

# Study of Methods for Increasing Safety Belt Use

Prepared by the Transportation Research Board National Academy of Sciences

Comments on the Study by the U.S. Department of Transportation
National Highway Traffic Safety Administration

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#### Introduction

The National Highway Traffic Safety Administration (NHTSA) has estimated that 12,000 or more of the traffic crash deaths that occurred in 1979 might have been prevented if the victims had been using their safety belts. A much larger number of injuries might have been avoided or reduced in severity. Yet, surveys show that only about 14 percent of drivers and a smaller percentage of passengers on average take the precaution of securing their safety belts while traveling in automobiles. People are, however, not unaware of the value of occupant protection; about 45-50 percent of vehicle occupants use belts occasionally or under special driving conditions (1).

Over the years, both government and private-sector organizations have attempted in several ways to induce more people to use their safety belts regularly. None of the methods used thus far has been very successful. Those that involve some degree of compulsion—starter interlocks, for example—have been effective in increasing the safety-belt use rate, but they appear to be unacceptable to the public. Those that involve persuasion have not been particularly effective, at least directly, in increasing and sustaining the occupant-protection-use rate. Failures of voluntary approaches to encouragement of safety belt use are not confined to the United States. The apparent failure of these methods does not, however, rule out all possibility of increasing voluntary, regular safety belt use.

This report summarizes the recommendations and suggestions of a special committee convened to assess methods that have been or could be used to induce people to wear their safety belts. The committee was formed in early May 1979 in reponse to a congressional directive contained in Section 214 of the Surface Transportation Assistance Act of 1978. This section provided that

The Secretary of Transportation shall undertake to enter into appropriate arrangements with the National Academy of Sciences to conduct a comprehensive study and investigation of methods of encouraging the use of safety belts by drivers of, and passengers in, motor vehicles, including, but not limited to, the use of various types of financial incentives and financial disincentives to encourage such use\*\*\*

Subsequent to the passage of this act, NHTSA contracted with the Transportation Research Board (TRB) of the National Academy of Sciences to convene a committee to study methods for increasing safety belt use. The stated objectives of the committee were

1. To conduct a comprehensive review of previously completed investigations and studies dealing with

evaluation of the effectiveness of programs designed to encourage use of safety belts by both drivers and passengers in motor vehicles:

- 2. To consult with and elict views and recommendations from public agencies, industry, private-sector organizations, and individual citizens interested in the issues and problems related to achieving increased use of safety belts by the motoring public;
- 3. To identify new or additional program areas that may not yet have been fully explored; and
- 4. To assess the feasibility of various programs, or combinations of programs, that appear to hold promise for more effectively encouraging safety belt use by both adults and children.

The committee could not evaluate, in depth, past or existing programs to increase safety belt use, because of the limited time available for conducting its deliberations and completing its report to Congress, [The NHTSA 5-year research plan in the area of safety belts has been reviewed by a workshop committee of the Conference on Highway Safety, Research, and Demonstration convened by TRB in April 1979; these deliberations are reported on elsewhere (2).] The low use rate, itself, testifies to the shortcomings of these approaches. But, it is possible that the methods that have been used may have a long-run, cumulative effect on safety belt use and that they may also be important components of a package of methods that might successfully increase the rate of voluntary safety belt use.

#### Recommendations for Federal Actions

The committee's principal conclusion about all efforts to increase safety belt use is that no single program is likely to work. It will take a combination of approaches on many fronts to overcome public apathy or antipathy toward safety belts and to change safety belt behavior so as to increase both the number of safety belt users and the regularity with which belts are used.

The committee discussed many ideas for improving the safety-belt use rate. Some involve actions to be carried out directly by the Federal government; others would be carried out by State and local jurisdictions or by the private sector. The committee has emphasized its recommendations for Federal action for two reasons:

(a) because it is responding to a congressional request for advice and (b) because a comprehensive program will not happen without leadership, which the Federal government is uniquely capable of providing.

The committee's discussions developed six key strategies through which the Congress and Federal departments could help mobilize a national commitment to safety belt use.

- 1. The states should enact child-and youth-occupant-protection laws: The Federal government should offer technical assistance and incentives, in grant or other forms, to States that pass laws requiring children up to the age of 18 to be properly protected while riding in motor vehicles or learning to drive them. Experience indicates, however, that adequate enforcement is essential to achieve public compliance with state laws related to the use of occupant-restraint systems.
- 2. The Federal government, in its own activities, should provide an example of compulsory safety belt use: Federal agencies should require and enforce on-the-job safety belt use by their own employees and should encourage belt use by employees at all times; proper occupant protection should be required of all persons working or living on military bases and of drivers and passengers in vehicles operated under federally funded programs. Implementation of these safety belt rules should be appraised and monitored regularly through the congressional oversight process.
- 3. States should make more productive use of the federal-assistance funds set aside for safety belt programs: The Federal government should provide more-detailed guidance to the States in the use of the 2 percent of their highway safety grant funds that is designated for safety belt programs.
- 4. The economic costs of not using safety belts should be identified and publicized among the groups that mainly bear those costs: The Federal government should conduct studies that would specify the costs of nonuse of safety belts; such studies should begin within units of federal agencies, and their results should be used to educate the public on how personal economic interests would be served by increasing the rate of safety use.
- 5. Employers should require on-the-job safety belt use by their employees: The Federal government should develop and test (in its own fleet-using agencies) model safety-belt-use programs that employers could adapt to their own circumstances; employers should be made aware of the cost-saving potential of such programs, and insurance companies should be encouraged to recognize, in their health and accident insurance-rate structures, the lowering of risk that employer-operated safety belt programs might bring about.
- 6. Traffic crash injury and death should be recognized as a major public health problem: Because traffic

crashes are one of the five leading causes of death, the Federal government should involve its health agencies, as well as its traffic safety agencies, in safety belt programs; congressional oversight could be used to monitor such involvement. Government should also encourage the health-care community, especially health maintenance organizations, to educate the public about the preventive health aspects of safety belt use. IIt should be noted that, although arterial diseases account for the largest number of deaths, cancer ranks second, and accidents of all types rank third, when losses are calculated in terms of working life (annual person years lost), accidents move to first place. Each arterial-disease death represents an average loss of 2 years of working life, cancer deaths represent slightly more than 5 years each, and accidental deaths average a loss of more than 20 years of working life each. Traffic deaths account for approximately 50 percent of the 100,000 accidental deaths recorded annually (3)].

The concept on which strategy one is based is not new, but the strategy of using incentives and grants to encourage State legislation does represent a new approach. Strategy Two is likewise a concept that has been adopted by some Federal agencies, but the implementation of policies is currently hampered by the lack of enforcement and compliance review. The concept of providing set-aside funds for State safety belt promotion programs, as in Strategy Three, is incorporated in the Surface Transportation Assistance Act of 1978. (Although Federal assistance to aid States in planning and conducting effective programs is increasing, Federal assistance should be expanded and intensified.) Strategies Four and Five are not new concepts. The study concluded, however, that the programs hold promise for increasing safety-belt-use rates if there is greater participation by and assistance from the Federal government. Strategy Six deals with the public health aspects of the traffic accident problem. Here again, the concept is not new, but the strategy of using congressional oversight to bring about greater involvement represents a new, and potentially productive, approach.

These six strategies should be considered parallel methods. No one of them is necessarily more effective than the others and no one, alone, is likely to increase the rate of safety belt use substantially. It may be possible to implement some strategies more easily and sooner than others, however. The cause of child-passenger protection, for example, is a relatively non-controversial one; precedent exists for State child-passenger-protection laws, and an increasing number of States are

actively considering such legislation.

Although some of the strategies may not bear fruit in the short run, they are no less useful because of that. The need for people to make a deliberate decision to protect themselves and their children against the consequences of a possible automobile crash will not disappear with the advent of automatic passenger-protection systems. The transition from manual to automatic systems will be a gradual one; it may be a decade or more before all automobiles on the road feature automatic restraints as standard equipment. (Note: NHTSA believes that the terms passive and active restraints may be misleading and now uses the terms automatic and manual, respectively, to describe those systems. Generally, this report will use the new terminology; where the type of occupant protection is unspecified, the reference is to manual systems). And even when automatic systems are universally available, they will not fully protect all occupants under all circumstances. At least three examples exist: Special childprotection devices will still be necessary to protect infants and young children fully in a crash; back-seat passengers, who may be injured or cause injury unless they are properly restrained in a crash situation, will still need to use manual belts; and air cushions will require the companion use of manual lap belts to protect completely even adult, front-seat occupants in noncrash incidents or in crashes that involve side collision, more than one collision, occupant ejection, or rollover.

Thus programs to encourage belt use are of both immediate and continuing value. The strategies suggested entail little additional cost to the Federal government. If, together, they increase the number of safety belt users and the frequency of safety belt use, the reduction in highway deaths and injuries would be well worth the effort.

# Committee Membership and Procedure

The committee, because of time constraints, was not able to survey the opinions of all those concerned about safety belt use. Instead, it relied on a number of resource materials, including special studies and position statements from several persons and organizations particularly interested in occupant protection (1,3-23). In addition, several members of the committee itself have had considerable experience in highway safety matters. The committee's multidisciplinary composition also was an advantage. Although this mixture of

perspectives required spending some time in a process of mutual education, it minimized the likelihood of parochialism in the committee's recommendations.

The full committee met four times, in June, July, August, and September 1979. In its third meeting, the committee identified program areas that might be major points of influence on the public's occupant-protection habits. At this point, the committee conducted a multiattribute analysis and evaluation of all candidate programs to obtain a consensus of such factors as effectiveness, feasibility, coverage, economy, and appropriateness (23). The committee then resolved itself into small task groups, each of which addressed one or more of these areas. There were five such groups:

- Occupant-restraint systems and childpassenger-protection programs,
- 2. Participation by health-care professionals and availability of insurance incentives,
- Business and industry programs,
- 4. Federal-State-local government programs, and
- 5. Education and media programs.

Each task group met at least once to prepare its report. These reports suggested programs, delivery systems, and approaches members considered likely to have positive effects on safety belt behavior. The present report is a synthesis of those task-group reports. The six strategies for Federal action are a product of that synthesis. A discussion of the approaches and delivery systems that might be used to advance those strategies follows.

# Points of Influence on Safety Belt Behavior

The task-group reports suggest a number of methods for reaching people to change their attitudes, and ultimately their behavior, with regard to using safety belts. Four such avenues are prominent throughout the reports:

- 1. Through prescription—that is, by laws, regulations, and judicial decisions;
- 2. Through economic incentives;
- 3. Through changing people's perceptions about safety belt use; and
- 4. Through personal and community influences, including that of health-care professionals.

# **Prescriptive Approaches**

The idea of applying mandates to personal behavior is not a particularly popular one in this country. Nevertheless, such mandates are not uncommon, and they are generally accepted if the public considers the end result justified. The justification for any safety belt rules, then, should be fully understood and accepted as sufficient by the public that will be affected by them.

# Comprehensive Belt-Use Laws

More than 20 jurisdictions outside the United States now have comprehensive, mandatory safety-belt-use laws. Almost all have experienced substantial increases in rates of restraint use, although the degree of success appears to depend on how well the public was prepared for such laws and on the diligence of enforcement. Based on data from some of these places, however, it would appear that the most effective way to increase safety belt use would be simply to pass belt-use laws and then enforce them (24).

The past history of attempts in this country to require the general public to use protective equipment casts doubt on the immediate feasibility of this approach. Federal regulations have successfully ensured that automobiles will be equipped with safety belts, but the mandates designed to compel people to use these belts for their own protection have been short-lived—witness the fates of the interlock system and the continuous buzzer.

The question of whether government should intervene in personal safety decisions is one appropriately reserved for legislative study and determination. But when government does decide upon such interventions, it should first secure public acceptance of the wisdom of those measures. It is probable that concentrated public information and education campaigns, similar to those that preceded the enactment of mandatory belt-use laws in other countries, might have made the interlock more acceptable. Had the rule survived long enough, it might eventually have established a public precedent.

The record of State attempts to enact safety belt laws also is discouraging. More than 30 states have introduced restraint-use legislation of some type in recent years, but few have had any success in enacting it. California requires all occupants of driver-education vehicles to use safety belts, and school bus drivers must wear belts in Massachusetts, Minnesota, and New York. In Maine, school bus occupants must wear safety belts when riding on buses equipped with such belts. Several States require State employees, officials, or police to wear safety belts while carrying out official duties (25).

Tennessee has enacted the broadest State safety belt law to date—a child-passenger-protection law that became effective in 1978. The Tennessee law applies to very young children, those under the age of four. It requires that, unless such a child is being held in the lap of an adult, he or she must be properly restrained in an appropriate child-protection device. It would be desirable for child-passenger-protection laws to apply to older children, as well. Furthermore, even for a young child, being held in the lap of an adult is not the safety equivalent of a restraint device. Nevertheless, the legislative success in Tennessee does suggest that State occupant-protection laws are not impossible to achieve, particularly if they apply to minors, whose safety decisions are the moral responsibility of adults. In fact, at present, State interest in such laws is increasing, and child-restraint legislation is pending in 24 States. (Similar legislation is expected to be filed in 8 more states in 1980).

# Child-Passenger-Protection Laws

There are several ways by which the Federal government could promote the enactment of State child-passenger-protection laws. At a minimum, it should

- 1. Provide an example, in practice, by requiring proper child-passenger protection on military bases among families of military personnel and in vehicles operated in federally funded programs;
- 2. Offer incentive grants to States that enact childpassenger-protection laws to help them implement those laws—similar grants were successful in 1973 in stimulating the introduction of restraint-use laws in about 30 State legislatures (even though the grants were never funded);
- 3. Suggest, or even require, that some portion of the States' 2 percent set-aside funds for safety belt programs be designated for child-protection programs that might pave the way for enactment of child-passenger-protection laws; and
- 4. Develop a set of model laws applying to children of all ages that States could use as patterns for technically sound legislation.

The States, too, could provide examples by insisting that, when feasible, pupils be properly protected while riding in school vehicles and by requiring that fostercare families properly protect foster-child passengers. Both Federal and State governments could offer tax deductions or credits for the purchase of child-passenger-protection devices.

Health-care personnel, particularly pediatricians and

hospital staff, could help shape positive public attitudes toward mandatory child-passenger protection by educating parents about the special needs of children for proper protection in automobile travel. If the use of appropriate devices is to be encouraged or required, however, it is essential that they be readily available to all parents. Hospital administrations could arrange to lend infant-protection equipment to parents when their new babies leave the hospital. As a community service, insurance companies, automobile dealerships, and other businesses could donate such equipment to social service organizations that would rent or lend the devices to parents. Hospital gift shops, automobile showrooms, and family-oriented retail and fast-food establishments are among the types of outlets that would be appropriate for the sale of child-protection devices to parents who wish to buy them.

Ideally, child-occupant-protection legislation should apply to all children, even those who are beginning drivers. There might be more public resistance to these broader laws than to those that apply only to young children, but the laws would be more acceptable to parents if children, themselves, accepted the desirability of using safety belts and did so voluntarily. Including safety belt use in the health education curricula at all grade levels would help establish safety belt consciousness in children. Emphasizing this aspect of safe driving in driver education courses would help establish the idea that safety belt use is a normal driving procedure.

A paradox that children face, however, is that they may be taught in school the wisdom of using belts at all times, but most of the buses that carry them to school are not even equipped with belts. Certainly, school vans and small buses should be so equipped, and belt use should be enforced. Technological research is needed to find ways to equip school buses with safety belts or to develop other, equally safe alternatives for protecting pupil passengers. Drivers of all school buses should be provided with safety belts and required to use them at all times

The enactment of child-restraint laws, important in itself, could also have larger consequences for safety belt use by all motor vehicle users. In the short run, parents who become accustomed to buckling up their children may remember and take the time to use their own safety belts as well. In the long run, the next generation of drivers and passengers will be those who, from an early age, were required to use restraints and probably will be habituated to doing so.

#### Safety Belt Regulations

Both Federal and State governments should require, by regulation, safety belt use by their own employees and by persons who drive or ride in publicly owned vehicles, in private vehicles used for public purposes, and in vehicles operated under publicly funded programs. Such regulations, in themselves, would expand safety belt use considerably: There are about 3 million civilian government employees; about 2 million military personnel, many with families, who live on military bases; and an unknown, but undoubtedly very large, number of people who use public or publicly funded vehicles.

Some units of the Federal government currently have voluntary safety belt programs, and safety belt regulations now apply in the U.S. Department of Transportation and to General Services Administration (GSA) fleets. There is little enthusiasm for enforcing these regulations, however, and they generally are observed in the breach. Congressional action is needed to extend the scope of safety belt regulations into all areas subject to Federal control and to require enforcement. Efforts to promote understanding and acceptance of such requirements should precede and accompany the promulgation of these regulations. The results of the safety belt rules should be the subject of congressional oversight on a periodic basis.

At least 19 States require State employees to use safety belts in vehicles used on the job, but the extent of enforcement is unknown (14). Safety belt use by State and local government personnel could be a very important means of encouraging safety belt use by the public. Many of these employees are highly visible in the community and frequently come in personal contact with individual citizens. The police, particularly, have a safety leadership role and should be required to use safety belts. Police academy curriculums should emphasize the importance of occupant protection.

The police, too, could be an important adjunct to public information and education efforts to encourage safety belt use. Police and emergency-medical service crash reports should require notation of whether safety belts were engaged at the time of a crash, if this can be determined. Such information would add to the data on safety-belt-use rates and on the consequences of use or nonuse. This information also could be given to the news media for inclusion in local news reports of crashes.

Police might also consider adopting a policy, when stopping automobiles for traffic-law violations or for other purposes, of commenting on whether the occupants are properly protected or of reminding them to buckle up for their own safety. Vehicle occupants might then perceive that safety belt use is a matter of interest to legal authorities, even in the absence of safety belt laws.

At least one local jurisdiction (Brooklyn, Ohio) requires safety belt use by the public. Local regulation of use is probably a limited tool for inducing large numbers of people to use safety belts regularly. Local regulation is appropriate, however, for ensuring that passengers in for-hire vehicles have proper protection available to them. Jurisdictions that have licensing or other control over taxi and limousine operations should condition licenses on having occupant-protection devices in all seating positions.

Those States that have vehicle inspection laws should require as an element of inspection that all seated positions in all motor vehicles have safety belts and that those belts be free of defects. All states should prohibit tampering with the safety system of a vehicle in such a way as to make the system inoperable or incapable of performing the function for which it was designed.

# Judicial Influence on Safety Belt Use

The courts could influence the public's willingness to use safety belts, although without laws they cannot enforce it. Indeed, the courts should have a social responsibility that goes beyond levying penalties for traffic violations. Several safety belt programs that could be carried out through the courts are suggested in the University of North Carolina (UNC)—NHTSA mannual, Safety Belts: The Uncollected Dividends (3, Section 6).

The courts or administrative adjudication systems, as well as licensing and related systems, could provide for reduced traffic fines or points if, at the time a driver was cited for a traffic violation, he or she and all passengers were using safety belts. Such a procedure would, however, require an accurate, relatively simple method for determining and documenting whether or not safety belts were, in fact, in use when a violation took place.

A judicial doctrine permitting mitigation of damages in a civil action if the plaintiff's safety belt was not in use at the time of a crash might help motivate drivers to use their belts. This doctrine could be enacted into law, of course, but judical recognition and application probably would be sufficient. Again, some method of proving use or nonuse would be needed to support this doctrine.

#### **Economic-Incentive Approaches**

Financial incentives could be used both directly and indirectly to promote regular safety belt use. Direct incentives are those that motivate individuals to use their own occupant-protection systems; indirect incentives are those that stimulate public or private efforts to encourage safety belt use by the public in general. Financial incentives can involve either a reward or a cost saving. Research is needed with regard to both types as they might be applied to safety belt use.

There is no guarantee that financial rewards will change personal behavior. They may not be large enough, continuous enough, or presented in a form that will have an incentive effect. Little is known about this relationship. One study (9) indicates that relatively small financial rewards can affect safety belt behavior, but this study was conducted on a relatively small scale, and the feasibility and practicality of large-scale financial incentive programs remain to be explored. The study should stimulate such exploration, however, by NHTSA or through State projects.

Compared with providing financial rewards, cost savings are an expensive way of achieving economic incentives—the saving is its own reward. But so little is known at present about the costs of not using safety belts, and it would be difficult to design programs that directly and specifically link safety belt use and money saved. Research is needed to identify the costs of nonuse and the specific groups that bear them and to then develop ways to educate those groups about their costs.

#### Individual Incentives

The personal and social costs of deaths and injuries from vehicle crashes are staggering. The people directly involved and their families, in addition to their grief and suffering, may face income losses and substantial health-care costs. In addition, along with other members of society, they must bear higher health-care and insurance costs, higher tax costs because of the additional burdens on the social welfare system and the real costs of lower productivity due to worker days lost, retraining expense, and the like. But it would be difficult, if not impossible, to personalize these shared costs in a way that would convince individuals that they should use their own safety belts.

The same difficulty applies to using individual tax incentives to reward safety belt use. It would be easy to justify reducing the taxes of regular safety belt users, because fewer vehicle-related deaths and injuries would result in lower government expenditures. It is not easy to think of a system for applying such incentives,

however, beyond allowing tax deductions or credits for the purchase of child-passenger-protection devices.

A reduction in insurance premiums or an increase in benefits allowed is also easy to rationalize and difficult to apply. In early 1979, Congressman James Cleveland of New Hampshire asked 18 insurance companies to comment on insurance incentives and disincentives that might be applied to safety belt use. The replies indicated that, although such approaches have a desirable objective, they would probably be defeated by a number of practical problems. The problems cited were of two types: Affordable incentives may not offer sufficient inducement to change safety belt behavior, and incentives could not be applied fairly because safety belt behavior is difficult to monitor.

In order for insurance premium reductions to be effective as incentives, the reward must be significant enough in the eyes of policyholders to induce them to comply with the conditions set forth for earning the reduction. An individual insurance company might feel financially justified in offering a 10–20 percent discount on the medical payment portion of policies for regular safety belt wearers. This could be a very small dollar amount for individual policyholders, however, and would seem to provide little incentive to change behavior.

Offering increased medical-benefit limits to crash victims who had been using their safety belts also may have little incentive effect. First, policyholders may perceive that their chances of being in an injury-producing crash are very small. Second, the reward may be more apparent than real, and many policyholders will understand this. In the event of a crash, a belted occupant would, in most cases, sustain only minor-to-moderate injuries (if any) and therefore would not benefit from any increase in the maximum medical benefit that could be claimed.

It would also be very difficult, in practice, to police the safety belt habits of policyholders who claimed to be regular safety belt users. The majority of crashes are not so severe that a victim could not remove or engage a safety belt after the crash. The investigator would have to rely upon the victim's honesty. As yet, there is no evidence that drivers with safety belt clauses in their policies would, in fact, wear belts more frequently than the rest of the driving public, and few companies offer such clauses.

Incentives to Employers to Promote Safety Belt Use
Ample economic incentive exists for employers to

undertake programs to require their employees to use safety belts on the job and to encourage safety belt use at all times. This incentive is the prospect of reducing the significant employer costs that crash injuries and deaths entail. In 1978, for example, about one-third of all work-related fatalities were caused by motor vehicle crashes. On average, each such death cost the victim's employer \$120,000. When on-the-job injuries are added to deaths, motor vehicle crashes directly and indirectly cost employers a total of about \$1.5 billion in 1978. The employer cost of vehicle crashes off the jobs is estimated by the National Safety Council to be an additional \$1.9 billion.

Few employers are aware of their economic losses from this source, and few recognize that an employer's risk of loss from motor vehicle crashes is much higher than a single individual's. Almost none can identify the specific risk of loss, because that risk will vary with the number of persons employed, the type of business or industry, and a variety of other factors; a data base for such calculations is not yet available.

There is little an employer could do to reduce the risk factors inherent in the nature of the operation of the organization but, by reducing individual employees' risks of injury or death in a motor vehicle crash by insisting on safety belt use, an employer can reduce his or her own aggregate risk exposure. Thus far, only a small number of companies actively promote or require the use of safety belts by their employees. For the most part, these are firms that face large aggregate risk because they have a very large number of employees (e.g., Dow Chemical Company, E. I. du Pont de Nemours and Company) and/or because they operate large fleets of vehicles (for example, telephone and utility companies).

Several states and NHTSA have developed materials for employers to use in safety belt programs for employees. But individual employers are unlikely to be convinced that the cost of operating a safety belt program is justified, unless they can be shown that the cost of not having such programs is even higher. Two types of data are needed to provide such evidence: Studies of the costs to employers of nonuse of safety belts by employees and studies of the cost savings that could be achieved by employer-operated safety belt programs.

These cost studies should be industry-specific, so a case-study approach would be appropriate. Such studies would investigate real-life incidents of crash-related injury and death and trace how much they cost the victims' employers. The studies should specifically identify

the hidden costs of those crashes—which can be four times greater than the direct costs—because most employers would not otherwise be aware of them.

Some units of the Federal government would make ideal starting places for cost-measurement studies. Data would be relatively easy to collect, and it would be possible to choose among a wide variety of operating characteristics, traffic environments, employee types, and other features. Furthermore, any attempt on the part of government to measure costs of nonuse of safety belts would be highly visible.

In addition to the research value of government cost studies, such studies would be in the public interest. It is public tax dollars that are consumed when government employees are injured or killed because they were not using safety belts. Monitoring these costs and publicizing them on a regular basis could be an important element of government cost control. A congressional request for such a study and congressional oversight of the cost-monitoring process would expedite and encourage agency compliance with the program.

Along with employer-cost studies, corresponding studies are needed of the effectiveness of employer-operated safety belt programs. Because there are so few such programs, it would probably be necessary to set up models to collect sufficient data for evaluation. Again, units of the Federal government that use motor vehicle fleets—military units or the GSA, for example—would lend themselves to such an experiment. Current safety-belt-use rates among employees could be measured to obtain a baseline figure. Then, a model belt-use program could be initiated and the results measured against the baseline. As for the cost studies, the model government programs would have a significance beyond data collection; they could be example-setting demonstrations of good employer policy.

Similar programs might be established through trade associations, unions, and other industry organizations to collect success models and case histories in various industries and for various firm sizes. These models would be examples for other firms, of course, but they also might be used to interest insurance companies in experimenting with pilot programs to reduce insurance premiums for those firms that have safety belt programs.

Incentives to States To Conduct Safety Belt Programs

During fiscal year 1978, only 14 States conducted programs aimed specifically at increasing safety-belt-use rates; the total amount spent on these programs was less

than \$900,000 (26). To encourage more States to initiate such programs, Congress in 1978 required the States to set aside 2 percent of their highway-safety grant funds for use in occupant-protection programs. As a result, NHSTA data indicate that in fiscal year 1979 nearly \$3.5 million in funds from this source was earmarked for such efforts in the States and territories. Many of the states have not yet obligated the funds earmarked for occupant protection, and many apparently have not yet formulated plans for spending the money.

Most of the States that have decided how to spend their 2 percent set-aside funds are concentrating on public information and education programs. But the past record of such programs, carried out alone and as an end in themselves, indicates that they are not very effective in increasing safety belt use and that any increase that does occur is of short duration. The States should be encouraged to adopt programs that promote safety belt use from many perspectives, in addition to providing public information and education.

The UNC-NHTSA manual (3) provides an excellent source of guidance for State safety belt programs. It suggests programs that involve all of the State safety-related systems along with service-oriented community organizations. The States should be urged to use their set-aside funds to plan and carry out such programs. NHTSA has recently distributed this manual to State officials, but there has been little active response to it. At least some states will need technical assistance in initiating the activities the manual suggests.

Particularly in some of the smaller States, 2 percent of the highway-safety grant funds may not be sufficient to launch a comprehensive safety belt program. Those States may have to spend a larger proportion of the funds they receive under Section 402 of the Highway Safety Act of 1966 or use funds from other sources. For example, authority exists under the Surface Transportation Assistance Act to provide States with supplemental grants for innovative highway-safety programs. Even though this authority has not yet been funded, that source potentially could be used to supply pilot funds to States that develop plans that apply the concepts outlined in the UNC-NHTSA manual.

# **Approaches Designed To Change Public Perceptions**

In surveys conducted by NHTSA of public attitudes toward safety belts, the discomfort and inconvenience of the belts are cited—particularly by nonusers of safety

belts—as major negative attributes of safety belt systems. However the extent to which these attributes actually deter safety belt use has not been determined. Often, the reasons given for nonuse differ from the real reasons. Furthermore, many people who consider safety belts uncomfortable and inconvenient nevertheless use them. NHTSA should examine closely the relationship between comfort and convenience versus belt use.

It is apparent that discomfort and inconvenience are relative concepts. The significance of these factors as deterrents to safety belt use probably depends on personal perception of risk. The low statistical probability that any one person will suffer serious injury or death from a traffic crash, over a lifetime of driving, may overshadow the critical need to use safety belts for protection in the event of a crash.

Thus, there are two ways to approach the comfort and convenience issue. One is to try to make safety belts as comfortable and convenient as possible without sacrificing their safety effectiveness; the other is to sensitize drivers to the personal risks inherent in driving and to convince them of the importance of reducing that risk.

To some extent, the comfort of safety belts could be enhanced through proper use. Many automobile owners are unaware of the comfort features that are available on present-day belts. Retail automobile dealers should show their customers how to use the restraint systems in their new automobiles and how to adjust them for both comfort and safety. Driver education courses should include similar demonstrations, although students would have to adapt the information to the vehicles they eventually will drive themselves.

Standardizing the operation of safety belts among the different models of automobiles would be a major step in promoting proper use and, thereby, enhancing comfort, convenience, and safety. At the same time, continued and perhaps increased effort is needed to improve safety belt design with these factors in mind.

Even with the low statistical probability of any one driver being involved in a serious crash over a lifetime of driving, the risk is nevertheless very real. Vehicle users' tolerance for any discomfort and inconvenience associated with safety belt use might be increased if they recognized that a crash could happen and that the consequences in terms of injury or death could be substantial. Public information and education campaigns could be useful in changing risk perceptions. There are many promising channels for delivering such information.

#### The Schools

Driver education courses and health education curriculums at all grade levels should include information about crash statistics and the relationship between crashes, even at slow speeds, and injury or death. The preventive potential of safety belts should be stressed.

#### Health-Care Systems

Physicians and other health-care professionals should be formally educated about the health risk involved in driving without safety belts. Such persons should be urged to provide this information to their patients as part of their preventive-medicine responsibility. Health maintenance organizations, pediatricians, and family practitioners could be particularly effective in delivering this message.

#### The Media

The media could be used in several ways to help change public perceptions about the risk of crashes, about the injury-preventive value of using safety belts, and about the consequences of failing to use them.

- 1. The news media.—Newspaper, radio, and television reports of local automobile crashes should include information about whether the victims were using their safety belts (this would require establishing a system through police or emergency medical service reports for recording such information and making it available to news reporters).
- 2. Movies and television programs.—The traditional automobile-chase scene has helped distort public perceptions of driving risk. Rarely does the hero (or heroine) crash, and never is he or she severly injured or killed, in spite of the failure to use safety belts.
- If, in all scenes that involve driving, the actors and actresses were shown buckling their safety belts, the implicit message would be that an accident could happen and that the possibility of injury is high enough to justify taking precautions. Furthermore, to the extent that people tend to imitate the actions of their heroes, such scenes could help promote the routine action of buckling up before driving.
- 3. Spot announcement.—Although past, one-shot media campaigns have had little influence on safety belt habits, media campaigns generally should not be considered valueless. It is not known whether different kings of campaigns might have been more effective. Different levels of effort, different time slots, different messages might have produced different results. It has

been sugggested, for example, that emphasizing the act of buckling up is more effective than emphasizing the wearing of belts.

Such campaigns should not be judged in terms of their immediate effects on belt-use rates. Particularly when used as part of a coordinated effort, they may have an important intermediate effect on public attitudes, which may eventually lead to behavior changes or make people more receptive to other methods of changing behavior. Research and evaluation are needed, however, on the effects of different messages and how best to use them.

4. Demonstrations.—A device has been developed that physically demonstrates the effects of collisions at even extremely slow speeds. Though these demonstrations are impressive, their effect on the risk preceptions of those who see them and ultimately on safety belt behavior is unknown. Evaluation is needed of the effectiveness and reach of these demonstrations compared with their cost.

#### **Approaches Through Private Initiatives**

Many private-sector organizations have carried out programs to encourage the public, or some subgroup thereof, to use safety belts. These efforts should be coordinated on a national level and carried into the local community to reach individuals on a personal level.

#### Health-Care Organizations and Personnel

Many health-related organizations, such as the American Medical Association, the American Academy of Pediatrics, the American Association for Automotive Medicine, Physicians for Automotive Safety, and the Epilepsy Foundation, have actively promoted safety belts and their proper use. These efforts have been, and will continue to be, important influences on legislators, but health organizations and their memberships also could play a more direct role in promoting safety belt use. State and national medical organizations provide readymade channels of communication with individual physicians and other health-care professionals who, in turn, could deliver the safety belt message to their local communities and their own patients.

Perhaps one reason physicians have not taken a more active role in promoting the use of occupant-protection equipment is that the average physician is not oriented toward traffic medicine. Most physicians do not think of crash injury and death as a public health problem or as a problem they should discuss with their patients.

This suggests developing a curriculum in traffic medicine that could be included in the first- or second-year program in medical schools. Similar courses should be a part of training programs for nurses, emergency medical technicians, and other health-care personnel.

The education of medical personnel does not stop in school, however. Physicians, for example, are required to complete a designated number of hours of continuing medical education in order to keep their accreditation. State and national professional societies should develop and promote traffic medicine courses, emphasizing occupant protection, as part of these continuing education programs.

Currently, there is a trend toward birth-to-death, prevention-oriented family health care. Family practice is now a recognized specialty, and health maintenance organizations (HMO's), group practices, and clinics provide comprehensive health care. These developments offer a medium for continuous, consistent, and planned public education on the benefits of occupant protection. Several HMO's already are involved in extensive child-passenger-protection programs. These programs should be expanded both in number and in content so as to include safety belt use by the whole family.

An added benefit of using HMO's as a delivery system is their ability to reach low-income families. The Child Health Assurance Program (CHAP), Department of Health and Human Services, now allows reimbursement for medical care provided by HMO's. CHAP is intended to provide medical care to 2.6 million needy children and more than 100,000 pregnant women in the Medicaid program. Through HMO's, the occupant-restraint message could be delivered to people who might not otherwise receive it.

#### National and Community Organizations

Many national safety-related organizations have advanced the cause of safety belts. Among others, the National Safety Council, the American Seat Belt Council, the Highway Users Federation, and the Motor Vehicle Manufacturers Association have been active in promoting safety belt use. These campaigns are not formally coordinated; many are even unreported. Mechanisms such as the Occupant Restraint Coordination Group, promoted by NHTSA are needed to coordinate national private-sector programs, both with one another and with efforts being made through other channels.

On local levels, community service organizations are a largely untapped source of support for safety-belt-use

programs. The NHTSA-UNC manual suggests several ways by which such organizations could be drawn into an overall statewide safety belt program. It suggests, for example, including representatives of such groups as State Parent Teacher Associations, State motor clubs, State chapters of the National Association of Women Highway Safety Leaders, the Junior Chamber of Commerce, or other service organizations on an occupant-protection council to work with State government representatives, public and private driving educators, judges, health organizations, and industry representatives to establish and coordinate a statewide safety-belt-use program.

This statewide program, when developed, would reach into local communities to enlist the aid of community leaders in promoting safety belt use. These leaders often are officials in local service organizations, such as Rotary, Lions, Civitan, Junior Service League, Boy and Girl Scouts, 4–H, and the like. These organizations could not only influence their own members and their families to use safety belts, but also could help support a community campaign to urge others to do so, as well.

# Summary

Past attempts to induce people to use their safety belts have not been particularly successful. This may be because these efforts generally have been too narrowly defined and have not been carried out as part of a consistent, comprehensive campaign. Some of the measures that have failed—the interlock and the media campaigns, for example—might have been successful elements of a larger effort. The committee strongly believes that increasing the use of manual safety belts or of the manual components of automatic occupantprotection systems will require broad commitment on several fronts. Such a commitment demands national dedication and leadership. The Federal government, with encouragement and oversight by Congress, can help supply this leadership through its own agencies, programs, and policies.

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Comments on the Report by the U.S. Department of Transportation, National Highway Traffic Safety Administration

# **Executive Summary!**

This commentary by the National Highway Traffic Safety Administration (NHTSA) on the National Academy of Sciences Report entitled "Study of Methods to Increase Safety Belt Use" is divided into two parts: (1) general comments and (2) comments on specific recommendations.

# **General Comments**

The NHTSA shares with the National Academy of Sciences Safety Belt Study Committee its concern with the complex problem of persuading the public to use the occupant restraints in their automobiles. We agree there is need for further inquiry into the problem, more detailed discussion of the relative feasibility of alternatives and the development of a clear system of ranking those alternatives.

The Academy Study Report is a valuable contribution to this effort, and we support many of its recommendations. Further, we are pleased to note that the Report confirms many of those projects either currently underway or planned by the Agency. Our activities fall into four general categories, each of which received significant attention from the Study Committee and which is addressed in a number of individual recommendations included in the Report:

- 1. The collection of detailed information on both current levels and trends in the use of restraints; the comfort and convenience of belt restraints; and those demographic and motivational factors associated with restraint usage and acceptance, as well as with nonusage.
- 2. The calculation of costs of nonuse of belts to employers, to the Federal government and to the general public, and ways of communicating those costs to those who bear them and of providing a mechanism for ongoing calculation of those costs.
- 3. The development of improved and new public information and communications efforts, including identification of critical networks of communications, use of new psychometric analysis of markets, point-of-sale programs, and investigation of the impact of personal influence on belt use. We also plan to conduct a series of about 30 workshops for State and regional highway safety officers, to take place in the fall of 1980 and organized as a follow-up to the 20 regional workshops of 1979. These will provide the following types of information and materials: Detailed suggestions for State programs, including potential uses of 2 per cent funds; outlines for potential legislative, public information,

judicial or other activities at the State level; materials to be used in any of these efforts; guidance in response to State inquiries; and information about programs in States other than those in which the particular workshops are being held;

4. Emphasis on child restraint testing and promotion, including dynamic testing of child seats in crashes, investigation of usage, comfort and convenience, and compatibility of the seats, development of new consumer and public information materials about child restraints and development of contacts with other governmental agencies, including the Department of Defense, with members of the health-care community, and with other organizations like the National Automobile Dealers Association. We have approached health-care professionals about their participation in the promotion of adult belt use as well.

We concur in the Committee's conclusion that no single program is likely to produce the significant and sustained increase in voluntary use of belts that we would all desire. There are no magic solutions to this problem. Further, we stand ready to participate with nongovernmental researchers, auto and restraint manufacturers, automobile dealers, health-care professionals, legislators and government officials at Federal. State and local levels, community action organizers. employers, representatives of the press and other public media, and other interested parties to cooperate in a coordinated campaign. We have already begun working with some of these groups through the Occupant Restraint Coordinating Group, an informal body composed of representatives of interested organizations who meet as needed to discuss important issues in the promotion of occupant restraints. Already this group has produced a comprehensive listing of available audiovisual materials on the subject and plans to coordinate an investigation of the costs to organizations of nonwearing of belts by their employees. We believe this call for a cooperative effort composed of a multitude of approaches to be the most important recommendation contained in the Report, and we wholeheartedly endorse it.

Our comments on specific recommendations in the Academy's Report can be summarized as follows:

#### Recommendations for Federal Action

The Report emphasizes that the Federal government should take a leading role, both as an employer and as a research, data gathering, and legislative institution, in promoting safety belt use. We concur that such a role is appropriate and important. We have provided and will continue to provide to the States technical assistance and guidance in the formulation and carrying out of their safety belt programs, although we are not currently authorized to offer incentive grants to stimulate the passage of laws. We are gathering information on the costs of nonwearing of belts and are working on ways to increase the use of restraints by government employees. Finally, we are working with government health-care officials in the Department of Health and Human Services and the Department of Defense, as well as with health-care professionals in private practice to focus on highway crashes as a health-care issue.

# Prescriptive Approaches

The Report notes that the passage of belt-use laws seems the most effective way of achieving rapid and sustained increases in belt use, but that such legislation is unlikely at the present time on the national level. It urges concentration on State child passenger protection laws, on regulations applying to special population subcategories (like military personnel, State employees or police), and on judicial mechanisms (like reduced fines for other violations or mitigation of damages in a civil suit if one was wearing a belt at the time). We support the thrust of these suggestions, noting in the process some of the difficulties that have arisen around special recommendations. We discuss, for example, the recent problems associated with insurance costs of "child-seat loaner programs," the negative aspects of a requirement to wear seat belts in school buses, or the poor publication of even currently active belt-use policies at the State level.

# Economic-Incentive Approaches

The Report stresses the potential impact which financial incentives, in the form of both rewards and of cost savings, might have on belt wearing. Reductions in insurance premiums, calculation of costs to employers and special incentives to States are prominent among the recommendations. We support these suggestions. We also note that new developments in technology and in forensic medicine which demonstrate the use of belts in a crash make insurance reductions more feasible than they might have been in the past. We draw attention to our investigation of employer costs and to some of the projects being conducted by the States with 2 per cent funds, partly with guidance provided by our Occupant Restraint workshop series.

Approaches Designed To Change Public Perceptions
The Report focuses on two critical elements of public

perception: comfort and convenience of belt systems, and perception of risk. It notes, and we agree, that the two are interrelated, in the sense that increased public perception of risk could increase the public tolerance of problems with comfort and convenience. The Report goes on to suggest the use of driver education, the health-care system, media, including television, radio and newspapers, and demonstrations like the "seat belt convincer," as ways to increase popular perception of risk. We concur with the general line of reasoning of these recommendations, although we caution against dismissing the critical importance of comfort and convenience problems as significant disincentives to belt wearing. We also draw special attention to the role that could be played by newspapers in their reporting of belt use in crashes and its relationship to injuries suffered by the crash victims.

# Approaches Through Private Initiatives

The Report focuses on the important contributions to be made by health-care professionals and safety or public service organizations at both the national and the local levels. We are especially supportive of these recommendations, and discuss the ways that health-care professionals and public service groups are already, in some cases in cooperation with NHTSA, working on the problem. We are continuing to build a firm working relationship with these organizations and to conduct additional research on the best way of using the critical networks of communication that these groups provide.

The Report concludes by noting the disappointing results of past efforts, especially when carried out divorced from other potentially complementary programs. It urges a comprehensive approach to the problem of safety belt promotion and broad commitment with leadership by the Federal government. We affirm these points, noting that, in an era which stresses tight funding restraints, there is—as should be—a tendancy to attempt smaller-scope and less expensive solutions first. We further note that the changes made in our own programs are an outgrowth of our analysis of past disappointments and are limited by the funding levels that could be brought to bear, given the need to balance this work with other Agency mission-dictated priorities. We acknowledge the leading role that the Federal government, in both the executive and the legislative branches, should play, but we emphasize as even more important the need for cooperation, coordination and commitment from as wide a spectrum or organizations and individuals as possible.

# Commentary

# Introduction

Persuading the American public to use the occupant restraints in their automobiles is a complex task. We are sympathetic, therefore, with the dilimma with which the members of the National Academy of Sciences Safety Belt Study Committee were confronted in their attempts to assess methods of increasing the use of occupant restraints.

We appreciate the willingness shown by most of the members of the Study Committee to give of their time and expertise to this issue of vital importance. Many of them spent long hours deliberating the relative merits of the suggestions before them and contributed written statements or position papers on particular facets of the problem. We commend them for their efforts.

As the report itself notes, the many ramifications of the drive to improve the rates with which safety belts are worn kept the Committee from pursuing, to as full an extent as many would have wished, all of the suggestions that were brought before it. This report marks. therefore, only a preliminary effort. We endorse many of the recommendations they made and had in fact already anticipated, in accordance with our 403 program plan, pursuing actions consonant with some of them. We also stand with the members of the Committee in supporting further inquiry into the issue and further study of the feasibility of various alternative strategies. The comments made below are intended as part of that supportive effort and are meant to clarify the particulars of the issue and to suggest directions for additional inquiry either by this Committee, by NHTSA or by other bodies and organizations involved in this critically important job.

# **General Comments**

Before beginning our commentary on individual recommendations, we would like to make several comments about the report as a whole. It is a succinct and well-organized document representing an investment of a great deal of time and effort. Because we are aware of the volume of material collected and generated by the Committee and of the immense task of assembling all that information into a coherent whole, we recognize the effort this document represents.

We strongly support many of the recommendations and shall note them in detail later in this commentary. We believe, with the Committee, that the responsibility for increasing safety belt use in the country rests with all of those touched by the issue. Clearly, a portion of that responsibility must be borne by this Agency. For that

reason, we not only have developed the programs and projects referred to below, but also have mandated and strongly supported the development of restraint systems other than the manual belts which were the subject of the National Academy study. Just as clear, however, is that significant portions of the responsibility must rest with other organizations as well: the automobile manufacturers who design, produce and sell safety belt systems; public service organizations committed to the enhancement of public safety; health-care professionals dedicated to overcoming dangers to people's health; insurance companies working to protect people from loss; State and local governmental organizations responsible to their own constituencies; and the public at large.

We are pleased to note that the Committee endorsed many of those efforts already identified, planned for or begun by the Department. We support the report's conclusion that Congress, other Federal and State agencies, the health-care community, the manufacturing and insurance industries, private organizations and, ultimately, individual Americans also have a responsibility in making such a campaign successful. The effort must be a coordinated one in which energy is spent not in casting blame for past failure but in building for a more carefully planned effort in the future. This requires good faith and continual communications among all these organizations and institutions, such as has taken place over the past several years. The Occupant Restraint Coordinating Group (ORCG), an informal gathering of representatives of major involved parties assembled precisely to provide a forum for this type of coordination, has already shown itself to be productive. The members of the ORCG has purposely tried to keep its deliberations free from organizational bias and have not assigned leadership responsibility to any single group or person. The meetings have resulted in several cooperative efforts, both in compiling media information and in coordinating a current emphasis on employer programs, both of which shall be discussed in more detail below.

Another example of cooperation in the promotion of belt use is the recent creation of a special Task Force of the Transportation Research Board which will recommend the creation of a permanent Standing Committee on Occupant Restraints. While we and others are concerned that the efforts to promote the wearing of safety belts not be diluted by merely the formation of additional committees, we are involved in and supportive of these efforts by TRB. They will provide a continuing conduit of information among most of the organiza-

tions involved in restraint research and promotion and should open the door for others to participate in these efforts as opportunity presents itself.

We endorse the Committee's recommendation that no single program, except mandatory safety belt laws, is likely to produce the sustained increase in voluntary restraint use we would like to see and that no organization can be singled out for total responsibility of this endeavor. Active involvement by many organizations and a coordinated combination of approaches is the most important factor in the potential success of a voluntary occupant restraint promotion program. We and the Committee are in full accord on this matter.

As the Committee concludes, mandatory legislation is the only proven means of gaining an immediate, substantial and sustained increase in voluntary belt wearing for the entire population. This record notwithstanding, we concur with the Committee's conclusion that the political climate in this country is not receptive to universal mandatory belt use laws at this time.

Our admiration for the Committee's efforts and support of its general conclusions notwithstanding, we would have liked to see a more detailed discussion in the Report of justifications or rationales for the suggestions it makes. We realize the limits which time pressures placed on the Commitee's ability to develop full justifications for all its recommendations. However, this Report is limited by the fact that these justifications are largely absent, and the alternatives suggested by the

Report tend toward a litany of things that might be done rather than a ranked list of opportunities. Further work might be done through our mutual cooperative efforts with members of the user and research communities to examine the relative feasibility and desirability of these alternatives. Such cooperation is called for not only by the members of the NAS Committee but also by representatives of the user and research communities themselves at the Dulles Conference in April 1979.

# **Specific Comments**

Our comments on specific items are partly occasioned by this limitation in the Report's content. Our comments fall into two general varieties:

- 1. Illustrations of ways in which the suggestions made in the Report are currently being implemented or discussion of plans that have been made by NHTSA or other organizations to carry out these recommendations.
- 2. Qualifications or additional factors which we believe might limit, hinder or otherwise influence the feasibility of implementing certain suggestions or recommendations.

We should also note that the planned activities mentioned in our commentary are contingent upon the retention of currently anticipated funding levels in this program area for 1980, upon a possible reprograming in the 1981 budget and upon a modest, but nonetheless, critical increase in 1982.

#### **NAS Recommendations**

#### INTRODUCTION

Page	Line.	Comment
1	10	"People are, however, not unaware of the value of occupant protection; about 45-50 percent of vehicle occupants use belts occasionally or under special driving conditions."
		NHTSA Comment: Information from a recent study conducted for NHTSA by Teknekron (1) supports the view that people are not unaware of the value of restraints. That study reported that 86.1 percent of the drivers interviewed believed that safety belts were likely to protect a person from serious injury in a major crash. However, there are clearly still doubts in people's minds. This same study found that 48.4 percent of the drivers believed safety belts were also likely to cause injury, and wearing safety belts ranked a distant third to "observing the speed limit" and "not drinking and driving"

<sup>\*</sup>In each case the recommendation from the Report will be quoted beside the page and line reference. The NHTSA comment will follow the quotation.

as a means of reducing death or injury on the highway. These general tendencies are supported by another study conducted by Peter Hart Research Associates (8). Safety belts were given a high

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safety rating by those persons surveyed by Hart, with especially high marks being given by individuals who were themselves frequent belt wearers. Again, however, there were doubts expressed, as some people were uncertain about the overall value of belts and believed that they could cause injury or prevent easy egress from a car in the case of a crash involving fire or submersion.

We take exception, however, with the assertion that 45-50 percent of vehicle occupants use belts occasionally or under special conditions. Reported use, as evidenced by several studies, including most recently the Peter Hart study noted above (8), would place the figure in this general range. However, we have never been able to corroborate that level of use through on-the-road observations. We believe, therefore, that reported use represents an inflated figure and that actual use is probably more in the range of 20-30 percent who use belts under some conditions.

''Those [measures] that involve persuasion have not been particularly effective, at least directly, in increasing and sustaining the occupant-protection-use rate. Failures of voluntary approaches to encouragement of safety belt use are not confined to the United States. The apparent failure of these methods does not, however, rule out all possibility of increasing voluntary, regular safety belt use."

#### NHTSA Comment:

Large sustained increases in belt use have not, as the Report notes, resulted from attempts to change public behavior through persuasion. Two points should, however, be taken into account:

- (1) Direct change in mass behavior may not be the only goal of such attempts. Changes in public attitudes may be just as critical, and there is evidence that well-constructed and controlled experimental public media campaigns may produce significant changes in public attitudes toward restraint systems. Two examples will serve to illustrate this point. A number of foreign jurisdictions have conducted carefully planned intensive public media campaigns prior to their passage of a mandatory belt use law. In many cases, including jurisdictions like Ontario and Australia, which are similar to the United States in their socioeconomic compositions and their cultural traditions, these public education campaigns did little in and of themselves to foster increased use. Officials in both jurisdictions report, however, positive changes in public attitudes towards belts and towards the idea of a law. Canadian studies in particular have given support for the effect of public information and media campaigns on attitudes (12), and a recently completed NHTSA study on the general effectiveness of foreign safety belt laws confirms that public information campaigns were crucial in creating positive attitudes towards the law in many other foreign jurisdictions (13). Similarly, a 1977 controlled experiment conducted by Motorists Information, Inc. (MII), using carefully placed and paid for television spots and other public media, found that, although reported usage increased by only a small amount, positive attitudes toward the possibility of safety belt laws and awareness of the benefits of belts increased significantly (9). Some critics have argued that the MII campaign created a "climate" in which an answer unfavorable to belts was perceived by some respondents as being socially unacceptable and that the results are skewed. Certainly, changes in attitudes are, as this study demonstrates, difficult to measure with a high degree of certainty, but the evidence from these sources suggests that positive attitude changes may result from well-programed media campaigns.
- (2) There is evidence that a well-directed and planned public media campaign, widely broadcast at appropriate times and reinforced by nonbroadcast media, could have limited direct success. The Government of the United Kingdom has supported just such a campaign, renewed annually, for six years, sustaining a wearing rate of around 30 percent, roughly double that of the years prior to the campaign. The British appear unable to raise the rate further through these means alone, however, and they have been able to maintain this figure only through annual expen-

ditures of over 1 million pounds. These results notwithstanding, the fact remains that most of the attempts to change public use of safety belts have met with disappointing results. Even the MII study noted above (9), with all its careful planning, was able to increase reported use from 15 to only 21 percent, a figure challenged by a simultaneous NHTSA observational study which reported no significant increase. In all fairness, we should note that both of these studies noted greater increases among certain socioeconomic populations or in certain areas of the test cities than in others. Consequently, we would argue that, insofar as media campaigns are successful, they should be directed, as our research plan outlines, at specially determined target populations. By the standards of a Madison Avenue advertising firm, the results achieved by the British government or those reported by MII are highly successful. But by the expectations of highway safety experts, they are nowhere near satisfying. Clearly, public information campaigns must be combined with other countermeasures in order to influence behavior in the ways and to the extent we would desire.

"The low use rate, itself, testifies to the shortcomings of [past or existing] approaches."

#### NHTSA Comment:

Although the effectiveness of many past efforts has not produced the anticipated results, a number of approaches currently being undertaken under the authority of Section 403 of the Surface Transportation Act take into account these past shortcomings. Increased emphasis on motivational analysis, on the use of critical networks of communication, and on targeting messages for specified population subgroups are examples of this change in emphasis. These approaches have largely been endorsed both by the TRB Conference on Highway Safety and by the recommendations of this Report.

'It is possible that the methods that have been used may have a long-run, cumulative effect on safety belt use and that they may also be important components of a package of methods that might successfully increase the rate of voluntary safety belt use.'

#### NHTSA Comment:

We are in full support of this conclusion. We would only add that the important element of synergism may well play a critical role in the promotion of safety belts, just as it does in other types of social behavior involving large numbers of persons or groups. That is, a combined effort, using many approaches and involving a number of varied organizations, is likely to produce effects considerably greater than the sum of the approaches. We would, with the Committee, underscore again the value of cooperation in producing an effective and integrated program.

# RECOMMENDATIONS FOR FEDERAL ACTION

5 "The States should enact child- and youth-occupant-protection laws: The Federal Government should offer technical assistance and incentives, in grant or other forms, to States that pass laws requiring children up to the age of 18 to be properly protected while riding in motor vehicles or learning to drive them,"

# NHTSA Comment:

We are fully behind this recommendation to focus attention on youth protection. Traffic crashes kill more young people than any other cause, and there is at least some evidence that there would be relatively widespread public support for mandatory child restraint laws. For example, the Teknekron study cited above found that fully 83.7 percent of the respondents favored a restraint use law applying to children under five (1). The fact that child restraint laws are the only mandatory restraint use legislation passed by any State and are the only type of legislation currently being considered also testifies to the relatively high acceptability of such laws by the American

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population. NHTSA is prepared to offer, through Section 402 (Surface Transportation Act of 1966) and other programs, technical assistance to States that pass such laws, if requested by the States. However, we are not authorized to offer incentives to States to pass laws. In 1975 NHTSA offered incentive grants to States and over 30 laws were introduced. However, the authority to offer such grants was rescinded by Congress and has not been reinstated. The Department can fund evaluation projects, such as it is currently doing in Tennessee, which may help in the implementation or enforcement of a law, but the States must, under current regulations, pass the law on their own initiative first. However, the Department can and will provide advice to States seeking help in preparing for and passing such a law.

"The Federal Government, in its activities, should provide an example of compulsory safety belt use: Federal agencies should require and enforce on-the-job safety belt use by their own employees and should encourage belt use by employees at all times; proper occupant protection should be required of all persons working or living on military bases and of drivers and passengers in vehicles operated under Federally funded programs. Implementation of these safety belt rules should be appraised and monitored regularly through the Congressional oversight process."

#### NHTSA Comment:

We concur that required use of safety belts by Federal employees would provide a positive example for the rest of the country. Already some States have raised questions about why they should institute a policy for their employees if the Federal Government is unwilling to do so for its employees. Some agencies, including DOT, already have policies requiring on paper the use of safety belts in government cars, although we recognize that the failure to emphasize or enforce these policies has made them largely ineffective. Discussions have been initiated with other agencies to institute such policies or to emphasize the policies currently on the books. We are also working on ways to increase the effectiveness of current policies and are considering various alternatives for monitoring and enforcing these policies. The Department of Defense is one of those agencies that already has a policy on the books, but it is has been enforced intermittently and at the instigation of base commanders. Some bases report 100 percent compliance; others have given belt use only little attention. The Air Force has taken the lead in promoting the use of restraints on military bases and not only has printed articles and program suggestions in various internal Air Force publications but also has collected data about restraint use and accident costs. As of March 1, 1980, restraint use on base also became an active part of the Inspector General's evaluation reports for Air Force bases. Other branches of the military have been less active, but the branch safety officers have expressed an interest in learning more about the issue. It is likely, therefore, especially if the Air Force can demonstrate success at reducing injuries, deaths, and costs through a belt use policy, that the rest of the military might also promote the systems.

25 "States should make more productive use of the Federal-assistance funds set aside for safety belt programs: The Federal Government should provide more detailed guidance to the States in the use of the 2 percent of their highway safety grant funds that is designated for safety belt programs."

#### NHTSA Comment:

Some States have made excellent and imaginative use of the 2 percent funds available to them. Others have done very little, either as a function of lack of interest by the personnel involved or because of lack of good information about the options. NHTSA has attempted both to provide information and materials to the States and to stimulate increased interest in the issue through the Occupant and Child Restraint Workshop Series. In 1979 NHTSA sponsored 10 Regional Workshops for State safety personnel which offered material and organizational assistance and suggestions. In addition, NHTSA sponsored 10 Child Restraint Workshops to stimulate coor-

dinated statewide child passenger safety programs and to provide State and community leaders with the most current resources and methodologies. These workshops offered suggestions for organizing promotional efforts at the State and local levels, for starting and seeing through a campaign for State laws, or for drawing new groups or critical individuals into the effort. They also presented and distributed audiovisual and printed materials for use in schools, in driver education classes, in health-care facilities or with the public at large. We are following this series with a set of around 30 workshops at the State or bi-State level in 1980 which will give even greater attention to the particular needs and requirements of the States. Most of the representatives at last year's workshops expressed appreciation for the materials but asked the Federal Government not to provide more detailed guidelines on how to spend their money. They wanted suggestions, not orders, and implied that any attempt on the part of NHTSA to push a particular use of the 2 percent funds would be regarded as an unwarranted imposition and would only alienate those very people whose cooperation is necessary in any successful State campaign. Finally, we should note that there has not yet been sufficient time since the enactment of the 2 percent requirement for States to demonstrate the effectiveness of the programs funded under the new mandate. Some of the recommendations offered by NHTSA at our workshops are concerned with establishing effective evaluation mechanisms for State programs.

"The economic costs of not using safety belts should be identified and publicized among the groups that mainly bear those costs: The Federal Government should conduct studies that would specify the costs of nonuse of safety belts; such studies should begin within units of Federal agencies, and their results should be used to educate the public on how personal economic interests would be served by increasing the rate of safety belt use."

#### **NHTSA Comment:**

We agree that more detailed study of the costs of not using safety belts is needed. In 1976 we completed a study entitled, "Societal Costs of Motor Vehicle Accidents (14)." In it we tried, using aggregate economic information, to assess the costs of all motor vehicle crashes. This was an important step in collecting the type of information suggested by the NAS Committee. But the request noted in the Report pertains specifically to the costs borne by employers because of their employees' nonuse of restraints. The rationale is that, if an employer perceives large direct or indirect costs out of his or her (organizational) pocket as a result of his or her employees not wearing belts, his or her motivation to increase belt usage by his or her employees will increase to the point where he or she will actively support and implement any legal activities which will be effective in obtaining such increases. Accordingly, NHTSA is now in the process of gathering a set of case studies of crashes, documenting the costs to employers of the nonuse of belts in those crashes. The Motor Vehicle Manufacturers Association and the Highway Users Federation have also contracted to secure aggregate cost data on vehicle crashes, also as applied especially to employers. We are coordinating these efforts through the Occupant Restraint Coordinating Group and have already discussed among ourselves and with other organizations, such as the National Safety Council, methods of disseminating these cost statistics once they are compiled.

"Employers should require on-the-job safety belt use by their employees: The Federal Government should develop and test (in its own fleet-using agencies) model safety-belt-use programs that employers could adapt to their own circumstances; employers should be made aware of the cost-saving potential of such programs, and insurance companies should be encouraged to recognize, in their health and accident insurance rate structures, the lowering of risk that employer-operated safety belt programs would bring about."

# NHTSA Comment:

We agree and are considering undertaking research to develop such a program in a nonmilitary Federal context. Some agencies or units of the Federal Government within the military have, we

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should point out, already begun to implement policies like this. For example, Tinker Air Force Base outside Oklahoma City has a successful policy and has worked to tell other bases about how and why it was put together. We anticipate also, that once we compile the results of the case studies mentioned above and the cost analyses being done under contract from NHTSA and MVMA, we will be better able to demonstrate to employers the value of a safety belt policy.

"Traffic crash injury and death should be recognized as a major public health problem: Because traffic crashes are one of the five leading causes of death, the Federal Government should involve its health agencies, as well as its traffic safety agencies, in safety belt programs; congressional oversight could be used to monitor such involvement. Government should also encourage the health-care community, especially health maintenance organizations, to educate the public about the preventive health aspects of safety belt use."

#### NHTSA Comment:

NHTSA has already established contact and begun coordinated programs with appropriate persons in the Department of Health and Human Services who have expressed a willingness to work with us on this problem. The Surgeon General, in his latest report, identified highway crashes as a major health issue, especially for young people, and has laid the groundwork for greater cooperation between highway safety and health-care professionals in this field. The American Academy of Pediatrics (AAP) has likewise designated highway crashes as a major focus of concern and opened the way for significantly greater involvement of pediatricians and other health-care professionals in crash prevention and injury amelioration. The AAP campaign "Speaking Up for Children" has involved pediatricians from around the country in both a public information and a personal influence initiative which promises to have a significant impact on the child health-care community.

We might also note an already existing theoretical opportunity to link highway safety to the health care community. Section 315 of the Health Services and Centers Amendments of 1978 to the Public Health Service Act (GPO: Public Law 95-626) authorizes the Secretary of Health and Human Services to grant funds to States "to assist them in planning for developing, and in providing... preventive health service programs which shall be designed to reduce, through primary or secondary prevention of risk factors and causative conditions, the mortality rate for one or more of the five leading causes of death in a State." The fact that traffic crashes are among the five leading causes of death would make use of these funds to address traffic safety well within the legal bounds of this bill. Unfortunately, these funds were not appropriated for FY 1980 and all indications are that they will not be appropriated for FY 1981 either. The potential benefits of this bill have not, therefore, been actualized.

3 30 "Programs to encourage [voluntary] belt use are of both immediate and continuing value. The strategies suggested entail little additional cost to the Federal Government. If, together, they increase the number of safety belt users and the frequency of safety belt use, the reduction in highway deaths and injuries would be well worth the effort."

#### NHTSA Comment:

We generally support the recommendations for Federal action. As far as we can estimate, the operating costs of most of these strategies will be relatively small. They will, however, call for the active cooperation of a large number of individuals and agencies.

# POINTS OF INFLUENCE ON SAFETY BELT BEHAVIOR PRESCRIPTIVE APPROACHES COMPREHENSIVE BELT USE LAWS

4 10 "More than 20 jurisdictions outside the United States have comprehensive, mandatory safetybelt-use laws. Almost all have experienced substantial increases in rates of restraint use, although

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the degree of success appears to depend on how well the public was prepared for such laws and on the diligence of enforcement. Based on data from some of these places, however, it would appear that the most effective way to increase safety belt use would be simply to pass belt-use laws and then enforce them."

#### **NHTSA Comment:**

We agree that the success of foreign safety belt regulations usually is dependent upon the extent of enforcement and the quality of preparatory public information and education campaigns. We would especially emphasize the importance of the latter. These campaigns, as noted above, have not been particularly successful in changing behavior in and of themselves—even the relatively encouraging British campaign produced only a 30 percent usage rate—but they are an essential part of changing attitudes and making the introduction of a law understandable and, therefore, palatable to the population. We would add also the factor of cultural bias. A people's tendency to obey the law of the land is often colored by the historical attitude towards authority. The population of the Federal Republic of Germany, for example, wears belts at a relatively high rate even though there is little enforcement of the regulation. In Switzerland, where a law is being considered but is not yet on the books, the German population again wears belts with relative frequency while the French and Italian sectors of the country show lower wearing rates. In other countries with mandatory belt use regulation, use is correlated much more closely with enforcement. Another indication of the critical importance of enforcement is the Tennessee child restraint law. Although a heavy and imaginative PI&E campaign has been in force for over a year and has produced a doubling of use, there has been little enforcement, and use is still only 22 per

"The past history of attempts in this country to require the general public to use protective equipment casts doubt on the immediate feasibility of this approach. Federal regulations have successfully ensured that automobiles will be equipped with safety belts, but the mandates designed to compel people to use these belts for their own protection have been short-lived—witness the fates of the interlock system and the continuous buzzer."

#### NHTSA Comment:

The history of the interlock was not, on the surface, encouraging to those who favor mandatory belt use regulations, and the climate for a universal law does not seem favorable at this time. We are not actively pursuing this as an agency priority. However, we would point out that the interlock was introduced with little advance public information and with no positive point-of-sale program. It also was plagued by many belt systems with significant problems in comfort and convenience, even when functioning as their designers intended. Add to this a large number of mechanical and electrical malfunctions and failures. These almost certainly played a large role in producing negative reaction from users who, with properly functioning systems, might have had neutral or even favorable reactions. Clearly, negative reactions are the forerunners of vocal opposition. Initiated by the auto manufacturers themselves as an alternative to the air bag and over the objections of the Department, the interlock was neither well-engineered, well-manufactured, well-publicized, nor well-promoted. Better preparatory PI&E efforts and better design and operation of the systems may well have made a critical difference to the success of the interlock. Nevertheless, the failure of that device should not be construed to indicate that Americans are intrinsically opposed to safety mandates. On the contrary, not all attempts to mandate the use of protective equipment have met with failure. Two examples will illustrate the point. Hard hats are required as not only a condition of employment but also a condition of presence on an active construction site. Employers and workers alike have recognized the value of wearing hard hats in spite of the discomfort they may cause at times or the inconvenience of putting one on during even a short visit to such a site. Safety belt use might fit the same theoretical model as hard hats. In the highway safety field, the passage of motorcycle helmet laws has resulted in a dramatic in-

crease in the wearing rates in spite of the stubborn resistance of small numbers of motorcyclists. Since NHTSA's authority to impose sanctions for failure to enact a helmet use law was revoked by Congress, some States have repealed the laws formerly in force in response to the objections of a segment of the motorcycling public, but in those States where the laws remain valid, wearing rates are high, and the success of the regulation is well-documented.

"The question of whether government should intervene in personal safety decisions is one appropriately reserved for legislative study and determinations."

#### **NHTSA Comment:**

Government intervention in personal safety decisions may, indeed, be a matter for legislative study. However, we would question whether the decision to buckle a safety belt is merely a personal safety decision. We have argued and will continue to suggest that the low use of safety belts produces losses to the society as a whole and costs borne by all Americans. As the Report itself notes, more working years are lost through vehicle crashes than from any other cause. The effect of nonuse of belts on societal productivity and the billions of dollars lost through people's failure to use restraints justifies active government concern and involvement.

4 "California requires all occupants of driver education vehicles to use safety belts, and school bus drivers must wear belts in Massachusetts, Minnesota, and New York. In Maine, school bus occupants must wear safety belts when riding on buses equipped with such belts."

#### NHTSA Comment:

NHTSA Standard 17, issued under authority from the Highway Safety Act, suggests to States that all school bus drivers be required to wear belts. States vary considerably in their enforcement of this standard. Some States maintain regular inspections by police and educational officials, and some give little attention to the matter. The statement on the law in Maine also requires elaboration. School bus occupants are required to wear belts only if seat belts are available in the buses. Maine officials note that there is no requirement that belts be installed and that there are only a dozen or so vehicles in the school bus fleet that have them, most of which are designed to transport special education students. The Maine law has little real effect, therefore, on the behavior of school children in buses.

4 "Several States require State employees, officials, or police to wear safety belts while carrying out official duties."

#### NHTSA Comment:

As an example of this statement, we would point to the State of Iowa. Effective February 1980, an Iowa Department of Transportation policy has been instituted requiring the use of safety belts in all Department-owned vehicles or in private vehicles on departmental business. This policy effects about 4,000 employees scattered at various locations around the State. Observations are being made of belt use and are taken into account in making employee evaluations. Further, a series of graduated sanctions, including the possibility of dismissals, has been authorized as part of the regulation. Surveys made prior to the introduction of the policy and again in June 1980 indicate that use by DOT employees have risen from around 25 percent to roughly 50 percent. We should add that this policy is part of a multifaceted campaign run by the Iowa DOT, involving promotion of child seat "loaner" programs, company and government belt use policies, and public awareness. It is coordinated by an Advisory Council composed of private citizens and health-care professionals as well as government officials. A one-page description of the program is appended.

#### **CHILD-PASSENGER-PROTECTION LAWS**

'There are several ways by which the Federal Government could promote the enactment of State

child-passenger-protection laws. At a minimum, it should provide an example, in practice, by requiring proper child-passenger protection on military bases among families of military personnel and in vehicles operated in federally funded programs."

#### **NHTSA Comments:**

The Department of Defense at present does not have an official policy applying to children on military bases, but negotiations have been initiated by NHTSA with the proper authorities about such a policy and direct contacts have already been made at a staff level with the Office of the Chief Pediatrician for the Air Force.

4 ''Offer incentive grants to States that enact child-passenger-protection laws to help them implement those laws—similar grants were successful in 1973 in stimulating the introduction of restraint-use laws in about 30 State legislatures (even though the grants were never funded)."

# NHTSA Comment:

At the present time NHTSA is not authorized to offer such incentives. One might also question the utility of such a program, given the failure of the earlier grant program to secure the passage of any laws; the availability of outside funds might cause State organizations to move for a law too quickly without laying the requisite groundwork and spending the time or securing the help necessary to ensure passage and successful implementation of a law. While NHTSA is willing to help both with State-based prelaw PI&E efforts and with implementation after a law is passed, the initiative should come from a well-organized State base.

4 "Suggest, or even require, that some portion of the States' 2 percent set-aside funds for safety belt programs be designated for child-protection programs that might pave the way for enactment of child-passenger-protection laws."

# NHTSA Comment:

NHTSA cannot require that States use their 2 percent funds in any specific way, although we can and have suggested possibilities to the States, including various child protection programs. As noted above, the States specifically requested that NHTSA confine its role in the use of 2 percent funds to advice. The 1980 workshops will provide advice and technical support to more people than the 1979 workshops were able to reach, but they will refrain from prescribing to the States a specific use of 2 percent funds.

4 89 "Develop a set of model laws applying to children of all ages that States could use as patterns for technically sound legislation."

#### NHSTA Comment:

Action for Child Transportation Safety (ACTS) has compiled a listing of all bills introduced by States on child passenger protection and has commented on the desirability and feasibility of each of these bills and their various components. The ACTS analysis is as good a model as can be put together given the wide variation in State needs and circumstances. (See attached for reference.)

4 96 "Both Federal and State governments could offer tax deductions or credits for the purchase of child-passenger-protection devices."

# NHTSA Comment:

We agree that the costs of child seats may be a disincentive to some parents, and tax credits are one way of addressing the issue. There are, however, other possibilities, two of which have already been tried with considerable success. Loaner programs provide large numbers of child seats for only the time period required by the child at a cost considerably below that of a new child restraint. Automobile dealers (or other businesses) could also give child seats as a promotional and public service activity to their customers, much as General Motors dealers did during 1979. We believe the potential incentive value of tax credits would best be tried first on the State

level, and we would note that the State of Michigan has recently considered a bill to provide just such incentives. Proponents estimated that \$1 million in tax credits would be awarded to Michigan taxpayers during the first year this law would be in effect, with the rewards going directly to those persons who purchased the seats.

5 "Hospital administrations could arrange to lend infant-protection equipment to parents when their new babies leave the hospital. As a community service, insurance companies, automobile dealerships, and other businesses could donate such equipment to social service organizations that would rent or lend the devices to parents. Hospital gift shops, automobile showrooms, and family-oriented retail and fast-food establishments are among the types of outlets that would be appropriate for the sale of child-protection devices to parents who wish to buy them."

NHTSA Comment:

"Loaner programs" organized by companies or government agencies for use by employees are another potential source of inexpensive child seats. Such a program was developed by the Iowa Department of Transportation for use by State employees with such good results that a number of companies in the State have adopted similar programs for their employees. Public service groups have likewise joined the effort in that State, as loaner programs have grown from two to 26 statewide in the first three months of the campaign. A similar program has been in operation for several years in the State of Michigan. This has resulted not only in a number of locally based child seat loaner programs, but also in a set of guidelines for setting up such programs elsewhere. Many of these guidelines have been published by NHTSA as part of the "Early Rider" Program (15).

The National Conference on Child Passenger Protection which convened in Washington, D.C., in December 1979, provided the setting for discussion of a new problem related to rental and loaner programs for child seats. Insurance underwriters have been reluctant to issue policies insuring against liability in case a loaned child seat fails, either because of equipment defect or because of the severity of the crash, to protect a child as intended. In some cases, the underwriters have refused outright to issue the policies to loaner programs; in others, they have raised their rates to excessive levels in the last six months. The problem has become so acute that some loaner programs are seriously considering dissolution and public interest groups which had been considering starting loaner programs have now shelved the idea. The primary difficulty seems to be lack of experiential data about the reliability of child seats in general and the nature of loaner programs in particular. Since underwriters usually use such data as the basis for setting their rates, they have responded very conservatively to the uncertainty inherent in this as in any new situation. This issue was discussed at the February meeting of the Occupant Restraint Coordinating Group and plans were made to try to assemble policymakers from the major insurance companies involved to see whether these difficulties could be addressed, industry doubts about the insurability of loaner programs could be allayed, and an industry policy on loaner programs could be resolved.

'The laws would be more acceptable to parents if children themselves accepted the desirability of using safety belts and did so voluntarily. Including safety belt use in the health education curriculums of all grade levels would help establish safety belt consciousness in children."

# NHTSA Comments:

Voluntary use of restraints by children is in many ways a function of the reinforcement given the child by the parents and the school. Some States have well-developed programs of education about safety belts; New Jersey, for example, uses the Beltman series, a multimedia and hands-on module developed by Filmloops, Inc., in all its elementary schools. But most jurisdictions depend upon the knowledge and enthusiasm of the teachers or the school board. There is as yet no fully developed program to get this message to preschool children, although preliminary experiments are underway. The Tennessee program of involving children by distributing a coloring

book about "Pete the Raccoon," who urges children to use restraints, is one such program. Both "Sesame Street" and "Mr. Rogers" have also agreed to include a focus on seat belt and child restraint use in their 1980 programs. We also agree with the general desirability and are considering the possibility of making occupant restraints part of the Pre-School Child Pedestrian Traffic Safety Club (Kids' Club) program, a safety curriculum designed by NHTSA for preschool children.

5 31 "A paradox that children face, however, is that they may be taught in school the wisdom of using safety belts at all times but [that] most of the buses that carry them to school are not even equipped with belts. Certainly, school vans and small buses should be so equipped, and belt use should be enforced. Technological research is needed to find ways to equip school buses with safety belts or to develop other, equally safe alternatives for protecting pupil passengers."

#### **NHTSA Comment:**

School buses with g.v.w.r.'s under 10,000 pounds are already required to have working belts in all seating positions (Standard No. 222). There is evidence that school districts may come under increasing legal pressure should these belts not be used and children be injured as a result. Local initiatives may produce the increases in wearing under these conditions, therefore, even in the absence of a general national standard. On the issue of belts in larger school buses, NHTSA recently completed a study of the feasibility of requiring belts in these vehicles. The study could not reach a definitive conclusion because of customary bus overcrowdedness, the difficulty of accommodating children of widely varying size and age, and the problem of designing bus seats that would be both able to absorb the stress imposed by belted passengers but yielding enough to minimize the injuries caused by head impact that would be likely to occur in the event of a moderate to serious crash. As a result, there seems to be at best uncertainty about the wisdom of installing safety belts in school buses as buses are now designed. The potential trade-off between the loss of protection and the benefits of positive example is one that makes the school bus issue much more complex than this statement in the Report would indicate. Considerably more technological research addressing the internal construction of school buses is necessary before the Department could support equipping school buses with safety belts. Even in such a case, there is doubt that, given the potential much larger payoffs of other countermeasures, the benefits would justify the costs of such a study.

"Drivers of all school buses should be provided with safety belts and required to use them at all times."

# NHTSA Comment:

Drivers of school buses fall into an entirely different category than passengers. There is no question that drivers should wear belts. Safety Standard No. 208 currently requires safety belts to be provided at the driver's seating position in buses. Standard No. 17 recommends that the States require drivers to use those belts, and many States do, indeed, have and enforce such a policy.

#### SAFETY BELT REGULATIONS

5 64 "Some units of the Federal Government currently have voluntary safety belt programs, and safety belt regulations now apply in the U.S. Department of Transportation and to General Services Administration (GSA) fleets."

#### NHTSA Comment:

DOT and GSA are not the only agencies of the Federal Government with policies. The Department of Defense, as mentioned above, has a policy that will shortly receive much more attention than in the past. Other agencies, like the National Park Service, also have active policies. We believe that overall coordination would be helpful to strengthen existing policies, to gain new policies, and to monitor use of belts by Federal employees.

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5 'At least 19 States require State employees to use safety belts in vehicles used on the job, but the extent of enforcement is unknown."

#### NHTSA Comment:

The extent of enforcement of these State-based regulations appears to vary considerably from nothing to strict observation. It should be noted that not all 19 States have regulations applying across the board. Some of these policies apply only to State police organizations, State departments of transportation, or other segments of the State work force. Many of these policies are also not well-publicized even within the States in which they have been promulgated. We would, therefore, add to the Report's recommendation that State-based policies be not only enforced but also publicized within the States themselves and among the various State agencies.

5 "The police, too, could be an important adjunct to public information and education efforts to encourage safety belt use."

#### NHTSA Comment:

We concur that the police can be an important channel of information to children and adults. For example, in the State of New Jersey the police deliver the Beltman package to the elementary schools, answer questions, and put on a program for the children; their involvement seems, from initial reaction, to be extremely successful. Likewise, in Tennessee, the police serve as the primary contact between parents and the child restraint law and have been instructed to respond to the parents' failure to use a restraint device in ways that will encourage rather than discourage the conversion of the parents to restraint usage. Specifically, police carry with them child seats which they will loan to parents carrying an unrestrained child until the parents can demonstrate to judicial authorities evidence of acquisition of their own restraint. The police also hand out explanatory brochures and coloring materials to the children.

5 91 "Police and emergency-medical-service crash reports should require notation of whether safety belts were engaged at the time of the crash, if this can be determined. Such information would add to the data on safety-belt-use rates and on the consequences of use or nonuse."

# NHTSA Comment:

We strongly support this recommendation and would particularly underscore, largely because so little attention has been given to the source in the past, the role of emergency-medical technicians. These persons are well-trained in treatment of crash injuries and could assess, in many cases probably better than the police, the potential injury reduction of safety belts.

5 96 "This information also could be given to the news media for inclusion in local news reports of crashes."

#### NHTSA Comments:

In some States this information is already given fairly regularly to the local newspaper (e.g., Idaho). The Department supports the practice on a much larger scale. We have strongly urged through our FY79 workshop series that States devote considerably greater attention to inserting information about the use of belts in accidents in the media reports of those crashes. We will continue to do so in our FY80 workshops. Studies in Canada indicate that traffic crashes receive a disproportionate share of newspaper readership and that information about the use or nonuse of safety belts in newspaper accounts can greatly increase public awareness of the issue (2).

5 99 "Police might also consider adopting a policy, when stopping automobiles for traffic-law violations or for other purposes, of commenting on whether the occupants are properly protected or of reminding them to buckle up for their own safety. Vehicle occupants might then perceive that safety belt use is a matter of interest to legal authorities, even in the absence of safety belt laws."

#### NHTSA Comment:

We have urged and will continue to emphasize in our workshops the adoption of such a program. Some enforcement personnel have indicated, however, that some police departments may be reluctant to place heavy emphasis on an issue that was not part of their enforcement duties, not because they would consider it unimportant but more because of the need to give priority to enforcement. The problem is exacerbated by police agencies' having to deal these days with far tighter constraints in budgets and manpower.

# JUDICIAL INFLUENCE ON SAFETY BELT USE

6 42 "A judicial doctrine permitting mitigation of damages in a civil action if the plaintiff's safety belt was not in use at the time of a crash might help motivate drivers to use their belts. This doctrine could be enacted into laws, of course, but judicial recognition and application probably would be sufficient. Again, some methods of proving use or nonuse would be needed to support this doctrine."

#### NHTSA Comment:

NHTSA agrees that a judicial doctrine such as recommended here might have a positive effect on drivers. Indeed, we recognize that precedents exist in this country and abroad. However, it should be pointed out that many attempts to argue cases on these grounds in the past have not been successful in this country. Mitigation of damages often requires a ruling which states that the plaintiff violated "common practice" and, therefore, contributed to his or her own injury through negligence. Thus far, the mere fact that belts are available in most automobiles has not prompted judges to make such a ruling. Absent a mandatory belt use law upon which such a legal judgment may be made, the likelihood of widespread changes in judicial doctrine appears small. The specter of such a change is one which even some supporters wish to avoid, however, and some State legislators, including key persons in Tennessee, have tied their support of belt use laws to the stipulation that failure to abide by the regulation cannot be used as the basis of a suit for a defense of contributory negligence.

#### **ECONOMIC-INCENTIVE APPROACHES**

64 "One study indicates that relatively small financial rewards can affect safety belt behavior, but this study was conducted on a relatively small scale and the feasibility and practicality of large-scale financial incentive programs remain to be explored. The study should stimulate such exploration, however, by NHTSA or through State projects."

#### NHTSA Comment:

NHTSA would like to explore further the possibilities implied by this study, but current levels of funding and already agreed-upon priorities prevent our undertaking it at this time. The circumstances under which the study in question was conducted were special enough to warrant some doubt as to the large-scale applicability of the technique of giving out financial rewards for belt use, but we would not rule out entirely its possible positive impact.

#### **INDIVIDUAL INCENTIVES**

6 95 "It would be easy to justify reducing the taxes of regular safety belt users, because fewer vehiclerelated deaths and injuries would result in lower government expenditures. It is not easy to think of a system for applying such incentives, however, beyond allowing tax deductions or credits for the purchase of child-passenger-protection devices."

#### **NHTSA Comment:**

The Department believes that reducing the taxes of regular users is unfeasible and it cannot sup-

port this recommendation. A more feasible way of providing individual incentives to adults would be to set differential rate structures for automobile insurance. Our position on tax incentives for child restraints was previously addressed on Page 00.

''In order for insurance premium reductions to be effective as incentives, the reward must be significant enough in the eyes of policyholders to induce them to comply with the conditions set forth for earning the reduction. An individual insurance company might feel financially justified in offering a 10 to 20 percent discount on the medical payment portion of policies for regular safety belt wearers. This could be a very small dollar amount for individual policyholders, however, and would provide little incentive to change behavior.''

#### NHTSA Comment:

Although there is some question about the amount of the direct incentive needed to motivate people to use belts, a special point should be made here. The amount of first party coverage in a tort State is, indeed, relatively small compared to the total cost of the insurance; however, in a no-fault State the first party coverage is six to ten times as great as in a tort State and the absolute dollar amount of 10 to 20 percent savings would be similarly augmented and may become significant to many individuals.

7 38 "It would also be very difficult, in practice, to police the safety belt habits of policyholders who claimed to be regular safety belt users."

#### NHTSA Comment:

The Department acknowledges the difficulty of relying upon reported rather than observed use of restraints as the basis for setting insurance rates. However, there is some precedent for setting differential rates in this manner. The smoking issue is one example in which a person's claim not to smoke has been enough for some life insurance companies to set differential rates for customers. We would urge that more inquiry be made into the analogies between the claims of nonsmoking and beltwearing behavior and the rates charged by insurance companies.

Though we recognize the regulatory and promissory constraints placed on the insurance industry, the Department believes that the potential role that insurance can play in promoting belt use has still not been adequately explored. The technology to determine usage in most accident cases exists, and there is precedent for reliance upon promises by policyholders in setting rates. The Department plans, accordingly, to explore with insurance commissioners at the State level, the possibility of experimenting with rate schedules that are partially dependent on belt-wearing. For example, a special rate may be offered to those persons who state that they wear belts, but the rates may increase substantially should such policyholders be involved in a crash in which they were not in fact wearing their belts.

7 40 "The majority of crashes are not so severe that a victim could not remove or engage a safety belt after the crash. The investigator would have to rely upon the victim's honesty."

#### NHTSA Comment:

There are certainly some crashes so minor that little direct evidence of belt-wearing could be gathered using currently available technology. However, these usually involve relatively minor personal injury claims as well. For more significant crashes, NHTSA is of the opinion that there should be ways of discerning the use or nonuse of belts. For ensic medicine is sophisticated enough to spot evidence in many cases. In addition, there is already a device in operation which will tell whether a belt has been worn in a more severe crash. A trip lock or snubbing mechanism can be attached to the ring through which the belt passes on the side opposite the latchplate. In a crash of predetermined magnitude, the mechanism will be activated, causing a small ripcord to be torn out and showing the use of the belt in the crash. The force necessary to tear the ripcord and trip the lock could be made resistant to triggering by hand without sacrificing the ability to register use in a crash of 12 to 15 mph or greater.

#### **INCENTIVES TO EMPLOYERS**

7 63 "Few employers are aware of their economic losses from [vehicle crashes] and few recognize that an employer risk of loss from motor vehicle crashes is much higher than a single individual's. Almost none can identify the specific risk of loss, because that risk will vary with the number of persons employed, the type of business or industry, and a variety of other factors; a data base for such calculations is not yet available."

#### NHTSA Comment:

NHTSA Comment:

These costs are now being investigated under contracts from both NHTSA and MVMA and should be available to employers by the beginning of 1981.

76 "Thus far, only a small number of companies actively promote or require the use of safety belts by their employees. For the most part, these are firms that face large aggregate risk because they have a very large number of employees (e.g., Dow Chemical company, E.I. du Pont de Nemours and Company) and/or because they operate large fleets of vehicles (e.g., telephone and utility companies)."

There is increasing evidence that a larger number of companies than had been thought already have belt-use policies for their employees. The National Safety Council (NSC) is currently conducting a survey of its regional offices and individual members to ascertain the number of companies associated with NSC that have such policies. Once these organizations are more specifically identified, more precise information can be gathered about the extent of enforcement and the effects on injury rates and cost expenditures.

7 90 "Two types of data are needed to provide such evidence: Studies of the costs to employers of nonuse of safety belts by employees and studies of the cost savings that could be achieved by employer-operated safety belt programs."

#### **NHTSA Comment:**

These data are, as noted above, currently being gathered. The NHTSA study especially is concentrating on gathering case studies as recommended in the Report and on computing the costs to the employers involved of the cases focused on by the study.

8 22 "Along with employer-cost studies, corresponding studies are needed of the effectiveness of employer-operated safety belt programs."

#### NHTSA Comment:

NHTSA is currently in the final stages of a contract designed to measure the effect of infusing belt-use information into a company's regular employee safety program. The preliminary results are not encouraging and show little significant gain in wearing rates largely because the belt-use message was lost in the flow of other safety information. It seems apparent that a more concentrated effort is needed to encourage belt use. The Agency supports studies which would investigate the effectiveness of more aggressive policies and is now in the process of looking for companies willing to instigate and to evaluate the results of such policies. We are also working with other groups like NSC in formulating long-term plans for the use of this information.

#### **INCENTIVES TO STATES**

6 "Congress in 1978 required the States to set aside 2 percent of their highway-safety grant funds for use in occupant-protection programs. As a result, NHTSA data indicate that in FY 1979 nearly \$3.5 million in funds from this source was earmarked for such efforts in the States and territories. Many of the States have not yet obligated the funds earmarked for occupant protection, and many apparently have not yet formulated plans for spending the money."

# NHTSA Comment:

A significant number of States have improved on the record of the first year of the 2 percent legislation by devising more imaginative, more active, and more potentially effective use of these funds. A full report, detailing both the projects and the expenditures of these funds, will be completed in July 1980.

8 ''Most of the States that have decided how to spend their 2 percent set-aside funds are concentrating on public information and education programs.''

Preliminary indications are that the projects for which funds have been authorized under the 2 percent legislation range over a variety of alternatives. Among those on which most attention has been focused are the following:

- 1. Seven States are funding workshops to train teachers, police personnel, etc., with emphasis on both information about restraints and methods to improve use.
- 2. Nineteen States are conducting surveys to determine public attitudes towards restraints and the usage rate in these States.
- 3. Seven States are conducting an educational program on child restraints for physicians, nurses, and other health care professionals, including those involved with immediate pre and postnatal care.
- 4. Twenty-six States are conducting some kind of PI&E effort.
- 5. Five States are developing materials for use in driver education classes.
- 6. Eight States are developing PI&E materials on child restraints, including three States that have purchased restraints for use in a loaner program.
- 7. Six States have purchased materials from the Beltman series for use in elementary schools.
- 8. Fourteen States have purchased seat belt convincers for demonstration at schools, fairs, etc.
- 9. Six States are using part of the funds for evaluation of their existing programs and recommendations for improvement.
- 62 "The past record of [PI&E] programs, carried out alone and as an end in themselves, indicates that they are not very effective in increasing safety belt use and that any increase that does occur is of short duration. The States should be encouraged to adopt programs that promote safety belt use from many perspectives, in addition to providing public information and education.

#### **NHTSA Comment:**

The Department acknowledges that, for the most part, the record of PI&E projects has not been encouraging. However, the relative success of the British program, expensive as it is, indicates that PI&E should not simply be written off as a potential means of increasing belt use. Ideally, a full-scale market research program, complete with pilot tests and sampling studies, should be undertaken in order to explore the potential of PI&E, but current available funds preclude the Agency's taking on this task. We have encouraged States, however, to spend part of their 2 percent money for market research if they intend to spend it on PI&E efforts.

8 70 "The UNC-NHTSA manual provides an excellent source of guidance for State safety belt programs. It suggests programs that involve all of the State safety-related systems along with service-oriented community organizations. The States should be urged to use their set-aside funds to plan and carry out such programs. NHTSA has recently distributed this manual to State officials, but there has been little active response to it. At least some States will need technical assistance in initiating the activities the manual suggests."

#### NHSTA Comment:

The Occupant Restraint and Child Restraint workshops conducted in 1979 and the follow-up State and bi-State workshops in 1980 have provided guidelines and suggestions for a variety of

State-based programs. These include both techniques of organization and promotion and technical assistance. Many of the suggestions were based on the UNC-NHTSA manual.

86 "Authority exists under the Surface Transportation Assistance Act to provide States with supplemental grants for innovative highway-safety programs. Even though this authority has not yet been funded, that source potentially could be used to supply pilot funds to States that develop plans that apply the concepts outlined in the UNC-NHTSA manual."

#### NHTSA Comment:

The Department would welcome applications for such projects on a State level.

#### APPROACHES DESIGNED TO CHANGE PUBLIC PERCEPTIONS

9 ''Many people who consider safety belts uncomfortable and inconvenient nevertheless use them.

NHTSA should examine closely the relationship between comfort and convenience versus belt use.''

#### NHTSA Comment:

The Agency acknowledges that some people who use safety belts do so in spite of their perception that the systems are uncomfortable and/or inconvenient to use. However, even if this were true for all those who use belts, the number would still be small compared to the total number of drivers and passengers on the road. Every survey conducted by NHTSA and other organizations inquiring into the reasons people do not use belt reports discomfort and inconvenience as the primary cited points. There seems good reason to conclude that these are significant enough factors to warrant considerable attention. Until the major comfort and convenience problems are eliminated, it is impossible to know what other reasons keep people from buckling up. The Agency's reasoning is that it takes only one problem with comfort and convenience to cause a person not totally committed to wearing belts to cease trying. There is evidence from marketing analysis that people are generally more motivated by immediate than by long-range reinforcement, especially if the reinforcement is negative. On that basis, the negative reinforcement of an immediate comfort or convenience problem is considerably more powerful than the potential positive reinforcement of getting used to a comfortable and convenient system over the long run. The Agency is now in the process of examining some of the comfort and convenience criteria to see how well they correlate with wearing rates. However, we should caution that one cannot dismiss the issue of comfort and convenience simply by looking at those rates, since many other factors, including variable risk perceptions, affect the final decision of whether to use the systems. We are also examining these other factors to try to identify those that are most closely correlated with the use of belts.

9 ''Retail automobile dealers should show their customers how to use the restraint systems in their new automobiles and how to adjust them for both comfort and safety.''

#### NHTSA Comment:

The Agency has contacted the National Automobile Dealers Association (NADA) about helping to promote the use of child restraint seats. NADA was positive in its response and seems eager to help. Should the experience with child restraints prove positive to the dealers, they might also be approached for help on promoting safety belts for adults as well. In any case, the point of sale should be an excellent circumstance for providing a positive safety belt message to the consumer. Auto dealers and sales personnel are critical transmitters of information to and influences on the attitudes of the buying public, and attention should be given to these persons. They are, accordingly, one of the important networks of communication upon which we are focusing.

The Agency has initiated a program wherein automobile dealers from around the country can come at periodic intervals to talk directly with NHTSA officials and discuss issues like point-of-sale influence on belt use. Our first meeting with dealers has reinforced our conviction that this kind of dialogue, both with Federal and with State government officials, is critical to recruiting the help of these people. As mentioned above, we are urging through our workshop series that State officials establish networks of communication with dealers within their states.

9 ''Standardizing the operation of safety belts among the different models of automobiles would be a major step in promoting proper use and, thereby enhancing comfort, convenience, and safety. At the same time, continued and perhaps increased effort is needed to improve safety belt design with these factors in mind."

#### **NHTSA Comment:**

Although standardization of safety belt design might help to eliminate some of the comfort and convenience problems that have surfaced, the wide diversity of internal automobile design would make such standardization difficult, if not impossible. The Agency does not attempt to dictate to the manufacturers how they should design either their cars or the belt systems in them; the main concern of the Agency is that whatever design is used conform to minimal comfort and convenience and performance safety criteria as defined by the Man Factors Studies of 1974 and 1978 (7). Results from recent studies of comfort and convenience tests with live subjects indicate that continued and increased effort is needed in this area. (6)

"Even with the low statistical probability of any one driver being involved in a serious crash over a lifetime of driving, the risk is nevertheless very real. Vehicle users' tolerance for any discomfort and inconvenience associated with safety belt use might be increased if they recognized that a crash could happen and that the consequences in terms of injury or death could be substantial.

#### NHTSA Comment:

The risks of any given driver's being in a serious crash on any trip are, indeed, small (approximately one in 4.2 million of being killed and one in 85,000 of a serious injury); however, the risk of being in such a crash over a lifetime of driving is much higher (approximately one in 100 of being killed and one in two of being injured). Changes in perception of risk from single trip to a lifetime could have an important impact on belt-wearing behavior. Studies by Decision Research indicate that people are much more likely both to wear their belts and to favor belt-use regulation if they consider the lifetime risks than if they continue to assess the risks of driving one trip at a time (3). The Department is interested in pursuing further the role of risk perception in the decision to use safety belts and in communicating the lifetime risks of being in a serious automobile crash to the public. The Report's recommendation that newspapers give greater attention to the incidence of safety belt use in crashes is one way this might be accomplished.

#### THE SCHOOLS

9 "Driver education courses and health education curriculums at all grade levels should include information about crash statistics and the relationship between crashes, even at slow speeds, and injury or death. The preventive potential of safety belts should be stressed."

#### **NHTSA Comment:**

Information about both use, belt effectiveness, and crash dynamics is part of the regular curriculum of most high school driver education programs. Initial evidence indicates that driver education is relatively more effective than other methods of learning to drive in producing long-term belt use, partly because of this emphasis on belts and their role in vehicle crashes (5).

We have also urged the States to use part of their 1 percent funds for development or purchase of materials for use in health education classes at the elementary and secondary levels. Some States have done this. Since the impact of information such as this and of influence at an early age on long-term belt use requires long-term study, we have no specific evidence concerning the overall effectiveness of these programs. However, we do have some indications that the effect is positive. A 1977 NHTSA study in which Loudoun County, Virginia, elementary school children were exposed to materials about safety belt use in health classes produced a 33 percent increase in direct use after a three-month period (10).

#### **HEALTH-CARE SYSTEMS**

9 56 "Physicians and other health-care professionals should be formally educated about the health risk involved in driving without safety belts. Such persons should be urged to provide this information to their patients as part of their preventive-medicine responsibility. Health maintenance organizations, pediatricians, and family practitioners could be particularly effective in delivering this message."

#### NHTSA Comment:

The dynamics have already been set in operation to bring information about traffic crashes as a public health issue to the health-care community. The American Association of Automotive Medicine and the American Academy of Pediatrics and the Physicians for Automotive Safety have designated the issue of occupant restraints a primary focus for the future. All have devoted time at national and regional conventions, space in journals and intraorganizational publications and resources for further dissemination of information on the issue. The American Medical Association is also considering a resolution on child restraints. The health-care community has been contacted through the military health-care personnel and the Department of Health and Human Services. The Surgeon General, who is himself a pediatrician, has identified highway crashes as a major health issue and seems to be positively disposed toward taking action on this issue. The correlation between all these activities and actual use of child restraints is difficult, if not impossible, to establish. However, the most recent survey of national use rates for such restraints indicates that over 45 percent of the infants one year or under are in some kind of restraining child care seat (11). Not all of these infants are restrained correctly, but they are at least in a device which can protect them. The national attention given to the issue both by NHTSA and by these health-care professionals may have contributed to the large number of infants using car safety seats.

#### THE MEDIA

9 70 "The news media: Newspaper, radio, and television reports of local automobile crashes should include information about whether the victims were using their safety belts (this would require establishing a system through police or emergency medical service reports for recording such information and making it available to news reporters)."

#### NHTSA Comment:

This idea is supported by the recently completed Canadian study cited above. In some locales in this country, crash reports also include information about the use of belts. The State of Idaho, for example, reports that police are required to communicate to representatives of the news media whether belts are worn whenever highway crashes are investigated.

9 77 "Movies and television programs: The traditional automobile-chase scene has helped distort public perceptions of driving risk. Rarely does the hero (or heroine) crash, and never is he or she

severely injured or killed, in spite of the failure to use safety belts. If, in all scenes that involve driving, the actors and actresses were shown buckling their safety belts, the implicit message would be that an accident could happen and that the possibility of injury is high enough to justify taking precautions. Furthermore, to the extent that people tend to imitate the actions of their heroes, such scenes could help promote the routine action of buckling up before driving."

#### NHTSA Comment:

NHTSA is currently sponsoring a study to quantify the character of portrayals of driving behavior, belt-wearing and the use of child restraints on network television. The results of this study are expected to provide information supporting the assertions of the Report and to underscore the recommendations that greater attention be given in the writing of television drama to the realities of automobile driving and of highway hazards. We should note also that automobile advertisements have become conspicuous in the past several years for their clear portrayal of safety belt usage by drivers and passengers in the cars being advertised. Though little direct attention has been focused on belt use in these ads, they have provided a positive example of the type of implicit messages that could be given to the viewing public if programers were more aware of the issue.

9 "Spot announcements: Although past, one-shot media campaigns have had little influence on safety belt habits, media campaigns generally should not be considered valueless. It is not known whether different kinds of campaigns might have been more effective. Different levels of effort, different time slots, different messages might have produced different results."

#### NHTSA Comment:

NHTSA is now in the process of examining some alternatives to the one-shot mass media campaigns of the past. The initial step in this inquiry is to identify the most critical target groups toward which we would like to aim advertisements. We are also in the process of pilot testing a series of alternative strategies designed to utilize contemporary research in learning theory, marketing, and motivation theory. If the results of these tests are positive, we will move to a more complete study in subsequent years.

9 'It has been suggested, for example, that emphasizing the act of buckling up is more effective than emphasizing the wearing of belts.'

#### **NHTSA Comment:**

A current study of media approaches relating to motorcycle helmets may suggest directions for the use of media for the promotion of safety belts as well (16). Using both data from potential users and a hierarchical ranking of factors critical to the effectiveness of the potential messages (e.g., time of delivery, message content, context of delivery, etc.), this study will produce a set of ranked suggestions for using media to appeal to motorcyclists. The Agency is now in the process of examining this technique for application in the safety belt area.

"Such [media] campaigns should not be judged in terms of their immediate effects on belt-use rates. Particularly when used as part of a coordinated effort, they may have an important intermediate effect on public attitudes, which may eventually lead to behavior changes or make people more receptive to other methods of changing behavior. Research and evaluation are needed, however, on the effects of different messages and how best to use them."

## NHTSA Comment:

The Agency is in total agreement with the suggestion. Media campaigns, even if more carefully focused, are not likely to produce immediate and large-scale increases in belt use, but are the critical elements of any coordinated effort. The studies cited above are now being conducted to

give better information on the effects of different messages on critical target groups and are expected to make the use of the media, both by NHTSA and by other organizations more effective.

13 "Demonstration: A device has been developed that physically demonstrates the effects of collisions at even extremely slow speeds. Though these demonstrations are impressive, their effect on the risk perceptions of those who see them and ultimately on safety belt behavior is unknown.

Evaluation is needed of the effectiveness and reach of these demonstrations compared with their cost."

#### **NHTSA Comment:**

The Agency generally has supported the use of Convincers whenever feasible. The long-range cost-effectiveness of the instrument is still uncertain and more study is indeed required. A study conducted by a team of researchers under a grant from the Office of the Missouri Governor's Highway Safety Representative (17) indicates that the Convincer produces short-term increases in reported use. Wearing rates reportedly fell off, however, after several months although they remained higher than before the experience with the Convincer. Combining the experience with exposure to other materials, like specially designed films, may add to the effectiveness.

# APPROACHES THROUGH PRIVATE INITIATIVES HEALTH-CARE ORGANIZATIONS AND PERSONNEL

"Many health-related organizations, such as the American Medical Association, the American Academy of Pediatrics, the American Association for Automotive Medicine, Physicians for Automotive Safety, and the Epilepsy Foundation, have actively promoted safety belts and their proper use. These efforts have been and will continue to be, important influences on legislators, but health organizations and their memberships also could play a more direct role in promoting safety belt use. State and national medical organizations provide readymade channels of communication with individual physicians and other health-care professionals, who, in turn, could deliver the safety belt message to their local communities and their own patients."

#### NHTSA Comment:

The Agency stands in full support of the Report's recommendation that highway crashes be treated as a serious public health issue. Increased attention by important medical associations, by the Department of Health and Human Services, and by individual health-care professionals throughout the country indicate that the momentum is clearly building to tie these issues together. This is now and will in the future receive high priority attention from NHTSA.

## NATIONAL AND COMMUNITY ORGANIZATIONS

10 90 "Mechanisms such as the Occupant Restraint Coordination Group, promoted by NHTSA, are needed to coordinate national private-sector programs, both with one another and with efforts being made through other channels."

#### NHTSA Comment:

The Occupant Restraint Coordinating Group has already provided both a forum for exchange of information and an opportunity for coordinating campaigns among the major groups represented. It continues to do so. The Transportation Research Board will also consider the appointment of a permanent Standing Committee on Occupant Restraints, which will, if approved, provide an additional forum, this time focused on sharing research ideas and results. Clearly, the need for greater coordination has been recognized by the organizations active in the promotion

of restraints and has already become the impetus for the establishment of these as well as more informal networks of communication.

"On local levels, community service organizations are a largely untapped source of support for safety-belt-use programs. The NHTSA-UNC manual suggests several ways by which such organizations could be drawn into an overall statewide safety belt program, it suggests, for example, including representatives of such groups as State Parent Teacher Associations, State motor clubs, State chapters of the National Safety Council, the National Association of Women Highway Safety Leaders, the Junior Chamber of Commerce or other service organizations on an occupant-pedestrian council to work with State government representatives, public and private driving educators, judges, health organizations, and industry representatives to establish and coordinate a statewide safety-belt-use program."

#### NHTSA Comment:

Many of the organizations suggested in the Report have already been contacted to request their cooperation in promoting restraint use. They have been most responsive on the child restraint issue, and many representatives of these and other grass roots organizations attended the series of regional child restraint workshops and the National Conference on Child Passenger Protection held in 1979. As a result, ideas and locally based program plans were passed from group to group and coordinated efforts were begun in some States. The Agency is following up on these workshops by providing technical assistance to those groups and helping to keep the channels of communication open.

11 'These organizations not only could influence their own members and their families to use safety belts but also could help support a community campaign to urge others to do so, as well.'

#### NHTSA Comment:

Evidence from a 1972 French study indicates that personal influence in a community might be an important link in the effort to promote belt use (4). NHTSA is in the process of formulating such a study in this country, examining the lines of communication and influence within important target groups and geographical locales. Heretofore, resources have not permitted, however, a study as detailed or as focused as that done in France.

#### **SUMMARY**

11 25 "Past attempts to induce people to use their safety belts have not been particularly successful."

#### NHTSA Comment:

The Agency agrees that many past attempts to induce belt use have been disappointing but cautions against labeling any single approach as "a failure." As part of a coordinated effort and with more realistic expectations, some of these past efforts may yet become successful. And even those things which have not met the full expectations of the Agency have been useful in that they are provided information for program modification. Partly because of the limited success of some past efforts, the Agency can project with greater confidence the potential success of future ones.

"The committee strongly believes that increasing the use of manual safety belts or of the manual components of automatic occupant-protection systems will require broad commitment on several fronts. Such a commitment demands national dedication and leadership. The Federal Government, with encouragement and oversight by Congress, can help supply this leadership through its own agencies, programs, and policies."

## NHTSA Comment:

Safety belts are an idea whose time has come. Evidence from sources throughout the country indicates that many organizations, businesses, health-care groups, and legislators are giving much more attention to the issue than in the past. Coordinated efforts have now been organized, and careful planning, both by the Agency and by other government and private organizations, is part of the program of many groups. Much remains to be done, but the groundwork is already laid for large-scale involvement of many people in this effort. The Federal Government should and will provide leadership in this effort, but the key will be, as the Report suggests, the active participation of as many organizations and people as possible. The climate for cooperation seems good, and the Agency supports that development.

One way of demonstrating the value of such cooperation is to concentrate the effort. Though by no means wishing to denigrate the potential of the national commitment called for by the Report, the Department would also support a pilot effort in a single State. Were special efforts made on a less than national scale to address the populations of employers, State officials, young parents, health-care professionals, auto insurers, manufacturers and dealers, young drivers, and others identified in the Report, documenting both the procedure necessary to and the results of a coordinated belt use promotion would be easier than on a nationwide basis. Bearing in mind the positive potential of a successful State-based example, we will be exploring this possibility in the future. The State of Iowa has a program which approaches the concepts outlined here, at least in their beginning stages. We have been in touch with Iowa officials and are keeping track of the campaign there. A one-page summary of the Iowa program is attached.

As the Report indicates, no single approach to the problem of belt use is likely to produce the results we would wish, but coordination among a variety of approaches may over the long run bring the long-lasting significant increase in belt usage for which we are all working.

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# Appendix A

# NHTSA 1980-81 Workshop Series on Alcohol and Occupant Restraints

Beginning in the fall of this year, NHTSA will initiate a new series of shops to facilitate the promotion of State and local programs in the alcohol and occupant restraint areas. These workshops will be carried out on a two-State per workshop basis wherever possible and desirable. Thus, we are planning on conducting from 20 to 26 workshops between October 1980 and April 1981. No workshop will be held for any State which does not want to participate. Following is a summary of the major aspects of the workshops:

# Purpose

To promote the inclusion of alcohol and occupant restraint activities in State and local planning efforts.

#### Length of workshops

Four days: Monday noon to Friday noon.

#### Primary subject areas

Alcohol, safety belts, and child restraints.

## Time schedule

Pilots to be held in October and November 1981. Workshops to be completed by May 1, 1981.

#### Locations

Locations are only tentative at this point but are indicated on the attached national map. All locations are based on previous communications with the States and regions and are subject to change pending their approval.

#### Curriculum

Curriculums for the past technology transfer workshop series are attached. These curriculums will be used as the starting point for developing curriculums for the proposed workshop series. The proposed series will include considerably more participant interaction and will be more detailed.

#### **Contractors**

Three contractors will be selected on a competitive basis to conduct the workshops. At present, it is ex-

pected that one contractor will be selected for an eastern series (Regions I, II, III, and IV); one contractor will be selected for a central series (Regions V, VI, and VII); and one contractor will be selected for a western series (Regions VIII, IX, and X). In addition, a separate contractor will perform all duties related to carrying out the logistics of these workshops, including: (1) making hotel arrangements; (2) providing for the packaging and distribution of workshop materials; (3) followup on participant invitations and registration, etc.

#### **Participants**

It is intended that 20 to 30 participants from each State attend these workshops. These participants should include those persons from each State (public and private) whom the Governor's highway safety staff see as being the most essential to the development and implementation of comprehensive State and local programs in these areas. (Some participants may attend only the alcohol portions of the program while others may attend only the occupant restraint portions. It is expected, however, that most participants will attend both programs.)

#### Travel reimbursement

A total of \$75,000 in 403 funds is available for participant reimbursement. This breaks down to approximately \$1,500 per State (if all 50 States participate). It is suggested that such funds be used to reimburse the travel of private personnel who cannot travel on State funds. All workshop locations will be selected as near State lines as possible so that out-of-State travel can be absolutely minimized. Reimbursements will be made through the central logistics contractor.

#### Invitation process

NHTSA will provide a list of potential categories of participants to each region. The region will then coordinate with each State's highway safety office to select and contact specific individuals and determine their desire or willingness to attend. A tentative list of attendees (30 to 40) will then be submitted through NHTSA headquarters to the central logistics contractor, who will then followup and confirm participant invitations and provide registration and other information. The central logistics contractor will keep NHTSA headquarters and regional personnel, as well as State personnel, apprised of the status of the invitation and registration process at intervals as needed.

# City, lodging, and date selection process

NHTSA headquarters will provide regional personnel with a list of tentative dates and cities for conducting workshops in that region. Regional personnel will then contact each State's highway safety office to determine the acceptability of those dates and locations and to agree on any desired alternatives. This information will be provided to the logistics contractor, who will then contact hotels in the cities selected and determine the alternative accommodations which can be made. These alternatives will then be provided to the State highway safety offices, with informational copies to NHTSA headquarters and regional personnel. Decisions on which accommodations to accept will be the responsibility of the State in consultation with the region. These decisions will be forwarded to the central logistics contractor who will confirm the desired reservations and will be responsible for all following logistics arranged with the hotels selected.

Although tentative, the sites on the attached map show the approximate locations desired on the basis of existing information from regional personnel. The dates are even more tentative but would be selected to have maximum influence on each State's highway safety planning effort for FY 1982, balanced against other factors. A possible scenario would be as follows:

October	WEST Region X (pilot)	CENTRAL Region VII (pilot)	EAST Region IV (pilot)
November	Region X	Region VII	Region IV
December			Region IV Region IV
January	Region IX Region IX	Region VI Region VI	Region III Region III
February	Region VIII Region VIII Region VIII	Region V Region V Region V	Region III Region II Region II
March	Region IX		Region I Region I
April	(Month of April can be used for delays in above schedule)		

The above schedule represents only one possible scenario. It is likely that this schedule will be changed as a result of further information from the States.

# Appendix B

# Status of Child Restraint Bills in the United States as of June 27, 1980

#### Arizona

S.B. 1073 which would have required child restraints has been killed in the Senate.

#### Alabama

S.B. 83 would require certain usage of child restraints and provide penalties for noncompliance.

## California

H.B. 1198 was passed by the House and sent to the Senate Transportation Committee. The bill authorizes law enforcement agencies to issue warnings to persons operating vehicles in which children under 15 are not restrained.

#### Connecticut

H.B. 5677 would require parents or guardians of children under four to require such children to use a child restraint system while riding in a motor vehicle.

# Delaware

A bill submitted aimed at restraint use for all passengers. No action was taken.

## Hawaii

S.B. 2181 requires parents or legal guardians of children under age five to require such children to properly use a child restraint system or be held in the arms of an older person.

H.B. 343 and H.C.R. 105 request the Department of Transportation to study the feasibility of implementing a public information and education program on the use of safety belts and child restraint devices for children 4 years of age or less.

#### Idaho

Idaho requires every child under 5 to be in a child restraint system, including vehicles owned by day care centers and kindergartens. No action has been taken to allow time to develop support.

#### Illinois

H.B. 1833 requires parents or legal guardians of children under four to provide for the protection of the child by properly using a child restraint system. The bill initially allowed for the child to be held in the arms of

an adult but this clause was deleted by an amendment.

#### Maryland

H.B. 33 and H.B. 447 would require persons transporting children in a motor vehicle to provide for the protection of the children by using a child restraint system.

#### Massachusetts

S.B. 1252 prohibits a child less than four or less than 40 pounds from riding as a passenger in a motor vehicle unless the child is using either a seat belt, lap belt, or child restraint device.

S.B. 1286 would require motor vehicle operators to have children under age four or 40 pounds restrained in an approved device.

H.B. 4011 (reported as H.B. 5967) creates a special commission to investigate possible methods to encourage use of child restraints.

#### Michigan

S.B. 394, as amended, would provide a tax credit of 50 percent (up to a \$25 maximum) of the actual purchase price of an approved child restraint device.

H.B. 5327 requires the parent or guardian to properly secure a child less than four in a child restraint system. This bill was passed by the House and scheduled for June vote in the Senate.

#### Mississippi

H.B. 859 would require every parent or legal guardian of a child under the age of 4 to ensure that the child uses a child restraint system when riding in a motor vehicle.

## Missouri (To be submitted in next session)

Missouri requires a parent or legal guardian of a child under four to protect the child by properly using a child restraint system when transporting such child in a motor vehicle.

#### Nebraska

L.B. 664 requires the use of a passenger restraint system for children under four years of age. This bill was indefinitely postponed on May 10, 1980.

#### Ohio

The Ohio General Assembly is currently debating two bills (H.B. 849 and A.M.S.B. 253) which would make

the use of auto child restraints mandatory. S.B. 253 passed in the Senate, which became stuck in House Rules Committee.

#### Rhode Island

H-7310 requires drivers of children under age 3 to ensure that the child uses a child restraint system when riding in a motor vehicle or is in the back seat. There is a \$15 fine for noncompliance.

#### South Dakota

H.B. 1169 would require children under 13 years of age to wear restraints or ride in the rear seat of a motor vehicle. This was reported upon *unfavorably* by the Transportation Committee and is dead.

## Virginia

S-440 requires the driver of any vehicle transporting a child under 4 years of age to ensure that the child is properly secured in a child restraint system.

#### Washington

H.B. 199 requires parents or legal guardians of a child less than five years of age to properly secure the child in a child restraint system. No action has been taken since January 12, 1979.

S.B. 2893 passed the Senate Transportation Committee. The Senate Rules Committee decided to delay action on this bill and work on increasing support.

# Appendix C

# Occupant Restraint Section Outline Technology Transfer Workshops

- I. STATEMENT OF THE PROBLEM
  - Low Usage Rates for Manual Restraint Systems
    - A. Safety Belts

(Opinion Research Study)

- B. Child Restraints (Opinion Research Study)
- II. A BRIEF REVIEW OF FEDERAL INVOLVE-MENT IN OCCUPANT RESTRAINTS
- III. AN OVERVIEW OF COUNTERMEASURE
  AREAS (NHTSA SBU Manual)
  Individual Countermeasures (NAS/TRB Report
  to Congress)
  Four Major Areas of Activity (NHTSA or Wksp.

Four Major Areas of Activity (NHTSA or Wksp. Workbook)

- IV. INDEPTH REVIEW OF MAJOR COUNTERMEASURE AREAS
  - A. Media Programs (Suggestions, Resource Guides)

Review of effectiveness, "how to" implement, materials available

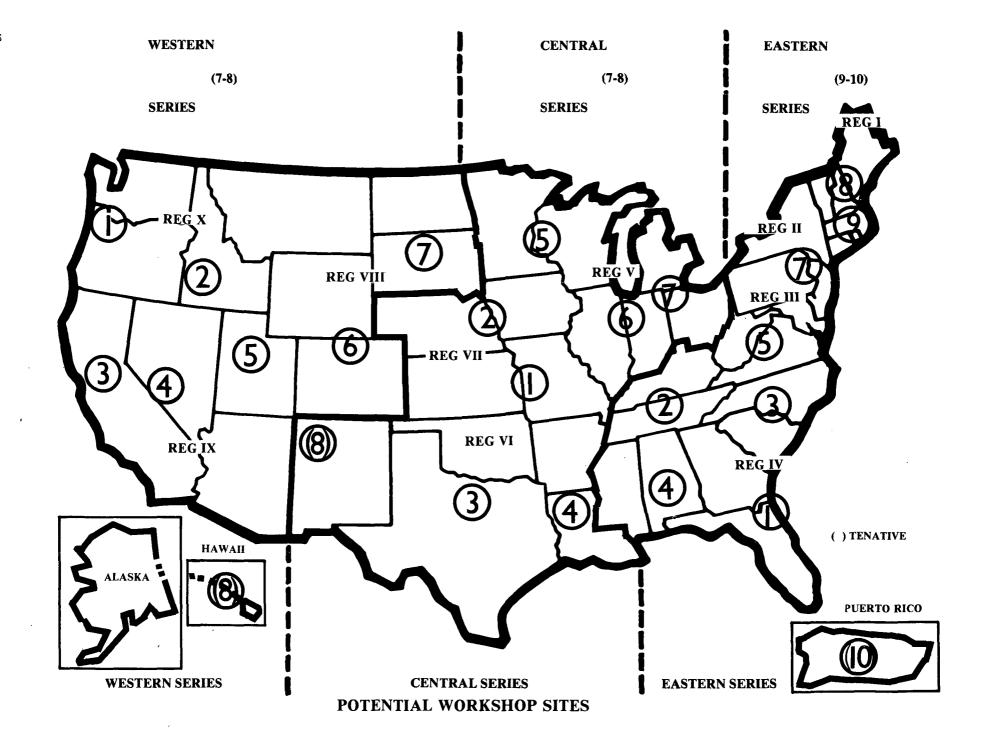
B. Education Programs (Audiovisual Aids)

Review of effectiveness, "how to" implement, materials available

- C. Regulation Programs
  Review of effectiveness, target groups,
  materials being developed.
- D. Legislation (NHTSA Legislation Manual)

Review of effectiveness, problems, "how to" approaches

- (E. Incentives?)
  Which are realistic? Are we ignoring this area?
- V. INDEPTH REVIEW OF CHILD RESTRAINT PROGRAMS
  - A. Media Programs (Publicity Guide)
  - B. Education Programs (Education Guide)
    (Workshop Outline)
  - C. Loaner Programs (Loaner Program Guide)
  - D. Legislation (Tennessee Articles)
- VI. A REVIEW OF STATE PROGRAMS RELA-TIVE TO AN IDEAL MODEL



# Appendix D:

# National Conference on Child Passenger Protection

Cost: 30K

Objectives: To improve understanding of the child

passenger protection problem and to provide a forum for exchanging ideas and technical information about ways of ad-

dressing it.

Results:

Very successful in stimulating interest and

subsequent activity. Continuous media coverage has been a major result.

Areas Needing Emphasis:

- 1. Involvement of the health-care community
- 2. Clearinghouse of information

- 3. Communications network
- 4. Economic incentives to support use
- 5. Greater compatibility between vehicle and CR device
- 6. Continued outreach and consumer education
- 7. Education materials for the "educators"

## Areas Needing Guidelines:

- 1. Liability issues
- 2. Legislation
- 3. Day care and nursery school transportation
- 4. Seat belts and school buses
- 5. Protection of children in vans and trucks

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# Appendix E:

# Summary of Proposed Child Restraint Legislation and Alternative Model Laws\*

This information is based on information sent to Action for Child Transportation Safety, Laws and Regulations Subcommittee (as of November 20, 1979), by State highway safety coordinators, sponsors of bills, the University of North Carolina Highway Safety Research Center, or National Highway Traffic Safety Administration.

States in which child restraint legislation has been filed:

Arizona	New Jersey	
Colorado	New York	
Connecticut	North Carolina	
Delaware	North Dakota	
Illinois	Oregon	
Louisiana	Rhode Island	
Maryland	South Dakota	
Massachusetts	Tennessee	
Michigan	Washington	
Minnesota	West Virginia	
Nebraska	Wisconsin	
New Hampshire	Wyoming	

Name of State; bill number; sponsor of bill

- 1 status of bill
- 2 children covered
- safety measures required and the agency determining the adequacy of the child restraint system (CRS)
- 4 person liable and vehicle specified
- 5 penalty imposed and application of parental immunity laws
- 6 educational efforts
- 7 comments

#### Arizona — House Bill 2418 (Rep. McConnell)

- 1 introduced 2-7-79; defeated in committee
- 2 less than 4 years
- 3 child properly placed in CRS meeting Federal motor vehicle safety standards
- 4 resident parent or legal guardian operating a motor vehicle registered to such parent or legal guardian or a spouse
- 5 violation of this section is a petty offense. Violation of this section is not negligence per se, and this section shall not be given effect in any civil action

Colorado — House Bill 1440 (Rep. Laura DeHerrera) 1 — filed in 1979, passed by committee; now scheduled

\*Prepared by Action for Child Transportation Safety, November 1979.

#### for House

- 2 less than 4 years & 40 pounds or less Exemptions—When executive director of department determines that use of a CRS would be impractical for physical reasons, including, but not limited to, medical problems or body size. Driver must carry certificate issued by department.
- 3 child shall be provided with a CRS suitable for child's size and shall be properly fastened into such CRS if a seating position is available which is equipped with safety belts. CRS must conform to Federal motor vehicle safety standards. No person shall install, distribute, have for sale, offer for sale, or sell in Colorado, any safety belt or CRS for use in motor vehicles unless it conforms to all applicable Federal motor vehicle safety standards.
- 4 every driver transporting children in a privately owned noncommerical vehicle registered in Colorado (including, but not limited to, vehicles owned or used by kindergartens & child day care centers)
- 5 failure of a driver to ensure that a CRS is provided and properly used by every child shall create a presumption of negligence on the part of the driver

#### Connecticut — House Bill

"Introduced in House and assigned to Transportation Committee which held public hearings on the bill (Monday, March 12, 1979). . . . Died in 3d Committee." (National Highway Traffic Safety Administration)

# Delaware — Filed in 1979 (University of North Carolina Highway Safety Research Center)

Illinois — House Bill 1833 (Reps. Dyer, Catania, Von-Boeckman, & Leon)

- introduced April 1979; sent to interim study committee; not voted on before session ended. Session meets again in January 1980.
- 2 under 4 years
- 3 properly using a CRS meeting Federal motor vehicle standards, or assuring that child is held in the arms of an older person riding as a passenger
- 4 resident parents and legal guardians when transporting own child in own motor vehicle.

  Exemptions—recreational vehicle of truck or van type and trucks of one ton or more

- 5 in no event shall failure to wear a CRS be considered as contributory negligence nor shall such failure to wear said CRS be admissible as evidence in the trial of any civil action
- 6 Division of Traffic Safety plans to manage State child safety educational programs
- 7 hope to eliminate "... or assuring that child is held in the arms of an older person...," if introduced in 1980

#### Louisiana — House Bill 655 (Mr. Haik)

- 1 introduced in 1979 and died in committee in July 1979; plan to reintroduce in future legislative session
- 2 under 4 years
- 3 child in properly used CRS meeting Federal motor vehicle standards, or held by an older person riding as a passenger
- 4 parent or legal guardian (resident) transporting own child in own vehicle
   Exemptions—recreational vehicle, of truck or van type and trucks of one ton or more
- 5 in no event shall failure to wear a CRS be considered as contributory negligence nor shall failure to wear said CRS be admissible as evidence in the trial of any civil action
- 6 planned program of public education before bill reintroduced in future sessions

#### Maryland — House Bill (Rep. Bienen & others)

- 1 introduced in 1979; died in committee
- 2 under 8 years
- 3 child must use an automotive restraint system. An automotive restraint system, for children 1 year and older, consists of either a safety belt or a CRS meeting Federal motor vehicle safety standards when installed in accordance with the manufacturer's directions. Children under the age of 1 year must be restrained in a CRS as defined above. An additional person may not be restrained under the same belt with a child.
- 4 all drivers licensed in Maryland when transporting children in a passenger vehicle
- 5 could carry fines up to \$500.00. If all safety belts are in use the driver may not be held liable if a child is not in an automotive restraint system, but only if the child is not in the front seat of a vehicle that has a rear passenger area.

- Maryland House Bill 33 (Reps. Brown, Alperstein, & Bienen)
- 1 prefiled; to be introduced and read first time on 1-9-80. If enacted, shall take effect 7-1-80.
- 2 under 8 years
- 3 use of automotive restraint system (safety belt or CRS) installed and used in accordance with manufacturer's directions. Automotive restraint system must meet Federal motor vehicle safety standards. An additional person may not be restrained under the same automotive restraint system with child.
- 4 licensed drivers in Maryland in a passenger vehicle
- 5 violation of this section does not constitute contributory negligence and may not be admitted as evidence in the trial of any civil action. A driver may not be held in violation if all safety belts are in use and an unrestrained child is not in the front seat of a vehicle having a rear passenger area.

Massachusetts — Senate Bill 1097 (Sen. John W. Olver)

- 1 filed 1979; dead for this year; will be refiled in 1980
- 2 less than 4 years of age or less than 40 pounds
- 3 said child shall ride as passenger only if in a seat equipped with safety belts in accordance with the provisions of Federal law or rules or regulations issued by the U.S. Department of Transportation. When in a seat equipped with safety belts, child shall ride only if using a properly adjusted and secured child or infant restraint approved by the commissioner of public health, and provided that such restraint is suitable for the physical development and weight of the child. Exemptions—a child riding as a passenger in a motor vehicle in which all seats equipped with child or infant restraints are occupied by other children who are using said restraints; a child unable to use a child or infant restraint for medical reasons, certified by a licensed physician, and certificate carried by operator of vehicle; and a child physically unable to use a child or infant restraint due to physical emergency.
- 4 any operator of any motor vehicle on a public highway.
- 5 with violation, operator subject to a fine of \$5 to \$25; person shall not be liable for contributory negligence for violation.

#### Massachusetts — House Bill 6141

Special commission to be established for the purpose of making an investigation and study relative to developing a range of alternative or supplementary methods whereby the use of child and infant safety equipment in motor vehicles may be encouraged.

#### Michigan — Senate Bill 400 (Sen. G. Hart)

- 1 introduced 5-10-79
- 2 child that weighs less than 20 pounds properly secured in CRS which is of a type approved by secretary of state. Child under 15 years of age that weighs 20 pounds or more properly secured with a safety belt. Beginning 1-1-81, a child that weighs less than 40 pounds properly secured in CRS which is of a type approved by the secretary of state. Exemptions—when secretary of state determines that use of CRS or safety belt is impractical because of physical unfitness, medical problem, or body size. Secretary of state may specify alternate means of protection for these children.
- 3 under 15 years
- 4 each driver, parent, or legal guardian when transporting a child. Exemptions—nonresident driver, parent, or legal guardian. Exemptions—bus, school bus, moped, motorcycle, or other motor vehicle not required to be equipped with safety belts under Michigan or Federal law.
- 5 person who violates this section is responsible for a civil infraction punishable by a fine of not more than \$30. Points shall not be assessed for a violation under this section. When a person has received a civil infraction citation, the court shall waive any civil fine and costs upon the receipt of certification that the defendant, before the appearance date on the citation, has produced evidence of purchase or rental of an approved CRS.

# Michigan — Senate Bill 394, "Income Tax Act of 1967" (Sen. Kelly)

1 — introduced 5-9-79. "For a taxpayer who is a parent or a legal guardian of a child under 4 years of age, there shall be allowed as a credit against the tax imposed by this act for the taxable year, an amount not to exceed \$50.00 for the charges paid for the purchase of a CRS of a type approved by

the highway safety planning division of the department of the state police."

Minnesota — House Bill 156 (Reps. Laidig, Kahn, Reif, H. Sieben, & Berkelman) Senate Bill 274 (Sens. Laufenburger, Kirchner, Hughes, & Coleman)

- 1 introduced 1-79; did not become law
- 2 under 4 years
- 3 CRS shall be provided in the motor vehicle and properly used. CRS must meet Federal motor vehicle safety standards.
- 4 resident parent or legal guardian when transporting child in own motor vehicle
- 5 with violation, person guilty of petty misdemeanor and upon conviction is subject to a fine not to exceed \$25.
- 6 many legislators prefer educational efforts instead. Plan to develop "Childsafe" (educational program primarily for hospital use).
- Nebraska Filed in 1979; defeated in committee; will be introduced this season (University of North Carolina Highway Safety Research Center)

New Hampshire — House Bill 497 (Reps. Lynch & Russell)

- 1 filed 1979; killed by House 4-12-79
- 2 under 12 years
- 3 proper use of safety belts or CRS meeting Federal motor vehicle safety standards; or assuring that child is held in the arms of a person 16 years of age or older while riding as a passenger in the vehicle
- 4 every resident parent or legal guardian when transporting his or her child in own private passenger vehicle operated in New Hampshire
- 5 any person violating this section shall be guilty of a violation. In no event shall failure to wear safety belts or CRS be considered as contributory negligence nor be considered in mitigation of damages in the trial of any civil action.
- 7 "House Transportation Committee feels that House Bill 497 is not workable (not enforceable) at this time"

New Jersey — Assembly Bill 1505 (Garvin, Lesniak, Deverin, Fortunato, Karcher, & Scanlon)

- 1 introduced 6-19-78; no action
- 2 under 4 years

- 3 properly using a CRS meeting Federal motor vehicle safety standards, or assuring that such child is held in the arms of a person 12 years of age or older riding as a passenger in the motor vehicle
- every parent or legal guardian in own motor vehicle
- 5 violation of this act shall be a motor vehicle violation punishable by a fine of \$10 to \$25. In no event shall failure to wear a CRS be considered as contributory negligence, nor shall such failure be admissible as evidence in the trial of any civil action.
- 6 New Jersey Division of Motor Vehicles shall print such materials as to adequately inform the public about the types of CRS meeting Federal motor vehicle safety standards. Such materials may be made available to car dealers, parent groups, and the general public. \$10,000 appropriated to Division of Motor Vehicles for implementing this act.
- New Jersey Assembly Bill 785
  Requires all passengers, including children, to be restrained—no action (National Highway Traffic Safety Administration)

New York — Senate Bill 2623 (Sen. Caemmerer)

- filed 2-79; passed by Senate, but Assembly has not acted yet. If enacted, takes effect on 1st day of September, next succeeding
- 2 under 5 years
- 3 restrained in a specially designed detachable or removable seat which meets any applicable standards imposed by the Federal Secretary of Transportation pursuant to the National Traffic and Motor Vehicle Safety Act of 1966 as amended.
- 4 no person shall operate a passenger motor vehicle, nor shall the owner thereof knowingly permit a motor vehicle to be operated unless each passenger under 5 years is restrained as mentioned

North Carolina — House Bill 1018 (Rep. Miller)

- 1 introduced 4-79; referred to study group and killed
- 2 under 5 years
- 3 properly secured in a correctly installed CRS which is of a type (and which is installed in a manner) approved by commissioner of motor vehicles. Exemptions—children occupying a seat where

- safety belts aren't required (i.e., cargo area of station wagon)
- 4 every driver licensed in North Carolina driving own child in own vehicle (or family purpose vehicle). Exemptions—vehicles registered in another State or jurisdiction; ambulances or other emergency vehicles; vehicles of over 9 passenger capacity or any vehicle exempt from the safety belt safety requirements by virtue of Federal law or regulation; or a temporary substitute vehicle.

North Dakota — House Bill 1490 (Reps. Richie & Lardy)

- introduced 2-79; defeated; session meets again in 1981
- 2 under 4 years
- 3 proper use of child passenger restraint device meeting Federal motor vehicle safety standards and approved by North Dakota Department of Health.
- 4 every parent or legal guardian (resident) when transporting child in a motor vehicle operated by that parent or legal guardian in North Dakota.

  Exemptions—trucks of one or more tons
- 5 with violation, statutory fee of \$20.00. Failure to use the CRS shall not be admissible as evidence in the trial of any civil action.
- 6 currently conducting public information and education campaign and loan program
- Oregon House Bill 2667 (Reps. Monroe, Bauman, Cherry, Frohnmayer, Kafoury, & Starr, & Sen. Brown)
- 1 filed 1979; killed by House vote
- 2 5 years of age or younger or weighs 40 pounds or less. Exemptions—Division of Motor Vehicles may exempt a child if a physician determines and publishes the reasons that use of a CRS by the child would be impractical or harmful to the child by reason of physical condition, medical problem, or body size.
- 3 child secured with a child safety system that meets minimum standards and specifications established by Division of Motor Vehicles.
- 4 parent or guardian operating or riding as a passenger in a motor vehicle with his or her child. Exemptions—privately owned commercial vehicles.
- 5 During phase-in period a violator shall not be cited or fined but shall only be issued a written

warning of the violation. Violation after phase-in period is a Class D traffic infraction. In lieu of paying any fine under this section, a court may allow a person to attend a class on safe operation of motor vehicles or to otherwise provide the court with evidence of study by the person of safety in the operation of motor vehicles. If a child is injured because of the violation a rebuttable presumption exists in any civil action that the injuries were caused by the negligence of the parent or guardian.

# Rhode Island — House Bill 5456 (Reps. Higgins, Freda, DeAngelis, Babin Jr.)

- 1 introduced 1979; in committee
- 2 any infant or child 4 years of age or under
- 3 proper use of CRS designed for use in motor vehicle
- 4 any resident person in a motor vehicle
- 5 any person deemed to be in violation of this section shall be issued a citation that will be recorded on said person's driving record. \$15.00 fine.

# South Dakota — Senate Bill 72 (Sen. Lamont & Rep. Edelen)

- 1 filed 1979; killed in transportation committee
- 2 under 5 years
- 3 child properly secured in CRS meeting safety standards promulgated by the Department of Public Safety
- 4 parent or legal guardian (resident) when transporting child in a motor vehicle owned by that parent or guardian and operated in South Dakota. *Exemptions*—motorcycles
- 5 a person violating this section has committed a petty offense. In no event shall failure to wear a CRS be admissible as evidence in the trial of any civil action.

#### South Dakota ---

- 1 to be filed in 1980
- 2 13 years of age and younger
- 3 seated in rear seat and using available passenger restraints. Front seats can be used only if age- and size-appropriate passenger restraint systems are used, provided they meet the safety standards promulgated by the Department of Public Safety.
- 4 every operator of a motor vehicle, except motorcycles, licensed in South Dakota and operated in South Dakota.

- 5 a person violating this section after 7-1-81 has committed a petty offense.
- 6 Department of Public Safety shall direct a public education campaign.

# Tennessee — Tennessee Child Passenger Protection Law (House Bill 300) (Reps. Bragg & Murphy)

- 1 filed in 1976; failed; revised bill filed 1977 and passed! Legislation effective January 1, 1978.
- 2 under 4 years
- 3 proper use of CRS meeting Federal motor vehicle safety standards or assuring that child is held in the arms of an older person riding as passenger in the motor vehicle
- 4 parent or legal guardian (resident) when transporting his or her child in own motor vehicle.

  Exemptions—recreational vehicles of the truck or van type or trucks of one ton or more
- 5 penalty for violation of this section is \$2 to \$10. In no event shall failure to wear a CRS be considered as contributory negligence, nor shall such failure be admissible as evidence in the trial of any civil action. Every highway patrol care in Tennessee will carry a CRS; whenever State troopers cite parents the trooper will lend the parent a safety seat. When the parent appears in court and provides proof of purchase of a CRS, the trooper will ask the judge to dismiss the case. The City of Chattanooga purchased and installed CRS's in city police cars.
- 6 9-77—a major public information and education program was started. Purpose: To educate the public about the importance of children riding safely restrained and to evaluate the results of these efforts and the effect of the new law. Loaner programs have been expanded to health departments.
- 7 Supporters plan to attempt to repeal the "babes in arms" (child crusher) amendment. They feel the health department loan programs will weaken any arguments that low income parents can't afford safe CRS's. Records are being kept of death due to the on-lap position. Educational efforts omit mention of the "babes in arms" amendment, except to explain its danger.

Washington — House Bill 199 (Reps. Hurley, Adams, Pruitt, Nelson, Burns, & Brekke)
Senate Bill 2895 (Sens. Ridder, von

- Reichbauer, Lee, & McDermott)
- 1 read first time 1-79 (HB 199) & 2-79 (SB 2895); informal meeting before joint House & Senate Transportation Committee 9-79; expect to introduce again in next legislative session.
- 2 less than 40 pounds
- 3 properly secured in CRS which is of a type and which is installed in a manner approved by the State Commission on Equipment. The following methods of restraining child passengers do not comply with the requirements of this section: Holding the child in the arms or lap of another passenger; use of a lap belt by a child under 40 pounds or less than 4 years; use of combination lap and shoulder belt by a child under 55 pounds or less than 54" in height.
- 4 parent or legal guardian when operating own motor vehicle in Washington State in which the child is a passenger. Exemptions—authorized emergency vehicles in emergency situations

West Virginia -

Filed 1979; possible public hearing 9-79 (University of North Carolina Highway Safety Research Center)

- Wisconsin Assembly Bill 747 (Reps. Czerwinski, Vanderperren, Soucie, Metz, Barczak, Duren, & Smith)
- introduced 6-79; public hearing in 9-79; if
   enacted, this bill takes effect on the first day of the
   12th month after publication
- 2 under 4 years
- 3 properly restrained in a restraint system approved by the Wisconsin Department of Transportation, in compliance with applicable Federal standards.
- 4 parent or legal guardian when transporting child in own motor vehicle
- 5 any person violating this prohibition may be required to forfeit \$10 to \$200.

Wyoming — Filed; no committee action
(University of North Carolina Highway Safety
Research Center)

#### States Expecting to File During 1980 Legislative Session

Alabama Hawaii—study bill Missouri
California Indiana Pennsylvania
Florida Maine

#### Statewide Educational Efforts

- Hawaii—Hawaii chapter of Academy of Pediatrics together with other organizations plans to begin public education efforts in 11-79. Administration unit of Hawaii Department of Transportation is planned. Hope to increase usage without legislation.
- Iowa—Broad-based public information and education program prior to any attempt achieving legislation through Iowa's Seat Belt Advisory Council.
- Kentucky—CRS load program through Jayceettes and hospital auxiliaries. Brochures and TV PSA's for statewide distribution.
- Oklahoma—Promoting CRS use through public education (prenatal classes; inservice for prenatal instructors; distribution of materials through physicians' offices; displays at fairs.
- Texas—Plan public education prior to attempting legislation.
- Vermont—Governor's Highway Safety Program involved in Vermont SEAT (seatbelts eliminate automobile tragedies). Goal—first State in Nation in which 100 percent of newborns leaving hospital ride home in a CRS.
- Wyoming—Public information and education programs underway in county hospital prenatal programs.

# Appendix F:

#### Alternative Model Laws

"The following analysis provided through the courtesy of Action for Child Transportation Safety:"

#### CHILDREN COVERED:

birth to 4 years

Includes ages when child restraints (CR) should generally be used. Many children are too large to fit some CR's before age 4. Children under 4 are normally considered unable to be responsible for their own safety. Least controversial.

birth to 40 pounds

Usual minimum and maximum weights that CR should generally be used and that most CR's fit. Least controversial.

birth to 18 years

Children older than 4 also need the protection of restraints and are considered to be under the care of their parents.

#### unacceptable exemptions:

exclusion of children for "physical or medical" reasons

Young children, if unable physically fit in a traditional CR, should use an acceptable alternative—5 point harness, roomier shield style, or snug vehicle safety belt while seated on a firm 2" cushion. Concern that the use of a CR will worsen an existing medical problem (i.e., wound, fracture, etc.) in the event of a collision is misplaced concern. Statistics prove that risk of injury or death is far greater when the child is unrestrained. If this exemption is included, it must be certified in writing by a licensed physician.

#### SAFETY MEASURES REQUIRED:

#### general:

children shall be carried only in seats intended for passengers

Specifically addresses abuse of the cargo area of station wagons, hatchbacks, light trucks, pickups, campers, and vans.

children birth to 18 years shall ride in a restraint suitable for child's age and size. Broad coverage. Allows for large 3 year old. Doesn't specify what is "suitable." This could be done through educational programs or within the bill. Question to be resolved: Should parents be required to install safety belts when absent, or only required to use safety belts when available? Children in older vehicles need protection too.

#### specific:

children under 1 year (or unable to sit up alone) must be correctly restrained in a properly installed CR Best crash protection; no alternative available for children unable to sit up. Correct use important. Some large babies outgrow infant CR's before 1 year or before they can sit alone. Requires purchase, rental, or borrowing of CR. Question to resolve: Could Medicaid cover the cost?.

children birth to 4 years &/or 40 lbs. must ride correctly restrained in a properly installed CR Best crash protection. Correct use important. Doesn't allow for large 3 year old, nor for use of lap belts with preschool car pool situations, nor when CR not available. Requires rental, purchase, or borrowing of CR. Question: Could Medicaid cover the cost?

children 4 years to 18 years (or when too large for CR) must ride in snugly fastened safety belt Best protection available for child who has outgrown CR. Correct use of lap and shoulder belts important.

children under 4 years and/or 40 lbs and able to sit alone, must ride in a correctly used CR if available, otherwise in a correctly worn lap belt In vehicles with CR, more than 70 percent of the children aren't using them. Of those used, only 25 percent are used correctly. Correctly worn lap belt is next-best alternative, according to current research. Child may have to sit on a firm 2" cushion to assure a correct fit.

children must ride in the rear seat and use available restraints

Applies to all children in all vehicles. Rear seat is safer than the front. What about older cars without safety belts in the rear seat or pickups without a rear seat?

no child shall ride in the front seat of a vehicle without being correctly restrained in a CR appropriate for age or size What about pickups without back seats or older vehicles without safety belts in the back or back and front? This addresses most hazardous cases (unrestrained front seat child passenger) but ignores the majority of children, who ride in the rear.

#### compromise:

all children shall ride in the rear seat unless in a restraint appropriate for age and size Implies children are safe in rear seat without restraint which is not true. Child should lie or sit on floor of rear seat. This position is less dangerous than other unrestrained positions.

any child without an appropriate CR available must ride in rear seat

Includes situations where all available CR and safety belts are in use. This could be attached to one of the more restrictive regulations above.

additional clauses which would eliminate unacceptable alternatives:

Person holding an infant or child in arms or lap would not be complying with the law.

An additional person may not be restrained under the same safety belt with a child.

Use of a CR that doesn't meet the current Federal Safety Standard No.213 (or expected Standard No.213-80) does not comply with this section.

#### AGENCY DETERMINING THE ADEQUACY OF THE RESTRAINT SYSTEM:

# meeting current Federal Motor

Vehicle Safety Standards No.213 or 213-80

Question of adequacy of present Standard No.213. New Standard (No.213-80) expected in 1980, which would be preferable, but CR meeting No.213 will be in use for many years to come.

State commission on equipment State department of transportation

This could lead to long, drawn-out rule making process at State level, also to varying regulations in different States (as in case of school bus regulations).

PERSON LIABLE:

State residents only Avoids problem of determining residency of responsible person. Residents of

other States could be informed of the law and advised about riding safely

restrained.

residents only, unless other State

has similar law

Penalty imposed by either the State of residency or State where violation oc-

Natural person to hold responsible for own child, but parent is not always parent

present in the vehicle with child.

Always present in vehicle and considered responsible for passengers. driver

owner of vehicle If the owner isn't the parent or present in the vehicle, it seems unfair to hold

the owner liable for restraint use.

parent or legal guardian in own vehicle (as driver or passenger) Very limited application, yet covers most children most of the time. Liable person likely in vehicle. Permits other people's children to ride unprotected.

Least controversial.

parent or legal guardian in any vehi-

cle with own child

Broader application: Covers more children.

parent or legal guardian when own

child rides in any vehicle

Can parents be totally responsible for how their children ride in another per-

son's vehicle, if not present?

any driver of own vehicle (or in case of institutional vehicle, the owner

or lessee)

Liable person likely to be present in vehicle. Most people usually drive their

own vehicle.

Broadest application; greatest number of children covered. Fair if requires any driver of any vehicle

use of available safety belts, probably not fair if it requires driver to provide

CR for another's child. Liable person always present.

**VEHICLE**:

licensed in State Avoids problem of determining residency of responsible person.

Limited application: Least controversial. parent's own

any vehicle used to carry children Broad application, includes day care trips, car pools, friends, relative's

vehicles, type II (small) school buses with lap belts installed. (Federal require-

ment since 1977.)

equipped with safety belts Least controversial, but neglects children riding in vehicles without safety

belts or without enough safety belts.

## exceptions:

type I school buses without safety

Practical necessity. Retrofitting of padding to metal seat backs and strengthening of floor should be done first in traditional school buses (built before Federal Standard came into effect in 1977) and where seats are not suitable for belts.

emergency vehicles during an emergency

Doesn't waste valuable time.

unacceptable exemptions:

Exclusion of recreational vehicles of truck or van-type over a specified tonnage.

#### PENALTY IMPOSED:

warning

Fair and reasonable during phase-in. After phase-in period, people become less concerned about violating a law when they know all they will get is a warning.

nominal amount of \$5 to \$10 and possible waiver

Increases likelihood of liable person obeying law. Suggestion: As with a warning for vehicle defect, fine is waived when the defect is corrected (with proof of purchase or possession of CR). Liable person might also be required to attend a class on children's car safety. Question: Under what conditions could fine be waived if penalty is result of failure to use an available CR?

\$50 or more and possible waiver

Liable person most likely to follow law. More than cost of CR. Likely to be controversial.

#### APPLICATION OF PARENTAL IMMUNITY LAWS:

parental immunity from suits by minor children doesn't extend to actions based on failure to comply to this law Useful in States with parental immunity laws. Injuries resulting from failure to use or correctly secure a child in a CR are often referred to as the "neglected child syndrome."



# (585327) Lawsing State Journal The Onlocker April 5 1980

# By JIM HOUGH

If you have a baby who rides in your car without a child restraint seat, don't let Lansing District Judge Charles Filice hear about it. You'll be in for a long lecture.

Ever since March 8, child restraint seats in cars have been a crusade for Judge Filice. His motivation is strong because a child restraint seat saved the life of his five-month-old daughter, Julianna. Filice uses any audience, even the juries of his court, to lecture on the subject. He tells the story this way:

"My wife, Judith and I were traveling in our car in the Detroit area on March 8 when our car was blasted by another vehicle driven by a drunk driver. Judith and I were hurt a little, but not seriously. Our car was destroyed. We had our baby, Julianna, strapped in a child restraint seat in the back seat of the car. She was unhurt. There is little doubt that she would have been seriously injured or killed if she had been held by either of us in the front seat. I have read a lot about the subject lately and I won't miss a chance

to save a child's life, let alone the terrible anguish of parents. Our doctor told us that no matter how much we love our babies, the most dangerous thing we can do to them is hold them as we ride in a car," Judge Filice said.

Filice is grateful to the Lansing Jaycees. "As a public service, the Jaycees rent child restraint seats for cars. They charge you \$12 for the seat and refund \$6 when it is returned after the child grows out of it. Without their encouragement, I probably would not have had such a seat and my daughter might have been killed," he said.

The Michigan House of Representatives approved a measure Thursday which would require all Michigan parents and guardians to secure children under four years of age in federally-approved car seating systems. The vote was 70 to 16.

The legislation, sponsored by State Rep. Drew Allbritten (R-Grand Rapids), would apply only to Michigan residents, children less than four years of age and vehicles required to be equipped with safety

belts. If approved by the Senate and signed into law, it will take effect Jan. 1, 1982.

Allbritten said at least 16 deaths and more than 2,400 injuries could have been avoided in Michigan in 1978 if the state had had a smiliar law on its books. The Grand Rapids Republican based his prediction on a seven-year study conducted in Tacoma, Wash., which revealed that more than 90 percent of the fatal accidents and more than 78 percent of injuries to young children could have been prevented if the children were properly restrained in a safe child car seat.

In 1978, 18 Michigan children were killed and 3,120 were injured in traffic accidents.

Drivers who violated the provisions of the bill would be fined up to \$25, but the fine would be waived if the person charged proved to officials that he or she had bought or rented a federally-approved seating system before the scheduled court appearance date.

No penalty points would be added to a violator's driving record.

# SUBSTITUTE FOR

# HOUSE BILL No. 5327

A bill to amend Act No. 300 of the Public Acts of 1949, entitled as

"Michigan vehicle code,"

as amended, being sections 257.1 to 257.923 of the Compiled Laws of 1970, by adding section 710d.

# THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

- Section 1. Act No. 300 of the Public Acts of 1949, as amended, being
- 2 sections 257.1 to 257.923 of the Compiled Laws of 1970, is amended by
- 3 adding section 710d to read as follows:

#### ANY PARENT

- 4 SEC. 710D. (1) -EACH DRIVER, PARENT, OR LEGAL GUARDIAN TRANSPORTING
- 5 A CHILD LESS THAN 4 YEARS OF AGE, SHALL PROPERLY SECURE THE CHILD IN A CHILI
- 6 SEATING SYSTEM WHICH MEETS THE FEDERAL MOTOR VEHICLE SAFETY STANDARDS SET
- 7 FORTH IN 49 C.F.R. 571.213.

- 1 (2) THIS SECTION DOES NOT APPLY TO A NONRESIDENT DRIVER, NONRESIDENT 2 PARENT, OR NONRESIDENT LEGAL GUARDIAN TRANSPORTING A CHILD IN THIS STATE.
- 3 (3) THIS SECTION DOES NOT APPLY IF THE MOTOR VEHICLE BEING DRIVEN
  4 IS A BUS, SCHOOL BUS, MOPED, MOTORCYCLE, OR OTHER MOTOR VEHICLE NOT REQUIRED
  5 TO BE EQUIPPED WITH SAFETY BELTS UNDER SECTION 710B OR FEDERAL LAW.
- 6 (4) A PERSON WHO VIOLATES THIS SECTION IS RESPONSIBLE FOR A CIVIL 7 INFRACTION PUNISHABLE BY A FINE OF NOT MORE THAN \$25.00.
- 8 (5) A VIOLATION OF THIS SECTION SHALL NOT BE CONSIDERED AS COMPARA-9 TIVE NEGLIGENCE.
- 10 (6) POINTS SHALL NOT BE ASSESSED UNDER SECTION 320A FOR A VIOLATION
  11 OF THIS SECTION, AND AN ABSTRACT REQUIRED UNDER SECTION 732 SHALL NOT BE
  12 SUBMITTED TO THE SECRETARY OF STATE.
- 13 (7) THE COURT SHALL WAIVE ANY CIVIL FINE OR COST AGAINST A PERSON WHO
  14 RECEIVES A CIVIL INFRACTION CITATION FOR A VIOLATION OF THIS SECTION IF
  15 THE PERSON SUPPLIES THE COURT WITH EVIDENCE OF PURCHASE OR RENTAL OF A CHILD
  16 SEATING SYSTEM MEETING THE REQUIREMENTS OF SUBSECTION (1) BEFORE THE
  17 APPEARANCE DATE ON THE CITATION.
- 18 (8) THE SECRETARY OF STATE MAY EXEMPT BY A RULE PROMULGATED PURSUANT
  19 TO ACT NO. 306 OF THE PUBLIC ACTS OF 1969, AS AMENDED, BEING SECTIONS
  20 24.201 TO 24.315 OF THE MICHIGAN COMPILED LAWS, A CLASS OF CHILDREN FROM
  21 THE REQUIREMENTS OF THIS SECTION, IF THE SECRETARY OF STATE DETERMINES THAT
  22 USE OF THE REQUIRED CHILD PASSENGER RESTRAINING DEVICE IS IMPRACTICAL
  23 BECAUSE OF PHYSICAL UNFITNESS, A MEDICAL PROBLEM, OR BODY SIZE. THE
  24 SECRETARY OF STATE MAY SPECIFY ALTERNATE MEANS OF PROTECTION FOR THOSE
  25 CHILDREN.
- 26 (9) THIS SECTION SHALL TAKE EFFECT JANUARY 1, 1982.

  26a Section 2. This amendatory act shall be known and may be cited as:
  27 the "Allbritten child passenger safety act".

# Appendix G:

#### The Iowa Safety Belt Program

The Iowa Seatbelt Advisory Council has initiated a three-phased program to increase utilization of seatbelt systems presently installed in cars and trucks used in the State. Adoption of the program began with the formation of the Council itself, under the Office of Safety Programs, Iowa Department of Transportation. Work of the Council is supported under a contract with the Governor's Representative for Highway Safety.

Members of the Council represent major health service providers and highway users in the State, as well as appropriate government units.

Problem analysis undertaken by the Council revealed that utilization of seatbelts is low, especially among youthful drivers, who are greatly overrepresented in serious crashes. Baby seats for car travel are rarely used in Iowa—perhaps partly because the parents of young children are the same youthful drivers. At the same time, some firms, such as Northwestern Bell, that have enforced seatbelt utilization for workers on the job reported that they are very satisfied with the results. However, none of them were able to quantify any reduction in crashes or injuries.

Finally, an informal study by hospital administrators at four locations in the State revealed that a significant portion of the children treated in hospital emergency rooms for injuries related to automobiles—some 36 percent of them—were *not* hurt in actual crashes. They were hurt in what the hospital emergency logs listed as

"falls in cars," incidents in which the driver saw a potential crash, and avoided it by sharp braking or steering. The unrestrained child in the car then suffered the "fall," and was thrown against some unyielding surface inside the vehicle and hurt seriously enough to require hospital attention.

Members of the Council also attended the regional conference on child protection in crashes sponsored by NHTSA in Kansas City in May. Following that meeting, the following three-phase program was initiated:

- 1. Establish a broad-based infant seat loaner program in Iowa, with direct appeals to young parents to utilize the systems, and to the new baby's grandparents to provide the seats and *model belt-wearing behavior*.
- 2. As a Council, make presentations to industry and government large-fleet operators requesting adoption and enforcement of a belt-wearing policy while on business. The Council would develop and recommend a model policy.
- 3. Implement a statewide public information program utilizing professional agencies as appropriate in support of the objectives above. The effort also involves measurement of attainment of these goals including documentation of results experienced by fleet operators.

To date, a public relations consultant has been retained by the Council, several local Early Rider programs are beginning or expanding operations, and one county government has adopted a seatbelt use policy paralleling the one in force for the Iowa Department of Transportation.

DOT HS 805 556 April 1981