

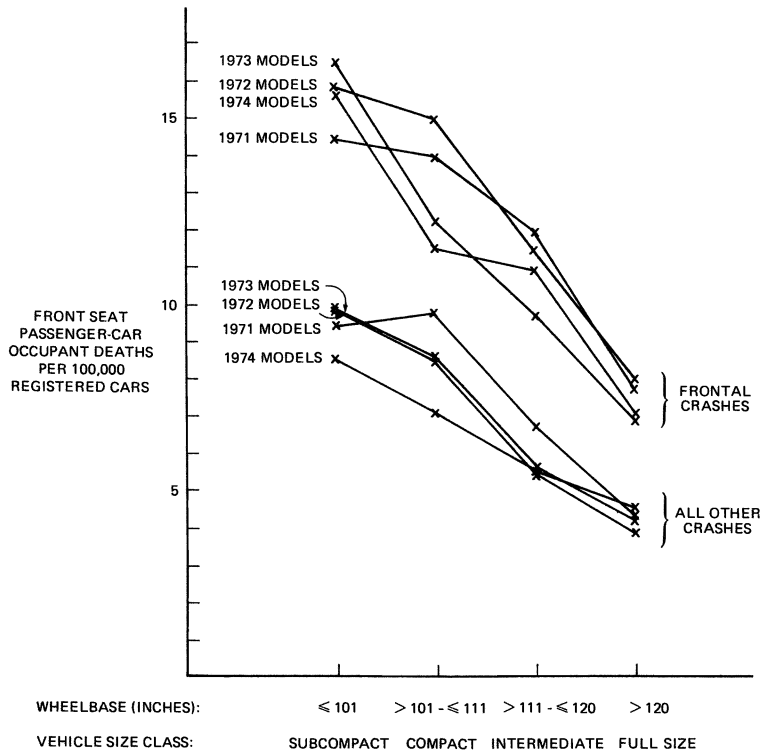
Asks 'Why The Delay?'

Adams Holds Passive Restraint Hearings

Stating dissatisfaction with his predecessor's decision to put off final action on mandatory passive restraints for five to eight years, Secretary of Transportation Brock Adams opened two days of hearings at which he heard more than 70 witnesses give testimony on air bags, mandatory belt use laws, crash experiences and government and industry inaction.

Adams said that he would reach an early decision on whether or not to mandate passive restraints in all new cars so that any such rule could accompany the Congressionally mandated fuel efficiency standards due on July 1. *(Cont'd on page 3)*

U.S. FRONT SEAT PASSENGER-CAR OCCUPANT DEATH RATES BY CAR SIZE — 1971-74 MODELS IN CALENDAR YEAR 1975¹



¹ SOURCE: NHTSA FATAL ACCIDENT REPORTING SYSTEM AND R. L. POLK NATIONAL VEHICLE POPULATION PROFILE, JULY 1 1975.

IIHS, April 1977

Haddon Tells Adams: 'Stop The Carnage'

At the April 27 hearing called by Secretary of Transportation Brock Adams to hear testimony on passive restraints, William Haddon, Jr., M.D., president of the Insurance Institute for Highway Safety, called on Adams to reverse the decision of his predecessor, William Coleman, who ordered a "demonstration" program of passive restraints rather than their installation in all new cars. (See Status Report, Vol. 11, No. 19, Dec. 13, 1976.)

Following is the text of Haddon's remarks:

Former Secretary Coleman reached the right conclusions but made the wrong decision. If his mistake is not reversed, tens of thousands of Americans will pay for it with their lives, and hundreds of thousands by being severely injured.

(Cont'd on page 2)

Mr. Coleman found that passive restraints “are a reliable and effective means of substantially reducing death and injuries on the nation’s highways;” that if installed on all cars “air bags would probably save over twelve thousand lives annually and prevent or reduce in severity over one hundred thousand moderate to critical injuries per year,” and that passive restraints could be provided to new car buyers as standard equipment “at a reasonable cost to the consumer.”

But he refused to mandate passive restraints.

You have proposed, on the basis of the Coleman record, to require passive restraints in future new cars. Thus we may finally be reaching the end of a process that began years ago with the technological development and perfection of simple, low-cost systems to provide greatly increased levels of passive – automatic – protection for people in cars when those cars are in front or front-angle crashes that otherwise might fatally or seriously injure them.

Early in the process the technological questions about passive frontal crash protection were raised and settled; the efficacy of the principal passive restraint system, the air bag, was demonstrated over and over again in both testing and real-world circumstances, and alleged adverse byproducts of the systems were shown to be either nonexistent or removable.

Yet those who control the technology have continued to resist giving it to the American people, just as in earlier years they resisted letting Americans have safety belts in their new cars, even as options.

Since the Coleman hearing and decision, evidence of the need for and benefits of passive restraints in frontal crashes – the kind that claim the majority of occupant fatalities in car collisions – has grown even stronger. For example, we have attached results of analyses showing that:

1. Air bag-protected occupants in severe frontal crashes experience greater reductions in fatal and serious injury (70 percent) than occupants of such crashes wearing lap-shoulder belts (55 percent) when both are compared to unrestrained occupants. These data are based on studies of real-world air bag crashes that occurred both before and since the Coleman hearing.
2. Occupants of smaller, lighter cars – such as will be coming on the roads in increasing numbers as America moves to cope with its energy crisis – *already* are being killed at far higher rates in frontal crashes than occupants of other cars. [See page 1.]
3. All other things being equal, smaller, lighter cars simply cannot provide occupant protection in *any* kind of crash as well as larger cars. People in the smaller cars particularly need the most effective, modern restraint systems available – and right away.
4. Even if high levels of active belt use could be achieved, the experience of countries with mandatory belt use laws makes clear that the life-saving and injury-reducing benefits would not be nearly as large as projected in the Coleman report. [See box on page 8.]
5. Active lap-shoulder belts, although inferior to air bags in frontal crashes, are so far superior to *no* restraints – *if they are used* – that you should also do whatever possible to increase belt use. It must be faced, however, that even mandating belt use by law will still leave very high percentages of occupants unprotected by belts – including, in disproportionately high shares, those in crashes.

As your March 24 notice suggests, “anticipated consumer resistance” is not a proper basis for failing to mandate passive restraints. Air bag-type passive restraints, unlike active belts and interlock devices, are completely unobtrusive and uninterfering. Because auto companies and DOT to date have made so little

accurate information about air bags available to the public, it may be misinformed about passive protection technology, but the public is *not* without a strong view of its own priorities. The only scientific nationwide survey of prospective *new* car buyers – a survey ignored by Mr. Coleman even though presented to him at his hearing – showed that a huge majority (four out of five) *preferred* increased crash protection requiring no action on their part, whether alone or in combination with active crash protection, and were quite willing to pay for such life-saving systems through increased car prices. [See *Status Report*, Vol. 11, No. 16, Oct. 12, 1976.]

Finally, Mr. Coleman declined to mandate passive restraints because, he said, “In instances such as this one, in which the primary purpose is self-protection, I believe that more than usual consideration should be given to maximizing the individual’s freedom to choose his means of protection”

Of all those people – children and adult passengers, second purchasers, car pool passengers, car renters and others – who have no “freedom of choice” to be protected in crashes when an automobile company or a government agency or a new car buyer decides that passive restraints shall *not* be a part of a new car, Mr. Coleman said nothing.

The Pulitzer prize-winning conservative commentator, George F. Will, recently described as follows the view implicit in Mr. Coleman’s position:

“There is a pitiless abstractness, and disrespect for life, in such dogmatic respect for the right of consenting adults to behave in ways disastrous to themselves. Besides, too many children passengers are sacrificed on that altar. And a large part of the bill for the irrationality of individual drivers is paid by society.

“Most important, society desensitizes itself by passively accepting so much carnage.”

It is time for the needless carnage to stop, and within your power to stop it.

(A complete copy of the Haddon statement with supporting attachments submitted to Secretary Adams is available by writing to “Passive Restraint Statement,” Insurance Institute for Highway Safety, Watergate Six Hundred, Washington, D.C. 20037.

Adams Holds Hearing (Cont’d from page 1)

Adams emphasized that the new fuel efficiency standards will result in smaller, lighter cars. “As the number of smaller cars on our highways increases, the larger risk of death or injury from collision of vehicles of disproportionate weight and size indicates to me that we must address the problem of occupant vehicle safety,” Adams said. (See *Status Report*, Vol. 12, No. 6, March 29, 1977.)

The April 27-28 meeting – the sixth Department of Transportation hearing on passive restraints since August 1969 – was called to hear testimony on three options that Adams is considering to provide occupant protection:

- keep the current federal occupant protection standard which allows, but does not require, manufacturers to provide passive – i.e. automatic – protection to vehicle occupants in the event of a frontal crash. Under this standard, most auto makers have provided manual safety belts;
- take action that leads towards state passage of mandatory safety belt use laws;
- require passive protection in all new cars.

(Cont’d on page 5)

Air Bags Endorsed By Those In Crashes

People who have been in car crashes – both with and without passive protection – told Adams that he should require passive restraints in all new cars. These witnesses included five people who suffered spinal cord injuries in crashes of cars *not* equipped with air bags and six people, two of them stunt drivers, who had experienced crashes in which an air bag deployed to prevent serious injury.

Eric Mohn, of Maryland, told Adams about the car crash 14 years ago that left him a quadriplegic. Mohn said he required two and a half years of hospital treatment at “incalculable costs.” Mohn said, “My parents have taken care of me for the last 12 years. They know everything that has happened in my accident and they know the consequences of an individual not wearing his or her seat belt. Yet, to this day, I cannot badger my mother into wearing her seat belt. I don’t think she is an exception.”

Phil Draper of the Center for Independent Living said that he had been hospitalized for four and a half years following the car crash that left him a quadriplegic. He did not know the total cost of his hospital stay but one eleven month period cost, in 1969 dollars, \$84,000. He pointed out that he is now totally dependent on the state, and thus “taxpayers’ money” for all his medical and living expenses. (The Insurance Institute for Highway Safety recently published an extensive study of the losses society sustains each year from the more than 5,000 spinal cord injuries that occur in motor vehicle crashes – 70 percent of which are to motor vehicle occupants. See *Status Report*, Vol. 11, No. 20, Dec. 15, 1976.) Two other members of the Center for Independent Living, Ron Washington and Kathy Kenworthy, also testified about the spinal cord injuries they received in car crashes, as did Judy Taylor of the Physically Disabled Student Project of Berkeley, California.

Ralf Hotchkiss of the Center for Concerned Engineering said, “Many of our disabled brothers and sisters know that their injuries could and would have been prevented by federal action in the early ‘70’s. If you decide to further delay passive protection we would appreciate your help in persuading thousands of us that our disabilities are necessary and in the national interest.” John Wilkin, representing the National Paraplegia Foundation, also urged Adams to require passive restraints in all new cars.

Debra Bell, from New York, told Adams of the two crashes she had experienced in her air bag equipped Cadillac. After the first crash, in which the air bags deployed and she was uninjured, her car was repaired and the air bags were replaced. In the second crash, she said, the car “was damaged beyond repair. However, I walked away from the accident without a scratch or a bruise thanks to the effectiveness of the air bags.” She said she would like to buy a new car equipped with air bags but was told that they are no longer available even as an option.

Kenneth Gnaster, from Chicago, told Adams that after his major crash in an air bag equipped car he was back at his office within one hour. He said he would like to buy a new compact size car that would get better gas mileage but “I want an air bag in a small car for protection. If I can’t purchase this, then my only choice is to stay with the big car.” Russ Parrish, from Louisiana, said he believed the air bag in his 1973 Chevrolet Impala saved him from serious injury in a head-on crash with another car. Adams also heard testimony from Helen Brosche, of Bloomfield Hills, Michigan, about her crash in an air bag equipped car and from two Hollywood stunt drivers, Hal Needham and Vic Rivers, who have both driven air bag equipped cars into concrete barriers.

(Cont'd from page 3)

WHY THE DELAY?

Adams repeatedly asked one question of witnesses throughout the hearing. He wanted to know why auto makers virtually ceased development of passive restraints in the early 1970's once the government removed rulemaking pressure. Adams pointed out that over the past several years there have been repeated delays in final rulemaking by the federal government on passive restraints and that most auto companies have never voluntarily introduced passive restraints in any of their cars.

Ralph Nader told Adams that the slow down in passive restraints came about because the major auto makers "decided they must be consistent in opposing all federal regulations." Nader said the lack of a standard was due to the "calculated delaying tactics of the concentrated automobile industry."

Ralf Hotchkiss, of the Center for Concerned Engineering, echoed that analysis, saying that auto maker action on passive restraints stopped when the federal government "mysteriously took the heat off."

Auto makers' replies to the question shed little light on passive restraint delays. For example, American Motors Corp. said only that it was a "very complex and intricate subject," and then proceeded to recite some of the rulemaking history of the standard.

SMALL CARS

In his opening remarks, Adams emphasized his concern about the need to provide additional protection for the increasing number of small car occupants. He noted that auto maker efforts to meet the new fuel efficiency standards, scheduled to go into effect with 1981 models, are "certain to result in reductions in the size and weight of many passenger cars, . . ."

Data confirming the hazards posed to occupants of small vehicles were presented at the hearing by the Insurance Institute for Highway Safety. The data showed that occupants of "smaller, lighter cars -- such as will be coming on the roads in increasing numbers as America moves to cope with its energy crisis -- *already* are being killed at far higher rates in frontal crashes than occupants of other cars." The Institute warned, "All other things being equal, smaller, lighter cars simply cannot provide occupant protection in *any* kind of crash as well as larger cars. People in the smaller cars particularly need the most effective, modern restraint systems available -- and right away." (See page 1.)

While some auto makers, such as Nissan and American Motors, talked of the difficulties of providing air bag protection in smaller cars, evidence was provided by equipment suppliers, independent researchers and other vehicle manufacturers to demonstrate that air bags are both practical and effective in smaller cars.

Thiokol, an air bag supplier, testified it had developed air bag systems for sub compact cars that not only meet the 30 mile per hour performance requirements of NHTSA's occupant crash protection standard (FMVSS 208), but perform equally well in 40-50 mph crashes.

Minicars, Inc., which is participating in NHTSA's program to develop a 3,000 lb. research safety vehicle, told Adams that "production-type, 30 mile per hour small car passive restraints exist and . . . advanced air cushion systems when placed in properly designed small cars can eliminate many additional fatalities." Minicars' President Donald Friedman, a former GM official, presented films of a 1974 Chevrolet Vega crash test in which an air bag "protected the driver at 32 miles per hour" and could have provided adequate protection at even higher speeds. Friedman noted that the air bags were able to provide adequate protection for small car occupants even though the Vega has "the worst crash deceleration profile

of all the small cars we tested.” The air bag in those crashes used “a simple adaptation of 1972 air bag technology,” according to Friedman.

The John Z. DeLorean Corp., which is headed by GM’s former vice president in charge of car and truck operations for North America, testified that it plans to provide passive restraints in its newly developed “two passenger, sports-type vehicle.” It said that because of advancements in air bag design it was “finding plenty of room for the modern air cushion system” in its small vehicle.

One foreign manufacturer of small cars, Toyota, also told Adams that it had developed an air bag system which has “succeeded in satisfying, on an experimental basis, the injury criteria of Motor Vehicle Safety Standard 208” Toyota, while not committing itself, said it hoped to offer a driver-only air bag system as an option in one of its car lines during the 1980 model year.

SAFETY BELTS

Public health researchers, insurers and citizens’ groups urged automatic passive protection be required in all new cars along with increased safety belt use as a means of further reducing crash deaths and injuries. Auto manufacturers and the American Automobile Association argued for increased belt use, required by law if necessary, rather than the installation of automatic restraints.

IIHS President William Haddon, Jr., M.D., said that “active lap-shoulder belts, although inferior to air bags in frontal crashes, are so far superior to *no* restraints – *if they are used*,” that Adams should “also do whatever possible to increase belt use.”

Belt use laws were supported by an Australian surgeon, Dr. Gordon Trinca, whose patients include many car crash victims, but he stressed that such laws were not an alternative to passive restraints. After describing the drop in deaths and injuries that followed enactment of the Australian safety belt use law, he reported the conclusion of the Sixth International Conference of the International Association for Accident and Traffic Medicine, recently held in Australia, that “governments and other appropriate authorities which had not enacted legislation making seat belt use mandatory were placing the road-using populations under their administration at needless risk.”

Kathleen Sheekey of the Consumer Federation of America warned that belt use laws are unlikely to be enacted in the U.S. She said that CFA members “have had broad experience working with legislatures in virtually every state in the Union. All too often state legislators, faithfully reflecting the sentiment of the people in the state, see mandatory belt legislation as an outrageous and unnecessary intrusion into people’s lives. Whether you agree with that view or not, it is a sentiment that is prevalent in the large majority of our states.”

All four major domestic auto manufacturers, as well as the Motor Vehicle Manufacturers Association and several foreign manufacturers, called for increased belt use, with mandatory laws if necessary. American Motors Corp. suggested “belt-wearing incentive programs,” such as automatic increases in motorists’ insurance protection if they wear belts or reduced insurance premiums for belt users. AMC said, “We stand ready to work with the insurance industry to develop a reliable belt use verification device for purposes of awarding user incentives.” (When queried about the “verification device,” an AMC official told *Status Report* that the vice president who could provide details on such a device was unavailable for comment at that time.)

Ford Motor Co. asked that Adams “enlist the Department of Transportation in a vigorous educational campaign that will raise both voluntary usage rates and public support for mandatory belt use laws.” Both Nissan and Toyota supported belt laws in the United States. (A belt use law in Japan has resulted in less than 1 percent use. See story on page 13.)

AAA claimed that “seat belt usage has increased significantly in newer model autos with new, improved systems.” AAA claimed 40 percent belt usage in new model autos. Trinca pointed out that in no country was belt use high without a mandatory belt use law. Edward N. Cole, former president of General Motors, cautioned that belts were not that effective in preventing head injuries and for particularly large individuals. Allstate Insurance Co. stressed that active belts, unlike air bags, are not subject under Federal Motor Vehicle Safety Standards 208 and 209 to any dynamic test requirements, nor do they have to meet the 208 injury criteria. (See *Status Report*, Vol. 12, No. 2, Feb. 3, 1977.)

INSURERS

Presenting a statement on behalf of insurance companies writing “more than 95 percent of all the auto insurance written in this country,” Donald Segraves of the American Mutual Insurance Alliance said, “We join together for the third consecutive year to offer our unequivocal support for a mandatory passive restraint standard.”

Commenting on the “insurance cost implications” of a passive restraint standard, Segraves said the “savings will be substantial – not only for auto insurance policyholders, but also for consumers who purchase health, disability and life insurance as well.” Nationwide and Allstate Insurance Companies both reminded Adams that they already offer a 30 percent reduction on premiums for certain auto insurance coverages on air bag equipped cars. (On the day of the hearing, Prudential Property and Casualty Co. announced that it would offer a similar 30 percent reduction for air bag equipped cars.)

In response to a question from Adams about product liability coverage for air bag equipped cars, Segraves pointed out that “when we insure a manufacturer of a car for an automobile, you don’t insure components, you insure the whole car.” An air bag, or other passive restraint, he said, is no different than any other safety device. Segraves added that, in his judgment, “the presence of an air bag on an automobile would in an overall sense reduce the product liability exposure of that car If you have a crash in a car because of the failure of some other part of the car, you run a risk of having a product liability claim, and if you don’t get an injury because you’re saved by the passive restraint system, you don’t get a claim.”

Adams also heard testimony strongly supporting the adoption of a passive restraint standard from the American Insurance Association and the National Association of Independent Insurers.

FIELD EXPERIENCE

As at previous hearings, public health researchers and others questioned the need for additional field testing of air bag equipped vehicles – which have now accumulated more than 300 million miles of real-world driving – while auto makers made renewed requests for more testing.

New data concerning the effectiveness of air bags in real-world crashes were presented to Secretary Adams by the Insurance Institute for Highway Safety. That data showed “air bag-protected occupants in severe frontal crashes experience greater reductions in fatal and serious injury (70 percent) than occupants of such crashes wearing lap-shoulder belts (55 percent) when both are compared to unrestrained occupants.”

Ford Motor Co. termed the field experience “anecdotal and insufficient,” while General Motors spoke of the “great need for more field experience.” GM also said its analysis of air bag crashes shows that “in the area of fatalities and aggravated injuries there does not seem to be a very distinct difference between the air bag deployed situation and the unrestrained driver.” American Motors, seemingly ignoring the current field data altogether, said to determine the “real-world worth” of air bags, “Field effectiveness data should be collected.”

(Cont’d on page 8)

Many auto makers supported former Secretary Coleman's demonstration project as the means to obtain more field experience even though only two domestic and two foreign manufacturers had previously committed themselves to limited participation in that program. Secretary Adams, however, has previously indicated that the DOT-auto makers' demonstration program agreements are no longer binding since the "decision by Secretary Coleman said that if there was a proposed rulemaking that moved forward, that they [the auto makers] didn't have to carry out the agreements."

Debate over projected air bag costs was less intense than at the last two hearings but there was still a wide discrepancy among different cost estimates. John Z. DeLorean, former General Motors vice-president

Effects Of Belt Use Laws

At the Sixth International Conference of the International Association for Accident and Traffic Medicine in Melbourne, Australia during February 1977, reports from provinces, states and countries with belt use laws indicated that about a 10 to 20 percent reduction in vehicle occupant deaths and severe nonfatal injuries resulted from such laws. These results are in agreement with the study of deaths in Victoria, Australia, that most carefully controlled for other factors affecting motor vehicle deaths.

The reductions are far less than would be expected from the known effectiveness of belts worn voluntarily. In Australia and New Zealand, researchers are finding that belts are often being worn too loosely resulting in greatly reduced belt effectiveness. Moreover, in Ontario where mandatory belt requirements came into effect in early 1976, the reduction in deaths has been far below the amount predicted. Placed in effect simultaneously with reduced speed limits, vehicle-occupant deaths have decreased 15.5 percent. Since pedestrian deaths decreased 14.6 percent, it is likely that much of the occupant decrease has been due to factors *other than* belt-use per se.

Motor Vehicle Crash Deaths, Ontario

		<u>Percent Change 1975-1976</u>
Vehicle Occupants	Drivers -16.2	-15.5
	Passengers -14.6	-14.6
Pedestrians		-14.6
Motorcycle Drivers		-19.6
Bicyclists		-16.1

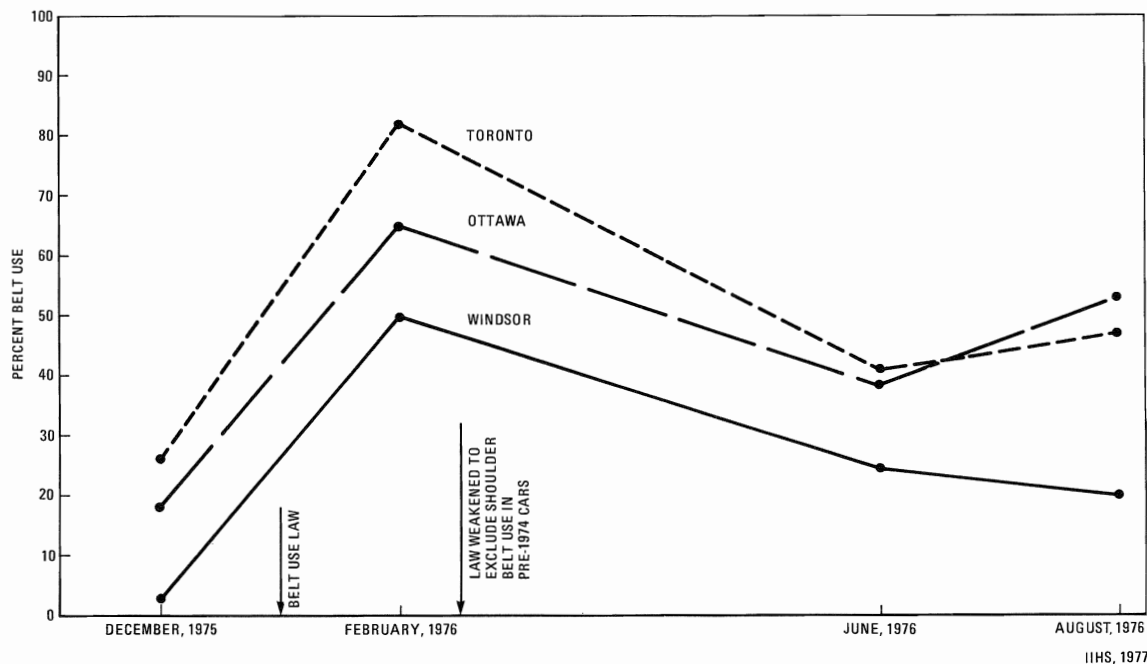
Belt use in Ontario has varied greatly in time, and has been consistently lowest in Windsor, the city among those observed closest to the United States. And, the law has failed most miserably with the most important group; belt use in the 5-19 year old group did *not* increase as a result of the law (see figures opposite page).

The DOT estimate that belt use laws would have the same benefits as air bags is incorrect since it assumes that belts would be worn properly and would be worn by teenagers and others disproportionately involved in severe crashes as much as by others. In contrast to the observed 10 to 20 percent reduction in deaths in countries with belt laws, air bags alone – without any belt use – would reduce occupant deaths 40 percent.

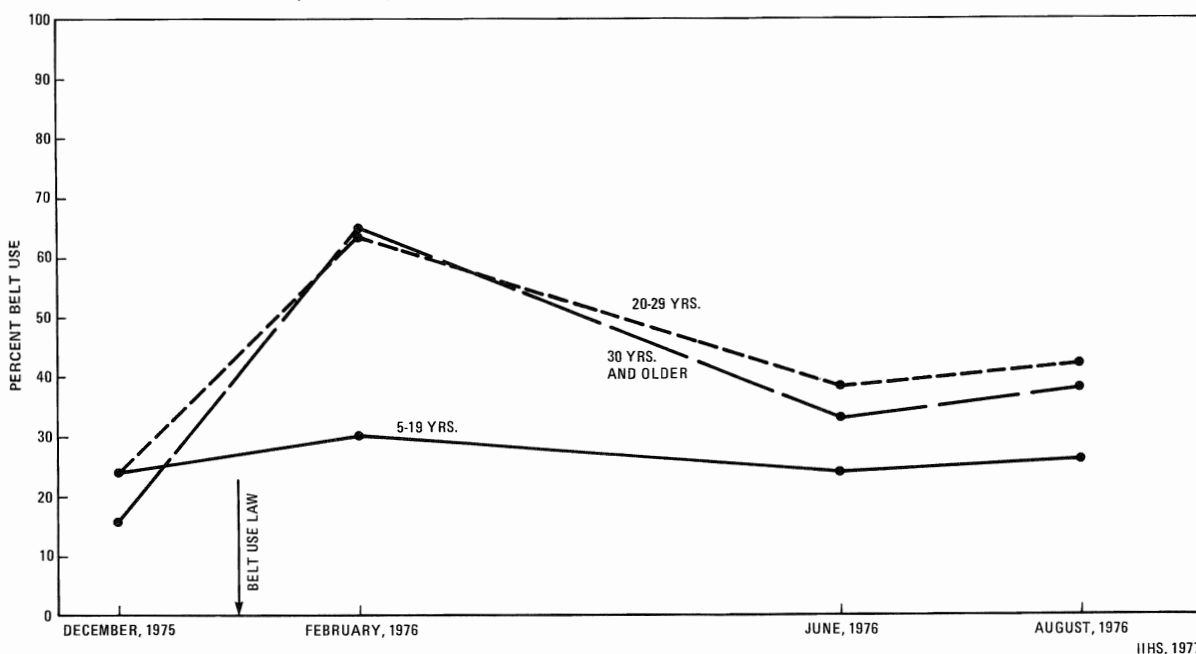
who now heads his own auto company, stuck by his August 1975 retail price figures, of \$90 for full front seat air bags plus lap belts in a four-passenger car and \$111.50 in a six-passenger car. He said these figures might have to be adjusted slightly for inflation. The figures included allowance for both manufacturer and dealer profit. DeLorean said that since auto makers are currently redesigning their cars to be more fuel efficient, it will be less expensive to incorporate air bags into these designs at the same time.

The American Automobile Association and Chrysler Corp. both cited the alleged high cost of replacing air bags that have deployed. AAA quoted a replacement cost of \$629.26. That quotation,

PERCENT DRIVER AND RIGHT FRONT PASSENGER SHOULDER BELT USE IN EQUIPPED CARS BEFORE AND AFTER A MANDATORY BELT USE LAW WENT IN FORCE JANUARY 1, 1976 IN ONTARIO, CANADA, BY ESTIMATED AGE.



PERCENT DRIVER AND RIGHT FRONT PASSENGER SHOULDER BELT USE IN EQUIPPED CARS BEFORE AND AFTER A MANDATORY BELT USE LAW WENT IN FORCE JANUARY 1, 1976 IN ONTARIO, CANADA, BY METROPOLITAN AREA.



however, was for replacement of air bags that were individually installed as an option, rather than mass-produced standard equipment. Insurers have explained that air bag replacement will be covered under auto insurance policies and the savings, because of reduced injuries, will far exceed replacement costs.

In reply to a question from Adams on whether "costs will be reduced by competitive forces" if passive restraints are required, IIHS President William Haddon, Jr., M.D. warned that the Department of Transportation should "monitor with the authority that it presently has any cost statements" by auto manufacturers and suppliers of passive restraints. Haddon said that the "auto companies clearly have used cost arguments as a way to attempt to defeat such automatic protection which would protect the lives of their own purchasers and car users."

Competitive forces, Haddon noted, had not brought down the cost of seat belts; "You can pay up to as much as over \$160 merely for the replacement of the belts in the front of the automobile." Haddon also criticized the auto manufacturers' practice of amortizing "safety equipment over one year, a ridiculously short period." He pointed out that the manufacturers apparently then continue to price the equipment at the rates indicated "by that high and very, very short amortization rate." This practice indicated, Haddon said, that "much needs to be done in the way of government surveillance on an issue of this importance."

Control Laser, a manufacturer of a steering wheel air bag, which weighs only three pounds and can be retrofitted on current cars, told Secretary Adams that while it now retails at \$75, mass production could drop that price to \$50. Control Laser said it was willing to offer the government the devices for \$30, which it claimed would be below its own cost, if DOT purchased 10,000 bags for installation on current government cars.

LEADTIME

Calling the air bag "technologically ready and feasible for installation in mass-produced vehicles," Allied Chemical, an air bag supplier, said that a 1981 model year effective date would provide "sufficient leadtime for necessary tooling and production commitments." Similar support for early introduction of mandatory passive restraints was voiced by Rocket Research Co., an air bag inflator manufacturer, and Thiokol, another air bag supplier. Rocket Research told Adams that mass production of air bag components would lead to increased product reliability.

Minicars testified that its extensive crash testing programs have shown that the existing GM passive restraint system, which "was designed five years ago and put into production . . . four years ago and which was in production for several years is adaptable with minor modifications . . . into almost any vehicle in the manufacturers' fleets in the time interval that it takes to put something into production which typically, from the end of the engineering cycle, is two years."

In contrast to the supplier and researcher estimates, Edward Cole, former president of General Motors, told Adams that because of manufacturers' current design cycles it would take "approximately six years" to completely introduce passive restraints in all new cars. (In 1970, while Cole was GM's President, GM told NHTSA that it planned to provide standard equipment air bags on all its passenger cars, most light trucks and some multipurpose passenger vehicles within four years.)

In what one NHTSA official termed an "unexpected reversal," Eaton Corp., an early developer and proponent of air bags and a principal supplier to the auto industry, urged Secretary Adams not to mandate passive restraints, but instead to return to the demonstration program developed by former Secretary Coleman. In addition to Eaton's reversal, Talley Industries, Inc., another air bag component supplier, cancelled its scheduled presentation.

George F. Will

Driving Without Restraint

CHEVY CHASE VILLAGE—Thinking he heard thunder, my neighbor went to close his car windows. Actually, he had heard a commonplace tragedy, the making of a statistic. A woman died and a man nearly did in an occurrence shocking but routine: an automobile accident.

The car veered out of control on Connecticut Avenue, hit trees, fragmented, broke in half. Three of us arrived immediately. Emergency equipment arrived quickly. Cleaning up took hours.

In 1900, this "village," six miles from the White House, was where Washingtonians came for country breezes. Today, it is a small incorporated area near the center of a sprawling metropolis. It is divided by Connecticut Avenue, which passes around a traffic circle as it enters Maryland. Trees on the circle are heavily scarred. Crumpling steel and crying sirens are common sounds here as on many urban thoroughfares.

Increasingly, American driving reflects, I think, the sublimated fury of persons heading for infuriating jobs, the animal spirits of persons whose lives allow little scope for such spirits. As Daniel Moynihan wrote years ago, the automobile is "both a symbol of aggression and a vehicle thereof. . . . It is a prime agent of risk-taking in a society that still values risk-taking, but does not provide many outlets."

The endless epidemic of accidents is one of the nation's gravest public health problems. Automobile deaths and injuries have costs beyond counting, and are a special plague to the young. Of every 100,000 males at age 15, about 1,100 will die in accidents, most involving automobiles, before age 25—a

death rate 20 times worse than polio inflicted at its worst.

As Moynihan notes, the social life of most Americans "now primarily takes the form of driving to a place where alcohol is consumed." And because traffic laws are widely ignored, almost everyone is a lawbreaker, and the incidence of arrest in America may be the highest of any nation in history. Repairing and replacing wrecked cars may provide 20 per cent of the business for the automobile industry, the nation's most important.

Such statistics are as lifeless as the woman who lay beneath blankets on the Connecticut Avenue median strip. But they describe a river of sorrow flowing from monstrously irrational behavior.

Most drivers frequently exceed speed limits, only 25 per cent use seatbelts, only four per cent use harnesses. Because slaughter behind the wheel is deeply rooted in aggression and other irrationality, it is very difficult to substantially reduce accidents by reforming drivers. So government has tried to reduce the severity of injuries received in accidents.

The public disliked, and the government quickly disconnected, the ignition "interlock" system that prevented cars from starting when safety belts were unfastened. Today, new cars just make a brief buzz of disapproval.

Government may yet require "passive restraints"—air bags that instantly inflate to cushion passengers in collisions. There is evidence that they would save many thousands of lives annually and may be one answer to what

Moynihan has called "the seeming incompatibility of safe driving and mass driving." That is a considerable problem in a nation where more people drive than pay taxes or vote.

Air bags require no forethought by drivers, so they are suited to the American driving public. The air bags would probably cost manufacturers less than \$100, a fraction of what car buyers exuberantly spend when loading their cars with snappy wheel covers and other options.

Long before the most recent Connecticut Avenue death, I regretted having once argued that government has no business requiring drivers to buy and use inexpensive devices that might save them from self-destruction. There is a pitiless abstractness, and disrespect for life, in such dogmatic respect for the right of consenting adults to behave in ways disastrous to themselves. Besides, too many children passengers are sacrificed on that altar. And a large part of the bill for the irrationality of individual drivers is paid by society.

Most important, society desensitizes itself by passively accepting so much carnage.

On Connecticut Avenue that evening, the police operated with the weary patience normal to those who are paid to look unblinkingly at what people do to themselves. "Go home," a policeman finally said, with barely noticeable disgust, to people milling around the debris. "Go home and watch television." After a while, we did.

(This column by conservative political analyst George F. Will, appeared in The Washington Post, April 14, 1977. Will recently was awarded the 1977 Pulitzer Prize for commentary. Copyright, 1977, Washington Post Company, Reprinted With Permission.)

Claybrook Outlines Goals For NHTSA

Replying to a set of written questions from the Senate Committee on Commerce, Science, and Transportation, Joan Claybrook, the new head of the National Highway Traffic Safety Administration, gave an indication of her priorities for the agency.

Noting her previous work as Director of Public Citizen's Congress Watch, the Committee asked if her "pro-consumer" experience would prevent her from working positively and constructively with the auto industry.

"I was and continue to be 'pro-consumer,' which is entirely consonant with the policy underlying the motor vehicle and highway safety laws," Claybrook replied. "I have and continue to be an advocate of improved motor vehicle and highway safety. I am not 'anti-business,' although I am opposed to business and industry practices, such as manufacturing unreasonably hazardous vehicles, that are contrary to the public interest and motor vehicle safety for all Americans."

Following are some excerpts from Claybrook's answers to the Committee's questions:

Passive Restraints: "I support Secretary Adams' decision to review the postponement of the passive restraint standard by Secretary Coleman. My support derives from the fact that passive restraints would produce very substantial reductions in deaths and injuries, that they are designed to work automatically when a crash occurs without any action by the occupants, and that they are presently in a highly refined state of development because of the efforts within the automobile industry to perfect them."

Motorcycle Helmets: "... there is no alternative to helmets for safety protection for the motorcycle rider. The most severe motorcycle injuries usually occur to the head (like lifetime brain damage). When such injuries occur, there are substantial costs which must be assumed by taxpayers, generally, such as ambulance service, hospitalization and medical care, unemployment benefits and other public services."

Speed: "... the real upper limits of speed are determined by vehicle design. Since the imposition of the 55 mph posted limit the public has recognized the economic, safety and environmental advantages of slower vehicle speeds. Thus, the public might now be more receptive than it was to a limit on the maximum speed capability of new vehicles."

Pedestrians: "There are at least three avenues that should be explored to reduce pedestrian deaths and injuries. These are:

- changes in vehicle design to make them less lethal to pedestrians,
- changes in roadway design to separate pedestrians from vehicles,
- changes in traffic patterns and rules to protect pedestrians.

"In pursuing these avenues, I shall regard pedestrian safety among my highest priorities."

Safety Belts: "Since some auto companies have failed, after ten years of mandatory safety belt installation, to design and install safety belt systems that are comfortable and convenient, I shall, as soon as possible, review carefully the pending proposals for amendments to Motor Vehicle Safety Standard 208 to improve the comfort, convenience and safety of safety belts installed in new cars."

Defects: “No defect or compliance investigation should last for more than six to nine months except in the most unusual circumstances. One of my first actions upon assuming office will be to thoroughly review the status of all pending matters in the enforcement offices to determine how best to bring each case to a speedy conclusion.”

Belt Use Laws Vary In Effectiveness

A multinational study of the effectiveness of safety belt laws has shown that compliance and enforcement vary widely from jurisdiction to jurisdiction. For example, more than 75 percent of the drivers observed in Australia were using belts, while less than 1 percent of Japanese drivers used their belts. Both countries have mandatory belt use laws.

The study concludes that although “belt use laws can have an important impact on reducing the incidence and severity of vehicle injuries,” they “cannot be considered as a fully effective measure by those who desire to insure that all occupants of vehicles are suitably restrained in crashes.”

The study was conducted by Leon Robertson, senior behavioral scientist at the Insurance Institute for Highway Safety. Robertson conducted his direct observations of belt use in Australia, Japan, New Zealand and the Canadian provinces of Ontario and Quebec – all jurisdictions with belt use laws. He also conducted observations in the United States and Canada (prior to the passage of belt use laws in Ontario and Quebec). In all countries, the same observational techniques were used.

SEVERITY OF PENALTIES

Robertson said that the “relatively high belt use in Australia and New Zealand some four to six years after belt use laws were enacted there indicates that such belt use can be sustained for an extended period in some jurisdictions.” He noted, however, that fines for not using a safety belt are 10 times higher in New Zealand than in Australia but “belt use in the two countries is similar. Thus, the severity of penalties does not appear important but enforcement may differ in the two countries.”

In Japan less than 1 percent of the observed drivers were using belts on expressways where they are required by law. “This is undoubtedly at least partially a result of lack of penalties for nonuse,” Robertson said.

Robertson found that the Canadian experience with belt use laws differed significantly from the experience in Australia and New Zealand. “The law in Ontario had an effect similar to those in Australia and New Zealand initially but after the law was weakened in Ontario (shoulder belt use in pre-1974 cars was exempted), belt use was halved. And the adoption of the weakened law in Quebec resulted in belt use levels similar to those after the law was weakened in Ontario. There is also much wider variation in belt use among metropolitan areas of the Canadian provinces than among those observed in Australia and New Zealand.” (See box on page 8.)

TEENAGE USE

“Estimation of the effects of belt use laws on fatalities and non-fatal injuries has been complicated because of energy shortages and speed reductions in various jurisdictions coincident with the enactment of the laws,” Robertson said. “The estimates range widely but most fall within the range of a 10 to 20 percent reduction in occupant fatalities . . . Such reductions are not as high as would be expected theoretically from the increase in use relative to the known effectiveness of belts . . . This is apparently because belt use

of teenagers (and perhaps others that are disproportionately involved in severe crashes) is lower than that of most drivers in the same jurisdictions with belt use laws.” (See box on page 8.)

Copies of the study, “Automobile Seat Belt Use In Selected Countries, States and Provinces With and Without Laws Requiring Belt Use,” can be obtained by writing for “Selected Countries,” Insurance Institute for Highway Safety, Watergate Six Hundred, Washington, D.C. 20037.

Institute Protests Proposed Bumper Delay

Citing a history of inaction and procrastination, the Insurance Institute for Highway Safety has strongly protested the National Highway Traffic Safety Administration’s proposal to delay yet again its standard to eliminate property damage to cars in some low speed crashes.

The agency has proposed that the second stage of its requirements, which virtually eliminates the amount of damage to the bumper system in tests at only three and five miles per hour, be delayed from the 1980 to the 1981 model year. The proposal was prompted by petitions from General Motors and Ford Motor Co. (See *Status Report*, Vol. 12, No. 4, March 2, 1977.)

In a filing with NHTSA, IIHS said the agency “should be concerned not with further foot dragging, but with progress – for instance, developing more appropriate compliance tests and adopting rules that will ultimately result in the unnecessary low speed crash damage being eliminated in real world crashes. The implication in the present notice that the second phase requirements are the ‘*permanent* Part 581 requirements’ (emphasis supplied) is explicitly inconsistent with the intent of the Congress that federal bumper requirements not freeze technology at particular levels of performance.”

STANDARD’S HISTORY

The Institute pointed out that Congress became concerned with the amount and severity of low speed crash damage in 1969, or nearly a decade ago. From 1970 to 1972, the House and Senate held exhaustive hearings on the subject which resulted in the Motor Vehicle Information and Cost Savings Act of

Insurer Scores Bumper Delay

Nationwide Mutual Insurance Co. also filed comments critical of federal rulemaking delays for bumper systems. The company said that the Department of Transportation “should be formulating federal standards for bumpers that resist damage in crashes at 10 mph rather than proposing a delay of 5 mph standards.”

Nationwide recalled its prediction in 1975 that the bumper standard would be delayed until the 1980 model year from the original 1976 effective date. “One can predict that delay now will lead to later proposals for additional delays,” the insurer said.

The company said it “recognizes the manufacturers’ need for reasonable ‘lead’ time to make necessary changes in design, tooling, and assembly line procedures. . . . We recognize the need for reasonable time for technological development. But even an impartial observer cannot help but wonder if ‘lead’ time is used as a convenient excuse for procrastination or for an alternative to improvement.”

1972. That act directed the Department of Transportation to set effective standards for reducing property damage in low speed crashes.

The Institute quoted Rep. Bob Eckhardt (D-Tex.), a member of the House committee that formulated the 1972 Act, who said that the committee wanted “*immediate* implementation of a five mile an hour bumper standard.” (Emphasis added.)

The Institute said it took a year after the Act was passed, however, before NHTSA issued a notice of proposed rulemaking. That proposal called for a standard that would have become effective with 1975 models. Since that time, the Institute explained, there has been a series of delays and attempts to weaken the standard. It was not until March 1976 – three and a half years after the Act became law – that NHTSA promulgated its two stage bumper requirement:

- Under the first phase, to be effective with 1979 models, no property damage would be permitted in five mph barrier tests and pendulum impacts except to the bumper itself and the brackets, fasteners, etc., that attach the bumper to the frame;
- Under the second phase, to be effective for 1980 models, damage would be limited to 3/8” dents in the bumper face bar itself and the bumper face set would be limited to 3/4”;
- There is and would be no restriction whatsoever in the amount of damage a car can sustain in low speed crashes that do not involve the bumpers – such as those involving the sides of cars.

GM TAXIS

In its comments, the Institute pointed out that the technology to solve the problems of low speed crashes has been available for years. “GM put a fleet of taxis in service in New York City in 1973 with soft front and rear ends and compared their repair costs with a comparison group of taxis that had bumpers satisfying FMVSS 215 [the current federal standard designed to protect only a car’s *safety* components]. The taxis with the soft face bumper system sustained 34 percent less damage per 10,000 miles than the standard taxis.”

The Institute pointed out that NHTSA has stated that most cars already come close to meeting the performance level in the first stage of the bumper standard and that auto makers “have had more than enough leadtime to provide more modern designs and technology” to reduce low speed damage. the Institute said that additional delays will only add millions of additional automobiles to the existing fleet which fail to offer the public protection from unnecessary costs in low speed crashes.

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the highway loss reduction

Status Report

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