

TWELVE YEARS OF ACCOMPLISHMENTS AND PROGRESS

Remarks by F. C. Turner, Director of Public Roads, Federal Highway Administration, U.S. Department of Transportation, before the First General Session, American Association of State Highway Officials, Minneapolis, Minnesota, December 3, 1968

Since President Eisenhower signed the Federal-Aid Highway Act of 1956 we have provided about 10 trillion miles of transportation over the highway system of this Nation, or the equivalent of more than 20 million round trips to the moon. During the same period we have moved over 4 trillion ton-miles of commercial freight to service the economy and meet the needs of our 200 million people.

Transportation by highways accounts for more than 8 out of every 10 dollars of the total investment in all types of transportation in the U.S. Of the outlay for the movement of intercity freight, more than 7 of every 10 dollars goes to the movement by highway vehicles. Likewise, 9 out of every 10 dollars spent for intercity passenger movements goes for highway travel by cars and buses.

This is another way of demonstrating the importance of the highway mode of travel. And people and shippers of goods choose this mode because it suits their needs best, it has a competitive advantage or it is their choice regardless of cost or other considerations. Yet we hear much talk about how highway movement must be throttled, curtailed, contained, subordinated, balanced, controlled, or have various other things done to it. But what would be put in its place to move the people and freight on the scale just mentioned? I believe that the basis for many of these comments is just plain enviousness - envy over the success and accomplishments of a program that is well administered, soundly financed, manned by trained

professionals, solidly backed by the public, and marked by tangible demonstrations of getting done some of those things that are so sorely needed as we build for a better Nation. For we as highway administrators do have just such a program and we can rightly be proud to be a part of it. I want therefore to salute you with my compliments for the good works of the men and organizations which you here today are representing. Not many people will say an audible "Thanks" to you, but I surely do, and I know that the average citizen does too, even though we don't always hear it; and that is what I want to talk to you about this afternoon.

I want to talk about the public monies under your control now running at a rate of \$10 billion a year for capital investment alone which you have prudently and capably invested in highways to better serve our public that now travels more than a trillion vehicle miles a year and ships by highway over 400 billion ton-miles of freight annually. And this you are doing with so few questions raised about personal and official integrity and old-fashioned honesty, that the few cases can literally be counted on the fingers of the hand. The Federal highway aid funds handled in each year now exceed the total budget of each of seven entire Cabinet departments; and the Bureau of Public Roads budget for Federal-aid highways is three times that of all the rest of the Department of Transportation put together.

You now have under traffic almost 27,000 miles of the Interstate System with another 6,000 miles under construction and still another 8,000 miles under design and right-of-way acquisition. Out of the 41,000 miles of the System, only 2 percent remains to be put into the active pipeline, and this holds true in both the urban and the rural areas. So those

who are now saying that the program has been forced to a halt at mid-point by a ground-swell of opposition are just not reading the facts. Furthermore, in the 12 years since 1956 another 225,000 miles have been reconstructed or newly constructed on the ABC systems including much urban work, and you have improved another 400,000 miles without any Federal fund assistance. Additionally, a substantial mileage has been improved by the Bureau itself under our own direct construction program in the National Parks, Forests, and other Federally-owned reservations. Yes, there are a few places, literally a handful only, however, and totaling less than half a percent of the mileage I've just mentioned, -- where there are some delays occurring. Perhaps it should be realized when it is implied that the entire program is being bogged down by public dissent and non-acceptance, that you are completing and opening to traffic every 10 days with clocklike regularity just about as many newly improved miles as all of the so-called "mileage in trouble." A finished road at ribbon-cutting time is a thing of satisfaction not only to you who create it, but also to the public which anxiously awaits your completion of many more miles of the same. Sometimes we seem to forget that we now have 83 million automobiles registered in the United States, and that the owners of these vehicles pay taxes, and vote, and have opinions which run strongly toward an expanded and improved road network.

There are far more supporters for the program which you administer, than there are opponents. So keep up the good work and do not become discouraged; for if the total public body-politic did not support the highway program, you can be sure that their wishes would be reflected in votes by their representatives in the Congress. But instead of disapproval,

the program has received overwhelming majorities, and quite frequently, the unanimous support by the Congress through more than 50 years.

Your work has made these 10 trillion miles of travel easier and safer for your customers, now more than half the total population who can drive to work, to the airport, to the shopping center, to church, to school, to see Aunt Susie, or just to drive around for the plain heck of it to see the countryside, the rest of the city, or just to enjoy the emotion of motion itself. Sadly and tragically a lot of the customers have gotten themselves killed or injured in the process.

It is past time, when any action on our part, or inaction, can be allowed to continue as even a possible cause for any of these fatalities or injuries. In a 1,000 ways, you are making substantial contributions to make driving and use of our highway system both safer and more efficient.

Many long sections of highway have been completed to make possible long continuous trips of a whole day, 2 days, and even three days on fully completed freeways with their safety, convenience, and efficient traffic service characteristics. Travel speeds in nearly all urban areas have markedly increased with major highway improvements, even during rush hours, while traffic volumes have been doubling. Highway service to and from airports and other inter-connecting travel modes has increased in both speed and capacity in the vast majority of instances, with the most frequent causes of travel delay now occurring in those parts of a total trip which are not within the area of responsibility of the highway people. We have expanded our previous area of interest and cooperative planing and development through improved coordination with and service to other transportation efforts, especially in the mass transportation direction in large urban areas.

Let no one forget therefore how far we have come since 1956 in every aspect of the road planning and road-building process.

You've also made great progress in the characteristics and applications of the basic materials that highways are made of -- and you've crossed new frontiers in alloys, plastics, silicones, lighting, signals, reflective and corrosion-resistant materials, along with testing methods that include the use of radioactivity and X-rays in determining roadway or material fitness.

Ability to plan your programs of needed highway improvements has increased through better travel forecasting methods related to land use and other community planning operations. You have made great strides in procedures to estimate travel and how to assign it to various modes; and how to determine when and where it will occur in order to better insure that the road is put in the right place and is of the right capacity; how to evaluate travel and highway ownership costs and to weigh benefits against "disbenefits;" and how better to coordinate with HUD, other modal agencies of DOT, Councils of Government, Regional Planning bodies and a long list of other agencies.

You have improved the design of the road needed to meet these planned transportation movements just as cars themselves have been improved, and model improvements and advances have been made in the telephone and the television set. The list of innovations or improvements is endless but I'll mention a few:

Single column cylinder bridge piers, permitting infinite combinations of skews and curves and super-elevation with box girders; better looking retaining wall faces; wider bridges and shoulders; more lateral clearance;

easier ramp connections; more and better guardrail; more and better median dividers; improved structural and load carrying capacity calculations; flatter and safer slopes and ditches; breakaway signs and light poles, improved lighting; skid resistant pavements along with methods to decrease or eliminate hydroplaning; enlightened designs to make your facilities better fit the adjacent neighborhood, and so on and on ad infinitum.

The Federal-State partnership, in the last four years, has invested some \$1.2 billion in spot improvements to make already existing highways safer for motorists. Nearly 18,000 of these safety improvement projects have been completed or programmed since the spot improvement program was started in April, 1964.

So far I have talked mainly in terms of physical advances but there have been many humanistic advances too. Equal employment opportunities -- without regard to race, color, creed or national origin -- are now written into legislation governing all Federal-aid highway contracts. Tremendous advances in wages, hours and working conditions have been recorded during these 12 years for the workers who toil to actually build and maintain our highways. Safety equipment and devices on both construction machinery and maintenance vehicles have shown constant improvement.

In the broader field of human values, you have given increasing recognition to the social and environmental impact of the highway program without forgetting at the same time that the principal purpose of highways is to move people and goods. Increasingly more equitable treatment has been given to those persons who necessarily must be displaced for the

benefit of the populace as a whole; and the present relocation payment program first established in the highway program will certainly become the pioneer model for all other programs involving people displacement, in both the public and private sectors of our economy.

Likewise, special considerations have been given on an ever-increasing scale to the protection of historical areas and natural scenic vistas, preservation of the natural landscape and its enhancement wherever possible, in the control of roadside blight and distraction created by billboard signs, auto junkyards, and other landscape blemishes even though these items are outside of our rights of way and not caused by our highway action. You have taken special measures to develop proposed plans in cooperation with the duly constituted public bodies responsible for administering fish and wildlife resources, and have spent considerable sums of highway funds for the preservation and enhancement of fishing stream areas and the protection of birds and animals in wildlife refuges; for archaeological and paleontological salvage; for the preservation of trees, and even for the increase of trees and shrubs through large scale landscaping efforts. You have created large numbers of wayside oases along the highway where the traveler can stop to rest and to enjoy a pleasant lunch, a cookout and even to walk the family dog -- who also gets tired of traveling just as do the kids. Yes, these highways you are building are being made responsive to a wide range of needs, desires, and viewpoints.

In specific terms, you now have over 6,800 roadside rest areas, which are so popular with our customers and 1,200 of these have been constructed during the past three years. In addition, you have acquired

5,300 scenic easements to preserve adjacent areas for esthetic purposes. And today, landscaping is included on all major Federal-aid highway projects as a routine, regular item.

You have drawn on the professional abilities of experts from other disciplines such as landscape architects, architects, sociologists, demographers, urbanologists, psychologists, chemists, doctors, lawyers, graphic display artists, academicians, and a host of others whose talent and training could be used to augment the training and expertise of your engineer types.

You have used and indeed have helped to pioneer, invent, develop, and adapt to your special purposes many of the new and exotic machines and processes, such as the computer, radio, telemetry, physics, lasers, infra-red imagery, aerial photogrammetry, nuclear reactors and devices, dataphones, data banks, automatic readout machines, automatic plotters, and even some byproduct offshoots from the space science creations.

You have adopted special measures to minimize air and stream pollution and erosion of the earth surface from the incisions which must necessarily be opened in which to plant these transportation arteries. But you have not left them as scars, but have developed ways to use them to help arrest stream and surface erosion from even their natural course, and more often than not have left a condition after construction far superior to that which you found.

These things and more you have accomplished as economically as possible and within the constraints of the general economic and budget requirements both of the Federal and your State governments. You have done this at a time of climbing prices for everything that we buy, whether

it be labor and services, or materials, or machines. By ingenuity, innovativeness, and sound management you have helped to keep the cost of all these works within reasonable bounds which your customers could properly afford and within their willingness to authorize for this purpose.

You have developed one of the soundest financing programs in existence by which to calculate, assign, and collect from the user his equitable share of the cost of the highway system in accord with his individual share of its use. The Highway Trust Fund in the Federal establishment, and similar type user financing arrangements within your States, have given the program fiscal stability to permit maximum utilization of resources and permit the long lead times needed for firm commitment of funds with which to assure that financing will be available to permit construction on a firm future schedule but without piling up a huge backlog of frozen cash which in the interim would have to be withheld from other needs of the overall economy. Because of the availability of information developed by highway managers over many years as a base, it has been possible to forecast with uncanny accuracy the revenues which could be anticipated with which to finance the highway program. It is a record unequalled in any other activity of this size and scope, either in the public or the private sectors of our Nation's economy.

All of these things have required excellent management, soundly administered from a background of experience in depth. But you have not remained static in this experience, for you have established some of the finest of executive management training courses carefully tailored to the needs of highway executives now in the chairs, and to those of their subordinates who will occupy the chairs tomorrow. Likewise training of all kinds for all levels of staffers required in the program has been organized

and given to tens of thousands of these members of the quarter-million highway team of this Nation.

As the Nation's top highway people gathered here within this one room today to consider how better to do an already good job for your customers, the American public, I commend and compliment you on an enviable record of accomplishment, even against considerable odds at times, but which odds are however just a part of the business of being a public servant. But you and I cannot afford to bask in an aura of self-satisfaction, however, for we still owe much to our customers and there is much more yet to be done.

We must continue to seek ways and methods to improve the product, to decrease its cost, to expand its benefits, to increase its level of service, and to fit it even more surely into the total fabric of our society and its goals. And we must participate fully in the setting of those public goals, for the personal mobility which we alone can provide is one of the value goals being sought in and for itself alone and transportation - more particularly highway transportation for which we are responsible - is one of the biggest influences which affect others of society's goals. Our goals must be interwoven into the setting and planning for goals of all kinds, and we must see that its effects and influences are known to and understood by those who are engaged in setting goals in other fields. If the strong molding influence of highways is not properly appreciated and understood by other goal-setters, then neither of us is likely to be able to reach our set goals. To do this we must be willing to work in cooperative endeavor with other interest groups to an even greater degree than

we have done in the past; and in the same way these other groups must work with us during the formulative stages of their programs. The best vehicle by which to accomplish this is by permitting them to participate in our plan formulations under the so-called 3-C planning process in urban areas and the joint development work which we have been pioneering, almost alone.

Looking ahead to the future as we must, we must be certain that our long range planning for a program of improvement after 1975 is done well and soon completed for presentation to the Congress to permit time for deliberation in advance of its authorization with needed lead time. Then bringing that larger plan down to more specific detail, we must strengthen and improve the 3-C planning process in each of the 233 urban areas of more than 50,000 population, and extend the concept even to smaller units as necessary. This element of our program is without question the foremost planning process in existence anywhere involving as it does land use planning in the shaping of our future urban areas. In my opinion, the planning process is the place and proper forum for expressions of public involvement and for citizen input to our program, rather than in the public hearings on highway corridor location and design as now is being done or proposed for expansion. This planning process must be translated into specific programs of projects to include all of the details of design configuration and construction detail to adequately reflect the desire for an efficient transportation service, compatible with its environment, functionally and esthetically acceptable to our customers both on and off the roadway, and economical in first and subsequent annual operational and maintenance cost.

We must continue to take an aggressive initiative in matters coming

within our competence and responsibility, which certainly embraces the total spectrum of highway transportation; and including its overall and specific planning, as well as its construction, management, and operation. The business of making a highway system is too important to each of the 200 million citizens of this Nation and to the world to entrust to untrained and inexperienced amateurs whose qualifications consist only of enthusiasm and an open mind that has been uncluttered with any prior experience. There is no doubt a place for this kind of contribution, but it is in research and "think-tank" advisory positions, rather than in policy-making and operational management places.

With the advent of a new Administration in January there will in effect be a new Department of Transportation, with new personnel and probably new policies. I perhaps will not be a part of it, because in accordance with custom, I shall be expected to submit a resignation to permit the new President to select his own Director of Public Roads. But I hope that the new Department will seek a truly balanced transportation system, not one weighted for or against one mode or another, but balanced to serve best the needs and desires of our people. I hope that the new policy will not include any artificial restrictions on highway travel such as are presently advocated by some theorists both in and out of government. I hope that the principle of non-diversion of highway use taxes imposed specifically for this purpose will be preserved intact. It was a long, hard struggle to get this principle adopted in 1956 and we must strongly resist any attempts to negate or dilute it now or to abrogate a moral commitment then made. I have said on many occasions that I am not against any other form of transportation because I know even better than most people that we will need all types to accomodate the desire and need for

mobility on the part of our rapidly expanding population and to provide them the choices they should have. What I am apprehensive about is what appears to be a growing tendency to try to force onto the public something else for the auto-highway mode of transportation, not as a choice but in substitution therefor. And I am apprehensive about the trend to substitute unilateral direction by one of the cooperators in this program, for the tested, tried, and successfully proven partnership arrangement established in the basic legislation of 50 years ago, the wisdom of which has been demonstrated in the interim, by many trillions of miles of increasingly safe and efficient highway transportation.

Yes, these 12 years have been challenging years for the State highway departments, for the Bureau of Public Roads and for the State-Federal partnership. I'm sure that the next 12 will be equally challenging and equally productive if we adhere to the principles which have brought such success and accomplishment since 1956. Thank you.