

FEDERAL HIGHWAY ADMINISTRATION

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Remarks by F.C. Turner, Federal Highway Administrator, U.S. Department of Transportation, at the 48th Annual Conference of the Western Association of State Highway Officials, Phoenix, Arizona, June 3, 1969.

It is a very real pleasure for me to be here again among so many familiar faces and friends. I always look forward to the opportunity to meet with WASHO, because this group more than any other that I know, believes in plain talking. I have always heard that that's what friends are -- people you can level with.

A recent episode in one of the more popular daily comic strips pointed out that teenagers want to tell it like it is; old-timers like to tell it like it was; and ministers like to tell it as it should be. I'd like to do a little of all three here today on that most important subject of highway safety.

First, to tell it like it is. During the year since we last met, there have been some 14-million motor vehicle crashes on our streets and highways. Out of our total population, one out of every 50 was injured, and one of every 3,675 was killed. . a total fatality figure in 1968 of 55,500. Some 10,000 persons are being injured every day. The direct annual cost to the nation of all this damage exceeds \$25 billion.

In short, while we are a nation now being aroused by the issue of violence and crime, we seem to be apathetic about the greatest form of violence of all...highway crashes. We are dismayed -- as well we should be -- at a figure of 14,500 young men killed in Viet Nam last year. But we are indifferent to the fact that we are killing that many Americans every three months here at home. Highway crashes have killed more Americans than all our wars combined, and are the leading cause of death for young people between the ages of 16 and 24. Some 46,800 young men were wounded in Viet Nam last year... wounded seriously enough to require hospitalization. But we regularly injure that many in only five days on our streets and highways, week after week after week.

These figures delineate a problem of such magnitude that one would think it would be sufficient to motivate an emergency national program to cope with the losses. But while the nation spends \$750 million per year for tobacco subsidies, and \$35 million this fiscal year for conservation of migratory birds, we must fight to get appropriations of \$26.5 million for the current fiscal year for the safety work of the National Highway Safety Bureau. Granted that this is only a part of the total highway safety effort, even that amount is hard to come by.

Nevertheless, we are making progress. Secretary Volpe has

gone on record that he intends that his department and his administration will place the highest priority on transportation safety. As you know, we have developed a comprehensive national program to help us deal with this problem, and I want to address my remarks to some particular aspects of that commitment. I want to stress two words, comprehensive and national. Notice that I did not say Federal.

The Highway Safety Act of 1966 means different things to different people. Its passage meant to some a Federal takeover of highway safety programs. To us, it meant exactly what the Congress envisioned -- a National program with the Federal government providing standards for the guidance of States, with some assisting in financing, but a program to be administered by the governors of the States on a partnership basis, and with full cooperation of their local communities. A half-century of experience with the Federal-aid Highway program and two amd a half years of experience under the 1966 Safety Act have shown us the wisdom of this approach.

The States, as well as other agencies, participated fully in and contributed substantially to the development of the 16 highway safety standards now in effect. Again, the States were fully consulted and participated in the development of the detailed guideline manuals

that have been issued to aid the States in carrying out their individual programs to meet these Standards.

But even more important...and this is one of the most encouraging signs of progress...the States have not waited for the Federal government. Most of them have moved ahead on a broad front, introducing, fighting for, and passing necessary legislation, expanding and improving programs, and funding new efforts.

In short, what is developing is a truly national program which distributes the responsibility for highway safety through every level of government. The Federal role is one of leadership, encouragement, and technical and financial assistance. The basic responsibilities, however, for the safe operation of highway traffic, and for the control of drivers, vehicles, and highways continue to rest with the States and their local subdivisions. This is as it should be, we believe. But having said this, we must in all fairness add that if the States and the local communities -- with this kind of leadership, encouragement, and assistance -- fail to carry their share of the burden, then the situation might not remain thus, regardless of how much we might want to maintain it.

Congress itself issued a caveat in passing the Act, when it said...

"This Congress is not interested in having the Federal government issue drivers' licenses, or title and register motor vehicles, or conduct driver education courses, or manage highway police forces, or sit as traffic courts, or operate any of the other safety programs here outlined for the States. But if, with the leadership and financial assistance which this legislation will provide, the States do not act promptly and decisively, some future Congress may very well find itself faced with just that alernative."

That...as they say...tells it like it is, and puts the responsibility very plainly on the States. I recognize that within your States, this program responsibility is with the Governor. You should also understand that demonstrable progress in the area of highway safety under this program (even though it may not be under State Highway Department control) is a prerequisiste to the continuation of the Federal-aid highway construction program which is under your control. You therefore have a pretty strong concern in seeing that the program is successful in your State.

The Act requires that each State must have a broad highway safety program...showing how it is implementing the existing Federal standards...and this program must be approved by the Secretary by the end of this calendar year. Failure to have such an approved program in your State can result in the loss of 10 percent of your State's Federal-aid highway funds, in addition to the loss

of access to any highway safety funds under the Act itself.

The Act recognizes that not all States will have strong programs in all 16 Standard areas. Some will be leaders in particular program areas and weak in others. What we are asking is what are you doing, what progress have you made, what plans do you have for the immediate future for strengthening those programs which need it?

To date, we have received program submissions from every State. We have given preliminary evaluation and conditional approval to the programs of 44 States, pending the submission of further information. And we have rejected or sent back 5 State programs as being insufficient and requesting additional evidence of progress.

This organization, like its counterparts in other sections of the country, and like its big brother, the American Association of State Highway Officials...is not a Johnny-come-lately to the field of highway safety. It is not a novelty with highway engineers and administrators that the safety of the highway user has highest priority. This is a matter of record as well as a requirement of law. As custodians of the nation's highways we are neither ignorant nor indifferent in the areas of safe highway design, construction, maintenance, or operation.

We have long recognized that the solutions to the highway safety problems will come in bits and pieces...not in one glorious burst of light; that there is more to the problem than safer drivers; or vehicles; or highways; that payoff comes from joint efforts in all these principal areas. That is why a major portion of our research in past years has been directed to determining and defining those vital dimensions of safety that have made our modern highways the safest in the world.

It was with the motorist in mind that we long ago undertook studies to determine adequate sight distances to provide safety for passing, and stopping distances for various speed and pavement conditions, and all of the many studies to determine the values required for the safe geometric and structural design of highways. We also recognize that today's highways must be designed to accommodate erratic driving performance and unusual driver behavior to the extent practicable. And we are adjusting our design processes to do that.

All this is not to say that we have not made errors. It is not to say that there is still not much to be learned about this transport system which can make it much safer. We must take whatever steps are necessary to assure that both new and reconstructed highways are designed and built with the highest safety standards in mind. We are making every effort to accomplish this in the Interstate system.

Admittedly we have not always been able to achieve an absolute uniformity in design features...as clearly demonstrated by hearings before the Blatnik committee on roadside safety, and the more recent hearings on traffic signs and signals.

We have programmed about all of the new freeways that our major cities will likely require. When they are completed... and even while drawing near to the day when the entire Interstate

System will be completed, we must concentrate more on improving the existing road networks, which will continue to carry some

80 percent of the nation's traffic. We recognized this need several years ago, and as a result developed the spot improvement program begun in 1964, which has become an extremely active and effective safety effort.

Since the spring of 1964, work has been completed or programmed on about 5,000 separate projects using Federal-aid funds. The estimated cost of these projects is roughly one-billion dollars... about half of which was Federal-aid. In addition, the States have reported more than 15,000 projects financed solely with State funds in the amount of more than half a billion dollars.

We have just issued new guidelines for this special program, which though already underway, meshed very well with the Federal safety standard Number 9, dealing with Identification and Surveillance of Highway Accident Locations, which was issued under the Highway Safety Act of 1966.

Even a cursory study of present and future highway needs makes it obvious that we just do not have the funds necessary to rebuild or correct all of our Federal-aid system at once.

In fact, at present rates of funding, it would take us some 40 years to bring the entire Federal-aid system up to today's standards by which time the ealier improvements would be obsolete. We must, therefore, carry out this upgrading program on a spot basis... exerting more effort to pinpoint bad or unsafe features and locations, and put the maximum amount of funds possible in a program to eliminate them.

Our new guidelines place a greater emphasis on the detection of the more hazardous locations and features, because to identify these becomes more complex as the more obvious accident spots are eliminated. The modified safety program asks, as a minimum, that the following things be done on a continuing basis:

First, the establishment in each State of a field reference system for identifying the location of individual crashes, such as mile reference posts, map coordinates, or other systems.

Second, a traffic records system with the ability to correlate collision data with information on the vehicle, driver, and highway -- and including the ability to correlate accident experience with existing

geometric features and traffic characteristics at specific locations.

An ultimate objective of this system should be to help identify causative factors in highway crashes.

Third, a procedure for identifying and reporting hazardous elements and locations based on accident analysis. This will involve the analysis of actual crash experience at specific locations.

Fourth, a system of ranking proposed safety projects based on the potential for reducing the number and severity of accidents, so that high-yield improvements will be programmed first. This would include a regularly scheduled review and revision of rankings or priority lists.

And fifth, a before-and-after evaluation program for analyzing types of hazardous conditions in relation to types of improvements. This will improve our techniques for identifying and scheduling improvements. These activities will have a direct bearing on the State's compliance with Standard 10 on Traffic Records, and may well fall to your responsibility in the State Highway Departments.

Several States are now using computers to identify hazardous locations and features, and using ADP techniques for correlating the location of such locations and design features, traffic volumes, and operating characteristics.

Aside from this program, however, we must demonstrate our concern and ability to fulfill our responsibilities to eliminate all major hazards in the highway environment. I refer to the types of improvements pointed up for us in the Blatnik Subcommittee hearings last year on roadside safety, and in the current hearings on traffic signs and signals. These subjects are the particular concern of Highway Safety Standards 12 and 13 on highway design, construction, and maintenance, and traffic control devices.

We must continue to work for much greater adherence to the uniform manuals, in order to eliminate confusing and conflicting signs and route markings. The experience of the State of Texas is already showing us the benefits to be gained from wider use of the break-away design for roadsigns and light posts and simple impact absorbing devices. We have learned much in recent years on the subject of more effective guardrail construction and installation. There are new techniques and especially new materials which hold promise in our efforts. These include new crushable metals, plastics, even new types of concrete, plain old oil barrels, and a lot of other things, both old and new. Why for instance, do we not use sections of woven wire mesh fencing as decelerants between divided roadway bridge openings, or to catch an out of control vehicle on a steep fill slope?

Our continuing goal -- as it has been for these many years -- must be to assure that we are designing, building, and upgrading

existing roads to the highest safety standards practicable within the limits of present knowledge, techniques, materials, and funds.

If you do not have a maximum effort now underway in the Spot Safety Improvement Program in your State, I urge you to do so when you return home from this session. Narrow bridges, unprotected bridge rail ends; hazardous, unprotected overcrossing structure piers; sign mounts; heavy gore-mounted signs; guard rail ends, slippery road surfaces, surprise location curves, restricted sight distances, trees, and utility poles, and a long list of additional items can all kill or injure the motorist if he leaves the intended travel way -- as many will do unintentionally every hour of the day and night.

While I'm the first to admit that he shouldn't be driving his vehicle off of the designed surface and shoulder areas, the inescapable fact is that he does do this -- and we should use our effort to protect him against his driving error to the extent that we can do so. We must administer and manage the use of our highways in a way to provide a lot of service and safety with the funding available to us.

That funding is not now, and is not going to be in the future, large enough to permit the needed reconstruction to a proper current standard of all the many hundreds of thousands of miles of roads under our responsibility. There is only one way to stretch our funds

and that is to pick out the many spots, or short sections, or individual items that are in need of attention and concentrate on these, while total reconstruction awaits its place in the priority-of-needs-line to receive funding, which will permit relocation or rebuilding to today's or tomorrow's accepted design standards of maximum safety and service.

While this is not a new goal to the members of WASHO, it is one that requires our constant attention, re-examination of program items, a large measure of ingenuity, and the rapid introduction of all available new developments in the state-of-the-art. I ask you to devote your energies to this end in the coming months even more than you have in the past.