## Developments in the National Highway Safety Program of the United States

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The large and tragic losses resulting from accidents of all kinds is recognized as a worldwide problem. No country or part of the world has escaped the staggering costs of accidents.

The dimensions and magnitude of the problem in the United States can best be understood against a backdrop of several significant facts. In 1977, transportation-related accidents in the United States resulted in nearly 51 000 fatalities. Of these, motor vehicle traffic accidents accounted for more than 46 800 fatalities. A recent study by the National Highway Traffic Safety Administration (NHTSA) of the U.S. Department of Transportation (DOT) estimated that the societal costs of motor vehicle accidents amounts to more than \$37 billion/year. This figure reflects the losses and costs resulting from fatalities, nonfatal injuries, and property-damage accidents.

Over the past 10 years, the federal government of the United States has assumed an expanded and more active role in the fight against traffic accidents. This new role of the federal government emerged as the direct result of increasing public and official concern over the rising number of traffic accidents. The fact that approximately 48 000 Americans were killed in traffic accidents during 1964 helped to trigger a sense of urgency that elevated traffic accidents to a major national issue.

It was in 1964 that a nationwide spot improvement program was instituted to deal with locations of high

hazard on highway systems receiving federal financial assistance. This program was based on the simple concept that the problems in highway locations that have a higher than normal accident experience could be corrected through the application of basic highway and traffic safety engineering techniques. Hundreds of hazardous locations were improved or corrected with a relatively small monetary investment.

The original spot improvement program is now referred to as the Highway Safety Improvement Program. Its objective has been expanded to include the correction of high-hazard locations, the elimination of road-side obstacles, and rail-highway crossing improvements. The program now extends to roads outside of the federal aid system.

In the 1940s and 1950s, the U.S. Congress placed almost complete reliance on the individual states to plan and conduct highway safety programs. The role of the federal government was largely confined to building our new Interstate system of highways and improving state highways in the national federal aid system. The Federal-Aid Highway Act of 1956, however, directed that a study be made to determine what action should be taken at the federal level to improve highway safety.

The study report made two specific proposals for immediate federal action. The first proposal called for establishment of a National Driver Records Clearance Center to identify drivers whose licenses had been suspended or revoked by the states. It was aimed primarily at drunk drivers and repeat violators. The object was and is to prevent bad drivers who have lost one license from crossing state lines to get a new license. This proposal was ultimately adopted and the National Driver Register Service was established within the U.S. Bureau

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of Public Roads. Subsequent reorganizations have now transferred this function to NHTSA.

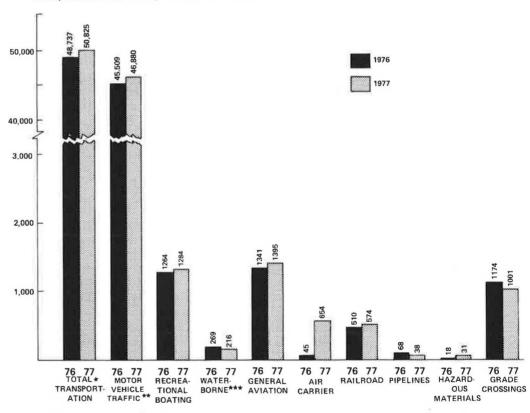
A second proposal related to establishment of an Interdepartmental Highway Safety Board to coordinate all official federal highway safety programs. The board, which represents all federal agencies that have highway safety responsibilities, was established by executive order of the President in 1960 and expanded in 1962. Until 1960, authority and responsibility for various federal safety programs had been divided between many different agencies.

In 1965, the Interdepartmental Highway Safety Board submitted a Special Report to the President on Federal Policy and Programs for Highway Safety. The report expressed the position that traffic accidents constitute a major national problem that respects no state or local boundaries and that the federal government must therefore accept the challenge for bold new policies in this area. In 1966, Congress enacted the first Highway Safety Act.

This discussion of history helps to set the stage for understanding where we have been in the United States and where we are trying to go in the federal-state management of the highway safety program. The Highway Safety Act of 1966 required that each state have a highway safety program. Each state has its own independent government that has police powers to act on matters of public safety. The Highway Safety Act also required that state programs be in accordance with uniform standards in such areas as driver performance, pedestrian control, accident records systems, accident investigation, highway design and maintenance, traffic control devices, vehicle codes and laws, emergency services, and systems to detect and correct locations of high hazard.

It is important to note that the act also designated the governor of each state as the responsible official. The congressional conference report on the act clearly stated that the federal government can and must assume a position of leadership in this field. The actual working programs, however, must remain in the hands of the states.

## Transportation fatalities by mode, 1976-1977.



- \*Does not include waterborne transportation fatalities.
- \*\*Based on a 30-day fatality definition.
- \*\*\*Data are kept on a fiscal-year basis; FY 1976 data cover 15 months (FY 1976 and a transition quarter).

Source: National Transportation Safety Board



- 1 An improperly installed guard rail can serve to trap a vehicle and direct it into a parapet or other roadside hazard.
- 2 A different type of guard rail, properly anchored and designed to deflect a vehicle.
- 3 The tragic consequences—one occupant killed and one seriously injured—of a collision with the improperly installed guard rail



Those who opposed increased federal activity were fearful that it would erode the traditional authority and responsibility of the individual states.

The act was passed in 1966. Several subsequent facts and figures are significant. While motor vehicle traffic fatalities rose from 1976 to 1977 by about 3 percent, there has been an encouraging reduction of 13.3 percent from the 54 000 fatalities recorded in 1973. The national maximum speed limit of 88 km/h (55 mph) imposed by the U.S. government in 1974 to conserve energy appears to have contributed to the reduction in severity of traffic accidents, which has resulted in a substantial drop in the number of fatalities and severe injuries.

Most highway safety organizations in the United States are confident that adoption of the 88-km/h speed limit, along with improved automotive safety devices, and new highway safety programs in the states and local communities are reflected in the lower fatality rate.

It is not known precisely how many vehicle defects contribute to accidents. The lack of complete and accurate accident investigation data has hampered studies in this area. At the same time, the vehicle is a very important element in our highway transportation system, which involves roads, vehicles, road users, and the interaction of all three.



In 1977, there were nearly 144 million vehicles registered in the United States. In that same year, federal requirements for compliance with motor vehicle safety standards resulted in the recall of 12.6 million vehicles by vehicle manufacturers to correct safety defects. This 1977 figure brings to nearly 65 million the total number of vehicles recalled since 1966, the year the Highway Safety Act was passed into law. Defects ranged from those in steering and braking systems to possible hazards associated with vehicle fuel tanks. Obviously, the vehicle itself is not being neglected in efforts to improve motor vehicle traffic safety.

Several recent developments may have a profound effect on the future of the national highway safety program in the United States.

Program evaluation is a vital function in the good management of any safety effort. After 10 years of operating under the Highway Safety Act of 1966, Congress mandated in 1976 that the Secretary of Transportation shall, in cooperation with the states, conduct an evaluation of the adequacy and appropriateness of all uniform safety standards. This evaluation did not include motor vehicle safety standards. In addressing this mandate, DOT undertook a broad reevaluation of the national highway safety effort. The reevaluation was intended to answer the questions: Where have we been? Where are we now? Where are we going in the future?

As part of this reevaluation, the Transportation Research Board was requested to convene a study conference on the Future of the National Highway Safety Program in the United States. The participants in this study conference represented all major segments of the national program—government organizations, universities and research groups, industry, professional associations, and private-sector organizations.

Over a period of 3 days, the conference participants explored and probed all aspects of the management of the federal-state highway safety program. Several important recommendations emerged from the study conference:

1. The present national highway safety program is structured around 18 highway safety standards detailed by DOT. While the standards have served a very useful purpose in achieving uniformity, it was the consensus of the conference that states should be given more latitude and flexibility in developing their highway safety programs aimed at specific state needs. Federally funded programs, nevertheless, would have to comply with uniform national requirements in such areas as rules of the road; driver licensing and titling; traffic control devices; highway design, construction, and maintenance; and traffic records systems. Obviously, uniformity between and among the states will remain as a national goal. We have certainly not yet achieved it in all areas, but it will be a primary objective. A second condition for federal funding of state safety programs would require approval

of procedures used by the state to plan and evaluate its program efforts.

- 2. State governors should remain responsible for the administration of state highway safety programs. States should be encouraged to concentrate program planning and administration within a single highway safety agency in order to better coordinate all state programs.
- 3. The federal government should continue to rely on the states to aid the highway safety efforts of local cities and towns and require that a minimum of 40 percent of federal funds granted to a state be used by these local communities.
- 4. In the area of research, the conference report recommended that the federal government should take measures to encourage the dissemination and expedite the implementation of research results. In a related area, the report recommended that a higher priority be given to programs to develop technical and administrative skills in highway safety.
- 5. One other recommendation deals with privatesector involvement in the national highway safety program. The report recognized the need for government and private organizations to work more closely together. There is a growing awareness that significant highway safety improvement must be based on strong official action backed up by active and organized citizen support.

These recommendations, and others, were later incorporated in a TRB Special Report, submitted by the Secretary of Transportation to Congress. The Highway Safety Act of 1978 reflects many of these proposed changes in the direction of the national program.

Those of us engaged in highway transportation safety in the United States are not satisfied with or complacent about past achievements. This explains why program evaluation has high priority.

So long as motor vehicle traffic accidents claim nearly 50 000 lives/year and the societal costs of all major vehicle accidents amount to \$37 billion/year, there is no room for complacency.

Any new direction in our national highway safety effort will undoubtedly include strengthening and improving state and highway safety programs, continued and perhaps even increased enforcement of the national 88-km/h speed limit, and requirements for the installation of occupant restraint systems in motor vehicles.

I do not presume to be able to look into the future. I believe, however, that the field of accident prevention in general, and the field of transportation safety in particular, has entered a new and encouraging period.