A Balanced Highway Improvement Program

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Even though I am speaking to highway engineers, the ramifications of this tremendous program are so great that I believe some of the non-engineering aspects of my talk may be helpful. At least, it will give you the advantage of the highway picture as we see it in Washington.

I want to express the appreciation of the American Road Builders' Association for the outstanding contributions made to the highway industry by Prof. Kenneth Woods and Prof. Ben Petty. I am hoping through an ARBA Highway Engineering Educational Foundation to make it possible for more professors such as these to take an active part in all of the activities of the industry.

I believe that one of the hardest things for all of us in the highway industry to recognize and appreciate is the enormous job that lies ahead of us. As a former Corps of Engineers officer who spent many years on big construction programs and as one who always looked upon the Corps as the biggest construction agency in the world, I was amazed to find out that, as of last July, the total money appropriated for River and Harbor work since 1827 plus the total appropriation for Flood Control work since passage of the Flood Control Act of 1936, amounted to only $6.5 billion or $2.0 billion less than is planned for expenditure during the peak year in this great highway program. We get so accustomed to talking about millions and billions that we are apt to forget how different they are. A million dollars in new $1,000 bills is eight inches high, but it takes a stack of flat new $1,000 bills 666 feet high to make a billion dollars. The Washington Monument is 555 feet tall.

The Federal Aid Highway Act of 1956 has given us a tremendous job to do and in the nine months since its passage, we have seen industry receive greater publicity and attract greater public interest than ever before in history. The road program and our recent Road Show put us in the national spotlight; in fact, we are on the spot. As an industry, we have said that we can produce the highways under an unprecedented accelerated long-range program and now it is up to us to make good.

Progress

I am often asked the questions, "How is the highway program coming?" and "Is it on schedule?" My answer is that it is coming along as well as I had expected it to, but not as well as a lot of people had hoped it would. Whether or not it is on schedule, depends a lot on whose schedule you are using.

Some of the states have already obligated all of their 1957 interstate funds and over 50% of their 1958 allocation. Other states have not obligated an appreciable amount of this year's money, but most of them are expecting to show great progress during the last few months of the fiscal year. I know from sitting in the Gore Committee hearings that it is the intention of certain members of Congress to insist upon uniform progress in all of the states so that a truly interstate system from coast to coast and from border to border will be built as the program develops. They do not intend that there be gaps in the system because of lack of progress on the part of a few states.

This wide variation in progress between the states can be readily understood. Mr. Tallamy pointed out that several of the states that have made good progress in fund obligation are those that had the plans and specifications on the shelf waiting for the Highway Bill to pass. They pulled the plans down, made a few changes, and put them under contract. On the other hand, the states that were not so fortunate have had to start from scratch. Under normal conditions it takes up to 16 months to 20 months to locate a highway, acquire the right-of-way, do the engineering, prepare plans and specifications, advertise, let the contract, and get the job started.

The overall status of the Highway Program as of March 31st, as reported by the Bureau of Public Roads, is as follows:

a. Apportioned to the states:
   1957—$1.125 billion
   1958—$2.550 billion

b. Obligated:
   Primary, Secondary and Urban—$580 million for 16,290 miles
   Interstate—$1,002 million for 1,151 miles

c. Breakdown of Interstate Obligation:

For construction	—$ 529 million
For right-of-way	— 341 "
For preliminary engineering	— 132 "
	$1,002 million

d. Under Contract:

364 contracts for $512 million, of which $418 million is Federal

Progress is being watched closely by the Roads Subcommittees of both the House and the Senate. Any serious bogging down might jeopardize the whole program. Mr. Tallamy, who has tackled his new job as Federal Highway Administrator with confidence and enthusiasm, has stated that, in his opinion, a good beginning has been made, but that the highest degree of continuing cooperation among State Highway Departments, the Bureau of Public Roads, contractors, and other segments of the roadbuilding industry, will be needed to insure that it gets and keeps on a nationwide basis.

I think, that in fairness to those states whose record of fund obligation against their allocations of Federal funds for the Interstate System is low, it should be pointed out that there is a lot of work to be done before funds are considered obligated by the Bureau of Public Roads. Since the record of obligations does not reflect this work, it is not necessarily an all-inclusive yardstick with which to measure progress. The District of Columbia, for example, was shown as of March 31, to have obligated 76% of 1957 Interstate money and 0% of 1958. Today, they are 100% 1957 and 58% 1958.

Highway Act of 1956

While it is the expressed declaration of the Congress that it is "essential to the national interest to provide for the early completion of the National System of Interstate Highways," and it is their intent that it be completed "as nearly as practicable over a 13-year period and that the entire system in all the states be brought to simultaneous completion," the Highway Act of 1956 contains an inherent delaying factor.

Although Title I of the Act authorized apportionments for the Interstate System in an efficient manner, starting with $1 billion in 1957, building up to $2.2 billion in 1959, and continuing at this rate until the program starts to taper off in 1968 and 1969, Title II contains a special provision, known as the Byrd Amendment, which limits the apportionments in any fiscal year to be the amount of cash estimated to be in the Highway Trust Fund to meet the expenditures required as a result of the apportionment. It further provides that the Secretary of the Treasury will, from time to time, estimate the funds which will be available in the Trust Fund and advise the Secretary of Commerce. The latter will compare available funds with the authorized apportionment, determine the percentage of deficiency and apply a cut across the board in the states' apportionments. In other words, the Interstate System will be a truly Pay-As-You-Go program and there will be no going into the "red."

Sec. 209 of the Act under the heading, "Highway Trust Fund", prescribes among other things that, "It shall be the duty of the Secretary of the Treasury to hold the Trust Fund, and (after consultation with the Secretary of Commerce) to report to the Congress not later than the first day of March of each year on the financial condition and the results of the operations of the Trust Fund during the preceding fiscal year and on its expected condition and operations during each fiscal year thereafter up to and including the fiscal year ending June 30, 1973." The first of these reports was made public week before last and created a minor bombshell effect. In brief, it showed that the estimated receipts in the Trust Fund would require 16 years to accumulate sufficient funds to meet the total apportionments contemplated in Title I of the Act of 1956. The study was predicated upon continuing the Federal support of the Primary, Secondary and Urban systems at the rate of $900 million a year after 1958 and of giving priority to these expenditures before considering availability of funds for the Interstate System. The study further indicated that instead of the orderly and efficient buildup of the volume of Interstate apportionments as contemplated in Title I of the Act, the apportionments could reach $1.6 billion in 1960, fall off to $1.4 billion in 1961, gradually build up to $1.7 billion in 1968, reach $1.9 billion in 1971 and finally complete the program of apportionments in 1972 with $2.9 billion. Under such an apportionment schedule, equipment, materials and supply planning would be difficult and actual construction would of necessity be extended beyond the financing period. Instead of being completed "as nearly as practicable over a 13-year period," we find ourselves facing a 16-year construction program.

The Gore Committee was told during a hearing two weeks ago by Mr. Tallamy that his interpretation of the report of Secretary Humphrey was that the inadequate receipts in the Trust Fund would cause him to defer a percentage of apportionments starting in 1960 and continuing through 1967. In 1968-1971, he would be able to make up the deferred apportionments. The net result on construction progress is hard to evaluate. It certainly will delay construction in those States that are ready, willing and able to go ahead with the entire program throughout the next 13 years. Other states, for one reason or another, may not have actual construction delayed because they might not be able to handle their full apportionment anyhow. One intangible disadvantage of this generated uncertainty is its possible effect on the industries that have been planning an orderly expansion program to keep abreast of the requirements of the road program.

Delaying Factors

There have been many delaying factors in getting this program off the ground during the last nine months. Some of these factors have caused more trouble in some states than in others. Regardless of the nature of the delaying factor, it is the duty of us, the highway industry, to try in every way possible to eliminate the obstacles and bottlenecks. We don't want this Pay-As-You-Go program to become a Pay-As-You-Don't-Go program. If the program bogs down, there may be efforts to limit its size and scope.

In some states there are problems that only the state legislature can overcome. I refer, of course, to the need for new laws governing the acquisition of property for controlled access, authorization for increased pay for highway engineers to assist in building adequate state engineering forces, laws granting immediate possession of land after condemnation, increased appropriations to meet the increased matching fund requirements of the new program, authorization of bond issues to raise matching funds and finally overhauling old highway legislation that is antiquated, burdensome and no longer essential.

In some highway departments there are delaying problems that only the top administrator can overcome. I refer now to the need for adoption of new engineering techniques as a means of overcoming engineer shortage by increasing engineering productivity. One of the big dividends in the adoption of such methods and devices as aerial photography, photogrammetry, electronic computers and the photographic reproduction of plans, is that it creates an interesting and exciting profession for the young men of our country who are growing in an Electronic Age. Another spot for overhauling in many departments lies in administration. Highway departments are big business, often the biggest business in state government. They must adopt modern business methods, review organization, eliminate deadwood, decentralize authority and responsibility, and key themselves to doubling their capability. Obsolete specifications must be overhauled and rewritten. Procedures must be set up to insure rapid, efficient methods of payment to contractors on partial and final estimates.

Public Relations

We are faced with another major problem—public relations. Too many people think that public relations is something that you hire someone to do for you and that his main job is to see that you get good publicity. They also think that the main effort of the public relations man is to get out news stories and releases slanted to put the boss in a good light. My idea is that public relations is the job of everyone who works for me and, in addition, it is one of my major responsibilities. A rude, impolite surveyor or junior engineer who gives a land owner or other taxpayer the "brush off" in answer to a question concerning the Highway Program, can undo in two minutes more good will and sound public relations than the Highway Commissioners can build up in a week. "Public relations" to me doesn't mean hiring a press agent; it means a sincere realization that you are working for the public; that the public is entitled to the facts; that the public is as intelligent as you pride yourself on being and, therefore, can usually be counted on to arrive at reasonable conclusions when given the facts; that the public (and I mean all segments big and little) is entitled to courteous attentive treatment at every level in your organization; that you should be cordially but firmly aggressive in your public relations and seek opportunities to explain the thinking, the reasoning, the engineering and the economics of your highway program so that an enlightened public will overcome narrow, selfish opposition.

The greatest public relations job in history lies before us in securing active public support of the controlled access concept. This support is necessary to facilitate the locating of the highways and the acquiring of the rights-of-way. It is a job that requires intelligent planning and skillful execution. We need only to read recent news stories and editorials in such publications as the "Red Book", "Barron's Weekly" or the "Wall Street Journal" to realize that the highway industry is not putting the highway story across.

Controlled Access

We must realize that the controlled or planned access highway is a new concept insofar as a large part of the population of our country is concerned, particularly in the rural areas. And we must realize that although everybody enjoys the many benefits of this type of highway after it is built, there will be widespread squabbles as to where it shall be located, whose land will be needed, how wide the right-of-way need be, and where the entrances and exits will be spotted. In the next issue of ARBA's magazine, the "American Road Builder," we will carry a feature story on the outstanding job of public relations already done by the Wisconsin State Highway Commission in its dealings with respect to right-of-way acquisition. Other States may be doing an equally effective job. I hope ARBA can be helpful in passing along to other highway departments the best ideas developed in any state.

During the past ten years we have seen old highways straightened and widened to accommodate the ever-increasing postwar traffic. We have seen numerous bypasses built to permit heavy through-traffic to avoid the business centers of our towns and cities. But what has happened? In a matter of months after completion of construction, new businesses, roadhouses and supermarkets have sprung up all along the new route, generating traffic and parking that reduce the capacity of the road to such an extent that it cannot carry the traffic for which is was built. To the highway engineer trying to make his funds stretch all over the state, this accelerated obsolescence is a discouraging factor in the losing battle against traffic strangulation. The public that demands that "someone ought to straighten out this traffic mess" is the same public that helps to create the mess by building or patronizing traffic generators along every new piece of road.

Today we have the new concept of controlled access that will prevent this accelerated obsolescence of our new interstate highways. We will project the traffic requirements to 1975, acquire the necessary right-of-way and build a six or eight lane controlled access, divided highway. When it is completed, we can sit back and say, "we have got it made for 20 years." Nothing can encroach on the highway to reduce its carrying capacity except poor maintenance and poor weather. If this is the case, why should there be any public relations problem involved in building a superhighway that will do the job for 20 years? The answer is lack of public education. Even people in high positions, the leaders of our communities, do not know the great benefits inherent in a controlled access highway serving their community. When the leaders do not know, we certainly cannot expect the rank and file to know.

While we have only a limited number of controlled access roads in operation in our country and although most of them are toll roads and have been completed only a relatively short time, we have been able to observe the dynamic and almost dramatic economic impact in practically every area served by them. There need be no doubts. Limited access bypasses, instead of leaving a town to "wither and die on the vine," have invariably rejuvenated the bypassed town, cured its disease of traffic paralysis, opened the streets to people who want to be *in* the town, not passing through the town, and have brought the merchants greater prosperity by facilitating shopping in the local stores.

With a superhighway system, interconnecting 90% of all of our cities with population of 50,000 or greater, designed and built for safe speeds of 50, 60 or 70 miles an hour, depending upon the terrain, with no stop signs or traffic lights, and with the same characteristics whether in a city or in the country, we are approaching a type of nationwide automobile travel which is revoluntionary.

This type of highway converts miles into minutes. Areas adjacent to our cities and towns which previously have been undeveloped because of inaccessibility, suddenly become minutes from town. Sites between the highway and the railroad track suddenly become valuable industrial sites because overnight they are only minutes from labor and materials. Real estate values skyrocket and in a matter of months increase tenfold. New attractive residential areas spring up on what was low value farm or woodland and wherever we find these new residential or industrial areas we also find a new and expanding commercial development to support them. This is neither theory nor wishful thinking—it is history. Industry is expanding and decentralizing. Those areas which have the most to offer will be the areas which will benefit from industrial decentralization. Developments during the past three or four years confirm the fact that the limited access highway which makes abundant parking areas and cheap land available only minutes from town, is a major inducement in attracting industry to a community.

Conservative estimates show that a completed National Interstate System will save 3500 lives annually, to say nothing of $550 million in reduced vehicle operating costs, $725 million in reduced accident costs and $825 million in elimination of time now wasted by commercial vehicles, a total annual saving of $2.1 billion. Our highway program has so much to offer for the safety, convenience and happiness of our people as well as the defense and economic growth of our country that it is reasonable to consider it to be a National Economic Investment rather than a Public Works Expense. It deserves the greatest possible support from all potential beneficiaries and I can't think of anyone who is not.

But remember this—no matter how hard you work, no matter how many meetings you attend or speeches you make, no matter how many people you call on personally, you are not going to satisfy everyone or make everyone happy. It is essential that you and the public arrive at the early realization that *a few must suffer or be inconvenienced so that the many may benefit.* When you shift the right-of-way to overcome the objections of one group of citizens, you will hear the same objections raised by another group. It is the case of the same record played by a different disc jockey.

The American Road Builders' Association is going to help in this program. We have two motion pictures under contract which I hope to place in the hands of every State Highway Department by the middle of October. These pictures are designed to help meet this public education need and also to attract young men into the highway industry. We will try to keep our members in Indiana advised of the happenings in Washington.