the highway loss reduction

STATUS REPORT

INSURANCE INSTITUTE

for Highway Safety

Vol. 9, No. 3

February 6, 1974

Senator Seeks Fuel Tank Safety 'Speedup'

A bill to require a "one-year speedup" in the Department of Transportation's fuel system integrity standards has been introduced in the U.S. Senate.

"We have had a fuel crisis for a long time: a fuel crisis represented by the threat of gasoline splashing from ruptured fuel tanks, ready to serve as fuel not for cars but rather for a raging and lethal inferno," said the bill's sponsor, Sen. Joseph M. Montoya (D-N.M.). His bill (S-2900) would require NHTSA to issue upgraded fuel tank crashworthiness standards by 1975 and 1976 instead of 1976 and 1977 as now proposed by NHTSA.

The Senate Commerce Committee, which oversees NHTSA's vehicle standard setting activity, has "put them on notice to be prepared to answer questions on fuel tank hazards" during hearings slated later this month, a committee staff member told *Status Report*.

Montoya noted, "The only fuel tank integrity test which presently exists involves frontal collisions. And since the vast percentage of automobiles have their fuel tanks in the rear, the result is that fuel tanks are not required to be very durable or strong and thus not very safe."

NHTSA's proposed standards for passenger car fuel tanks include static and dynamic rollover tests as well as a 30-mile-per-hour rear-end crash test, a 30-mile-per-hour angular frontal crash test, and a 20-mile-per-hour lateral crash test. All of these proposed standards are due to take effect as of Sept. 1,



1976, except for the dynamic rollover test which does not go into effect until Sept. 1, 1977. Montoya's bill would move these effective dates up one year to Sept. 1, 1975, and Sept. 1, 1976, respectively.

'INCREDIBLE DELAY'

"A postponement of the effective date of a rear-end collision standard until September, 1976, would represent a 4-year, 9-month delay past the date proposed in August, 1970; a 6-year, 9-month delay since the date proposed in January, 1969; and an incredible delay of over 8 years since the National Highway Traffic Safety Administration first announced its intention to devise a fuel system standard covering rear-end collisions," Montoya said.

The Insurance Institute for Highway Safety is an independent, nonprofit, scientific and educational organization. It is dedicated to reducing the losses-deaths, injuries and property damage-resulting from crashes on the nation's highways. The Institute is supported by the American Insurance Association, the National Association of Automotive Mutual Insurance Companies, the National Association of Independent Insurance Association.

"The magnitude of the dangers involved in unsafe fuel tanks, the existence of available technology to remedy tank deficiencies and the seeming reluctance on the part of the Department of Transportation to implement safety standards in an expeditious fashion provide persuasive evidence of the necessity for this legislation."

The National Highway Traffic Safety Administration's "actions with regard to fuel system integrity safety standards may well rank as one of the foremost instances of bureaucratic delay in recent history," he said.

In support of his bill, Montoya said, "Some of the most recent data providing persuasive evidence of the need for speedy action in setting fuel tank standards came from tests conducted by the Insurance Institute for Highway Safety in April, 1973. The Institute conducted six rear-end crash tests with 1973 cars. Despite the fact that these crashes occurred at speeds less than 40 miles per hour, the results were leaking fuel tanks. Each crash produced either fire, or one of fire's prerequisites, namely spilled gasoline. In short, each crash had the potential of becoming a flaming and very deadly inferno." (See *Status Report*, Vol. 8, No. 11, May 29, 1973.)

Using NHTSA's original estimates of vehicle fire fatalities, Montoya asked, "If some 2,000 to 3,500 people died each year in airplane crashes as a result of faulty fuel tanks, would we see a similarly casual attitude on the part of government officials toward remedying the situation? I doubt it."

Another aspect of the bill would require that "all supplemental fuel tanks which are added to a vehicle after its original sale meet standards which provide for at least as much safety as that provided by original equipment standards...."

"This part of the legislation is especially important in light of the current fuel shortage and the increasing tendency for people to install supplemental fuel tanks in order to be able to store more gasoline," Montoya said.

The House Committee on Commerce is also considering legislation that would direct the Secretary of Transportation to upgrade automobile fuel system crashworthiness as early as next year.

\$157 Million Allowed For Hazard Projects

The Federal Highway Administration has told states that they can - but don't have to - spend almost \$157 million during the next fiscal year on programs to inventory and eliminate highway and roadside hazards.

About \$4.4 billion has been divided among the states for highway construction and improvement. Each state may decide what portion of its money - if any - it will spend on hazard identification and removal. (Maximum amounts each state may spend for such projects are listed on page 3.)

Officials at FHWA and staff members of the House and Senate Public Works Committees told *Status Report* that the energy shortage may influence states to spend money on loss reduction measures rather than on construction projects. Hazard identification and correction projects are less "energy intensive" than construction projects a Senate staff member said.

State	Safer Roads Demonstrations	Rail-Highway Crossings	High Hazard Locations	Elimination of Roadside Obstacles
A	¢ 090 120	\$ 424 961	\$ 876 238	\$ 438 119
Alabama	3 009,120	697 485	242 500	121 250
Alaska	250,000	282 002	469 135	234 567
Arizona	470,040 F02 F01	202,002	574 113	287.056
Arkansas	582,591	1 976 674	2 092 714	1 001 857
California	4,041,778	242 160	626 028	313 013
Colorado	635,261	343,109	587 098	203 549
Connecticut	595,645	2/9,82/	242 500	121 250
Delaware	250,000	107,100	1 400 157	7/0 578
Florida	1,521,091	6/2,34/ E44 910	1,499,107	561 834
Georgia	1,140,167	544,819	242 500	121 250
Hawaii	250,000	110,134	242,500	153 100
Idaho	310,940	188,789	2 250 509	1 175 254
Illinois	2,384,844	1,102,507	1 180 925	594 962
Indiana	1,207,357	000,090 ADA 500	860 357	430 179
Iowa	8/3,0/0	424,522	800,337	404 658
Kansas	821,321	300,310	762 625	381 313
Kentucky	//3,811	3/2,202	207 A20	403 714
Louisiana	819,244	393,793	242 690	121 346
Maine	250,000	155,120	762 782	281 201
Maryland	//3,88/	400 765	1 083 646	541 824
Massachusetts	1,099,411	490,705	1,003,040	058 070
Michigan	1,945,998	092,000 520,602	1,917,956	530,373
Minnesota	1,076,342	205 200	603 654	301 827
Mississippi	012,540	505,505	1 180 273	594 637
Wissouri	1,200,757	222,020	343 772	171 886
Montana	348,903	273,432	557 524	278 762
Nebraska	565,803	102 275	242 500	121 250
Nevada	250,000	103,275	242,500	121,250
New Hampshire	250,000	612 006	1 348 724	674 363
New Jersey	1,308,335	220 211	335 058	167 529
New Mexico	340,020	1 661 015	3 516 325	1 758 162
New York	3,507,503	555.065	1 165 444	582 722
North Carolina	1,102,519	205 208	384 989	192 494
	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1 021 456	2 207 107	1 103 554
Ohio	2,239,323	380.486	797 688	398 843
Oklanoma	609,402	308,400	652 945	326,472
Dependencie	2 455 589	1 121 324	2 420 276	1.210.137
Pennsylvania Dhada Jaland	250,000	127 942	242 500	121,250
South Carolina	250,000	291 375	645,924	322,961
South Dakota	359 035	221 254	353,749	176.874
	956 411	465 509	942,579	471.291
Toxac	2 804 479	1 396 632	2.763.885	1.381.943
l Itab	335 424	192 837	330,536	165,269
Varmont	250,000	86 635	242,500	121,250
Virginia	1 022 762	509 746	1.008.023	504,011
Washington	854 700	398 241	842.329	421,165
West Virginia	421 819	208 008	415,720	207,861
Wisconsin	1 123 093	531 125	1.106.828	553,414
Wyoming	250 000	174 855	242.500	121.250
Diet of Col	250,000	62 434	242.500	121.250
Puerto Rico	200,000 208 814	213 006	491.678	245.838
Guam	250,014			••••
American Samoa	250,000			
Virnin Islands	250,000		***•	
TOTAI	\$50,000,000	\$24,240,374	\$48,500.000	\$24,250,000
	<i><i><i>wwwwwwwwwwwww</i></i></i>	·-····································	· · ·	-

FEDERAL HIGHWAY ADMINISTRATION APPORTIONMENT OF HAZARD RELATED FUNDS AUTHORIZED BY THE HIGHWAY SAFETY ACT OF 1973

Status Report

Congress Squelches NHTSA Crash Recorder Program

The Congress has refused to fund the National Highway Traffic Safety Administration's automotive crash recorder program. The NHTSA views the five-year \$18 million program as necessary for determining its priorities in the development of future motor vehicle safety standards.

Crash recorders measure what happens during crash decelerations and in how much time, thus helping researchers to determine the types of injuries that result from crashes at certain speeds. The devices can also measure pre-crash information such as vehicle speed, brakeline pressure, steering wheel angle and lateral and longitudinal acceleration.

NHTSA feels that use of crash recorders would make it possible for the agency to judge the effectiveness of various safety standards and to establish the need for future standards and the criteria which should govern them. Such fundamental information is now almost completely unavailable despite an urgent need. Sen. Warren Magnuson (D-Wash.), chairman of the Senate Commerce Committee, which oversees NHTSA activities, also strongly urged the Congress to provide \$2.5 million for the crash recorder program.

Representatives John J. McFall (D-Cal.), chairman of the House Appropriations Committee's transportation subcommittee and Silvio O. Conte (R-Mass.), the subcomittee's ranking minority member, both opposed the program.

A House Appropriations Committee staff member told *Status Report* the House members considered the crash recorder program "too costly and of marginal benefit."

In requesting the \$2.5 million necessary for implementing the crash recorder program, NHTSA Administrator Dr. James B. Gregory told the transportation subcommittee of the Senate Appropriations Committee: "We are proposing this program as a guide to where we must ultimately go in getting survivability standards in terms of vehicle crash integrity and occupant restraint.

"Attempting to advance regulations without such data," Gregory added, "requires us to make guesses on multimillion dollar impacts on the consumer without assurance of proportionate protection. In order to solidify the research base to answer this question, the information to be retrieved from the recorders will provide actual accident data as distinguished from subjective information derived from accident reports subject to human judgment and error by persons least likely to be objective."

NHTSA had scheduled the crash recorder program to run for five years at a cost of \$18 million. Crash recorders were to be installed in 100,000 passenger vehicles. The agency estimated that in two years of data gathering 30,650 crashes of relative severity including 150 fatalities would take place.

An NHTSA official told *Status Report* that 1,200 crash recorders have been manufactured for the agency. Another 500 units have been ordered.

A total of 644 air bag-equipped cars also have recorders. Others have been installed in various fleet cars throughout the United States – including 200 in Houston, Texas police vehicles.

NHTSA has documented 30 crashes thus far and "the accuracy of the crash recorders has been confirmed." However, the NHTSA official said the results obtained from existing crash recorders are not sufficient because in order to obtain quantitative real-world accident data, "a greater data base" is required. Research and development funds and funds made available under the NHTSA's passive restraint fleet test

program were used to purchase existing crash recorders. Although funds have been barred for the crash recorder program for fiscal 1974, the NHTSA official said the agency is "trying to figure out how to meet the spirit of the law" and still continue the program. He added that the agency plans to request money for the crash recorder program for the next fiscal year.

The Congress did give NHTSA \$30.3 million for traffic and motor vehicle safety programs for fiscal 1974, almost \$5 million less than the \$35.1 million NHTSA had requested. (See *Status Report*, Vol. 8, No. 4, Feb. 12, 1973.)

Because the Congress failed to authorize a new spending level, NHTSA has been forced since June 30, 1973, to operate at its fiscal 1973 level of 32.9 million and to initiate no new traffic and motor vehicle safety programs. Its funding level for fiscal 1974 – now more than half over – will be 2.6 million less.

In addition to ruling out implementation of the crash recorder program, the Congress also made cuts in the following NHTSA programs.

• \$1.3 million from the Experimental Safety Vehicle (ESV) program. NHTSA has requested \$4.8 million. It got \$3.5 million.

• \$600,000 from research on the functional parts of cars (brake performance, maneuverability, stability, etc.). NHTSA had requested \$2.3 million. It got \$1.7 million.

• \$250,000 from tire research. NHTSA had requested \$1.3 million. It got \$1.05 million.

• \$28,000 from information and data systems. NHTSA had requested \$613,000. It got \$585,000.

Exploding Auto Batteries Prompt Warning

People who use "jumper cables" to start their cars are risking serious eye injuries, according to Dr. Frederick H. Davidorf, assistant professor of ophthalmology at Ohio State University.

Three cases he reports treating include:

• A 30-year-old woman suffered a central corneal laceration requiring hospital care and intensive medical supervision. The battery exploded in her face while she was using jumper cables to start her car.

• A 60 year-old man suffered secondary glaucoma and required surgery to repair a retinal hole caused by contusion of the eye after his car battery also exploded while he was using jumper cables.

• A 47-year old man lost the vision in his left eye and suffered multiple facial lacerations requiring plastic surgery when a car battery exploded in his face.

Davidorf told of these cases in a letter to the *Journal of the American Medical Association*. "This letter is written," he explained, "to document the danger involved in using a booster battery to start a car. Charging batteries releases a mixture of hydrogen and oxygen gases that will explode with great violence if a spark or flame is brought too near."

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The Ohio ophthalmologist also outlined in the *JAMA* letter the proper method of starting a dead battery with jumper cables:

1. Connect one end of a cable to the positive pole of the discharged battery.

2. Then connect the other end to the positive pole of the booster battery.

3. Connect the second cable to the negative pole of the booster battery and the other end to the engine block of the vehicle with the discharged battery, as far away from the battery as possible.

4. After starting the car, remove the cable from the engine block first, then remove the other end of this cable from the booster battery. Disconnect the other cable, first, from the newly recharged battery, then from the booster battery.

Product Safety News, which reported Davidorf's warning, notes: "There is no reason why a small placard explaining the procedure could not be attached to a battery by the manufacturer, who is certainly aware of the frequency with which jumper cables are used."

The Battery Council International, a trade association, has urged member companies to add warning labels telling consumers that lead-acid batteries generate explosive gases and that cell caps should be removed while a battery is being charged. Some battery makers are complying with the request. Owners' manuals provided by some auto makers also tell how to use jumper cables correctly.

Neither Davidorf's letter, the battery industry's association, nor the *Product Safety News*, suggested changes in battery design that would make public education to the hazards unnecessary. The National Highway Traffic Safety Administration has had authority since 1966 to issue standards that would minimize or eliminate battery explosion hazards. The agency has taken no regulatory action in this area.

IIHS Films Receive Major Awards

The Insurance Institute for Highway Safety film, *Boobytrap!* recently received two major awards in its field. The 28-minute documentary on roadside hazards was awarded the CINE (Council on International Nontheatrical Events) Golden Eagle – the highest award given to films submitted for official U.S. showing abroad – and was accorded highest honors in the traffic and transportation category by the National Committee on Films for Safety of the National Safety Council.

An earlier film of the Institute, ... In The Crash recently won first prize at the Zagreb International Film Festival of Traffic Safety, where it was the U.S. entry.... In The Crash also won a CINE Golden Eagle when originally released.

Both films were produced by Harvest Films, along with the Institute's *Small Cars and Crashes*, currently in demand due to growing interest in small cars, and the most recent release, *Cars That Crash and Burn*. All are available for loan and purchase from Harvest A-V, Inc., 309 Fifth Ave., New York, New York 10016.

Clarification

In an article on the effects of the Emergency Medical Services Systems Act of 1973, *Status Report* (Vol. 9, No. 1, Jan. 15, 1974) said that federal grants for EMS "may lead more communities to take over from private contractors and run their own services." The article failed to point out that local government units receiving grants under the act may hire private contractors to provide ambulance services.

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Three Defect Probes Suspended

The National Highway Traffic Safety Administration is about to close three motor vehicle defect investigation cases involving American Motors, General Motors and Chrysler Corp. autos. The actual investigations have been completed and the cases have been put into a suspended category to allow for public comment, NHTSA says.

If no additional evidence is forthcoming, the cases will be closed 60 days after public announcement of their being placed in the suspended category. The files of suspended investigations are open for public scrutiny, except for materials exempt from disclosure under the Freedom of Information Act, upon their appearance on the suspended list.

Suspended cases are publicized monthly in NHTSA news releases that also list ongoing, newly initiated and recently closed defect investigations (See *Status Report*, Vol. 8, No. 19, Oct. 19, 1973).

According to NHTSA, in exceptional cases the agency will suspend a defect investigation when "insufficient" information is found to justify pursuing the investigation. Unless evidence to support a determination of defect is received by the agency within 60 days thereafter, the investigation will be automatically closed.

Dr. James B. Gregory, NHTSA administrator, says the listing of suspended cases "represents our efforts to tap every source of information before the decision to terminate."

Thus far, NHTSA has placed three defect investigations in the suspended category. They are:

• All 1971-73 American Motors Corp. cars for "alleged low torque and looseness of critical fasteners in vehicle front suspensions." (Case no. C3-08)

• 1969 Chevrolet Biscaynes for rear suspension tie rods, the "failure of which may cause loss of vehicle control." (Case no. 209)

• 1973 Plymouth Valiants for "low or insufficient torque control" on the upper control arm. (Case no. C3-15)

The first case, involving the 1971-73 cars, was put into the suspended category Oct. 31, 1973. However, public announcement of the fact was not made until Dec. 31, 1973, 61 days later.

An NHTSA official told *Status Report* the AMC case would be held in the suspended file until March 2, 1974, because of the time lapse between actual suspension and announcement in NHTSA's *Monthly Defect Investigatory Report Cases.* The defect investigations involving 1969 Chevrolet Biscaynes and 1973 Plymouth Valiants were both suspended Dec. 31. 1973.

Information on suspected safety-related defects should be sent to the Office of Defects Investigation, National Highway Traffic Safety Administration, 400 Seventh St., S.W., Washington, D.C. 20591. A complete list of NHTSA's current defect investigations is also available from that address.

Status Report requests that a copy of the report also be sent to "Defects," Insurance Institute for Highway Safety, Watergate Six Hundred, Washington, D.C. 20037. The form on page 8 was prepared to facilitate reporting possible safety-related defects.

Office of Defects Invest	tigation			
National Highway Traff	fic Safety Administration			
400 Seventh Street, S.W	V.			
Washington, D.C. 2059	91			
This letter is to advise y	you of a possible safety-rela	ated motor vehicle defect. The de	tails are as follows:	
Description of problem	(note if crash was involve	d.)		
(Please print)				
Vehicle make and year		M odel		
Vehicle make and year	(Chevrolet, Ford, etc.)	M odel(Impala, Pir	nto, etc.)	
Vehicle make and year	(Chevrolet, Ford, etc.)	M odel (Impala, Pir Date Purchased	nto, etc.) New	Used
Vehicle make and year Mileage Vehicle identification (d	(Chevrolet, Ford, etc.) or serial) number	M odel (Impala, Pir Date Purchased	nto, etc.) New	Used
Vehicle make and year Mileage Vehicle identification (o	(Chevrolet, Ford, etc.) or serial) number (Found on	M odel (Impala, Pir Date Purchased state vehicle registration card)	nto, etc.) New	Used
Vehicle make and year Mileage Vehicle identification (o Name	(Chevrolet, Ford, etc.) or serial) number (Found on	M odel (Impala, Pir Date Purchased state vehicle registration card) Address(Str	nto, etc.) New reet)	Used
Vehicle make and year Mileage Vehicle identification (o Name	(Chevrolet, Ford, etc.) or serial) number (Found on	M odel (Impala, Pir Date Purchased state vehicle registration card) Address(Strate)	nto, etc.) New reet)	Used
Vehicle make and year Mileage Vehicle identification (o Name (City)	(Chevrolet, Ford, etc.) or serial) number (Found on	M odel (Impala, Pir Date Purchased state vehicle registration card) Address(Str (State) Work	nto, etc.) New reet)	Used(Zip)
Vehicle make and year Mileage Vehicle identification (of Name (City) Telephone: Home (Ar	(Chevrolet, Ford, etc.) or serial) number (Found on ea code)	M odel (Impala, Pir Date Purchased state vehicle registration card) Address(Str (State) Work(Area code)	nto, etc.) New reet)	Used (Zip)

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