

Statement of

JAMES B. GREGORY, ADMINISTRATOR

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Before the

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON FOREIGN AND INTERSTATE COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES

on

February 27, 1976

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before this Subcommittee today to discuss my agency and the issues of regulatory reform.

The mission of the National Highway Traffic Safety Administration is public protection. Our efforts are aimed at (1) reducing the number of motor vehicle accidents, deaths and injuries, and (2) providing economic protection to consumers and to users of motor vehicles and motor vehicle equipment.

The National Traffic and Motor Vehicle Safety Act authorizes us to issue standards improving the safety of new vehicles and to secure the elimination of safety defects in vehicles on the road. In addition, the Vehicle Safety Act provides the authority for such safety related consumer information efforts as the Uniform Tire Quality Grading System and requirements that motor vehicle

manufacturers disclose certain safety-related data to prospective purchasers of vehicles.

Under the Highway Safety Act of 1966, we develop uniform standards for State highway safety programs and provide Federal funds to assist the States in administering such programs. These programs focus on developing safer drivers, safer roads and vehicles-in-use.

Finally, the Motor Vehicle Information and Cost Savings Act has required us to undertake action in such marketplace consumer protection areas as automobile damage-ability, odometer fraud, and the development of information to facilitate comparing the quality of available automobiles.

One way to gauge the progress made in traffic safety is to consider the reduction in the traffic fatality rate, measured typically in the annual number of deaths per 100 million vehicle miles driven.

In 1966, when the national focus on highway safety began, the fatality rate was 5.5-5.6 and rising. By 1973, the rate had dropped over 20% to 4.2-4.3. Using the 1966 figure as an index, traffic deaths could have been predicted to be closer to 75,000 in 1973 rather than the 55,000 which actually occurred. That was still, of course, an unacceptable number.

But the fact of the reduction in the fatality rate remains. And it is doubtful that it can be credited to chance.

It is difficult, if not impossible, to sort out and quantify individual portions of the national program which must be given credit for this improved picture. Indeed, no single action or program alone can take credit for the safety gains we have realized. The highway environment was being improved during this period; new motor vehicle safety standards were introduced; and new traffic safety programs in states and communities were being implemented.

Nevertheless, I think it is safe to say that the efforts to improve the technical performance of motor vehicles and motor vehicle equipment are apt to have an earlier effect than efforts aimed at the more difficult task of changing human driving habits. Therefore, among NHTSA's efforts, I think we must credit our motor vehicle safety programs with a majority of the safety gains we achieved through 1973.

But I hasten to add that the implementation of the national 55 mph speed limit in 1974 demonstrated the dramatic benefits to be found in improving driving habits. Proposed originally as a fuel savings measure, the 55 mph speed limit almost immediately began to contribute also to the reduction in highway fatalities. In 1974 and again in 1975, the

absolute number of fatalities was more than 9,000 fatalities below the 1973 number. The fatality rate dropped to about 3.6 in 1974. We expect that the final figures for 1975 will show a somewhat lower rate of 3.5 or less because of an increase in miles driven last year compared to 1974.

I must admit that we have no cause to rejoice as long as more than 45,000 Americans are being killed annually on the nation's highways and many thousands more are being injured. However, we can say, based on the record, that the implementation of the Vehicle Safety Act and the Highway Safety Act has had measurable, significant benefits.

Carrying out the intent of the Acts which NHTSA administers has meant regulation in more than one sense of the word. NHTSA directly regulates the safety of vehicles and their components, the principal subject you have asked us to discuss today. But the traffic safety program standards developed under the Highway Safety Act are regulations as well; they form the basis on which State programs are judged to be satisfactory and therefore supportable with Federal funds. Indeed, virtually all government based on laws, rules and procedures can be said to be "regulatory."

The concept of "regulatory reform" needs, in my judgment, more precise definition when we begin seriously to consider and debate the subject. If I may, I would

like to relate my discussion of the concept as well as I can to the mission of NHTSA and specifically to the Vehicle Safety Act.

At the outset, we must ask ourselves whether the need for the legislation leading to vehicle safety regulation was at its inception and is today substantial. Then, we must ask whether that type of regulation is still necessary and, if so, whether the approach taken has been appropriate and effective and is likely to be so in the future. In considering these questions, we must discriminate between the substance of regulations and the process by which they are developed.

There seems little question that reducing death and injury on the highway continues to be an acknowledged, worthwhile societal goal. Indeed, the proportions of the problem exceed those of many medical diseases. It was this perception that led to the 1966 legislation which NHTSA administers. The creation of safer vehicles, safer roads and more safety conscious drivers and pedestrians through the force of national legislation and the funding and regulations that flow from that legislation was the objective.

Certainly the extent of the problem warranted a national focus not then being given. The intent of the legislation was worthy, and hard working, dedicated people got busy to carry it out. Yet, despite their effectiveness, these programs seem at times to have been among the most controversial in this country since the Stamp Act of 1765.

I do not draw this parallel lightly - nor am I suggesting that safety legislation be withdrawn as was the Stamp Act in 1766. The point is that personal safety of any kind is just that - very personal - and it is subject to the personal interpretation and action of each of our citizens. It is strange but true that unless a person perceives himself in or about to be placed in jeopardy of personal injury or death, safety does not seem to have a high place in his thinking priorities. Training and experience will increase his perception.

I am confident that air travelers wish to be assured of a safe flight, including those travelers most hostile to the idea of wearing safety belts for their protection in their own cars. Few, if any, of the travelers would fault the expenditure of billions of dollars over the years to improve air safety or balk at the costs added to flight fares to ensure their safe arrival. They expect safety; they are in the hands of someone else; and generally speaking, the costs are indirect and relatively unnoticed.

Perhaps it is because being a pedestrian, driver or passenger in highway transportation is such a common experience that an individual's traffic safety awareness suffers. Certainly, these are more personal experiences in which personal decision and action exert a direct influence over safety. Long before the 1966 legislation, there were traffic laws to control many of these actions in the interest of safety. There was an abundance of helpful advice going beyond the statutes, advice which could be embraced or ignored by individuals regarding safe vehicle operation and maintenance, pedestrian practices and the like. Much of the advice called for personal investment in dollars, time, inconvenience or effort.

With some exceptions, essential vehicle safety was pretty much left to individual manufacturer initiative or to industry-wide adoption.

With the 1966 Vehicle Safety Act came requirements for manufacturers to build in standardized safety features. To the extent which costs were added, all car purchasers paid these costs whether they welcomed or were indifferent to improved vehicle safety. Standardized braking, lighting and other accident avoidance measures have been introduced. Interior padding, collapsible steering wheels, more protective windshield glass, safety belts and other features to

improve car occupant protection in the event of a crash are found in all of today's new passenger cars and in many other types of vehicles as well. And virtually all of these occupant protection devices, save the occupant restraint system, are "passive", that is, they provide protection without requiring any human action.

So, the car purchaser buys safety protection for himself and others whether he would otherwise choose to do so or not. It is a direct cost, no matter how modest. Probably only to a few persons can this be said to be a truly "popular" purchase. Relatively few of the millions of persons who purchase cars each year will be involved in a serious accident. Fewer still will perceive the money spent for the safety features to have resulted in a benefit, even when the benefit was avoiding death or serious injury. If the occasion does not arise when safety features, like insurance, must perform their intended function, the cost of those features may be thought of as "wasted" by many persons, even by those grateful for protection against the risk of injury. Further, among those persons who have enjoyed the benefit, most cannot quantify the effectiveness, much less the cost-effectiveness of their purchased safety.

Here we must face squarely not only the question of regulation effectiveness and benefit, but also the question

of who benefits from regulation. Many laws today require that virtually all citizens pay in some way, generally through tax dollars, but in many cases the benefits of such regulations accrue only to a segment of those who pay. Those who rarely use the Interstate Highway system may be devoting a disproportionate share of their gasoline tax dollars to the system's construction and maintenance of the system which includes by the way, many safety features.

This indirect purchase of safety may not be welcomed, but at least has been largely accepted on the basis, whether fully thought through or not, that overall societal benefits equal or exceed societal costs. These benefits include those which can be expressed in terms of dollars as well as those expressed in the less quantifiable terms of human injury and death.

Again, I must emphasize that the "costs" of safety also go beyond dollars alone, and include inconvenience and expenditures of time and effort. For example, there is a dollar cost for a traffic stop sign, of course, but if the dollar cost of the personal time lost, the gasoline used and the inconvenience experienced in stopping for it during its life time could be quantified, it would undoubtedly far exceed the installation cost. Here I would like to point

out as a basis for further discussion that, in stopping at a stop sign, an individual is personally taking an active role in safety as opposed to relying on the passive safety features of the highway or the car which I talked about earlier. And, grudgingly or not, he is paying a price for doing so. Despite this, we can say that stop signs have public acceptability, a factor not to be disregarded in talking about regulatory reform.

I have worked my way into the subject of benefit/cost analysis because it is another aspect of regulation that is being examined and debated today. I think I have already made it clear that safety regulation contains benefit/cost factors in the equation which are very difficult, if not impossible, even to estimate accurately. This difficulty sets safety regulation apart from strictly economic regulation. This is not to say that, when a safety regulation is proposed, as good a job as possible should not be done to predict the benefits and assess the costs. I think that such a job should be done as early as possible and that NHTSA made good sense strides toward that goal long before the present debate. Nevertheless, we cannot ignore the consensus I see among the public, the Administration and the Congress for

even more precise and persuasive information as a basis for regulation of all types. This, by the way, includes not only prospective regulation but, past requirements as well - a post-audit, if you will, of regulatory practice. Good solid answers to tough questions must be provided if the credibility and integrity of regulatory programs are to survive, despite the worthiness of objectives. Safety regulation is embattled along with other types of regulation, whether we wish it so or not. And it will survive ultimately on public understanding of problems and acceptance of practical solutions.

Again, perhaps the problem is perceived and accepted all right, but the solutions are not. In either case, we in government must share the blame if we have not communicated well or have sought unacceptable solutions.

I seriously doubt that many individuals know or care about the societal benefit/cost ratio of their automobile's safety features. Nor do many take pains to analyze the increased costs that are placed on them as a result of other people's accidents in terms of emergency services provided, community-sponsored hospitalization, increased insurance rates, and the like. Yet these costs are real, even though they are not direct. We still have lot of informing to do,

it seems to me. Even so, the informed person may legitimately choose an alternative to mandated safety action on philosophical grounds as we have recently seen in the case of the motorcycle helmet question in the Congress. Here the facts were known; the savings in lives and the societal costs were identified. We must view the action to date as a signal from the public on how far safety regulation may be extended to require personal action.

The issue of requiring personal action previously arose under the Vehicle Safety Act during my tenure in the case of the safety belt ignition interlock. It would be easy for me to file a disclaimer on this subject, since the requirement came into being before I assumed the Administrator's job, but I shall not do so. Nor do I pretend to claim that all the belt and interlock systems were well designed by the manufacturers to facilitate easy use by car drivers and passengers. The fact is that the interlock was largely a safety success. People buckled up in increasing numbers beginning with the 1974 models which contained this "ultimate reminder." Even as all the unhappy shouts against the interlock finally abated we were seeing over twice the average lap belt wearing in these cars and upwards of 8 times the normal shoulder belt usage. Lives were indeed being saved and injuries were indeed being reduced among about 10% of the total car occupant population by the fall

of 1974. We conclude that it was primarily expressed unpopularity which prompted Congress to do away with the interlock in favor of a less strident reminder. It was another signal regarding the lengths to which personal action can be required to promote safety. Yet the answer might have been different had all those working on this idea - government, industry and the public - communicated better in advance and had provided better designs. The interlock experience was perhaps as much a failure of this aspect of the regulatory process as it was the idea of interlock itself or its implementation.

On the other hand, I think the struggle to maintain the integrity of MVSS 121, the truck air brake standard, might have taken on a different character had the public been truly involved. In many ways, the air brake standard could be said to be more like the air safety standards I mentioned earlier. There is hardly a car driver who has not felt misgivings a time or two when sharing the road with a large articulated vehicle which outweighs his car by some 15-20 times and over which he has no control. And there are probably few who have not been further concerned over the potential hazards in a stopping emergency, particularly when such a vehicle is behind them. To all these people, the

idea of better truck brakes and the avoidance of fishtailing and jackknifing should basically have merit. As in the case of the air traveler, the safety is built in for his protection with the costs being basically indirect. Yet the public has seemed largely uninterested even with the recent news and editorials which have drawn attention to the subject. This too is a signal for better communication and public involvement early in the regulatory process, all technical merits of the regulation aside. I cannot leave this subject without saying that, based on my Congressional mail, the perception of MVSS 121 has largely been negative, although in recent days I am happy to report a more understanding and supportive tone.

As I have indicated, problems in the regulatory process for the NHTSA come from a variety of sources. However, many of these problems grow out of the fact that the automobile is an integral part of the economic and social fabric of the Nation. We at the NHTSA frequently find ourselves faced with a number of legitimate societal and legal interests that are inconsistent and competitive with one another. One problem involves the technological complexities of our programs. Injury causing accidents are extremely complicated affairs, and our data concerning the pre-crash, crash, and post-crash environments is not as complete as we would wish. There is an unavoidable

subjectivity in the determination of the cause of an accident or injury by an after-the-fact investigator. Furthermore, accidents and injuries typically involve several causes, in varying degrees, which cannot be easily factored out for purposes of devising programs which can with precision predictably eliminate, or at least mitigate, such causes. I also must say that our crash data has not been limited solely by the state-of-the-art of data collection. The NHTSA has requested without success appropriations to purchase and install crash recorders in automobiles. These devices would add substantially to our ability to determine the dynamics of an injury or death producing accident, and would thereby aid our efforts to issue motor vehicle safety standards tailored precisely to meet the need for motor vehicle safety.

Establishing cost and leadtime estimates for safety standards has been difficult. The industry is the major source of information regarding the costs of safety regulation. We often receive cost estimates for a safety feature computed on the basis of the added-on equipment that would be used in the first years of compliance rather than on the basis of the designed-in equipment that would be subsequently used. Since added-on equipment is more expensive than designed-in equipment, the estimates tend to be somewhat inflated. Another factor leading to inflated

estimates is the practice of expensing engineering and design costs and amortizing, over a short time, tooling costs. In addition, the industry's comments on the total costs of safety regulation often include costs for safety equipment that was installed in cars prior to any Federal standards or that in some instances might well have been adopted in some form by the manufacturers in the absence of standards.

There are legal and procedural requirements with which we must comply in our regulatory activities which unavoidably slow down the administrative process. However, I do not regard these requirements as "impediments." As I have indicated earlier, the safety regulation of automobiles and drivers of automobiles has an effect on other societal interests of importance comparable with motor vehicle safety, particularly the economy, energy, and the environment. I firmly believe that the time taken for a full consideration of the views received in our notice and comment rule making procedures, is necessary for a responsible administrative decision which is likely to have far reaching consequences.

In summary, the major problems which the NHTSA faces are substantive rather than procedural. More often than not, it is the increasing complexity of our problem solving that

governs our schedule. Motor vehicle safety is not a problem area for which it is always reasonable to expect quick and cost-free solutions. It is also important to remember that our basic safety programs are in operation and are working. We have reached a much higher level of sophistication in motor vehicle safety than existed at the program's inception. I think the controversy arising around the safety program has grown in direct proportion with the difficulty of achievement. In the early days, adoption of standard practice was palatable to the regulated industry in the case of motor vehicles and to the States in the case of traffic safety standards. New ideas, new hardware, new approaches are always hard to sell because they disturb plans largely based on the status quo or which are aimed at objectives other than those of the regulation. We have had to make tough decisions, and the job ahead is even more complicated as we consider major changes in the interest of vehicle occupant safety.

The lingering, most important issue today is the improvement of MVSS 208, the Occupant Restraint Standard.

I mentioned that in 1974 and again in 1975 traffic fatalities dropped by more than 9,000 as compared to 1973. In my view, only one other step in highway safety can be expected to produce an additional decrease of that magnitude within predictable time: either greatly increased

use of present and improving "active" safety belt systems, or provision for so-called "passive" restraints.

Somehow the whole subject of "passive restraint" has become confused. Passive restraint systems have been equated by some persons with air cushion restraint systems, commonly referred to as the "air bag." This equation is not correct, and I want to take this opportunity to set a few things straight publicly.

First, there are many passive protective features in cars already as I briefly mentioned earlier in my statement. The interior padding, collapsible steering wheel, the head restraint, and the windshield glass are passive and, if you will, so is the absence of many protruding handles and knobs that formerly injured people in cars of bygone years. All these features are passive and protective, as are the side door guard beam and the other collapse characteristics of the car's structure. Proponents and critics will differ on their quantitative assessment of these features' effectiveness, but the features reduce the severity of injuries and help avoid fatalities under a wide variety of common crash conditions. The idea of a "passive" restraint merely carries this type of protection one step further.

Second, the "air bag" need not be the only answer. For many future smaller cars, the three-point belt could be replaced by soft or collapsible knee bolsters below

the dashboard for lower torso protection and a simple, comfortable shoulder belt that is automatically placed around and restrains a person's upper torso in the event of a crash.

Fourth, reduction of car weight is the single most effective measure to improve automobile fuel efficiency, although improved technology in carburetion, ignition, and power transmission undoubtedly will play a part. Even given the continued salutary effects of reduced speeds, the laws of physics dictate that occupants of lighter cars come off less well in a given crash than they would if surrounded by the greater energy absorption potential of heavier vehicles. The chances of a person's being in a smaller car are rising and the chances of a small car's being in a crash with a larger vehicle will remain high for sometime. Even after the fleet is "converted" and smaller cars are the rule, the potential for injury and death will still be greater than in today's world.

With this in mind, NHTSA is digesting the voluminous series of docket submissions and reports from all sides which were received in our hearings of last May. We are being as careful as possible in reaching our decisions. We must be, because of the controversial nature of the issue. Moreover, we must be mindful that the Congress has reserved the right to pass on our final judgment in this matter. My

goal is to have a final rule published before the traditional August recess this year.

If the Committee would like, I am prepared to discuss after my statement our most recent analysis and indicate the set of options we can consider.

Although I thought it extremely important to express some of the basic difficulties in improving motor vehicle safety, I do not want to leave the Subcommittee with the impression that we have been overwhelmed by the difficulty of our task. Not only would such an impression be inaccurate, but it would be unfair to many people in the NHTSA whose talents and energies have resulted in substantial safety gains since 1966. We have been saving lives, as the record shows. Indeed, NHTSA is one of the few agencies which can point to a measurable "bottom line" impact, month to month, year to year.

As you know, motor vehicle safety standards are issued and modified pursuant to the informal rule making provisions of the Administrative Procedures Act. These procedures maximize participation in the rule making process by persons outside the NHTSA, whether from a member of an industry which may be affected by a standard, or from a person or organization representing the purely "safety interest," or by a governmental entity or member of Congress. Such

persons have an opportunity to submit their views and to consider and respond to the views of others.

As a practical matter, most of the comments received in the course of a rule making are from industry members or associations. The interest of such organizations is usually direct and economic, and induces them to expend the resources necessary to participate in an effective way. However, it must be remembered that not all commercial concerns come out the same way on safety issues. The insurance industry and manufacturers of safety components have contributed useful information in support of what is usually called the "consumer interest."

Nevertheless, it is true that consumer groups participate less in our rule making than industry and certainly less than we would like. This imbalance in the quality of participation creates a problem for the NHTSA - we seem to be variously criticized as adversaries of the industry, or as its advocates. But more important, the imbalance in participation deprives the NHTSA of useful input in the rule making process as I have already indicated.

The problem of increasing the quality of consumer participation is not an easy one to solve. Effective participation in a complex rule making proceeding requires substantial skill and education in the safety area. Thus, merely increasing the publicity of rule making activity,

while perhaps stimulating some participation, would not necessarily lead to the quality of participation that we need.

There does seem to be a natural selection process at work. Although consumer participation in rule making is not great when viewed across the board, certain issues, especially those involving children, do arouse considerable useful consumer input. Thus, it seems that the level of consumer participation is related to consumer interest, and consumer interest in safety varies with particular issues. If so, the best approach may still be the one which we presently employ, that is, to ensure easy access to the decision-making process and consider all comments received. I have already mentioned the critical factor of basic communication.

A safety standard program is not worth much unless there is an adequate enforcement effort to ensure compliance in the industry. We have emphasized an aggressive enforcement posture.

Our standards enforcement is done through compliance testing of motor vehicles by independent test laboratories. Although I am submitting a detailed description of the scope and depth of our compliance testing program as part of my written statement, let me say in passing that in 1974,

we tested a total of 253 vehicles, including 210 passenger models, 19 trucks, 6 multipurpose vehicles, and 18 buses. We also tested approximately 5,112 items of motor vehicle equipment, including 1,089 tires and 1,995 seat belt assemblies.

The other aspect of our enforcement effort is our Defects Investigation program. This program is designed to deal with safety related problems that are not covered by a particular standard, by identifying safety related defects in motor vehicles and requiring the manufacturers of such vehicles to recall and remedy those vehicles at no cost to the vehicle owner. The defects investigation program relies in large part on consumer complaints. Public participation in this area has been excellent - we receive about 1,500 letters a month. Further, our Auto Safety Hotline Pilot Project, where consumers may telephone complaints about their automobiles has added to the volume of consumer input in the defects area. I might add that our Office of Defects Investigation does not play a passive role in detecting defects. We have, for example, conducted surveys of recreational vehicles which have unearthed several safety problems which have been the subject of investigations. We have conducted a school bus survey and are presently analyzing the data to determine

whether defect trends exist. We have also been conducting monitoring of manufacturer recall campaigns to ensure that manufacturers have been conducting these campaigns properly.

In summary, Mr. Chairman, NHTSA's programs have been effective despite impediments and problems we face involving human nature, public acceptance of regulation, technological complexities, and procedural requirements. The prospects for the future are good, but better results will not come easily. As much rests on communication and public involvement as on improved technology and sheer rulemaking. Frankly, I fear ill-advised or irresponsible rhetoric, whatever the position taken on issues, far more than I do any potential inability to identify and continue to solve the problems of motor vehicle and traffic safety.

Now, Mr. Chairman, we welcome any questions you may have.

Statement of

JAMES B. GREGORY, ADMINISTRATOR

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Before the

SUBCOMMITTEE ON CONSUMER PROTECTION AND FINANCE
COMMITTEE ON INTERSTATE AND FOREIGN COMMERCE
UNITED STATES HOUSE OF REPRESENTATIVES

on

March 4, 1976

Mr. Chairman and Members of the Subcommittee:

I am pleased to appear before this Subcommittee today to present our views on H.R. 9291, the Department's bill to authorize funds to implement the National Traffic and Motor Vehicle Safety Act. I would also like to discuss our efforts under the Act to reduce the death and injury toll on our highways.

H.R. 9291 would authorize \$13,000,000 for the transition period, and \$60,000,000 for each of fiscal years 1977 and 1978. These funds would be more than sufficient to cover our anticipated expenses through fiscal year 1977. As provided in the President's Budget, we are seeking the appropriation of approximately \$11,740,000 for the transition period and \$44,185,000 for fiscal year 1977. We have already provided the

Subcommittee with information regarding the general areas for which these funds would be used, the specific programs planned for each of these areas and the resources to be allocated to each. Information concerning our funding needs for fiscal year 1978 will not be available until the budget cycle is completed early next year. Since the appropriation process has already begun for fiscal year 1977, I urge early enactment of this bill.

I would like to turn now to our progress in implementing the Act. Since the promulgation of the first Federal motor vehicle safety standards in 1967, there has been a continuous and significant decline in the nation's highway fatality rate. In 1966, when the national focus on highway safety began, the fatality rate was 5.5 - 5.6 per hundred million miles travelled. By 1973, the rate had dropped about 25 percent to 4.15. Using the 1966 figure as an index, traffic deaths could have been predicted to be closer to 75,000 in 1973, instead of the 54,347 which actually occurred.

It is difficult, if not impossible, to identify the individual portions of the national program which must be given credit for this improvement and to quantify their contributions. Certainly, no single action or program alone can be given the full credit for the safety gains we realized between 1966 and 1973.

During that period, the highway environment was being improved; new motor vehicle safety standards were introduced; and new traffic safety programs in states and communities were being implemented. I think it is safe to say that the efforts to improve the safety performance of motor vehicles and motor vehicle equipment are likely to achieve concrete results earlier than efforts aimed at the more difficult task of improving human driving habits. It is, therefore, my assessment that our motor vehicle safety programs have contributed most to the safety gains we achieved through 1973.

But I hasten to add that the implementation of the national 55 mph speed limit has demonstrated the dramatic benefits to be derived from improving driving habits. Proposed originally as a fuel savings measure, the 55 mph speed limit began to contribute almost immediately also to the reduction in highway fatalities. The number of fatalities declined from 54,347 in 1973 to 45,717 in 1974 and an estimated 45,674 in 1975. This decline cannot be explained entirely by changes in annual vehicle mileage. Although the mileage dropped from 1.309 billion miles in 1973 to 1.290 billion miles in 1974, it reached a new height of 1.315 billion last year. The net effect of the changes in fatalities and mileage was that the fatality rate fell to about 3.6 in 1974 and to an estimated 3.5 for 1975.

While this significant downward trend in traffic fatalities is quite encouraging, we certainly cannot and will not be satisfied so long as more than 45,000 people are being killed on the highways each year and many hundreds of thousands more are being seriously injured. Still, we can say, based on the record, that the implementation of the Vehicle Safety Act and the Highway Safety Act has had measurable, significant benefits.

Further reductions in the death and injury toll will depend in part on the rulemaking decisions made under the Act. I would like to discuss some important aspects of our rulemaking activity.

One of our most important vehicle safety efforts continues to be the improvement of MVSS 208, the Occupant Restraint Standard.

I mentioned that in 1974, and again in 1975, the number of traffic fatalities was about 9,000 below that in 1973. It is my view that the only other step that could be expected to produce an additional decrease of this magnitude within the predictable future would be to either greatly increase use of present and improved "active" safety belt systems, or to provide for so-called "passive" restraints.

There is substantial public confusion about the subject of "passive" restraints. Some persons believe that air cushion restraint systems, commonly referred to as the "air bag," is the only type of passive restraint system. This belief is incorrect, and I want to take this opportunity to set a few things straight publicly.

First, there are many passive protective features in cars already. The interior padding, collapsible steering wheel, the head restraints, and the windshield glass are passive. The side door guard beams and the other collapse characteristics of the car's structure are passive protective features as well. Proponents and critics will differ on their quantitative assessment of the effectiveness of these features. It is clear, however, that these features reduce the severity of injuries and help avoid fatalities under a wide variety of common crash conditions. The idea of a "passive" restraint merely carries this type of protection one step further.

Second, the "air bag" need not be the only answer. For many future smaller cars, the three-point belt could be replaced by soft or collapsible knee bolsters below the dashboard for lower torso protection and a simple, comfortable shoulder belt that is automatically, that is, passively, placed around and restrains a person's upper torso in the event of a crash.

Third, there is a long term trend toward smaller cars that will make our task of securing safe highway travel considerably more difficult. Smaller cars are being produced in increasing numbers primarily in response to the recognized national need for improving the fuel economy of new vehicles. The laws of physics dictate that persons in smaller cars would fare less well in a given crash than they would if surrounded by the greater energy absorption potential of larger cars. The problem is made worse by the fact that the chances of a small car's colliding with a larger car will remain high for sometime. Even after smaller cars completely replace larger cars, the potential for death and serious injury will still be higher than under current conditions.

With these considerations in mind, NHTSA has been digesting the voluminous series of docket submissions and reports received from all sides to date. We are being careful and cautious in reaching our decisions because of the controversial nature of the issue. Moreover, we are mindful that the Congress has reserved the right to pass on our final judgment in this matter. My goal is to have a final rule published before the traditional August recess this year.

Another standard that has attracted considerable attention is Standard 121, Air Brake Systems. I have been informed that my letter of January 15, 1976, to Subcommittee Chairman Van Deerlin, reporting on problems which have arisen since the promulgation of Standard 121 and our plans to resolve the problems, is to be included in the record of these hearings. Therefore, I will take this opportunity to comment only upon more recent developments.

On January 16, 1976, a three-judge panel of the United States Court of Appeals for the Ninth Circuit, in San Francisco, granted an order barring further enforcement of the air brake standard for at least 60 days. The court issued its order in connection with suits attacking the standard brought by the American Trucking Association, PACCAR, Inc., a truck builder, and the Truck Equipment and Body Distributors Association. The court stated that it was uncertain about the status of the standard because of proposed amendments, and did not understand what issues the parties wanted the court to rule on. The plaintiffs were accordingly instructed by the court to get together to refine and agree on the issues to be considered.

The court's decision was appealed by the Government to United States Supreme Court Justice William Rehnquist who reversed the lower court on January 29, 1976. Justice Rehnquist said that the ban on the enforcement of Standard 121 would "impede Congress' intention to promote improved highway safety...." The suit has returned to the Ninth Circuit, however, to follow that court's instruction to the plaintiffs to refine and agree on the issues they wish to be considered. PACCAR Corporation has just asked the Ninth Circuit for a stay once more, and the Government has filed its response. The court has not yet reached a decision.

I would also like to bring the Subcommittee up-to-date on the problem of electromagnetic interference or EMI that was cited in my January 15, 1976, letter to the Chairman. Two of the seven commercially-available brake antilock systems have demonstrated a susceptibility to electromagnetic interference. The problem may arise when a stationary or on-board source of radio signals activates the antilock mechanism, causing a release of air pressure when it should be available for braking.

The NHTSA has two research contracts in progress that deal with stationary and on-board sources of EMI that affect motor vehicle electronic controls and safety devices.

One contract has been underway since July 1974, and the other was initiated in October 1975. These contracts are intended to develop the parameters for testing of motor vehicle electronic systems.

One antilock manufacturer, Kelsey-Hayes, undertook extensive testing for EMI prior to implementation of the standard but did not locate the frequency band that can cause antilock system actuation resulting in momentary brake loss. The computer modules are affected by transmissions at some radio frequencies above 20 megahertz at power levels in excess of 30 watts when in close proximity to the computer module. One source of such transmissions is on-board radios. To correct this problem, Kelsey-Hayes replaces the computer module in some cases and adds a filter element in all cases to protect the system against EMI.

Ford Motor Company recently reported that part of its heavy truck line may be susceptible to EMI. The vehicles are equipped with an Eaton antilock system. I can now report that Ford has issued its technical bulletin setting forth the means to correct the potential defect. No accident as a result of the problem has been reported.

Instances of brake failure due to EMI have been greatly exaggerated. Reports of activation by citizen band radios, for example, are common. All testing demonstrates that the power output of these radios is insufficient to interfere with brake system operation. Isolated

reports of EMI in the antilock systems of Rockwell and AC Division of General Motors are being investigated by these manufacturers, but we have not found any pattern of malfunctions.

One major amendment to Standard 121 has been issued since my January 15 letter. On February 26, I issued a final rule modifying the truck stopping distance requirements. This amendment is intended to improve the handling characteristics of production 121 vehicles without eliminating the requirement that the vehicles stop without wheel lockup. That additional change has been sought by some vehicle manufacturers and users.

In the area of schoolbus safety, we have issued final safety standards for each of the eight aspects of performance specified in the Schoolbus Safety Amendments of 1974. Since we had either issued or were in the process of developing standards in 7 of the 8 specified areas before the 1974 Amendments were enacted, we were sufficiently prepared to complete the extensive study and analysis necessary for prudent rulemaking within the 15 month period mandated by the Act. Although we believe that these rulemaking efforts will lead to substantial progress, we do not suggest that the standards are etched

in granite. Revisions will be issued if they are determined to be necessary.

In February 1974, we issued a proposed amendment to our child seating standard that would add a dynamic test requirement to the standard. The dynamic test requires the use of a child dummy to measure realistically the safety and restraining effectiveness of child restraints. Two commercially-available child dummies were specified as alternatives in the proposed amendment. We recently completed an evaluation of the two dummies to determine which is the superior test instrument. We intend to issue final specifications for the one selected not later than April 1976. That issuance will mark the completion of a lengthy, but necessary, series of research efforts needed to develop an adequate and reliable dynamic test procedure. The need for such a procedure is clear from the Chrysler v. Volpe, a 1972 U. S. Circuit Court of Appeals decision involving Standard 208. The court found that specifications of the test procedures and test dummy for measuring the performance of passive restraints did not meet the statutory requirement for objectivity. Objective test procedures and devices are necessary, the court said, to enable manufacturers to replicate compliance test results.

Standard 301, Fuel System Integrity, became effective on January 1, 1968, and required that passenger car fuel systems not leak fuel at a rate greater than one ounce per minute after a 30 mph front-end barrier collision.

On September 1, 1975, the entire fuel system, including fuel pumps, carburetors and emission control components, became subject to the standard. Effective on that date also, a static rollover test following all impact tests was required. On September 1, 1976, provisions regarding three additional tests, a fixed barrier 30 mph front-end angular collision test, a 30 mph rear-end moving barrier test and a 20 mph lateral moving barrier test, will become effective. Coverage of other vehicles is being phased-in over the next year, and by September 1, 1977, the standard will cover all multipurpose passenger vehicles, trucks and buses under 10,000 pounds.

With regard to upgrading the requirements of Standard 302, Flammability of Interior Materials, we have concluded that a more stringent limitation on burn rate of interior materials would be unjustified. Our analysis of accidents, including the bus fires investigated by the National Transportation Safety Board, indicates that the current requirements of the standard are sufficiently stringent to allow evacuation by vehicle occupants. Deaths and injuries directly caused by vehicle fires are almost always attributable to burning fuel. Since the burn rates or modes of testing interior materials do not significantly affect the intensity of these fuel-fed fires, the standard's

present burn rate of 4 inches per minute in a horizontal test is considered adequate to permit evacuation from a vehicle in those cases where fuel is not a factor and the burn rate can make a significant difference.

We have granted a recent petition by the Center for Auto Safety to commence rulemaking to amend Standard No. 203, Impact Protection for the Driver from the Steering Control System, to upgrade the performance of steering columns. While our earlier proposals to upgrade both Standard 203 and Standard 204, Steering Control Rearward Displacement, were determined to require revision and were consequently withdrawn, some increased level of minimum steering column performance is undoubtedly needed. We are presently evaluating the incidence of steering column injuries and fatalities for all vehicle types, the minimum performance levels required to prevent such injuries and fatalities, and the costs of mandating this level of performance. Because of the complexity of this process and the need to rely on incomplete accident data, we do not at this time have a schedule for action in this area.

We are holding in abeyance rulemaking on exterior protrusion protection until basic research is more advanced on the fundamental problems of pedestrian injuries and deaths from motor vehicles. Because the accident data

indicate that the vast majority of pedestrian injuries caused by motor vehicles are "blunt trauma," we consider that the most reasonable rulemaking action would address the hostile aspects of the vehicle body as a whole and not establish arbitrary limits on sharp protrusions in the interim. We are planning to issue a proposal for general pedestrian protection in 1979.

Finally, I would also like to mention that we are considering extending the applicability of the hydraulic brake standard for passenger cars and schoolbuses (Standard 105-75) to trucks, multipurpose passenger vehicles and all other buses equipped with hydraulic brakes. The decision on whether to issue this amendment will be made this Spring.

We have been quite active in the area of standards enforcement and safety defect. In 1974, we tested a total of 253 vehicles, including 210 passenger models, 19 trucks, 6 multipurpose vehicles, and 18 buses. We also tested approximately 5,112 items of motor vehicle equipment, including 1,089 tires and 1,995 seat belt assemblies.

Since 1966, when the agency was first established, through 1975, vehicle and vehicle equipment manufacturers have initiated 1,941 safety defect recall campaigns involving 48.9 million vehicles. Through NHTSA's investigative efforts, 277 recall campaigns were influenced involving some

23.8 million vehicles.

I would like to mention here that a number of the defects investigations resulting in recalls were prompted by the approximately 1,500 letters and reports we receive each month from consumers experiencing vehicle problems. Public participation in this area has been excellent. Our Auto Safety Hotline Pilot Project, which enables consumers to telephone complaints about their automobiles, has added to the volume of consumer input in the defects area.

I might add, too, that our Office of Defects Investigation has played an active role in defect detection. We have, for example, conducted surveys of recreational vehicles which have uncovered several safety problems which have been the subject of investigations. We have conducted a schoolbus survey and are presently analyzing the data to determine whether defect trends exist. We have also been monitoring manufacturer recall campaigns to ensure that these campaigns are being conducted properly.

To aid us in our safety defect activities, we signed a lease on November 25, 1975, for our in-house Engineering Test Facility located at East Liberty, Ohio. We estimate that we may begin occupancy of the facility this August, in which case initial testing would be expected to start that same month. The facility will be used to provide

an in-house testing capability needed to evaluate public petitions, requesting action on possible safety defects, and to conduct compliance testing and testing in support of rulemaking actions.

In the research area, one of our most important programs is the Research Safety Vehicle or RSV program. It addresses the transportation requirements for the 1980's for not only safety, but energy as well.

Phase II of the RSV program has been underway since July 16, 1975. On that date, sixteen-month contracts were awarded to Minicars, Inc., and Calspan Corporation to prepare detailed designs for the fundamentally different performance specifications that the two companies each developed during Phase I.

While Calspan is developing a 2,700 pound RSV and Minicars a 2,100 pound RSV, we are also doing research on cars under 2,000 pounds. This latter effort is being carried out in cooperation with several foreign manufacturers who market many of the lightweight subcompact automobiles sold in this country. Given the increasing number of lighter, smaller cars and the associated problems of vehicle mix, improved crash performance of vehicle structures and occupant restraint systems are being especially emphasized in this area of our research.

Mr. Chairman, this concludes my prepared testimony. My colleagues and I will now be happy to answer any questions you or members of the Subcommittee may have.

