

STATUS REPORT**FEDERAL ROLE
IN
TRAFFIC SAFETY****INSURANCE INSTITUTE for HIGHWAY SAFETY**Watergate Office Building
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SUBCOMMITTEE HEARS OF BAFFLING SIGNS

A motorist in Michigan approaching an intersection sees a sign in his lane that says "Must Turn Left." When he reaches the intersection he finds a one-way street -- to the right.

A truck driver passing through Cambridge, Mass., is told by a sign that the Massachusetts turnpike, where he is headed, is straight ahead. But at the same time another sign tells him that commercial vehicles cannot go straight ahead.

A motorist driving at dusk in any one of a number of states catches the outline of the familiar octagon stop sign and brakes to a stop. But this sign doesn't say stop. It tells him there's a park ahead or conveys some other bit of surprising intelligence -- at the same time creating a possible rear-end crash situation.

These and many more examples of baffling and hazardous signing practices were graphically described to a House subcommittee taking a third look in as many years at the neglect of safety in highway construction and maintenance. As in two previous sets of hearings before Rep. John A. Blatnik's (D-Minn.) Special Subcommittee on the Federal-Aid Highway Program, the record again produced evidence of gross deficiencies that often lead to highway tragedy.

The earlier hearings dealt with roadside hazards and freeway signing and geometrics. The series that began May 6 examined traffic control devices, especially signs, signals and paving markings. But the story was essentially the same as in the earlier instances -- sound engineering practices being ignored, professional "manuals" apparently gathering dust, and even common sense being flagrantly offended.

Representative Blatnik said, "This whole area seems to be a welter of confusion, bordering on chaos. How can we expect the motorist to respond properly to a traffic device that means something different in different places?" One witness described the system as characterized by "a communications breakdown."

Slides shown to the subcommittee by witnesses showed a lack of uniformity in signs and signals, signs obscured by trees and brush, signs that violate shape and color coding provisions of the Manual on Uniform Traffic Control Devices, signs hung backward, signs that require a motorist to know the exact time of day and day of the week to know what to do, and signs that communicate such nonsense messages as "Go Children Slow."

Charles W. Dietrich, a research engineer with Bolt, Beranek and Newman, Inc., Cambridge, Mass., showed slides of traffic lights in the Boston area that are simultaneously red and yellow, that show no light at all when traffic is supposed to move, and that have yellow globes in them in all three positions

"How can a driver from somewhere else in the country be expected to know what to do in these situations," asked Subcommittee Counsel Walter R. May. "The answer is, they can't."

Mr. May noted that according to a 1968 survey by the Bureau of Public Roads, only 45 per cent of all road signs and markings on federal and non-federal highways and streets throughout the country complied with the Uniform Manual. The compliance percentage ranged down to only 24 per cent on non-federal country roads.

The Uniform Manual is the generally accepted model for sign and signal placement, coloration, shape and message. It has been endorsed by the American Association of State Highway Officials, county and state officials' organizations, the Institute of Traffic Engineers and others. It was last updated in June, 1961.

Arthur Freed, traffic engineer with the Westchester County Department of Public Works, White Plains, N.Y., described examples of inadequate signs and signals in the New York road system. He said there were growing legal implications in jurisdictions not conforming with officially-recommended practices. Several successful law suits have been brought against governmental jurisdictions for putting up ambiguous or misleading signs that contributed to crashes, he said.

That the public is confused and seeking better driving information was brought out by a research psychologist, Dr. Joseph Mankowitz, who said a recent survey showed 42 per cent of motorist respondents identified the biggest driving need as "greater uniformity" in signs and traffic laws.

A vivid example of how an inconsistent highway environment can lead to tragedy and expense was provided by Arthur C. Gibson, manager of the Highway and Traffic Engineering Department of the Michigan Automobile Club.

Mr. Gibson said safety officials pleaded with state and federal officials to make a new bridge on Interstate Highway 75 at the west edge of Detroit wide enough so disabled vehicles could safely pull off the traveled way. As a "compromise," staggered pull-off bays protected by guardrails were installed in the center median, with the result that the median at times "belonged" to traffic from one direction and at times to oncoming traffic. In a 13-month period, Mr. Gibson said, there were 180 accidents on the bridge, 59 of which involved vehicles that hit the median rail. Three persons were killed and 63 injured.

The "compromise" originally cost \$500,000. Another \$500,00 now will have to be spent to correct the situation as well as circumstances will permit, Mr. Gibson said.

No statistics were presented in the hearings as to how many crashes, injuries and deaths evolve from inadequate signs, signals and other markings, but Mr. May suggested that a substantial percentage of crashes attributed to "speeding," "failure to have vehicle under control," and other so-called "driver error" factors actually fall in this category.

The hearings are intended to alert policymakers, highway officials, the engineering profession and others, to the need to apply sounder practices in communicating information to the driving public. The hearings will continue into the summer.

DOT REPORTS TO CONGRESS ON SAFETY PROGRAM

The Department of Transportation has reported to Congress that injury and death reduction is beginning to emerge from portions of the national highway safety program, but the overall prognosis is not necessarily a favorable one.

The two safety acts of 1966 require the Secretary of Transportation to report annually on the status of the national safety program. Two reports prepared by the National Highway Safety Bureau, one covering activities under the Highway Safety Act and the other activities under the National Traffic and Motor Vehicle Safety Act, went to Capitol Hill April 28.

In them, Secretary John A. Volpe declares recent research has "exploded the myth" that vehicles cannot protect occupants in crashes. The energy-absorbing steering column, the high penetration-resistant windshields, lap and upper torso restraining belts are beginning to produce a "substantial savings in life," he said.

Likewise, the death rate in motorcycle crashes has declined an average of 6.1 per cent since a federal standard urging the states to enact laws requiring motorcyclists to wear helmets was issued in 1967. Before that, the death rate was rising an average of 24.5 per cent every year.

Another example of progress relates to the highway environment itself. Mr. Volpe said one state (Texas) that has installed roadway signs that break away on impact has recorded only one death in crashes involving such signs, compared with 80 deaths in a comparable period before their installation.

Two insurance companies have reported a downtrend in the number of bodily injuries per 1,000 property damage claims resulting from crashes, according to the DOT.

Despite evidence of progress in certain areas, traffic fatalities hit an all-time high of 55,500 deaths in 1968. The two reports state "the inescapable conclusion must be that the new programs in the two years since passage of the long overdue landmark legislation have not as yet begun to reverse the upward trend in death tolls. Stated otherwise, the problem is worsening more rapidly than the capability of countermeasures thus far implemented to deal with it."

The Secretary noted at one point that if the nation's highway/vehicle safety program were to plateau at the current level, in short, there were "no further improvements in highway safety countermeasures," the death toll could expect to rise to 73,000 by 1975 and 87,000 by 1980.

In partial explanation of this grim estimate, the reports cite a combination of factors, including relentless increases in the number of vehicles and drivers, increasing per capita consumption of alcoholic beverages, and increasing average speed of vehicle travel.

While vehicle "packaging" features are doing their job in reducing crash injuries and death, the magnitude of the job is increasing due to the increasing average speed. One Bureau of Public Roads study shows three times as many rural drivers are now traveling at speeds above 60 miles per hour than was the case only seven years ago.

Data gathered from studies in Sweden, Florida and Nebraska have led the DOT to conclude that an estimated 8,000 lives could have been saved last year "if combination lap and shoulder belts were installed and used in every car."

The reports include other research findings that document the efficacy of vehicle safety features, including one UCLA study that showed no driver fatalities in crashes at speeds up to 50 miles per hour in cars with the new energy-absorbing steering column.

The report on implementation of the Highway Safety Act notes that while 16 standards have been issued, "there are no requirements in the standards as to when full compliance must be achieved, and evaluation of state programs will depend largely on demonstration of reasonable progress."

It adds: "Because of the wide differences in present levels of program activity among the states, detailed consultation and negotiations between the federal government and individual states might be required in several instances before agreement can be reached and final or conditional approval granted." The Highway Safety Act requires every state to have a safety program "approved" by the DOT Secretary by the end of this year.

State legislative action during 1968 fell behind the pace of 1967 because there were not as many legislative sessions, the DOT said. But there was still "significant" progress. Six states enacted "implied consent" provisions bringing the total to 32; motorcycle legislation was enacted in 12 states; five states met licensing and regulation standards for commercial driver training schools called for in the federal standard; three states created medical advisory boards to assist in developing driver licensing examinations, and three states passed laws to improve emergency medical services.

The report covers the research program of the National Highway Safety Bureau and reports factually on the grant-in-aid program, safety research and demonstration projects, and other program elements. It says the states will need more than 17,400 additional highway safety personnel by 1970 to support existing highway safety program standards.

DOT ANNOUNCES HIGHWAY SAFETY GRANTS

The Department of Transportation has announced the approval of 18 grants, involving 13 states, the District of Columbia and Puerto Rico, for highway safety projects under the Highway Safety Act. Federal money is made available on a matching basis to help the states comply with federal highway safety standards.

The projects announced and the federal share involved, with total project cost where appropriate in parentheses, are:

ALABAMA -- To increase the scope and coverage of driver education throughout Alabama, \$487,337 (\$974,774).

CONNECTICUT -- To provide a more rapid audio or visual response to all priority requests for driver's license data by the implementation of a direct access system, \$80,646.

GEORGIA -- To purchase equipment and to streamline various driver education courses, \$314,871 (\$941,181).

ILLINOIS -- To establish a chemical test training program in the Cook County Sheriff's Academy to train approximately 880 greater Cook County police serving a metropolitan area of six million, \$141,600 (\$285,900).

To assist in a model traffic records system for state police, \$70,800 (\$141,600).

KANSAS -- To cover the first 15 months of the state's four-year plan for implementation of its central traffic and highway records system, \$283,900 (\$630,730).

MICHIGAN -- To assist in a "community education and comprehensive highway safety project" for the Upper Peninsula, \$114,932 (\$229,900).

NEW HAMPSHIRE -- For a statewide traffic records system survey to be performed by a consultant firm, including a new record design system, a statewide accident report, and implementation of the resultant plan, \$60,000.

NEW YORK -- To provide continuation of financial assistance to Nassau County for planning local safety programs, \$56,145 (\$122,690).

To continue a project to determine the feasibility of establishing a statewide emergency medical services data collection system, \$159,591.

OHIO -- To furnish a \$400 grant-in-aid to 180 Ohio driver education teachers to attend six state universities that will make available an advanced driver education course during the summer of 1969, \$72,000.

OKLAHOMA -- To establish at Oklahoma State University a center for training Oklahoma college professors in driver education, so they can return to their respective colleges and train secondary school level driver education teachers, \$163,000.

PENNSYLVANIA -- To continue a 1968 project to carry out on-site interdisciplinary investigations of crashes as well as a field review of state route to identify crash-causing characteristics, \$379,117 (\$758,235).

To assist in a comprehensive emergency medical services program to be initiated in Blair County, including the training of personnel, the purchase of ambulances and communications equipment, \$64,859 (\$129,718).

TENNESSEE -- To strengthen driver education by holding a series of in-service training workshops for teachers, administrators, and teacher preparation instructors, \$75,060 (\$125,060).

PUERTO RICO -- To continue a helicopter highway patrol project, including actual operation of helicopters previously purchased, and an evaluation of their use, \$192,417 (\$384,834).

VIRGINIA -- To purchase imprinters to record driver data on a newly adopted uniform traffic summons and arrest form, \$87,000 (\$174,000).

WASHINGTON, D.C. -- To continue a traffic records project, \$75,000 (\$157,683).

BILL WOULD MAKE GRANTS FOR MOTOR CARRIER SAFETY

At the request of the National Association of Regulatory Utility Commissioners (NARUC), Sen. Warren Magnuson (D-Wash.) has introduced a bill in the Senate that would authorize federal grants for state motor carrier safety programs.

The measure would amend the Interstate Commerce Act to "provide assistance to the states in establishing, developing, and administering state motor carrier safety programs to insure the safe operation of commercial motor vehicles. . ."

Minimum motor carrier safety regulations, related to such considerations as driver qualifications and maximum hours of service, equipment and operation and the transportation of hazardous materials would be issued by the Secretary of Transportation after consultation with state commissions, their national organization and the National Motor Carrier Safety Advisory Committee. Five years after the Act would take effect, states complying with the minimum requirements would qualify for federal grants.

For some time, safety officials have been seeking to bolster motor carrier safety programs carried out by the states and the Department of Transportation particularly its Bureau of Motor Carrier Safety. There is a generally recognized lack of personnel to enforce state and federal motor carrier safety regulations and little prospect of bringing additional forces to bear on the problem in the near future.

TABLE ON SAFETY REQUESTS

The following table, with all figures in millions, shows the sums that have been requested by the Nixon Administration from Congress for the federal safety program.

Major changes in the Nixon requests compared with those of the Johnson budget are \$5 million less for the vehicle safety authorization for 1971, \$25 million less in the safety grant ceiling and \$40 million less in grant liquidation cash for 1970, and \$400,000 less in the DOT safety appropriation for research standard-setting and other purposes for 1970. Authorization is the legal basis against which appropriations subsequently are made.

	Current	1970 (Requested)	1971 (Requested)
1. <u>Authorization for Vehicle and Tire Safety</u>	\$24.4	\$23	\$35
Planning and Design, Research Facility	---	\$10 (open-ended)	
2. Highway Safety Grants to States and Communities -- Ceiling on Obligations	\$63.8	\$72.9	NA
<u>Cash Appropriation to Liquidate Prior Grants</u>	\$50	\$50	NA
3. <u>DOT Safety Appropriation for Vehicle and Highway Safety (Not Including Grant Program)</u>	\$26.5	\$35.7	NA
Breakdown by Major Program:			
a. Motor Vehicle and Equipment	\$ 9.9	\$13.5	NA
b. Used Car Safety	\$ 2.4	\$ 2.5	NA
c. Accident Investigations	\$ 4.3	\$ 8.9	NA
d. Research, Demonstrations	\$ 7.7	\$ 8.6	NA

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ALCOHOLISM BILL -- Sens. Jacob Javits (R-N.Y.), Frank Moss (D-Utah) and 43 of their colleagues from both parties are sponsoring a Senate bill that, if enacted, could have a substantial remedial impact on the alcohol factor in highway crashes. The senators are seeking passage of an Alcoholism Care and Control Act of 1969 "to undertake a concerted drive against alcoholism, the nation's fourth most serious health problem." The bill calls for establishment of a special division within the National Institute of Mental Health, and provides for federal grants to build facilities, pay staff personnel, conduct educational programs and establish regional centers to deal with alcoholism. Highway safety experts agree a by-product of any massive nationwide effort against alcoholism could be a reduction in the role alcoholics and other problem drinkers play in highway crashes. A recent federal study pinpointed excessive drinking as the single most prevalent factor in the initiation of fatal highway crashes, contributing to an estimated 50 per cent of all fatalities.

SENATE HEARINGS -- Sen. Jennings Randolph (D-West Va.), chairman of the Senate Committee on Public Works, has announced that his Subcommittee on Roads will hold hearings on the Highway Safety Act on June 19, 24, 25 and 26. In

announcing the "far-ranging examination of the entire 34-month history of the highway safety program," Senator Randolph said it was the subcommittee's intention to highlight those areas which can make the greatest impact on achieving an "immediate" reduction in highway crashes. It will thus be possible to give additional guidance to the DOT and the states in attacking the problem, he said. Outside interests and organizations are invited to participate in the hearings. Inquiries should be addressed to J. B. Huyett, Jr., of the committee staff.

SAFETY JOURNALS -- Three scholarly journals in the planning or just-published stage are devoted exclusively or in part to highway safety. Behavioral Research in Highway Safety will report on the "principal international findings of behavioral and social research related to motor vehicle use and operation." Subscription information can be obtained by writing Behavioral Publications, Inc., 2852 Broadway, Morningside Heights, New York, N.Y. 10025. . . . Accident Analysis and Prevention will be an international journal dealing primarily with transportation safety, "although papers dealing with other types of accidents will also be published." Information is available from Pergamon Press, Inc., 44-01 21st St., Long Island City, N.Y. 11101. . . . Finally, the Journal of Safety Research has replaced the National Safety Council's Research Review, which for 12 years has dealt only with traffic safety. The new publication will "include research in all areas of safety such as industrial, farm, home, school and public in addition to traffic safety." Information is available from NSC, 425 N. Michigan Ave., Chicago, Ill. 60611.

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