

HIGHWAYS ARE HAPPY WAYS

Remarks by Francis C. Turner, Director of Public Roads,
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Transportation, prepared for delivery at a luncheon
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Most of you I'm sure have seen a sign at the end of a highway construction project in the last few years which carries the legend: "Your Highway Taxes At Work." It's not advertising by highway engineers, but it is put up because the law requires our Federal-aid highway projects to be identified by a sign describing it as such and telling how much it costs. The quoted slogan is not set out in the statute and so we might appropriately change it to read "Highways Are Happy Ways," and that's what I want to talk about today with you. It is the title and lead words of a popular song of several years ago. I believe the next part of the song phrase was "When they lead the way to home."

Well, most roads do lead the way to home, for that is the beginning or the end of nearly all of the trips we make by the tens of millions every day in the family car, or the public bus. They are trips to our jobs, to visit friends, to attend a meeting such as this, to pay a sick call at the hospital, to take the kids to school, to go to the store, and for any of the innumerable purposes for which we hop into the family car every day.

Now we collectively make an enormous number of such trips constantly and really don't think much about them

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because as a rule they are short and routine and so they don't impress us very much. But the average number of trips made by the members of each household in America every day is about 6, for an average length of about 6 miles. All these put together, combined with the travel by commercial vehicles, then make a daily total travel that approximates nearly 3 billion miles. If we assume that the average life of a car before it is finally junked is 100,000 miles (and this is the correct figure), then if your arithmetic is quick and you haven't misplaced a cipher, you can calculate that we drive enough miles every day to wear out or consume 30,000 of our 90 million automotive vehicles every day. Preposterous, you say, but the figures are correct, because that is the number of new vehicles which are manufactured and sold every day in this Nation -- including Saturdays, Sundays and holidays.

The Apollo Astronauts have just returned from an 11-day, 4 million mile trip through space at the fantastic speed of about 18,000 miles per hour and we salute the accomplishment and marvel at it in total disbelief because it is just too dramatic for most of us to comprehend. But the total miles these brave men have traveled amount to about the same number of miles which you and I, as Mr. and

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Mrs. Average American, generate in our autos in only 2 minutes time -- or about the time it has taken me just to say these two sentences to you.

Now, I haven't made up these figures just to test your mathematical ability or to use as superlatives and exaggerations; they are the actual measured dimensions of our highway use today. While you don't think much about your own daily 36-mile contribution (as an average), put yours together with all the others like yourself and the other users and they reach the figures I have just recited to you. We are counting and observing traffic at several thousand stations all over the United States every minute of the day and night, year after year, or using other devices to measure highway usage, and then cross-checking the results against other measuring processes available to us. Thus we know with a high order of accuracy who, where, and how our Nation's highways and streets are being utilized.

I have used these introductory remarks to show you why we need the highway and street system we have, and why we constantly need to enlarge, extend, improve and maintain it. The figures I gave you are just this year's -- 1968 figures, and they are increasing at about 4-1/2 percent compounded in each succeeding year so that we have half

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again as much traffic in this 1968 year as we had only 10 years ago, in 1958. If you have been thinking that traffic seemed to be getting heavier each time you made a trip, you were quite correct in your impression. And it is going to continue to grow, according to every sign, every study, every forecast that we in the highway business know about. The growth rate is almost twice that of our population. Obviously the two growth rates must eventually be about the same, but that date seems to be beyond the lifetime of most of us in this room, and certainly so many years in the future that each of us will probably buy and wear out several new autos before there is much slackening of the trend.

Therefore, we have to have a massive highway program to satisfy the demands made by these 100 millions of our customers who just take for granted that "somebody" is going to provide the highways and streets on which to drive their vehicles. I represent one of those many "somebodys" who generally unbeknownst to most people are trying desperately to stay ahead of -- or just even -- with the traffic demand, and avoid being run over by it. The job is difficult, but I believe that by and large we are making reasonably acceptable progress in our endeavors.

It's a big time operation. For example, in the time interval occupied by our meeting here today, my own

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organization will do about \$5 million worth of business -- receiving from the motoring public and paying out for construction of new projects about that amount of your money. And I emphasize that none of it comes from your income taxes. All of our funds come from the highway user as he uses the highway, in the form of such things as the gasoline tax. Only the person who uses the road with his vehicle pays this tax and he pays to use the road in direct ratio to the amount of that use. I consider it one of the fairest tax structures that we have. It and other similar use taxes such as that on oil and tires are also related proportionately to the amount of use made by the individual of his highway system. These revenues are earmarked by law for highway construction only -- they cannot be used for any other purpose. Likewise, no other revenues, such as your income tax for example, are used for this highway program.

The Federal-aid highway program which I represent, as far as the Federal side is concerned, is more than 50 years old. The Bureau of Public Roads itself is much older -- in fact we observed its 75th anniversary just a little over two weeks ago, on October 3. It began primarily as a research and development agency and it started building so-called "object lesson" roads long before there was any Federal-aid program.

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The first Federal-aid Road Act, enacted in 1916, inaugurated the Federal-State highway program with an appropriation of \$5 million. This year the program, administered cooperatively with the States, amounts to an authorized \$4.8 billion. The Bureau's basic function is to represent the Federal interest in administering the greatest single construction program in history -- the building of the 41,000-mile National System of Interstate and Defense Highways, and a greatly expanded program of other highway construction. I want to emphasize that this is not a Federal program but a Federal-aid program, conducted under a Federal-State partnership arrangement.

The States choose the systems of routes for development, select and plan the individual projects to be built each year, acquire the right-of-way, and award and supervise the construction contracts. The States pay for the work as it progresses and then claim reimbursement from the Federal Government for its share of the cost. The Bureau's function is that of guidance, approval and control in each succeeding step of the process where Federal-aid funds are involved. The States pay the entire cost of maintaining the highways which are built with Federal aid.

Under the controlling Federal highway legislation, each State is expressly required to have a highway

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department organized and equipped to discharge its duties to the satisfaction of the Federal Government. I am proud and happy to say that there has never been even the slightest question on that score as far as Texas is concerned. It has historically had an efficient and progressive highway department, among the finest in the Nation, and I salute them here today and congratulate you and your good fortune in having such a fine organization to serve your interests here in Texas.

If I have indicated that the Bureau of Public Roads is merely a checking and supervising agency, I want to dispel that notion. We have many other activities -- planning, research and development, safety, highway esthetics, special urban problems -- all these have grown in size and scope along with the growth of the construction effort. The Bureau is quite properly concerned with the total implications of the program and its impact on human and social values, and does not confine its interests just to the construction of highways.

I make this point because highway engineers are sometimes accused of having no interests in the realm of human values except lowest cost and the shortest distance between two points. This is sheer fantasy, but we do have an obligation to keep in mind that the basic function of

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highways is to move persons and goods safely and efficiently. And this in itself -- providing "happy ways" -- is a human value of a high order.

We have become so utterly dependent on highway transportation in this country that we are inclined to take it for granted and to forget how great that dependence is. Actually, if all highway transportation were suddenly suspended, the whole structure of our civilization would fall apart. Even if you don't drive a car your dependence on the motor vehicle is not greatly lessened. The highway vehicle delivers the milk and dozens of other commodities. It picks up the garbage. It moves the police and firemen; it provides hundreds of other vital services, both routine and emergency, that no other type of transportation can perform.

As much as 95 percent of all travel in the largest cities is concerned with trips that are almost entirely dependent on the private automobile or taxi since they are of a type which neither rail nor bus transit can accommodate. About 15 percent of all downtown trips are made by trucks and other commercial vehicles and these are obviously dependent on the highway. Other examples of this type of dependence are:

Persons who use their cars in their work, such as salesmen, physicians, repairmen, servicemen and the like.

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Persons who need to drop others off along the way -- children to school, or the wife or husband to another job location.

Those who come to the downtown district from outlying areas not well served by any type of transit.

Those who prefer to use their personal cars (the great majority) regardless of the availability of transit.

Out in the rural areas, motor transportation has been one of the most important forces transforming farm life in the past half century. The isolation that was once characteristic of the farm has been largely eliminated by the auto-highway combination, and improved mobility has brought greatly-improved standards of living to the rural population. Farm families now have more opportunities to enjoy the various types of cultural, social and educational activities that are available in the urban centers.

Modern highways, especially freeways, enable faster, safer and more economical delivery of farm and ranch products to the markets. The farm-to-market road does not end at the city limits. It continues over the freeways and other city arterials to the end of the haul -- usually in the city centers and at the produce and market areas. Ninety percent of all livestock and 66 percent of fruits and vegetables are delivered to market by truck.

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The dependence of industry on highway transportation is well known. Industry follows highways, particularly freeways, with a resultant increase in land values. A survey of 4,000 companies which have moved, expanded or opened branch plants in recent years showed highways to be the top consideration in the selection of a site. The Interstate System in particular is of vital importance as part of the production, assembly and distribution lines of business and industry as well as the lifelines of national defense.

The Interstate System is a whole discussion in itself and I'm sure that all of you have become familiar with the ease and comfort of driving on the modern freeways that compose it. It is linking together more than 90 percent of our cities with populations of 50,000 or more, as well as many smaller cities and towns. It will serve well over half the urban and almost half the rural population of the country. When it is completed in the mid-70's, the Interstate System -- including little more than 1 percent of the Nation's total road and street mileage -- will carry 20 percent of all the country's traffic.

Its greatest contribution to the betterment of our society lies in the benefits it will pay in terms of savings of lives, injuries and money. Our surveys indicate that

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highway-user benefits of the Interstate System will total some \$11 billion during the first year after the System is completed. These dividends will result from lower operating costs, time savings, accident reduction, and decreased driving strain. Most important of all, the safety features of the System are expected to save at least 8,000 lives and countless injuries.

I will have a further word on highway safety later on but I want to mention some of the other social implications of highways that have been given increasing attention in recent years. Highway beautification, although by no means a new development, has engaged a great deal of attention on the part of the State highway departments and the Federal Government. In planning Federal-aid projects, a major effort is made to achieve pleasing appearance and harmony with the environment. Landscaping is required on all Federal-aid construction, and Federal-aid funds are also being used to build roadside rest areas and scenic overlooks. These are tremendously popular with the traveling public. Maximum efforts are made to avoid disruption of established business districts and residential neighborhoods, parks and recreation areas, and scenic and historic sites. In the urban areas we encourage the joint development of freeways with other community needs -- housing, parking, recreational facilities --

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so that several purposes can be served at a minimum expenditure of funds and minimum use of valuable space.

In brief we are trying to make our highway system attractive, as well as safe and efficient. Pleasing appearance, safety and efficiency are certainly prime attributes of happy ways but in some cases there is a problem of compatibility. We have the matter of roadside trees, for example, which has become something of a controversial matter, largely because of misunderstanding. In 1966 nearly 18,900 persons died in crashes of vehicles which left the roadway and struck fixed objects, including trees and manmade roadside obstructions. This was about 34 percent of the highway toll for that year.

In view of this alarming problem, the Bureau adopted a general policy requiring the removal of trees of 4-inch diameter or larger from an area about 30 feet from the edge of the pavement on new Federal-aid highways. However, there was another clause which did not receive proper attention. This provided that exceptions can be made if preservation of trees is of primary importance.

Because of the apparent misunderstanding of the policy we issued guidelines for preserving large trees of historic, scenic or esthetic value nce then the tree removal

program has been carried out more judiciously and with due regard for those values which may be involved in addition to safety. We believe that highway safety and highway beauty can and must be compatible. Obviously, however, if there is any conflict between the two, the value of a human life must be the deciding factor.

Nearly 2 million persons have lost their lives in highway crashes in the 60 years of the automotive age. In each of the past two years traffic deaths have occurred at the rate of more than 1,000 every week and injuries at the rate of 10,000 every day. We know that collisions with roadside trees make up a relatively small proportion of these totals but our efforts must be directed to the removal of all types of hazards, not just the worst ones.

There is one type of hazard that is truly lethal and I want to mention it in connection with the death toll of 53,000 last year and a probable similar number this year. While these deaths occurred and will occur on the highway, the big majority of them are not connected with any defect in the highway itself. Carefully documented studies show conclusively that alcohol is the dominant cause of this appalling tragedy of deaths and injuries in auto crashes on the highways. If we could -- or rather, if we would -- remove entirely the alcohol factor and quit mixing it with

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moving automobiles, these sickening annual statistics would be reduced immediately by about 75 percent -- perhaps even more.

I personally resent the continued statistical reporting custom which charges against my highways and streets, the large number of those alcohol-caused crashes which I feel should be charged to the alcoholic beverage industry of the Nation. I believe it is past time when these deaths should be charged against the activity which is responsible for them, rather than against my fellow highway engineers and administrators by being listed in all the usual reports as "highway deaths." Correctly they must be labeled "alcohol deaths", even though many of the caskets contain the remains of wholly innocent victims of another's drunken driving or at least driving under the influence of alcohol.

The Fort Worth Women's Club, like similar clubs in cities across the Nation, is a substantial voice in the community and I invite you to consider this tragic situation and to do everything in your power to give the drinking driver problem the attention it deserves. As long as drinking and driving are a socially acceptable combination, we cannot hope to reduce the toll of deaths and injuries occurring on our highways.

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Finally, while we do not have perfection as yet in our highway program, we strive earnestly toward that objective, and in so doing I am confident that there are enough good points about the program that people of this Nation want it to continue because they know that its benefits far exceed its disbenefits. Any minuses charged against the auto-highway combination must be weighed against one great plus: that this combination has contributed certainly as much -- perhaps more -- than any other factor to the material betterment of the average American's way of life and thus to the formulation of the social order in which we live. I, therefore, say with complete confidence that highways are happy ways of the future as well as of the past and present.