

## **NHTSA Hit For Ignoring Research Findings**

The General Accounting Office, the investigative arm of the Congress, has criticized the National Highway Traffic Safety Administration for its lethargy in translating research findings into safety standards.

GAO said its "review of selected research findings showed that many years had elapsed between the completion of research projects and the formulation of safety standards." In some important areas, such as crashes between vehicles of different size and weight, research was not continued because of internal NHTSA disputes, GAO said.

It reached this conclusion after studying 21 research contracts in five major rulemaking areas which NHTSA had determined needed improved safety standards. The contracts were completed at a cost of \$3.1 million during 1967-73. The GAO criticism was contained in a report prepared at the request of the Senate Commerce Committee.

GAO criticized NHTSA in the following five rulemaking areas studied:

**Fuel system integrity (FMVSS 301):** The extension of the fuel system standard covering front-end crashes to cover other types of crashes causing fire hazards from fuel spillage has taken close to seven years, GAO said. In spite of several federally-funded research studies completed between 1967 and 1971, NHTSA did not issue an improved standard until 1974 and it will not apply until the 1977 model year. (See *Status Report*, Vol. 9, No. 13, July 8, 1974.)

(Insurance Institute for Highway Safety crash tests documenting the danger of fire in rear-end collisions, as seen in the film *Cars That Crash and Burn*, were shown at a May, 1973, House hearing. See *Status Report*, Vol. 8, No. 11, May 29, 1973.)

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NHTSA has still not based any “safety standard on the March, 1970, research study which suggested improving the crashworthiness of electrical systems,” the report said.

**Rear lighting and signaling (FMVSS 108):** In 1967, NHTSA awarded six research contracts to develop improved rear lighting systems but used the results for only “minor amendments” in standard 108, GAO said. NHTSA did not issue a Notice of Proposed Rulemaking (NPRM), proposing “separation of rear lighting functions and the use of red as the sole color for rear turn signals,” until October, 1972, the report said. NHTSA’s motor vehicle program office gave GAO several reasons for the delay, including lack of funds for necessary follow-on research contracts. In April, 1974, NHTSA announced that, based on the comments it received on the NPRM, it was postponing this rulemaking.

GAO considered that “the decision to prescribe red as the sole color for rear turn signals does not seem adequately supported in the safety administration’s rulemaking process.”

**Rearview mirrors (FMVSS 111):** “Research done under several contracts awarded since June, 1968, confirmed that drivers’ rear vision under the present standard has been unsatisfactory and that the standard needs upgrading,” GAO said. NHTSA issued a NPRM in 1971 but withdrew it in 1973, “primarily because of adverse comments from industry,” GAO said.

Research findings had indicated in 1970 that convex mirrors would eliminate blind spots in rear vision but NHTSA delayed awarding the necessary follow-on contracts, GAO said.

**Seating systems and head restraints (FMVSS 202, 207):** Although research studies which provide a basis for upgraded standards were completed by June, 1971, a proposal to strengthen the standard was not issued until March, 1974, to be effective for the 1977 model year. The amendment to standard 207 would require that head restraints be higher and permanently attached to the seats. NHTSA officials “estimated that properly adjusted head restraints could prevent approximately 931,000 whiplash injuries a year,” GAO said.

An NHTSA sponsored study of head restraint systems that deploy in a crash showed that they were already “technically feasible and, in some respects, superior to conventional head restraints,” GAO said. Deployable restraints would allow better rearview vision for the short driver and provide highly effective restraint for the tall driver, according to the study. Because deployable restraints could deploy further forward than fixed restraints, they could reduce head motion during a crash, GAO said.

NHTSA deferred additional research on these systems because of their “low priority,” GAO said. (Research by IIHS in 1971 suggested that conventional head restraints reduce whiplash injuries, but if improperly adjusted, may favor their occurrence. See *Status Report*, Vol. 9, No. 8, April 16, 1974.)

**Motorcycle rider protection:** None of NHTSA’s present standards afford “protection against motorcycle design hazards that can cause injuries in crash situations,” the report said. NHTSA awarded two research contracts to “study the dynamics of motorcycle crashes in support of a proposed rider protection standard.” The first study, completed in 1971, recommended several changes in the design of motorcycles but the motor vehicle program office “did not consider the information sufficient to support rulemaking,” GAO said. GAO blamed the research and development office for failing to emphasize the findings that could support immediate rulemaking.

The second study concluded that motorcycle air bags would be “most effective, preventing almost all contact with the decelerating motorcycle and other obstacles in a crash situation.” NHTSA is currently studying the feasibility of such air bags in an additional research contract, GAO said.

(IIHS research has documented the high rate of serious multiple injuries resulting from motorcycle crashes. See *Status Report*, Vol. 9, No. 10, May 15, 1974.)

GAO recommended that NHTSA institute a more adequate evaluation procedure to determine, following completion of research contracts, "whether a sound technical basis exists for rulemaking action or whether further research is warranted." Although NHTSA said it established a procedure in 1972, GAO said that several evaluations it reviewed were "little more than summaries of the contractors' findings and contained few constructive recommendations on rulemaking."

## POOR COORDINATION

GAO also found that there was little coordination between NHTSA's research and development office, which is responsible for planning and conducting research, and the motor vehicle program office, which develops safety standards.

"A properly coordinated research program" was needed, GAO said, to ensure that priority areas were identified and researched within time and funding limits.

As an example, GAO cited the disagreement between the two offices on how to undertake research on crashes between vehicles of different sizes that resulted in no work on this priority research project. GAO questioned "why this issue was not referred for resolution to an impartial or a higher level in the safety administration."

(Cont'd on page 4)

## ***Woodcock 'Misunderstood' On Emissions And Safety***

Leonard Woodcock, president of the United Auto Workers, has said that his statements on auto emission and safety standards have been "widely misunderstood."

Some reports have cast Woodcock and other UAW officials as following the lead of auto makers in demanding a federal moratorium – and in some cases roll back – for emission and safety requirements in exchange for promises from auto makers that they will improve fuel economy. (See *Status Report*, Vol. 10, No. 2, Jan. 21, 1975.)

In a recent speech at the National Press Club, however, Woodcock said that although he supports a "pause" in emission requirements, the federal government should mandate fuel economy improvements and that current federal emission and safety requirements should be evaluated by an "independent agency." The agency should evaluate the effectiveness of "safety devices that have been mandated" as well as "how they have been implemented" by the auto industry, Woodcock said.

He said that he is "bothered" that domestic auto makers put "so much more weight" on their cars to meet the federal bumper rule "than did the imported models in the same weight class or the same price class." He said the weight difference is "about two or three hundred pounds."

Research on the effect of vehicle size and weight in crashes was started by the National Highway Safety Bureau (as NHTSA was then known) in 1968. NHTSA, as GAO pointed out, has not continued research in this area. Last year, it told its employees, though not the public, of the “morbid reality” of small car crash hazards. (See *Status Report*, Vol. 9, No. 6, March 26, 1974.) IIHS research, as shown in the film *Small Cars and Crashes*, has documented some of the dangers of crashes between vehicles of different sizes and weights. Recent IIHS studies have found that the size-weight characteristics of the occupant’s own car, rather than those of the car with which it collides, are the principal determinants of injury severity in two car crashes. (See *Status Report*, Vol. 9, No. 14, July 26, 1974.)

GAO blamed the motor vehicle program office in turn for failing to tell the research office of its overall priorities. As a result, GAO said, ten research requirements were not met and four planned safety standards were delayed. NHTSA had estimated that one standard alone, for truck spray protectors, would prevent 100 deaths, 5,200 injuries and 31,000 crashes annually. The report did not list the other three delayed standards.

GAO also criticized NHTSA for failing to use information from the experimental safety vehicle program in developing safety standards. GAO said that the prototype family sedans produced under the ESV contracts exceeded current safety standards in braking, visibility, exterior protection and fuel system integrity but none of the prototype test results were used for new or improved standards.

Responding to the GAO recommendations, the Department of Transportation said it “fully recognized the need for a coordinated program plan for motor vehicle safety standards” and for making better use of research findings.

Single copies of GAO Report No. B-164497(3), Sept. 16, 1974, *Improvements Needed in Planning and Using Motor Vehicle Safety Research*, are available for \$1.00 from GAO, P.O. Box 1020, Washington, D.C. 20013.

### ***Ford Supports Modified Five Mile Per Hour Bumper***

Ford Motor Co. has told the National Highway Traffic Safety Administration that the “most viable approach” to an “effective bumper system” is to retain the five mile per hour test speed of the current bumper safety standard (FMVSS 215), but lessen the number of impacts a bumper must withstand.

Ford presented its evaluation of different bumper systems to the NHTSA less than two weeks before that agency proposed its major roll back, that included lowering the test speed as well as lessening the number of test impacts. (See *Status Report*, Vol. 10, No. 2, Jan. 21, 1975.)

In its evaluation, the auto maker said, “At present Ford does not possess the technology to build a bumper with ‘no damage’ capability.” Ford asserted that its “‘best effort’ conventional designs [aimed at no damage] have shown themselves to be less cost effective than even the current bumper system.”

Ford said that its suggestion of fewer test impacts would allow it to reduce the “cost and weight of front and rear bumper reinforcements by one-third” and allow it to “delete front and rear energy absorbers.”

## President Ford Trims Request For Safety Funds

The President has requested substantially less money to carry out the Department of Transportation's motor vehicle and highway safety programs in fiscal year 1976 than was requested for fiscal year 1975. No funds at all have been requested for programs under the Motor Vehicle Information and Cost Savings Act of 1972.

The total budget request for vehicle and highway safety programs for fiscal year 1976, which begins on July 1, 1975, is only \$9.2 million more than the amount appropriated by the Congress for fiscal 1975. (See chart, page 6.) The Department of Transportation will testify before the Congress on its fiscal 1976 budget request in March, when more details will be released about individual items in the budget.

The budget requests \$166.1 million for the National Highway Traffic Safety Administration during fiscal year 1976. Of this, \$42.6 million is for motor vehicle programs and the remaining \$123.5 million is to finance state and local highway safety programs including \$80.0 million for the 15 highway safety program standards NHTSA administers. The Federal Highway Administration request includes a further \$15.0 million for the three highway safety program standards it administers.

The proportion of funds devoted to highway safety programs has been similarly large since the programs began in 1966. This year, for the first time, all funds for highway safety programs will come from the Highway Trust Fund. In previous years, two thirds of the highway safety money came from the Highway Trust Fund and one third from the general treasury. All funds for motor vehicle programs come from the general treasury.

### COST SAVINGS ACT

DOT has requested no funds under the Cost Savings Act for fiscal 1976 and plans to spend only \$1.8 million that will be carried over from the fiscal 1975 budget. This sum will be spent on "a special diagnostic inspection demonstration project to promote the use of advanced inspection and diagnostic equipment," according to the budget request. Contracts under this act that have already been awarded by NHTSA will not be affected.

In drawing up last year's budget, the Secretary of Transportation's office cut \$5.5 million from NHTSA's request for Cost Savings Act funds. This cut included all fiscal 1975 funds for a consumer information study on automobile crashworthiness and damage susceptibility under Title II of the act. (See *Status Report*, Vol. 9, No. 5, March 5, 1974.)

### TEST FACILITY

The budget figures also reveal that NHTSA expects to spend a total of \$332,000 in fiscal years 1975 and 1976 on leasing and equipping a compliance test facility. NHTSA expects to initiate the facility in 1975 to cover the additional workload it expects to result from provisions (in the 1974 Motor Vehicle and School Bus Safety Amendments) covering investigation and remedy of motor vehicle defects. Funds earlier appropriated by the Congress for construction of a new facility were impounded by the Nixon Administration. (See *Status Report*, Vol. 9, No. 5, March 5, 1974.)

### TRUCK SAFETY RESEARCH

The FHWA budget includes a further \$9.1 million from the Highway Trust Fund for a variety of safety-related research and development projects, including "research in the safety aspects of increased size

and weight of heavy vehicles,” according to the budget request. An increase in the weight of trucks allowed on interstate highways was passed by the Congress at the end of last session. Bills have recently been introduced to repeal those increases. (See *Status Report*, Vol. 10, No. 3, Feb. 5, 1975.)

In millions of dollars, the fiscal 1976 budget request compares with the fiscal 1975 budget request and with the congressional appropriations for fiscal 1975 as follows:

	<u>FY 1975 Budget Request</u>	<u>FY 1975 Appropriations</u>	<u>FY 1976 Budget Request</u>
Traffic and Motor Vehicle Safety Act of 1966	42.5	35.5	42.6
Motor Vehicle Information and Cost Savings Act of 1972	8.4	7.7	—
Highway Safety Act of 1966			
Highway Safety Research and Development (Sec. 403)	33.5	28.4	30.5
State and Community Safety Program Grants (Sec. 402)			
NHTSA (15 standards)	85.0	71.9	80.0
FHWA (3 standards)	15.0	15.0	15.0
Federal-aid Highway Act of 1973			
Incentives for fatality reduction	48.0*	13.4	13.0
	<hr/> 232.4	<hr/> 171.9†	<hr/> 181.1

\* This item included funding requested for the program of incentives for states that passed safety belt usage laws. The Congress eliminated funding for this program in June, 1974. (See *Status Report*, Vol. 9, No. 13, July 8, 1974.)

† This total is slightly larger than that originally reported by *Status Report* because of increases to cover the 5.5 per cent federal pay increase in October, 1974. (See *Status Report*, Vol. 9, No. 20, Nov. 11, 1974.)

## Gregory Asks Insurers About 'Air Bag Discounts'

National Highway Traffic Safety Administrator James Gregory has asked for auto insurance industry reaction to the idea of providing premium discounts for vehicles equipped with air bags.

A discount on bodily injury medical coverage would give the public "additional incentive to purchase and request passive restraints" and make them "better able to understand how much better these systems are. It would also emphasize the confidence which the insurance companies have in the reliability of passive systems," Gregory said.

In letters to industry leaders, Gregory stressed "the substantial advantages of passive restraints over present systems in saving lives and injuries in motor vehicle crashes."

Gregory also asked about the feasibility of a similar discount for liability coverage in cars with air bag systems.

His letter came after an NHTSA cost-benefit analysis showing increased superiority of air bag lap belt systems over lap-shoulder belt systems. (See *Status Report*, Vol. 9, No. 23, Dec. 26, 1974.)

A proposed amendment to NHTSA's occupant crash protection standard (FMVSS 208) would require passive restraints, such as air bags, in 1977 model cars.

General Motors is the only auto maker thus far to offer air bags to the general public. To date it has produced just under 5,600 air bag equipped cars for public sale — all of them large luxury models. According to a GM spokesman, air bags will be offered as optional equipment on a total of 30,000 passenger cars during the 1975-1976 model years. Earlier GM estimates had been for 50,000 such cars in 1974 and 100,000 in 1975. (See *Status Report*, Vol. 9, No. 4, Feb. 21, 1974.)

### New HLDI Reports Available

The Highway Loss Data Institute has published two new reports on automobile insurance losses based on collision coverage claims. One report deals with 1974 models during their first year of availability; the other deals with 1973 models during their first two years.

Earlier HLDI reports on 1974 and 1973 model cars were reported in *Status Report*, Vol. 9, No. 10, May 15, 1974, and Vol. 9, No. 6, March 26, 1974.

Single copies of the new reports, *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1974 Models During Their First Year* (HLDI R74-2) and *Automobile Insurance Losses, Collision Coverages; Variations by Make and Series, 1973 Models During Their First Two Years* (HLDI R73-3), are available by writing to "R74-2" and "R73-3," Highway Loss Data Institute, Watergate Six Hundred, Washington, D.C. 20037.

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## STATUS REPORT

Editor: Ralph Hoar

Writers in this issue: Stephen Oesch, Lloyd Slater,  
Christine Whittaker

INSURANCE INSTITUTE for HIGHWAY SAFETY  
WATERGATE SIX HUNDRED • WASHINGTON, D.C. 20037  
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