

'Priorities' Identified For Hazard Correction

A major study of roadside hazard crashes, being released nationally this week, spells out basic criteria by which highway administrators and engineers can identify sites with "hazards most likely to be struck" by errant vehicles and correct them before motorists are killed and maimed.

The availability of the new study is expected to assist federal, state and local highway authorities — who until now have been faced with roadside hazards "so numerous that immediate removal or modification of every one is unfeasible" — by providing them with "criteria for identifying road locations where fatalities from collisions with roadside hazards are most likely to occur as well as the numbers and types of hazards in defined areas contiguous to the crash sites."

The findings indicate that highway officials should give "top priority" to "roadside hazard modification on and near curves greater than 6 degrees, particularly those accompanied by downhill grades of 2 percent or steeper, on nonlocal roads," the researchers said.

The findings "suggest a clear set of priorities for removing roadside hazards or modifying them or the roadway to manage the energy of errant vehicles to protect vehicle occupants," they said. "The potential for relatively large reductions in human damage by relatively small efforts in modifying roadside hazards is clear."

The study was conducted by Paul H. Wright, Ph.D., Georgia Institute of Technology and Leon S. Robertson, Ph.D., Insurance Institute for Highway Safety. *(Cont'd page 2)*

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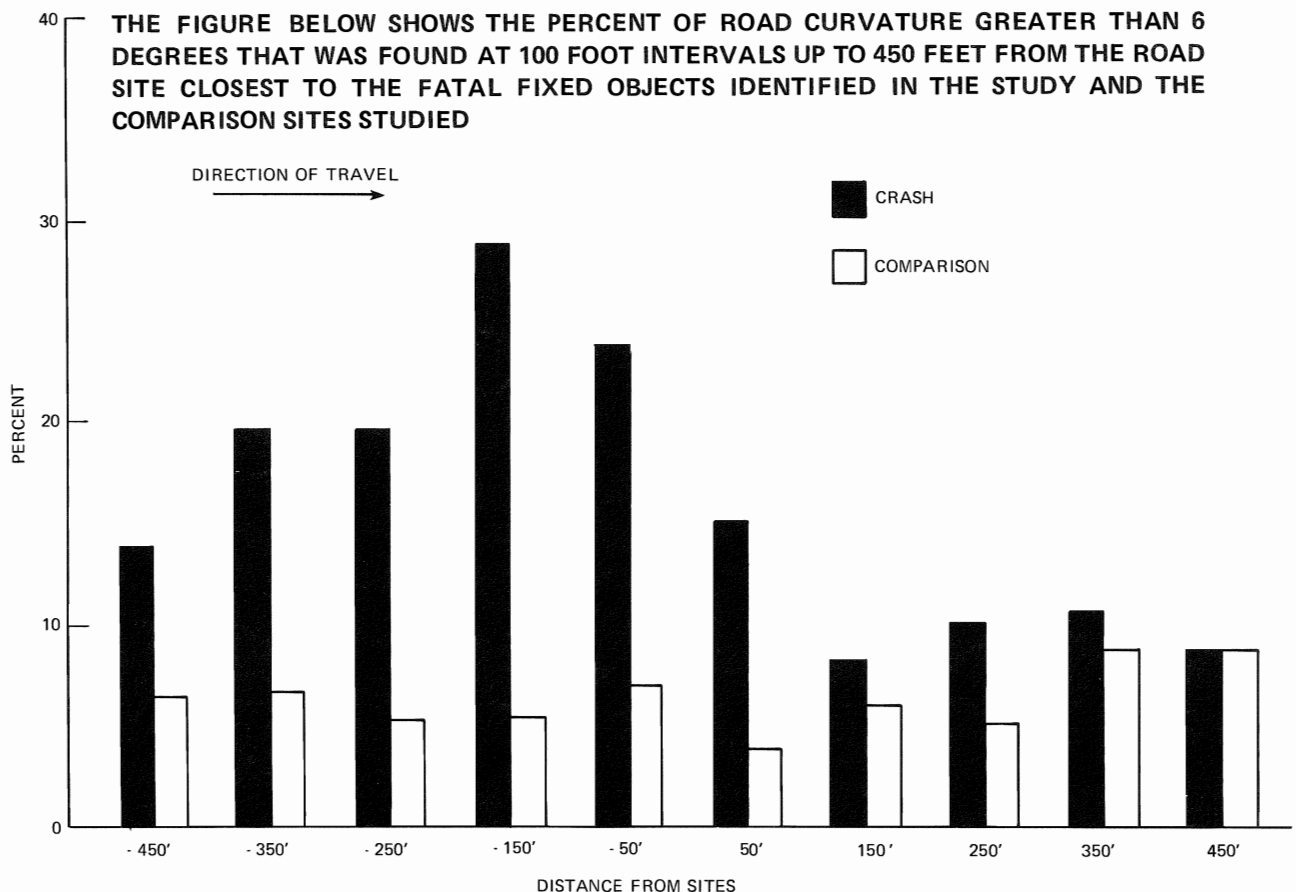
The researchers surveyed 300 sites that accounted for virtually all of the fatal crashes involving roadside hazards in a major segment of Georgia during 14 months ending April 1975. They studied road characteristics such as curvature, and grade, as well as the number and distance from the roadway of roadside hazards. Roadway and roadside conditions at the 300 fatal sites were compared with locations one mile from those sites to determine differences between the crash site and another location that the vehicle likely had successfully passed just moments before crashing.

They found, “more than 26 percent of fatal crash sites had curvature greater than 6 degrees combined with downhill gradient of 2 percent or steeper at or approaching the sites. Only 8 percent of comparison sites had such roadway characteristics.”

“Undoubtedly the vast majority of occupant fatalities in single vehicle crashes (averaging more than 17,000 per year in the U.S.) result from collisions with unyielding structures along the roadside,” they said.

According to the researchers, “a clear set of factors that can be used to identify likely locations of crashes into roadside hazards has not emerged prior to [this] study.” They warned that “failure to act promptly in ameliorative efforts could provide grounds for legal liability.” An earlier study, sponsored by the Institute, set forth a series of legal frameworks for forcing removal of roadside hazards. (See *Status Report*, Vol. 10, No. 1, Jan. 10, 1975.)

“The technology is readily available for removing roadside hazards or modifying them or the immediate environment to manage the energy of errant vehicles – protecting occupants from intolerable energy transfers. However, the hazards are so numerous that immediate removal or modification of every one is unfeasible. Therefore, it is imperative that those hazards most likely to be struck be identified and given top priority in ameliorative actions,” the researchers said.



The researchers also reported:

- “Half the fatal crashes occurred at or near curves greater than 6 degrees irrespective of gradient. Only 23 percent of comparison sites had such curvature and a state study found only 22 percent of roadway with curvature more than 5.5 degrees throughout the state.
- “Nonlocal roads accounted for 83 percent of the fatal crashes into fixed objects but comprised only 33 percent of the roads in the state.
- “Ninety-eight percent of the objects struck were within 15 meters (50 feet) of the pavement edge.”

“Differences between the sites can be used to identify sites where such fatalities are more likely to occur, since the exposure to both the crash and comparison sites was usually equal. Comparison of characteristics of these cases and comparison sites with available data on characteristics of roadways in the area studied provide additional criteria for selecting sites for modification,” the study said.

Trees were the objects most often struck (39 percent). Other roadside hazards involved in the fatal crashes were embankments and ditches (23 percent); utility poles (14 percent); guardrails (7 percent); signs (5 percent); bridge abutments (3 percent) and others (19.3 percent) including parked vehicles, brick walls, buildings, fences, bridge columns, curbs, fire hydrants, billboards, guywires, dumpsters, median barriers and light poles.

Copies of the study may be obtained by writing “Priorities for Roadside Hazard Modification,” Insurance Institute for Highway Safety, Watergate Six Hundred, Washington, D.C. 20037.

NHTSA Issues New Bumper Rule

A long-awaited – and long-delayed – federal property-damage bumper standard has been promulgated by the National Highway Traffic Safety Administration. It sets bumper performance criteria that all passenger vehicles must meet for the 1979 model year. The criteria become more stringent for the 1980 model year.

The standard affects bumper performance in three and five mile per hour crash tests. In its original notice proposing the standard, issued Aug. 3, 1973, NHTSA defined “low speed” crashes as those ranging from 0-20 miles per hour. It so far has not offered proposals or standards, however, for damage-limiting bumper performance in crashes at speeds greater than five miles per hour.

Effective Sept. 1, 1978, the new standard requires that all new passenger cars must have front and rear bumpers capable of protecting them from damage in barrier and pendulum crash tests at five miles per hour and corner impacts at three miles per hour. Damage is permitted for the bumper itself and the brackets, fasteners, etc. that attach the bumpers to the chassis frame.

Effective Sept. 1, 1979, the standard limits bumper face bar damage to three-eighth inch dents and limits bumper set to three-fourth inch in the same series of tests. (Bumper set is the flattening of the bumper face bar.)

In 1966, Congress passed legislation providing for the establishment of a series of auto safety standards. On that legislative mandate, NHTSA established federal motor vehicle safety standard 215 which requires that cars be built with bumper systems that will protect safety-related equipment in low speed

crashes. New cars sold in the U.S. are currently manufactured under this standard. This requirement will be incorporated into the new property damage bumper standard.

In 1972, Congress, concerned with the rising costs of auto repair, passed the Motor Vehicle Information and Cost Savings Act. Title I of that act instructed NHTSA to develop bumper standards that would provide “the maximum feasible reduction of costs to the public and to the consumer. . . .”

The original goal of the agency was to establish property-damage bumper requirements for the 1976 model year. The rule, however, was subsequently postponed. In April 1975, NHTSA held a hearing on the “property-damage” rule and indicated that standards would be set for the 1977, 1978 or 1978 model year. (See *Status Report*, Vol. 10, No. 8, April 11, 1975.)

Citing auto maker retooling costs, in its announcement of rulemaking, the agency chose the most distant date for implementation.

At the April 1975 hearing, the Insurance Institute for Highway Safety urged implementation for the 1977 model year. The Institute explained that its testing showed that many cars on the road already met the proposed “no-damage” requirements. The designs of these same cars, however, commonly allowed needless and unnecessary damage to the bumper itself. It was routine for bumper replacement costs to exceed \$300 and, in some cases, exceed \$500. As it now stands, 1980 will be the earliest year that consumers can count on bumpers that will not be significantly damaged in very low-speed crashes.

Some auto makers had argued at the same meeting that the current bumper requirements – designed only to protect safety equipment – caused unnecessary fuel consumption because the required bumper systems were too heavy. In the rulemaking notice establishing the “property-damage” requirement, NHTSA said that “considerable data have been presented indicating that the bumper systems on some current-model automobiles are heavier and costlier than necessary. This unnecessary weight not only adds to the initial costs, but also increases the life-time operating costs of the vehicle. The use of such bumpers, it has been concluded, has been the result of unnecessary design choices by motor vehicle manufacturers.”

The new testing requirements will allow the production of bumper systems made of soft materials. Current safety-related bumper testing requirements do not make soft-face bumpers feasible, according to NHTSA. For that reason, NHTSA has issued a notice of proposed rulemaking which, until the 1979 model year, would give auto makers the option of meeting either the current requirements or the 1979 standards which permit soft-face bumpers.

Gregory Resigns From NHTSA

President Ford has accepted the resignation of James Gregory, head of the National Highway Traffic Safety Administration, “with regret.” Gregory will continue as administrator until a successor is appointed, the White House said.

At a congressional hearing the day after his resignation was announced, Gregory said that his leaving was “voluntary and strictly personal.” He explained that he reached the decision to resign at the first of the year, but that Department of Transportation Secretary William Coleman, Jr. had asked him to stay and “think it over.”

Reports had linked Gregory’s resignation with the recent controversy over air brake requirements for heavy trucks and with the decision on passive restraints that he has promised for the near future. Gregory, however, flatly denied that the resignation had anything to do with these issues.

Gregory took the opportunity to sum up the work of NHTSA in his testimony before the House Commerce Committee's Subcommittee on Oversight and Investigation. He said that "we must credit our motor vehicle safety programs with a majority of the safety gains we achieved through 1973," along with the 55 mile per hour speed limit for further reductions in highway deaths since 1973.

Gregory emphasized that traffic fatalities were cut from 5.7 per 100 million miles in 1966 to 4.2 in 1973. Once the lower speed limits were imposed, the rate fell to 3.6 per million miles in 1974. Gregory predicted that the rate for 1975 will be 3.5 or lower.

"I think it is safe to say that the efforts to improve the technical performance of motor vehicles and motor vehicle equipment are apt to have an earlier effect than efforts aimed at the more difficult task of changing human driving habits," Gregory said in addressing the contribution of the motor vehicle safety program to reducing highway crash deaths and injuries.

In a published summary of auto industry regulation issued shortly before the congressional hearing, Ralph Nader charged that NHTSA's safety effort had slowed and that "few significant changes have been made in motor vehicle safety standards in the seventies."

When asked by the subcommittee staff if NHTSA's rulemaking activity has slowed down, Gregory said that he was "not satisfied with the pace" of rulemaking in some ways. He said that the agency lacked the basis in data for some decisions. Gregory said, however, the agency's "hard work . . . has improved standards" by amendment.

Gregory became head of the agency in August 1973. He was formerly in charge of environmental sciences for Union Oil Co. of California.

DOT, Virginia Sued Over Highway Hazards

A major union group and several motorists are suing the U.S. Department of Transportation and the state of Virginia over allegedly hazardous driving and working conditions found at highway construction sites in Virginia.

The suit centers around hazards along a 22-mile construction zone on the Virginia section of Interstate Highway 495, the beltway that circles Washington, D.C. Because this highway is constructed, in part, with federal funds, DOT must see that Virginia complies with "the safety objectives mandated by the Federal-aid Highway Act and with federal safety standards" in the planning and execution of any construction project, the suit says.

The suit has been brought by the Building and Construction Trades Department of the AFL-CIO — the organization of unions representing highway construction workers — and by several motorists who travel on that road. Two of the plaintiffs, Lynne Smith and Gerald Donaldson, work on the Center for Auto Safety's project on roadside hazards. (See *Status Report*, Vol. 9, No. 23, Dec. 26, 1974.) The federal and state officials sued include William Coleman, Jr., Secretary of Transportation; Norbert Tiemann, Administrator of the Federal Highway Administration, and Douglas Fugate, Virginia's Highway and Transportation Commissioner.

The hazards at the construction sites, the suit charges, include:

- Use of timber barricades that fail to meet federal safety requirements and guidelines. These barricades, according to the suit, can "spear" cars that inadvertently strike them, causing injury to "vehicle

occupants and to . . . the control components (i.e. steering system, tires, brakes, suspension) of the vehicle, rendering it uncontrollable.” The barriers fail to protect workmen from errant vehicles since they “shatter upon impact,” it says. When the decision was made to use the timber barricades, “there were known superior alternatives available,” the suit alleges;

- Placement of the timber barricades “immediately adjacent to travel lanes” so that “the maximum practical shoulder width and clear roadside recovery area” is not provided as required by federal safety requirements and guidelines;
- Parking of equipment and use of timber barricades around entrance and exit ramps and other areas where no work is being done, thus creating unnecessary roadside hazards;
- Failure to remove “numerous obsolete lane markings” as well as other hazardous traffic control measures “thereby creating confusion and lane change conflicts” for motorists.

These and other hazards “have resulted in disproportionately high accident and injury rates” at the construction sites, the suit says.

The suit points out that the National Transportation Safety Board, the federal agency that monitors transportation safety, issued a report in August, 1975, detailing the hazards at the Virginia construction sites. NTSB reported that in one crash at the construction sites “an automobile struck timber barricades which had been placed along the median within the construction zone and then struck fuel containers within the construction barricades. A fire resulted and the three occupants of the automobile were killed.”

The January, 1976 issue of the FHWA *Newsletter*, which reported the findings of the NTSB study, noted that “the lesson learned by observing problems on the I-495 construction site can help in making detours on other projects more in conformity with the concept of ‘forgiving’ highways and more effective in preserving the lives of motorists.”

The photo below left shows a close-up of the barricades used along Interstate 495, which the suit alleges fail to meet federal safety requirements. Below right is an example of lane markings guiding motorists directly into the construction area – another specific hazard mentioned in the suit.



Among the actions the suit seeks is a court order that would require:

- Virginia to bring “all traffic control devices and practices in the construction zone . . . into compliance” with federal safety requirements and guidelines and with “those safety standards generally regarded as necessary for safety by experts in highway design and operations,” within 30 days of the court’s order;
- DOT to withhold all federal-aid highway funds for the I-495 construction sites from Virginia, except for funds to correct existing hazards, until Virginia shows that the construction sites comply with all applicable safety requirements and guidelines;
- DOT to withhold approval from all other construction projects throughout the U.S. until it has a “reasoned and independent basis for concluding” that the projects “will be conducive to safety and will be designed and constructed” in accordance with federal safety requirements and guidelines;
- DOT to submit, for court approval, a proposed plan for implementing the Federal-aid Highway Act’s requirement that it “give priority to those [federal-aid] projects with incorporate improved standards and features with safety benefits.”

The suit, *Building and Construction Trades Department of the AFL-CIO v. Coleman*, civil action number 76-155A, was filed in the U.S. District Court for the Eastern District of Virginia, Alexandria Division, on Feb. 26, 1976.

Truck Stopping Distances Increased

The National Highway Traffic Safety Administration is increasing stopping distances for heavy trucks. The agency, however, has retained the requirement that trucks stop with no wheel lockup — a requirement some manufacturers and users want eliminated.

The increase in stopping distances is another agency response to its October 1975 public meeting held to hear comments on its standard (FMVSS 121) that specifies minimum performance requirements for vehicle air brake systems. (See *Status Report*, Vol. 10, No. 19, Nov. 24, 1975.) As a result of that meeting, NHTSA previously amended the standard to exempt buses from the stopping distance and no wheel lockup requirements until Jan. 1, 1977. (See *Status Report*, Vol. 11, No. 1, Jan. 12, 1976.)

The air brake standard first went into effect for trailers on Jan. 1, 1975 and for trucks and buses on March 1, 1975. The second stage of the standard — upgrading the braking capability of trucks and buses — was scheduled to go into effect on Sept. 1, 1975. In the face of considerable manufacturer and user opposition and pending court suits attacking the standard, NHTSA delayed the second stage’s upgrading until Jan. 1, 1978. (See *Status Report*, Vol. 10, No. 15, Sept. 15, 1975.)

In its latest action, NHTSA eliminates the second stage’s upgraded stopping distances and increases the current stopping distances for loaded and unloaded trucks. NHTSA has said that those changes were needed because of the decision of some manufacturers to use oversize front brakes on their vehicles, causing them to “exhibit unsatisfactory characteristics during brakings.” NHTSA says that the effect of increasing the stopping distance will be “to permit the ‘depowering’ of the steering axle brakes sufficiently to improve handling characteristics while design problems are being resolved by the manufacturers.” NHTSA has previously said that in the future it “intends to reduce the disparity between heavy and light vehicle braking

performance levels” but that no action will be taken “without further notice and opportunity to comment by interested parties.”

According to NHTSA, the average loaded passenger car can currently stop from 60 miles per hour on a dry surface in approximately 200 feet. Under NHTSA’s new action, air brake-equipped trucks would have 293 feet in which to stop under equivalent conditions.

Noting that the Oshkosh Truck Corp., among others, had opposed a substantial increase in stopping distances, NHTSA points out “It is an unfortunate effect of reducing the requirements for all vehicles that manufacturers of the better-designed vehicles, such as Oshkosh, may feel forced by commercial considerations to downgrade the braking abilities of their products.”

The following table compares the new dry surface stopping distance requirements, effective on Feb. 26, 1976, for trucks with the requirements effective up to that date and with the requirements, originally scheduled for Jan. 1, 1978, now eliminated by NHTSA:

<u>Miles Per Hour</u>	<u>New Requirements, Effective 2-26-76 Unloaded and Loaded</u>	<u>Prior Requirements, Effective To 2-26-76</u>		<u>Requirements Originally Scheduled for 1-1-78, But Now Eliminated Unloaded and Loaded</u>
		<u>Unloaded</u>	<u>Loaded</u>	
20	35	35	35	33
30	75	72	73	68
40	131	121	127	115
50	203	183	194	174
60	293	258	277	245

ANTILOCK

A principal source of controversy surrounding the air brake standard concerns its performance requirement that a vehicle’s wheels not lockup during braking, in order to preserve directional steering control and prevent the vehicle from skidding out of its lane of traffic. By statute, NHTSA can only set performance requirements in its safety standards, and cannot require the use of specific designs. According to NHTSA, “Most manufacturers utilize antilock systems to provide the required ‘no lockup’ performance, although other devices (such as load-sensitive proportioning devices) may be capable of providing the specified performance.”

Citing claims that antilock systems are unreliable, NHTSA points out that if “a manufacturer’s failure to build a reliable product could of itself defeat the validity of a standard” then “the decision to implement, continue in effect, or cancel any safety standard” would be in “the hands of the regulated industry.”

After a previous review of antilock systems, NHTSA said that “durability problems stem from design deficiencies of certain systems that are being isolated and changed with introduction of the systems into service.” Based on that evaluation, NHTSA concluded that “antilock systems are sufficiently reliable and will become more so, justifying their continued installation on air brake vehicles.”

The agency, however, notes that one effect of its current action to increase stopping distances is to eliminate “the need for antilock (or other mechanical means for preventing uncontrolled wheel lockup) under all conditions in the case of many vehicles.”

New Halt Sought On Air Brake Standard

The U.S. Court of Appeals for the Ninth Circuit in San Francisco is again being asked to halt enforcement of the federal safety standard on air brake systems (FMVSS 121).

That court has previously granted such an order, but the U.S. Supreme Court overturned it. (See *Status Report*, Vol. 11, No. 3, Feb. 18, 1976.)

The order is being sought by the American Trucking Associations, Inc., Paccar, Inc., a truck builder, and the Truck Equipment and Body Distributors Association.

A date for a hearing on whether to grant the halt has not been set as yet, according to a Department of Justice official.

Government To Investigate Crash Part Prices

The Council on Wage and Price Stability has begun an investigation of price increases in automobile replacement parts over the past two years. It is currently drafting questions to ask the four domestic auto makers and selected independent parts suppliers in order to obtain needed price and cost information.

A council spokesman told *Status Report* that the information received from the companies will be confidential. The council, however, will formulate aggregate information on the rise in crash parts for the industry, which will be released to the public. No deadline has been set for completion of the study.

According to the council, "the wholesale price index for motor vehicle parts increased 23.8 percent in 1974 followed by another 9.9 percent increase in 1975. By contrast, the wholesale price index for new cars increased by 12.9 and 6.0 percent over the same period." The council went on to point out that an index maintained by State Farm Insurance Company showed that *crash* part prices increased by 31.7 percent in 1974 and 24.8 percent during 1975. Crash parts include such items as fenders, hoods, trunk lids, doors and bumpers.

Maintenance parts — such as mufflers, engine parts, shock absorbers, fuel pumps and spark plugs — have been rising less rapidly for the last year, according to the council.

The council's investigation "will focus on crash parts prices, but will also include maintenance parts prices. Demand and cost data will be obtained to analyze the causes of the increases in these prices."

A recent report published by the Highway Loss Data Institute, based on insurance company loss experience, shows that the average loss payment per claim rose this past year for 1974 and 1973 models. According to the report, this reveals "the probable influence of parts price increases." (See *Status Report*, Vol. 11, No. 1, Jan. 12, 1976.)

On March 1 and 8, the Senate Commerce Committee's Consumer Subcommittee is scheduled to hold hearings on various aspects of the crash parts issue.

Ten States 'Likely'**Safety Chief Predicts Helmet Law Repeals**

National Highway Traffic Safety Administrator James Gregory has predicted that “efforts will be made in a number of states” to repeal existing motorcycle helmet legislation.

In a letter to the American Association for Automotive Medicine, Gregory expressed hope that “organizations concerned with highway safety, will speak out against efforts to repeal existing helmet laws.”

Gregory’s agency has forecast attempts in at least ten states to repeal motorcycle helmet use laws during 1976.

This forecast came as the Congress prepared to take away the Department of Transportation’s authority to enforce helmet use requirements by withholding federal funds from states that don’t have helmet laws. (See *Status Report*, Vol. 10, No. 21, Dec. 23, 1975.)

Meanwhile, after surveying NHTSA’s regional offices, Fred W. Vetter, Jr., the agency’s associate administrator for traffic safety programs, told Gregory in a memorandum that “while there is currently little likelihood of early repeal of such laws in most states, it is possible that Alaska, Arizona, Connecticut, Florida, Iowa, Kansas, Nebraska, South Dakota, Utah, and/or Washington might undertake repeal action during 1976. Should the helmet use sanction actually be eliminated by Congress – and unfortunately this now appears most likely – state legislators will be under heavy pressures throughout the country. Accordingly, these survey results could change rather rapidly.

“Of equal concern is the fact that while many states and jurisdictions might retain the law itself, enforcement of its provisions may seriously degrade,” Vetter said.

In the event helmet law repeal becomes a national trend, “we can expect an increase in [motorcycle] fatalities on the order of 5 to 15 percent if [helmet] usage drops to 50 percent after repeal” of helmet use laws. Those percentages translate to a “very conservative” estimate of “an increase of 143-413 fatalities nationwide if all 48 states [that now have helmet laws] repealed in 1976,” he said.

Vetter urged caution in using the agency’s helmet use and fatality estimates because, “Historically, many states have collected little or no helmet use data from fatal and injury accidents, nor from the on-road rider population, which could support statistically sound conclusions concerning the effects of adoption or repeal of a helmet use law on motorcycle fatalities.” In order “to study and evaluate the effects of helmet use and helmet law repeal,” Vetter said, NHTSA should launch “immediate efforts . . . to collect the necessary data,” before any state repeals its law.

(A recent study conducted by the Insurance Institute for Highway Safety observed helmet use in California and Illinois, two states where helmet use is not required, to be 60.7 percent and 25.4 percent respectively. Helmet use in Georgia and Maryland, where helmet use is required, was observed at 99.8 percent and 100 percent respectively. The study also found in the 16 states studied that the “average fatal involvement rate for the eight states that enacted helmet use laws declined from more than 10 per 10,000 registered motorcycles the year before the laws’ enactments to about seven per 10,000 registered motorcycles, both in the years of enactments and the following years. In contrast, the average fatal involvement rate in the eight matched states that enacted no helmet laws at the time that their comparison state did so remained at about 10 per 10,000 registered motorcycles throughout the period studied.” See *Status Report*, Vol. 10, No. 18, Nov. 5, 1975.)

State legislators are already being pressured to repeal helmet use laws. For example, this year two helmet law repeal bills have been introduced in Maryland. Both bills were introduced at the request of the Maryland chapter of ABATE (A Brotherhood Against Totalitarian Enactments), a motorcyclist group opposed to mandatory helmet use laws. One bill is awaiting hearing. The other bill was voted down in committee.

During hearings, the repeal bill was supported by several motorcyclists and a spokesman for a group of Maryland motorcycle dealers. The bill was opposed by the state's department of motor vehicles, a public health researcher and the American Automobile Association. (See letters below for reaction from two Maryland physicians.)

The following letters to Sen. Edward Conroy, chairman of the Maryland Senate's Committee on Constitutional and Public Law, were sent by two doctors of the staff at the Maryland Institute for Emergency Medicine's shock trauma center. The letters were written in response to the committee's consideration of a bill that would have repealed Maryland's motorcycle helmet use law. See article on page 10 for predictions of similar repeal efforts in other states.

Dear Senator Conroy:

As a physician working in the Shock Trauma Unit at the University of Maryland and as an ardent motorcyclist, I must state that if Senate Bill No. 119 is passed it could have potentially disastrous results on motorcyclists.

During my time working at this Institute, I have seen a number of motorcyclists with various injuries. It is clearly obvious which patients have been wearing helmets and those which have not. Those that have not are frequently dead on arrival, or at the least have sustained massive head injuries and, frequently, subsequently die. In sharp contrast to this, however, are those patients who do wear helmets. These patients, who may suffer concussion and multiple trauma to other parts of the body, do more frequently survive to return to a functional existence.

The position taken by the anti-helmet groups is basically untenable. While the heads under discussion are certainly all a private individual thing, the care of the resultant injuries to those heads is a very public thing. The majority of the motorcyclists that we see injured are over the age of 17 so there would be a disadvantage to this group if helmets were not required specifically for them.

Since helmets are one of the very few valid protective items required to be worn by a motorcyclist, I would strongly urge you and the members of the Committee to vote against Senate Bill 119 for the benefit of my fellow motorcyclists and the public as a whole.

Sincerely,

William Frederick Pfeifer, M. D.
Clinical Associate in Traumatology

Dear Senator Conroy:

In reference to the above mentioned bill, I would like to express to you and the members of your committee my deep concern as to the dire consequences that will take place, based on past experiences here at the Institute, if such a bill is enacted into law.

During recent years we have experienced an ever increasing number of admissions to our Institute of severe multiple trauma due to motorcycle accidents. Identification of those patients who were not wearing helmets at the time of the accident is readily determined by the types of injuries sustained. These individuals invariably end up as organ donors, whenever the family gives such permission, because of the severe and irreversible brain damage sustained leading to brain death. In sharp contrast, the major injuries sustained by those patients who were wearing helmets are primarily lower extremity trauma, although frequently severe, injuries certainly compatible with a functional life.

The argument presented by anti-helmet law groups, such as ABATE, that it is their constitutional right to do what they wish with their heads, since it does not involve or concern anyone else is ludicrous. In addition to taxing medical facilities, frequently public supported, for their initial care, those "fortunate" enough to survive must be placed in public supported chronic care facilities frequently for the rest of their lives. Therefore, it is indeed the concern of all taxpayers, who must underwrite the medical and custodial care of these motorcyclists, and in some instances the support of their families. I believe a visit to our unit by you and/or other members of your committee at any time would give you first hand knowledge of the pitiful end results of severe head injuries, especially in adults.

Which brings up another point, that is, the proposal that only those under the age of 18 years be required to wear helmets. It is a well established medical fact that children have an infinitely greater chance of complete recovery from severe brain trauma, and that the overwhelming number of motorcycle accidents occur in males over the age of 17 years. If helmets do indeed create hazards, as claimed by the anti-helmet law groups, why should children who have the best chance of recovery be required to wear them.

I've been informed that the claim has been made that the wearing of helmets increases the incidence of neck injuries. This couldn't be further from the truth. In our own experience, less than one (1) percent of the motorcyclists admitted to our unit have had neck injuries, none of which were severe.

Another argument presented by these groups that it is not fair that they are required to wear helmets, while automobile occupants are not, is childish but a valid one. Based on my experience here at the Institute, I am not only against the banning of the helmet law as it pertains to motorcyclists, but would welcome and encourage a law requiring automobile occupants to wear them as well.

I would like to take this opportunity to encourage you and the other members of your committee to vote against Senate Bill No. 119 for the benefit of the motorcyclists, despite themselves, as well as the taxpaying citizens of the State of Maryland.

Sincerely,

Ernest A. Austin, M.D., F.A.C.S.
Associate Clinical Director
Chief of Surgery and Traumatology

Skid Measurement Guidelines Issued

The Federal Highway Administration has issued guidelines for conducting skid measurements for skid crash reduction programs.

As part of their implementation of Highway Safety Program Standard 12 (highway design, construction and maintenance) states are to establish a program to reduce crashes caused by skidding. According to FHWA, state programs should:

- evaluate current design, construction and maintenance practices “to ensure that only pavements with good skid resistance characteristics are used in construction and resurfacing;”
- identify locations “with a high incidence of wet pavement” crashes and establish priorities for their correction;
- analyze the skid resistance of all roads with a speed limit of 40 miles per hour or greater “so that skid resistance can be given consideration in the development of priorities for resurfacing and maintenance practices.”

The FHWA guidelines for measuring skid resistance appeared in the *Federal Register* for Feb. 3, 1976.

Trims R & D

President Requests Minor Increase In Safety Spending

President Ford has requested \$13 million more in fiscal year 1977 than in 1976 to carry out the vehicle and highway safety programs administered by the Department of Transportation. The total request for fiscal 1977 is \$193.97 million. The President has, however, requested less money for highway safety research.

In the motor vehicle program administered by the National Highway Traffic Safety Administration, “Additional funds in 1977 will cope with inflationary inroads of recent years which have caused reductions in the level of compliance testing,” according to the President’s budget message. The budget request of \$44.18 million in 1977, however, is only \$1.58 million more than the request for 1976. Compliance testing is carried out to determine if vehicles meet current federal safety performance standards. Testing is carried out to investigate safety-related vehicle defects. Most testing is conducted by private contractors.

Funds requested to carry out the 15 highway safety program standards administered by NHTSA show an increase of \$8 million over the \$80 million requested in 1976. According to the budget, there will be an effort by NHTSA in 1977 to develop programs “to deal with youth over involvement in highway accidents,” and an intensified program “to improve state traffic records systems.”

Funds requested for the three safety standards administered by the Federal Highway Administration have been increased by \$2 million to a total of \$17 million in 1977.

The President has requested a \$380,000 cut in the research and development program administered by NHTSA. The budget message says that the \$28.8 million requested in 1977 will be used to continue

“efforts to improve the accident investigation data base and to resolve vehicle-to-vehicle crash compatibility problems in the research safety vehicle effort.”

COST SAVINGS ACT

Requesting only \$995,000 to carry out the Motor Vehicle and Cost Saving Act of 1972, the budget message states that, “The 1977 program provides only for the financing of the expenses of present staff. Studies will continue to evaluate the program requirements for title II, automobile rating systems, and title III, special diagnostic inspection demonstration projects.”

Federal fiscal years are named for the calendar year in which they end. They have been ending each June 30th. In 1976, however, although the 1976 fiscal year ends on that date, the 1977 year will not begin until October 1. Consequently, the following chart includes requested funds for a transitional quarter that will extend from July 1, 1976 through Sept. 30, 1976. The figures are given in millions of dollars.

	<u>FY 1976 Budget Request</u>	<u>FY 1976 Appropriations</u>	<u>Transitional Quarter Budget Request</u>	<u>FY 1977 Budget Request</u>
Traffic and Motor Vehicle Safety Act of 1966	42.6	38.32	11.74	44.18
Motor Vehicle Information and Cost Savings Act of 1972	---	.95	---	.99
Highway Safety Act of 1966				
Highway Safety Research and Development (Sec. 403)	30.5	29.18	6.4	28.8
State and Community Safety Program Grants (Sec. 402)				
NHTSA (15 Standards)	80.0	92.0	26.25	88.0
FHWA (3 Standards)	15.0	15.0	3.75	17.0
Federal-aid Highway Act of 1973				
Incentives for fatality reduction	13.0	13.0	---	15.0
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	181.1	188.45	48.14	193.97

UPDATE . . .

MARYLAND CRACKS DOWN ON DRINKING TRUCKERS: The Chief of Operations for the Maryland State Police has ordered a crackdown on drinking truck drivers. Lt. Col. W. W. Corbin took this action following a *Status Report* article reporting on a study of fatal crashes in Maryland involving tractor-trailers which showed that a third of the tractor-trailer drivers killed in the crashes were impaired by alcohol. (See *Status Report*, Vol. 11, No. 2, Feb. 3, 1976.)

In a memo to state police commanders, Corbin said, "The study seems to indicate that we have a real problem confronting us with the drinking truck driver. In addition, it is not unusual to see truck drivers making purchases of alcoholic beverages and enter their trucks which, coupled with the study, seems to indicate that there is a considerable amount of drinking by truck drivers while driving Publicity regarding this problem should be encouraged."

ONTARIO BELT LAW AMENDED: The Canadian Province of Ontario has exempted police vehicles, taxi drivers and persons making rural mail deliveries from provisions of its safety belt use law.

Administrative rules adopted under the law allow "removal of all seat belt assemblies from police department vehicles except the pelvic restraints for the out-board seating positions in the front seats. The purpose of permitting the removal of the other equipment is primarily to prevent its use as a weapon by a person being transported in custody," according to C. J. McCombe, Director of Legal Services for Ontario's Ministry of Transportation and Communications. Taxi drivers also are allowed to remove their shoulder harness "so that it cannot be used as a weapon by a passenger," McCombe explained.

Rural mailmen are exempted from use requirements so that they "can drive and deposit mail in boxes without constantly fastening and unfastening a seat belt assembly," McCombe said.

McCombe told *Status Report* that, in general, the law has prompted "a lot of adverse correspondence" primarily from persons claiming it is an infringement of civil liberties. He said that during January the government conducted a public relations campaign aimed at increasing acceptance of the law.

The law, the first of its kind on the North American continent, went into effect Jan. 1, 1976. (See *Status Report*, Vol. 10, No. 20, Dec. 10, 1975.)

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the highway
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