 crashes that were fatal to those 15-19 years old.
- * Almost 60 percent of fatally injured teenage drivers had alcohol in their blood systems prior to their crash, with 43 percent at legally intoxicating levels.
- * Fourteen teenagers die each day in alcohol related crashes.
- * An additional 360 teenagers are injured each day in alcohol related crashes.
- * Alcohol involvement in fatal teenage collisions is at least three times greater at night (8 p.m. - 4 p.m.) than it is during the day (4 a.m. - 8 p.m.)
- * Although teenagers comprise only 8 percent of the population and account for only 6 percent of the vehicle miles travelled in this country, they add up to at least 15 percent of all drunk drivers in collisions.
- * Of 330 children born today in the U.S. (about the size of a small grade school), one will die and four will sustain serious or crippling injuries in an alcohol related crash before they reach the age of 24.
- * The Surgeon General has reported that life expectancy has improved in the U.S. over the past 75 years for every age group except the 15-24 year old American, whose death rate is higher today than it was 20 years ago. The leading cause of death for this age group is drunk driving.

US Department of Transportation
National Highway Traffic Safety Administration

AUTO SAFETY-FROM HOTLINE TO VEHICLE RECALL

One of the U.S. DOT's most important activities is the identification of safety defects in vehicles or vehicle equipment. Since NHTSA was created in 1966 and given responsibility for motor vehicle safety, more than 99.4 million vehicles have been recalled by manufacturers to correct safety defects through the end of 1982.

Essential to NHTSA's defect investigation program are the many consumer complaints and reports the agency receives. These reports and letters are used to help identify safety problems for analysis, investigation and possible recall.

More than half of these consumer reports come in on the toll-free Auto Safety Hotline which was started in 1975 to supply recall information and receive motor vehicle safety defect reports. In 1982, the Hotline was expanded to provide consumers with information about fuel economy ratings, crash test results, tire safety and tire care, odometer tampering, child safety seats and drunk driving.

The Hotline provides Vehicle Owner Questionnaires to persons calling. When the completed questionnaire is received by the agency, the data is computerized and used to help identify trends of potential safety-related defects. A copy of each questionnaire is sent to the vehicle manufacturer enabling them to resolve the consumer's problem. Many auto owners have received assistance as a result of these referrals.

The Auto Safety Hotline also provides consumers with safety-related recall information. A printed copy containing a summary of the recall(s) on a particular make, model, and model year vehicle is available. With this data the caller can visit an authorized dealer to determine if any of the recall items pertain to his or her vehicle. This can be especially useful to used car buyers who want to be sure any recall corrections have been made. In 1982, over 100,000 calls were received requesting recall information.

Although NHTSA's authority is primarily in the area of safety, many consumers report problems related to warranties, service, sales, etc. As a public service, the Hotline operators have reference materials to quickly refer consumers to the responsible organizations.

The Hotline numbers are 800-424-9393 and 800-424-9153. The operating hours are 8:00 to 4:00 EST, Monday through Friday. During other hours callers may leave their inquiry with an automatic telephone answering service. There is a nationwide toll-free Teletym (TTY) number for the hearing impaired and a Spanish-speaking operator is available during normal operating hours.

Most safety recalls are initiated by manufacturers entirely on their own in response to applicable laws and regulations. Most recalls are voluntary even when NHTSA is involved, and very few recalls have been "ordered" by NHTSA.

The identification of a safety-related defect by NHTSA is basically a four step process. First, information is gathered, primarily from consumer/owner letters and from the NHTSA Hotline. Each letter is reviewed and the safety defect information is then computerized for easy analysis and quick retrieval.

When a trend is identified, the second step is the initiation of either an inquiry or an engineering analysis. During an inquiry, a manufacturer is contacted for information related to the defect. This information is used to decide whether an engineering analysis should be initiated.

An engineering analysis is conducted to identify engineering defects. The manufacturer is contacted and requested to supply production information, technical support data and complaints. Complaint data is further analyzed and engineering studies and tests may be conducted.

After an engineering analysis, the third step is opening a formal defect investigation. The manufacturer is again notified. In addition, the public is also notified and requested to contact NHTSA to supply information. All previously collected information is reviewed, confirmed and supplemented. Interviews may be conducted with accident victims and surveys may be taken to define the consequences of the safety defect. Further studies and vehicle testing may also be conducted.

In the fourth step, a recommendation is made whether to close the investigation or to proceed with an initial determination of a defect. If the manufacturer agrees to recall at this point, the investigation process ends; if not, an initial determination of safety defect is made, a letter so stating is sent to the manufacturer, and a public hearing is scheduled.

The purpose of the public hearing is to allow the manufacturer and the public to present views and arguments concerning the alleged safety defect. Even at this stage, after the initial determination is made, the manufacturer may still agree to recall. If a hearing is held, all results are reviewed prior to the NHTSA Administrator's decision to either close the case or to issue a final defect determination and order a recall.

In 1982, NHTSA initiated 36 inquiries, 50 engineering analyses, and 7 defect investigations. Manufacturers voluntarily initiated 135 recall actions involving 1,910,000 vehicles. There were no NHTSA ordered recalls in 1982.

DOT TO TEST AIR BAG KITS ON POLICE CARS

The Department of Transportation has signed a contract for the design and production of an air bag retrofit kit for installation in police cars.

The Department's National Highway Traffic Safety Administration has issued a contract to the Romeo-Kojyo Co., Inc. of Tempe, Arizona, to build up to 500 driver-side air bag restraints.

DOT Secretary Elizabeth Dole said the contract represents a "key step in our effort to test the feasibility of retrofitting air bags into existing cars."

"We plan to assist several state police departments in retrofitting their cars with air bags," she said. "This is part of our overall effort to promote the use of air bags in government cars in order to test their effectiveness."

DOT has also entered into an agreement with the General Services Administration to purchase 5000 1985 compact cars equipped with driver-side air bags. The goal of this project is to make available to large fleet buyers--and eventually to the public--an affordable domestic car equipped with an air bag.

Reprinted from Engineering Times

FORD WINS APPROVAL OF SECURIFLEX TESTS

The Ford Motor Company has received a government waiver to go forward with a test fleet of 2,500 cars equipped with experimental nonlacerative windshields.

In a June 6 letter to Diane Steed, acting head of the National Highway Traffic Safety Administration (NHTSA), Roger Maugh, director of Ford's automotive safety office, said the windshields were manufactured by Ford and are being laminated with Securiflex, an inner coating of polyurethane. Because the windshield does not meet all of NHTSA's requirements under Federal Motor Vehicle Safety Standard 205, a special exemption was granted June 13 to allow the windshields to be installed.

"The purpose of this fleet test is to gain manufacturing and field experience," said Maugh. "We need more data concerning in-plant handling, vehicle assembly, mirror attachment, haze and scratching resistance, lamination durability, and performance in accidents."

Maugh said the windshields will be installed in 1984 model Ford vehicles. The windshields have already been shipped to Saint-Gobain Vitrage, a French manufacturer, for the Securiflex coating.

Reprinted from Status Report

SWAREFLEX REFLECTOR

A sophisticated Austrian roadside reflector has practically eliminated night-time collisions between large game, such as deer and elk, and oncoming motorists. In use on a test basis in various states, the reflectors are unique in that they bounce headlight beams off the road at sharp angles unnoticed by the motorist but perceived by game as a threatening and fast moving string of bright red lights flashing in sequence. The Swareflex reflector system was introduced to the States a couple of years ago after successful applications in Austria where it reduced deer kills by an average of 80% at a fraction of the cost of constructing roadside fences.

By the end of 1981 more than 300,000 Swareflex units were installed on some 3,000 kilometers of European highways.

The Austrian experience appears to be matched in the States where about 5,000 of the units, which cost \$10 each, have been mounted along varied sections of Interstate and State highways. The Minnesota Department of Transportation recently announced that hundreds of the reflectors installed along a heavily wooded one mile stretch of I-94 near Sauk Centre had resulted in a drop in the number of deer killed in collisions with motorists in September 1981 from 36 to 6. Equipping a mile of highway with the reflectors cost \$4,500 as against \$50,000 for construction of a deer fence.

Estimates of the number of deer killed by vehicles on U.S. roads range between 160,000 and 400,000 annually with property damage calculated at \$400 million. With the trend toward smaller cars continuing, the likelihood of greater property damage and personal injury increases. The "pulsating light fences" from Austria that serve as a visual barrier for deer and other game whenever headlights are in use has proved that they can reduce these collisions dramatically. The Swareflex reflectors are now available in the States and the U.S. licensee will be pleased to provide samples and documentation on numerous successful tests. Write or call the Council for International Urban Liaison for details.

Reprint from SSITE

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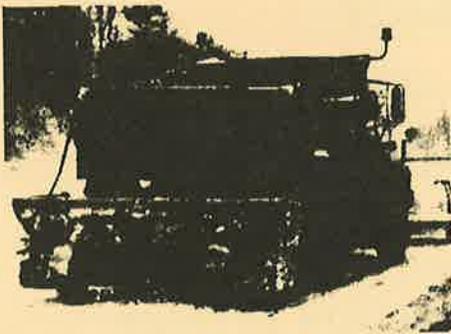
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FRONTAGE ROAD YIELD POLICY AT FREEWAY RAMPS IS EVALUATED BY TRAFFIC RESEARCHERS

Researchers W. R. Stockton, S. H. Richards, and J. A. Nordstrom have evaluated the 1979 Texas law (V. C. S., Sec. 73 A) which requires frontage road traffic to yield right-of-way to freeway ramp traffic.

The law was enacted to encourage statewide uniformity in right-of-way assignment at frontage road-ramp intersections. It affected traffic control at approximately 2,700 ramps in Texas and cost nearly \$900,000 to implement.

The evaluation revealed that the new law has encouraged uniformity, but also has resulted in safety and operational problems at some locations. It also concluded that the new law violates driver expectancies in certain instances, particularly at "buttonhook" ramps on two-way frontage roads.

Based on the research findings, the researchers recommended that the law be revised. It is suggested that ramps on two-way frontage roads be excluded from the current policy of mandatory frontage road yield.

The study is reported in Research Report 288-1, "An Evaluation of the 1979 Texas Law (V. C. S. Sec. 73.A) Which Requires Frontage Road Traffic to Yield at Freeway Ramps."

The report emanates from a major research endeavor on freeway ramp and frontage road operation which is being sponsored by the State Department of Highways and Public Transportation and the Federal Highway Administration. Reprint from Texas Transportation Researcher

CENTER OF SEMCOG REGION CHANGED SLIGHTLY

Despite continued suburbanization of Southeast Michigan during the 1970's the seven-county region's population center moved only slightly, remaining in northwest Detroit, according to the DataCenter of the Southeast Michigan Council of Governments (SEMCOG).

Figures from the 1980 U.S. Census established the population center at the intersection of 7 Mile Road and Greenfield, a shift of about one mile from the 1970 center, at 6 Mile Road and Schaefer.

The region's geographical center is located at the intersection of 12 Mile and Orchard Lake Roads, in Farmington Hills, according to SEMCOG's DataCenter.

Neither the direction nor distance of that population center shift was surprising to John Amberger, Executive Director of SEMCOG. He points out that "There has been, as we all know, a steady development around the entire urban fringe of our region. But, development slowed considerably during the decade's final few years and we did not expect a population center shift much different than these results," Amberger concluded.

During the 1970's the seven-county region's total population diminished slightly, from 4,736,008 in 1970 to 4,682,782 in 1980.

NEW LIGHTS FOR CYCLISTS

The National Highway Traffic Safety Administration (NHTSA), in a move to provide a greater margin of safety for the nation's motorcyclists, has agreed to allow the installation of pulsating headlamps as an option on some cycles.

The new lights, not presently permitted, move rapidly from high to low beam with the purpose of attracting attention to the cyclist. NHTSA figures show that approximately 75% of motorcycle accidents occur during daylight hours.

Reprinted from TSA Newsletter

In major metropolitan areas of Japan nine out of ten people who own cars leave them at home to commute to work.

DRUNKEN DRIVERS BRANDED

FORT BEND COUNTY, Texas - A bumper sticker on Joe Gutowsky's car tells motorists he's been convicted of drunken driving.

"The owner of this vehicle is on probation in Ft. Bend County for driving while intoxicated," it reads in red, white and blue.

The 60-cent sticker also asks motorists to report Gutowsky if they see "unsafe driving." A phone number is included.

"I was trying to think of some way to call attention to certain DWI offenders, the most serious type who aren't sent to jail," says Fort Bend County Judge Thomas Culver III.

County figures report 572 DWI arrests in 1982. There have been 465 in 1983.

DWIs are up because Houston is spilling into the county, Culver says.

He had 250 stickers printed. If a driver removes one, probation may be revoked.

Prosecutor William Meitzen likes Culver's bumper stickers. "It's kind of like putting a mark on Cain's head, but anything that might deter a DWI is a good idea," Meitzen says. "I'd be embarrassed to wear one."

By Janet Pesce

Special for USA TODAY

WAIT A SECOND!

An extra "leap" second was inserted in the nation's official clock between June and July this year, so that timekeeping can be kept in tune with the rotation of the Earth.

According to the U.S. Naval Observatory, the U.S. timekeeper, the "leap" second was added to the last minute of June--12:59 p.m. Greenwich time (7:59 p.m. EDT)--making the last minute 61 seconds long.

More than 21,000 deer were hit by vehicles on Michigan roads and highways last year, costing an average of \$980 per accident.



THE SMALLER THE BETTER

The first really large computer, ENIAC, was assembled in 1948. It was the size of an average room with 8000 overheating vacuum tubes and was built for \$3 million 1948 dollars. A comparable machine build today would be the size of a typewriter and cost \$300.

There are more than 200,000 traffic signals on the 9,500-mile state highway system in Michigan. Each signal costs about \$20,000 to install, and replacement of the entire signal system would run more than \$80 million.

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LOCAL GOVERNMENT ENGINEER NAMED

Gary P. McCarthy, Grand Ledge, has been named chief engineer of the Michigan Department of Transportation's local government division. He succeeds Richard Mastin, who retired in January.

In his new position, McCarthy is responsible for the administration of all federal highway funds for the improvement of county and city roads, streets and bridges. He also is responsible for the administration of the distribution of all Michigan transportation funds to 83 county road commissions and 532 cities and villages.

Before assuming his new post, McCarthy had been chief federal aid engineer with the local government division since 1977.

He joined the department in 1962, working in various engineering positions.

In earlier years, he worked for engineering consultants and contractors throughout the state.

A native of Mackinaw City, he earned a degree in civil engineering from the University of New Mexico in 1959. He is a registered professional engineer.

McCarthy resides in Grand Ledge with his wife, Connie. They have two sons, Chris and Lee, who are students at Michigan State University.

SOUNDOFF

The Detroit Free Press often asks its readers to phone in a yes or no answer to a recent news item. Recently, they addressed the safety belt issue with the following very positive results:

SOUND OFF/Should seat belt use be mandatory?

State Rep. David Hollister, D-Lansing, has reintroduced a bill that would make Michigan the first state in the country to require the front-seat occupants of an auto to wear seat belts. His similar bill did not pass last year. Do you think the use of seat belts should be mandatory?

YES, 60 percent: "I feel undressed if I don't buckle up" ... "People who don't wear seat belts violate my freedom by causing higher insurance rates with their injuries" ... "As a police accident investigator, I've seen for myself how deaths are avoided by the use of seat belts."

NO, 40 percent: "The law will just give cops another reason to stop us" ... "Next, they'll make us wear seat belts to mow the lawn" ... "I'm terrified of being strapped into a car" ... "They don't force people to take medicine when they're sick."

Sound off is a non-scientific, reader opinion feature. These percentages are based on 1,1760 calls.

YOUTH NEGLIGENCE COST PARENTS ONE MILLION DOLLARS

In California, an Alameda County jury ruled that the parents of Bradley Nelson were legally responsible for their son's negligence in a drunk driving crash that killed one and permanently injured another.

Although the youth was 20 years old at the time of the crash, the parents were liable because:

- * Young Bradley lived at home
- * The parents helped Bradley purchase a souped-up automobile capable of reaching up to 140 mph
- * They were fully cognizant of the youth's extensive record of reckless driving - he participated in speed contests, would try to outrun police cars, and had prior arrests for driving under the influence and reckless driving
- * The parents purchased gas for the youth's car
- * They served him wine with dinner on the evening of the fatal crash, knowing he would be driving later

The victims were driving home from a family gathering. Gary Juhl was killed instantly and his sister, Jenny Lee Stone, suffered major hip and head injuries.

In addition to the parents being liable, the youth was also held responsible. The jury agreed that the youth should pay an additional \$85,000 in damages to Jenny Lee Stone.

This case, though unusual, should serve as a reminder to parents that they may be held responsible for the negligent acts of their children, regardless of their ages.

PEOPLE in the news

SWANSON FORMS NEW COMPANY

Ed Swanson, a member of ITE since 1967, has recently formed the company of Ed Swanson & Associates based in Grand Rapids, Michigan.

Swanson has a broad base of experience in the transportation field, most recently he worked for the City of Grand Rapids. He was a project director for implementation of two master control systems and other traffic and parking related projects. He currently serves as secretary of IMPC.

Other notable accomplishments include membership on committees for MMV&CD and the FHA, chairing a Michigan ITE funding committee, and has served on the Board of Directors for the Missouri Valley Section of ITE.

The new firm provides a broad range of professional traffic and parking services. For further information, contact: Ed Swanson, 2805 Coit, N.E., Grand Rapids, Michigan, 49505 Phone (616) 363-8181.

We wish Ed well in his new endeavor.

WALKER FOUND HIDING IN FLORIDA

Sources close to the Michiganite have recently revealed that Don Walker, ex-3M salesman from Michigan, is alive and well living in the Fort Lauderdale area of Florida. He apparently sold enough material here to retire at an early age. To keep himself busy he is working for Dave Smith and Company, which handles a full range of traffic supplies.

IN MEMORIAM

Elliot Aitchison, Traffic Engineer for the City of Detroit, passed away suddenly on September 4, 1983.

Walley Reisch, sales representative for 3M Company recently passed away after a long illness. Both were active in the Michigan Section and will be missed.

Detroit and Michigan lost an important and dedicated civic leader and the Traffic Safety Association lost a highly valued friend and supporter when Ross Roy died Tuesday, August 16, 1983. Members of the Board and the staff who have worked with Ross on traffic matters close to his heart over the last 30 years will sorely miss his guiding hand and encouraging assistance. He had been a member since 1953, a Trustee since 1958 and was a Chairman of the TSA Board of Trustees since 1973. His successor on the Board, Donald A. Lindow, Chairman of Michigan Mutual, presented Ross with a plaque at the May 5, 1983 Annual Meeting of the Association, which named him Chairman Emeritus for his dedicated service as a member and chairman of both the TSA of Detroit and the TSA of Michigan and for his unstinting support and financial assistance, as well as his personal involvement in the improvement of Detroit's traffic flow and the recognition of our many Good Drivers over the years.
by Howard Cox

WHAT PEOPLE WILL SAY

Shown below is a series of actual statements provided to insurance companies by policy holders involved in traffic accidents. As you read these statements, take note of the value of each driver's narrative in describing factors or causal relationships which the professional may tend to misunderstand or overlook. These quotes were published five years ago (Toronto Sunday, July 26, 1977), but the lessons they demonstrate with respect to the driver's perspective are still applicable today.

Coming home, I drove into the wrong house and collided with a tree I don't have.

The other car collided with mine without giving warning of its intentions.

I thought my window was down, but found out it was up when I put my hand through it.

I collided with a stationary truck coming the other way.

A truck backed through my windshield into my wife's face.

The guy was all over the road. I had to swerve a number of times before I hit him.

I pulled away from the side of the road, glanced at my mother-in-law and headed over the embankment.

In my attempt to kill a fly, I drove into a telephone pole.

I have been shopping for plants all day, and was on my way home. As I reached an intersection, a hedge sprang up obscuring my vision. I did not see the other car.

I had been driving my car for four years when I fell asleep at the wheel and had an accident.

I was on my way to the doctor's with rear end trouble when my universal joint gave way, causing me to have an accident.

As I approached the intersection, a stop sign suddenly appeared in a place where no stop sign had ever appeared before. I was unable to stop in time to avoid the accident.

To avoid hitting the bumper of the car in front, I struck the pedestrian.

An invisible car came out of nowhere, struck my vehicle, and vanished.

My car was legally parked as I backed into the other vehicle.

I told the police that I was not injured, but on removing my hat, I found that I had a skull fracture.

I was sure that the old fellow would never make it to the other side of the roadway when I struck him.

The pedestrian had no idea what direction to go, so I ran over him.

I saw the slow-moving, sad-faced old gentlemen as he bounced off my car.

The indirect cause of this accident was a little guy in a small car with a big mouth.

I was thrown from my car as I left the road. I was later found in a ditch by some stray cows.

The telephone pole was approaching fast. I was attempting to swerve out of its path when it struck my front end.

I was unable to stop in time and my car crashed into the other vehicle. The driver and passenger then left immediately for a vacation with injuries.

Reprint from the Hoosier Newsletter

40 STATES NOW HAVE CHILD RESTRAINT LAWS

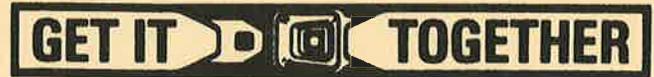
As of July 5, 1983, all but ten states have adopted legislation mandating the use of approved child restraints or seat belts for small children.

Since the first law was passed in Tennessee in 1978, 40 states and the District of Columbia have acted to protect young children from death in motor vehicle crashes. Tennessee, the first state to enact such legislation, allowed children to be held in the lap if they weren't riding restrained, but that provision was struck down in a 1981 amendment.

Many states have phased in the laws gradually, first warning violators that they must restrain their young children. Then, in a later phase, fines are assessed for violations. These often are waived when parents provide proof that they have obtained child restraints. Reprinted from Status Report

STOP SIGN VERSUS YIELD SIGN

Harry S. Lum of FHWA and William R. Stockton of Texas Transportation Institute have reported on a study to evaluate the relative effectiveness of stop and yield signs at low-volume intersections in rural and urban environments. They concluded that many stop signs at low-volume intersections are unjustified (although warranted by MUTCD) and could be replaced by yield signs without increasing accident experience. Furthermore, the use of yield signs would restore respect and effectiveness of the stop sign and improve operating efficiency. The full report is contained in Transportation Research Record 881 available from TRB.



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