

Savings Found In Current Standard

NHTSA Reaffirms 5 MPH Bumper Benefits

Bumpers that can withstand without damage a 5 mph impact save motorists money and aren't wasteful of gasoline, federal analysts have agreed once again.

Taking another look at the comparative merits of 5 mph bumpers and their weaker counterparts designed for only a 2.5 mph no-damage impact, the National Highway Traffic Safety Administration (NHTSA) has reaffirmed its faith in the 5 mph standard that became effective with 1979 models. The new study came in response to comments received after publication in June 1979 of NHTSA's evaluation of the bumper standard. (See *Status Report*, Vol. 14, No. 9, June 6, 1979.)

Net Savings Between \$11 and \$29

"We base our conclusion on a number of factors, including our estimate that the net benefits resulting from current 5 mph bumpers exceed those of 2.5 mph bumpers by between \$11 and \$29," NHTSA explained. "These savings should not be lost."

NHTSA revealed its current judgment in a letter to Senate Majority Leader Robert C. Byrd (D.-W.Va.) and in detailed comments filed in the bumper docket. Senator Byrd was the author of an amendment to the NHTSA authorizations bill that would order the agency to roll back the bumper standard to 2.5 mph, a toddler's walking speed. (See *Status Report*, Vol. 14, No. 11, July 13, 1979.) The House bill does not carry a similar requirement, and the bills are now awaiting action by a House-Senate conference committee.

The Part 581 bumper standard requires that, starting with 1979 models, passenger cars suffer no damage in a 5 mph barrier impact test, with the exception of the bumpers themselves and their attachment hardware. Only minimal damage was permitted to the bumpers, starting with the 1980 models.

'Little Effect on Fuel Consumption'

Explaining its cost-benefit analysis, NHTSA observed that "changes in the bumper standard would have little effect on fuel consumption." The agency added: "As a general rule, manufacturers plan to meet the standards, not exceed them, so that reductions in fuel consumption attributable to a change in the bumper standard would most likely be offset by modifications elsewhere in the vehicle."

While steel bumpers are found on 70 percent of the new cars now produced, NHTSA commented, continuing pressures to improve fuel economy are likely to bring a larger share of the market for the lighter aluminum and soft-face bumpers.

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NHTSA Reaffirms 5 MPH Bumper Benefits (Cont'd from page 1)

“Our analysis of current technology indicates that aluminum and soft-face bumpers are more beneficial to the consumer than steel bumpers, in that they provide greater fuel economy and cost less to manufacture and replace,” the agency said. “If manufacturers continue to switch to these materials, the net benefits to the average consumer will increase by about \$6.50 for each 10 percent increase in their use.”

Pedestrian Protection Involved

NHTSA indicated that the trend to the lighter and softer materials will be hastened by the agency's plans for a new vehicle safety standard to protect pedestrians. “If such a standard is promulgated (and we expect to initiate rulemaking in the near future),” NHTSA observed, “its effect would be to substantially soften vehicle front ends, including bumpers. The effective date of a pedestrian protection requirement would fall at or soon after the time when manufacturers would adapt to a 2.5 mph standard if the current standard was reduced.”

Interagency Group To Study Car Repair Problems

Five federal agencies have joined in an effort to cut back the fast-rising cost of auto repair. The group, called the “Automotive Inspection, Maintenance, and Repair Interagency Coordinating Committee,” will consist of representatives from the Department of Energy, the Environmental Protection Agency, the Federal Trade Commission, and the U.S. Office of Consumer Affairs, with the National Highway Traffic Safety Administration (NHTSA) taking the lead.

In announcing the move, NHTSA said consumers pay some \$50 billion per year to have their cars repaired, and that its research indicates 53 cents of each dollar spent is wasted. “While large segments of the auto repair industry have performed adequately in keeping most vehicles in reasonable operating condition, it also has been a major source of consumer complaints,” said Joan Claybrook, head of the agency.

Cost of Car Ownership Booms

NHTSA also cited a recent Congressional report which found that the cost of owning and operating an automobile has risen much faster than the overall cost of living in recent years. The report, released by the House Consumer Protection Subcommittee, said the soaring cost of crash repairs was among the factors contributing to the rise. It also stressed that it is the “mechanic's inability to diagnose and repair cars properly, and not fraud, that is the principal cause of the auto repair problem at the shop level” (see *Status Report*, Vol. 14, No. 16, Oct. 29, 1979.)

A number of problem areas will be investigated by the committee, NHTSA said. Ways will be explored of improving repair diagnoses. Programs may be expanded to establish independent centers that would identify necessary repairs, and efforts may be made to increase diagnostic equipment in vehicles. NHTSA said the certification of mechanics and the establishment of periodic refresher courses to help them catch up on new repair techniques also will be considered, among other activities.

However, in response to a query, an agency spokesman said the committee will not be looking into the issue of vehicle and parts designs that increase damageability. He said cutting auto repair costs by controlling damageability would come under the jurisdiction of NHTSA's Office of Automotive Ratings, not that of the committee.

X-Body Cars Show Improved Collision Coverage Results

Initial collision coverage results for General Motors "X-body" cars indicate that the front-wheel drive compact models are faring somewhat better than other compacts, the Highway Loss Data Institute (HLDI) has reported.

HLDI compared results for the 1980 model Buick Skylark, Chevrolet Citation, Oldsmobile Omega, and Pontiac Phoenix (all introduced in April 1979) with the 1979 model AMC Concord, Buick Century/Regal, Chevrolet Malibu, Ford Fairmont and Granada, Mercury Zephyr and Monarch, Oldsmobile Cutlass, Pontiac LeMans and Grand Am, and the two-door Dodge Aspen and Plymouth Volare.

Data were supplied by nine insurers from collision coverage and loss experience for the calendar period May 1 through Sept. 30, 1979. In order to eliminate any possible effects due to different vehicle ages, only those 1979 cars insured after April 15, 1979, were used to compute the 1979 model year results for the comparisons. The findings are summarized in the accompanying table, where a figure of 100 represents the overall result for all 1979 models.

Fairmont Two-Door Tops Citation

In a comparison of the bigger selling individual auto makes and series, the Chevrolet Citation ranked second among the five regular two-door compact models. The Ford Fairmont was first with a relative average loss payment per insured vehicle year of 78, Citation second with 83, followed by Oldsmobile Cutlass (88), Buick Century/Regal (97), and Chevrolet Malibu (101).

The Citation ranked first among the three regular four-door compact models having more than 3,000 insured vehicle years of exposure. The Citation had a relative average loss payment per insured vehicle year of 75. Following that were the Chevrolet Malibu and the Ford Fairmont (both 79).

**LOSS PAYMENT SUMMARY BY BODY STYLE
1979 AND 1980 COMPACT MODELS - COLLISION COVERAGES**

MODEL YEAR	BODY STYLE	TOTAL EXPOSURE (INSURED VEHICLE YEARS)	RELATIVE CLAIM FREQUENCY	RELATIVE AVERAGE LOSS PAYMENT PER CLAIM	RELATIVE AVERAGE LOSS PAYMENT PER INSURED VEHICLE YEAR
1979	Regular 2-Door Models	54,969	97	90	87
1980	X-Body 2-Door Models	9,393	88	89	78
1979	Regular 4-Door Models	17,016	79	92	73
1980	X-Body 4-Door Models	9,944	74	97	72
1979	All Reg. 2- & 4-Door Models	71,985	93	90	84
1980	All X-Body Models	19,337	80	92	74

Results for both model years are standardized to the following distribution of exposure:

DEDUCTIBLE	YOUTHFUL OPERATOR	NO YOUTHFUL OPERATOR
<\$150	10%	60%
≥\$150	5%	25%

Survey Finds Half Would Pay More For Air Bags

Air bags would outsell automatic belts even if they cost \$200 more, 51 percent of respondents to a nationwide poll have said.

In a survey of public attitudes toward highway safety last June, conducted under contract for the National Highway Traffic Safety Administration (NHTSA), 63 percent of the 1,500 licensed drivers interviewed said they would use automatic seat belts if cars came equipped with them, and 32 percent said they would not. Fifty-one percent said they would opt for air bags if they could, even at a higher cost.

The survey, weighted to reflect the geographic distribution of the nation's population, revealed that 86 percent of the drivers interviewed believe that manual safety belts would provide protection in a crash. In sharp contrast, only 24 percent said they wear seat belts regularly. (Reported use, based on actual observation, indicates that only about 14 percent of the nation's drivers use safety belts.)

Chief among their reasons for not using safety belts were complaints about their lack of comfort and convenience. (See *Status Report*, Vol. 15, No. 1, Jan. 11, 1980.)

Majority Favors Belt-Use Law

More than half the respondents (52 percent) were in favor of a general safety belt-use law and even more (60 percent) said they would favor a law requiring those under 18 to use belts. An overwhelming (84 percent) majority said they would favor a law requiring children to be restrained while riding in vehicles.

Also among the study's notable findings:

- Drunk driving was perceived by 75 percent of the respondents as the chief highway menace, reflecting the fact that in well over half the fatal crashes logged annually, alcohol is cited as a contributing factor. Sixty percent of the drivers interviewed said they would be willing to pay higher taxes to fund programs aimed at the problem.

- Three out of four motorists favor the 55 mph speed limit, primarily for safety reasons.

The survey also revealed that few people realize the extent to which they are at risk on the nation's highways. While the report estimates the average driver's actual risk of being involved in a car crash during the next year is about one in seven, over half (58 percent) believe the odds are one in 100.

Copies of the report, "1979 Survey of Public Perceptions on Highway Safety," may be obtained from the General Services Division, NAD-42, National Highway Traffic Safety Administration, Washington, D.C. 20590.

Motorcyclist Head Injuries On Rise In Maryland

Since the July repeal of Maryland's helmet use law for motorcyclists over 18, severe head injuries have risen sharply, the state's chief medical examiner has reported.

"Severe head injuries are now found in 76 percent of fatally injured motorcyclists, compared to 57 percent in our previous review of injury data for 1973-75, when most Maryland motorcyclists wore helmets," Russell S. Fisher, M.D., chief medical examiner of Maryland, and Susan P. Baker, an associate professor at the Johns Hopkins School of Public Health, wrote a Maryland legislator.

Although the current statute specifies that motorcyclists under 18 must wear helmets, four out of the five fatally injured motorcyclists who were 16 or 17 years old were not wearing helmets at the time they crashed, Baker and Fisher told Edward Conroy, chairman of the State Senate's Committee on Constitutional and Public Law, which held a recent hearing on the matter.

The committee is now considering a measure that would restore the helmet use law to cover all motorcyclists, regardless of age. The previous statute had been repealed by the General Assembly in 1978 and 1979, but in 1978, Acting Governor Blair Lee vetoed the measure. Last year, however, Governor Harry Hughes signed the bill into law, starting July 1. (See *Status Report*, Vol. 14, No. 9, June 6, 1979.)

Maryland Assembly Considers New Crash Data

In a separate study prepared for the 1980 General Assembly, the University of Maryland's Institute for Emergency Medical Services Shock Trauma Center reported that out of a total of 25 motorcyclists treated by the unit for injuries, only 7 (28 percent) were wearing helmets at the time of their crash. Of this number, none received head injuries and all survived the impact.

Of the 18 motorcyclists not wearing helmets, 14 (77 percent) suffered head injuries. Four of these suffered permanent disabilities as a result. Eleven of the 18 (61 percent) unhelmeted motorcyclists died, ten from head injuries, and one from a double amputation.

According to a study conducted by Princeton University researchers and the Insurance Institute for Highway Safety, repeal of state motorcycle helmet use laws has been typically followed by an almost 40 percent rise in fatalities. (See *Status Report*, Vol. 14, No. 8, Dec. 21, 1979.)

No Choice For Motorists

Motorcyclists have long lobbied for repeal of helmet use laws on the grounds they should have the freedom to choose whether they wear helmets or not. After all, they say, failure to do so results in harm to no one but themselves.

Not so, says one lawyer.

Pointing out four recent judgments for brain injuries, totaling in excess of \$6 million, attorney Stephen Teret, an assistant professor at the Johns Hopkins School of Public Health, told the Maryland Senate Committee on Constitutional and Public Law during a hearing, that Maryland law prohibits drivers from defending themselves in damage suits by claiming that the motorcyclist should have worn a helmet.

"Needless to say, these amounts [judgments] are far in excess of the automobile liability insurance that most of us carry," Teret testified. "The point . . . is simple. When a motorcyclist chooses to ride without his helmet, he is not only placing his own head at risk; he is also placing at risk for the other drivers on the road their bank book, their homes, and their children's college education."

Death of a Son a Grim Lesson

(The following article first appeared in the Redding, Calif., newspaper, Record Searchlight, on Aug. 30, 1979, and is reprinted here with that paper's permission. It is ironic that this story appeared in California. Until 1976, a federal highway safety standard required that all states enact and enforce mandatory motorcycle helmet use laws. California was one of only three states that failed to comply. In 1976 the U.S. Congress passed a law — introduced in the Senate by Alan Cranston (D.-Calif.) — revoking federal sanctions against states not complying with the helmet use standard. Since then, 26 states have repealed such laws, and have typically experienced substantial increases in motorcycle crash fatalities compared to the states that have retained the laws.

Meanwhile, California continues to allow motorcyclists to ride without helmets.)

By Gary Eagan, Staff Writer

Cliff Adams was a heck of a motorcycle racer.

Once on a powerful bike, he knew no fear. He vowed to friends he "wouldn't die with a helmet on."

He didn't. When he fell from his bike Aug. 22, onto Interstate 5, suffering fatal injuries, the helmet his 18-year old brother had loaned him the cash to buy was sitting at home.

Adams was 23 when he died. He had the potential to be one of the best flat-track racers in Northern California. He had a garage full of trophies. His father blames his son's penchant for speed and absolute refusal to wear a protective helmet for Cliff's death.

The father, Cliff Adams Sr., is a California Highway Patrol officer in Redding. An 18-year veteran of law enforcement, the senior Adams rode motorcycles for the CHP and still runs a large bike for pleasure.

"Cliff's death has left us (the family) sad and hurtin'," Adams said Wednesday. "But there has to be a lesson in it so he didn't die in vain."

The lesson is a simple one. Helmets can save the lives of motorcyclists. Adams said that if his son had been wearing a helmet, "We would have a live boy today."

"Parents have got to keep the lines of communication open with their children," Adams said. "I tried every way I could think of to reach Cliff. We had lots of conversations about him wearing helmets. But he wouldn't confine himself in a helmet."

Adams wanted to tell the story of his son's death, and of the circumstances that led up to it.

Some 18 months ago, Adams recalled, his son led Redding police on a high-speed chase through city streets. He sped away from the pursuing officers, at times traveling more than 100 mph on South Market Street, weaving in and out of traffic. A week after the chase, police nabbed

young Adams as he was washing the motorcycle at a car wash.

"Cliff promised every judge in this town that he would sell his bike," Adams said. "But he just loved speed too much and wouldn't sell it."

He was involved in drag races of all sorts on city and county roads. He was arrested for drunken driving once while speeding on his Kawasaki 900 bike, and had his license suspended once. He was about to lose it again when he was killed.

The night of Aug. 22, the young racer was south-bound on I-5 about 11 p.m. His father said he was probably going at least 70 mph. The bike went into a "front end wobble," a development that strikes panic into the guts of most riders.

Adams said his boy had been in a wreck on Highway 299 about two months before, dumping the cycle at high speed on the highway. His bike was hurt worse than he was, with extensive damage to the front forks. The forks were straightened, but a mechanism attached to the forks was still in poor shape. Adams said his son knew of the damage, but still refused to keep off the accelerator.

As he darted down I-5, the bike began to wobble, he was tossed onto the pavement and the bike slid on top of him for about 300 feet. He was then thrown into the center strip. Adams said the only serious injuries were to his boy's head. The young man died three days later at the Mercy Medical Center.

The younger Adams was a sort of legend among young riders in the Redding area. His father said that at his funeral some of the riders arrived on their cycles, many wearing helmets. He said that was a tribute to his dead son.

The dead cyclist's younger brother, Jeff, is also a top-notch competitive rider. Jeff said that his brother's death has had an effect on his riding habits.

"I'll never, ever get on another bike without a helmet," Jeff said. "I know a lot of Cliff's friends are also wearing helmets now because of what happened, but they'll probably just forget about the helmets in a few weeks."

"I want to help some kid," Adams said. "If some father reads this and gets through to his son, then Cliff's death is worth something. Maybe if the kids see what Cliff's final end was, they might be spared."

Adams and fellow CHP officer Don McKeown exchange their thoughts now about the loss of sons. A year ago McKeown was sent out to Happy Valley to investigate an accident, and when he arrived he was told his son was killed in the crash.

"Don has had a lot of time to think about the loss of a son since the accident," Adams said, "and he has talked about it a lot."

McKeown, in some notes he jotted down and gave to Adams, asks parents to think about the words to a popular song titled "The Cat's in the Cradle." The song, by writer Harry Chapin, talks about the progression of a young boy's life, and of his father being too busy to pay much attention to the youngster. The father always promises to get with the boy "real soon."

The boy in the song always keeps heart in spite of his dad's refusal to spend time with him. The boy always points to his dad with pride and says "some day I'm gonna be just like him."

The song cycles around, with the youngster even-

tually becoming a parent. And he repeats his father's habits, being too busy to allow any time for his now elderly father.

The two officers have learned a sorrowful lesson at the hands of experience. They both beseech parents to open their lines of communication to their children before their children are gone.

And to the children, regardless of age, Adams says he hopes they will listen to their more experienced parents and heed the advice.

The advice an 18-year veteran of traffic enforcement gave his son could have saved the boy's life — and left a top-flight motorcycle racer on the track instead of in the grave.

Inside Rear-View Mirrors Proposed For Some Trucks, Vans

Light trucks and vans equipped with rear windows will be required to have inside rear-view mirrors, under a National Highway Traffic Safety Administration (NHTSA) proposed rule.

Since most light trucks and vans are already equipped with interior-mounted rear-view mirrors, the agency said it expects the cost of compliance to amount to less than \$2 for remaining vehicles.

Comments on the proposed rule change should be received no later than Feb. 14, 1980. They should be addressed to Docket No. 79-19, Notice 1, Room 5108, National Highway Traffic Safety Administration, 400 Seventh Street, S.W., Washington, D.C. 20590.

Quoted Without Comment

If the internal-combustion engine is to remain the principal technology for the next few decades, how efficient could it ultimately be made? The answer will depend to a large extent on what will be required of tomorrow's automobiles. If they are designed to have rapid acceleration, a fast cruising speed, the ability to carry five or six passengers, and sufficient power to pull a trailer — all standard features of today's American cars — fuel economy is unlikely to reach more than 50 miles per gallon. Far greater fuel efficiency could be achieved by designing less powerful vehicles, and by matching vehicle power with actual requirements.

Most trips do not require the full power that large automobile engines are capable of delivering. Indeed, even though speed limits have been imposed in most countries, automobiles are still being designed to travel at speeds of more than 80 miles per hour. If cars were built to attain a maximum speed of, say, 60 miles per hour — faster than the current U.S. speed limit to provide some reserve power for passing — engine power and weight could be reduced substantially. Moreover, with lower average speeds, rapid acceleration would be less important when passing cars on highways. Performance, in short, should be equated with efficiency, not power.

— From *Running on Empty, The Future of the Automobile in an Oil-Short World*, a Worldwatch Institute book by Lester R. Brown, Christopher Flavin, and Colin Norman, published by W. W. Norton & Company. Copyright © 1979 by Worldwatch Institute.

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