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SAFETY AND BEAUTY -- ESSENTIALS IN HIGHWAY PROGRESS

By

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Another year has gone by, and I am happy to meet with you again in your annual meeting, to discuss some of the current major problems and objectives of our highway program.

The Interstate Highway System is moving along on schedule, with more than 19,000 miles open to traffic and in use. Some 5,000 miles are under construction; and preliminary engineering or right-of-way purchase is underway on still another 12,000 miles. Thus almost 90 percent of the Interstate mileage has now advanced beyond the preliminary stages.

We are now a little beyond the halfway point in the time schedule of the Interstate program, aiming at completion in late 1972. In each of the past few years we have opened to traffic about 10 percent more mileage than in the preceding year. With this trend, we should reach the halfway mark of mileage in use by some time this fall.

I might caution you that it will take this 10 percent acceleration rate, sustained for perhaps five years more, to meet our goal in 1972. But we are confident we can make it.

Our recent estimate of the cost of completing the system showed that \$5.8 billion more is going to be needed than was previously expected. As you know, \$3.6 billion of this is accounted for by changes in law or practice resulting in better and safer design, by better traffic forecasting, and by more detailed knowledge of actual conditions and needs. More than \$1 billion is accounted for by increased unit costs of highway construction. And nearly \$1 billion is occasioned by higher right-of-way and preliminary engineering costs.

Additional authorization and financing for the nine-tenths Federal share of this increase will be necessary, and I have no doubt will be accomplished in this session of Congress. In his budget message, President Johnson noted his intent to recommend some increases in highway-user taxes, and extension of the taxes beyond the present expiration date. "These recommendations," the President said, "will permit orderly completion of the Interstate System with a minimum extension of the construction schedule." I emphasize the word minimum.

I think that if we have any problem in completing the Interstate System on schedule, it may be on some of the difficult sections of our metropolitan areas.

We have had some concern about the possible effects on the program of the planning provision in the 1962 Highway Act: that Federal-aid projects in urban areas of over 50,000 population cannot be approved after this July 1 unless they are based on a cooperative, comprehensive, continuing transportation planning process.

Not all of the 224 urban areas involved will have such a planning operation in full being by July 1, unfortunately. However, it does not appear now that this will delay many Interstate projects which are not going to be delayed anyhow for other reasons.

I might say here, incidentally, that the purpose of the provision of the 1962 Act is well supported in President Johnson's Message to Congress on the Cities.

In it, the President said: "The Federal Government cannot, and should not, require the communities which make up a metropolitan area to cooperate against their will in the solution of their problems. But we (the Federal Government) can offer incentives to metropolitan area planning and cooperation. We can help those who want to make the effort but lack the trained personnel and other necessary resources."

Further along in that message, President Johnson continued: "We do not believe ... planning is a cure-all or a panacea. ...It must be flexible and open to change. And we cannot wait for completed plans before trying to meet urgent needs in many areas." These comments by the President, to me, are a clearcut expression of our objectives in administering the 1962 Highway Act's planning provision.

I will touch only briefly today on the Federal-aid ABC program -- just long enough to note that in the past $8\frac{1}{2}$ years, contracts have been completed on nearly 182,000 miles of roads and streets on our Federal-aid primary and secondary systems. Put more graphically, we have restored and improved one-fifth of the total mileage of those two systems, in less than a decade -- a record of which we can well be proud.

The work completed in the Interstate and ABC programs since they were expanded in 1956 has cost \$26.7 billion. Of this total, the Federal share was \$18.4 billion -- and all of it, as you know, came from the Highway Trust Fund and was derived solely from highway-user taxes.

A figure such as 27 billion -- even in this era of outer space dimensions -- is not easy to visualize. This is true also for a companion figure -- the 4 trillion vehicle-miles traveled on the Federal-aid systems during the period the \$27 billion was spent. But put together, they yield a readily understood, very modest quotient -- the Federal-aid and State matching highway expenditure since 1956 has amounted to only two-thirds of a cent per mile of travel.

Comparing travel now with pre-1956, I think the motorist has had a real bargain. In fact, the user benefits on the Federal-aid highway systems due to highway improvements since 1956 are expected to reach \$7 billion in this year alone.

Last year, in addressing you, I noted the great life-saving benefits of the Interstate System. But I pointed out, too, the great need for improving safety on our other roads and streets. On March 23 of last year, President Johnson wrote to the Secretary of Commerce that the traffic accident toll was a matter of serious national concern. The President urged an immediate, accelerated attack on traffic accidents, through a safety priority program within the regular Federal-aid program.

And so we began an emphasis on projects which could be expected to reduce the hazard at locations with high accident experience. In somewhat less than a year, 33 State highway departments have programmed 181 such projects, with an estimated cost of nearly \$40 million, half of it Federal aid.

The projects range widely, from minor improvements at a railroad grade crossing to replacement of a narrow, bottleneck bridge. Intersections are being rebuilt, medians constructed, signals and lighting installed, climbing lanes added, sight distances increased, and so on.

We know that a number of States are carrying on substantial safety improvement work on their own. California alone spent over \$8 million of State funds last year on 301 such projects -- which will eliminate up to 1,000 accidents a year. Texas spent over \$9 million in this same fashion, last year, and also programmed more Federal-aid safety improvement projects than any other State.

The death of 48,000 Americans in traffic accidents last year -- an increase over 1963 not only in number but in fatality rate as well -- is a merciless sign that this program must continue. It is perhaps the only practical major means immediately at hand by which we can hope to reverse the rising accident trend in a reasonably short period of time.

To promote further State participation, we are encouraging the combination of work at several locations into one project -- for example a number of bridge widenings or traffic signal installations. This will reduce paperwork, and have other advantages.

Too, where a State has difficulty in pinpointing accidents and determining their rates, we can offer HPS funds to help improve their accident records system.

Finally, we are developing information of case histories to show the varied approaches to spot improvement and to demonstrate their value in preventing accidents and saving lives.

We are intensely concerned, of course, with the search of any other possible means of improving highway safety. We know unflagging attention must be given to the vehicle and to the driver as well as to the road, and to their interactions.

The Bureau's safety research program is aimed at finding answers to the most urgent safety needs. Much of the problem lies in the frequent inability of the driver to cope with the demands made upon him for percep-

tion, judgment, and reaction, and so on. Some of our basic studies will enable us to understand just how the driver controls his vehicle. Then we will seek to develop practical aids to help the driver in his control job and thus eliminate many of the driver errors that lead to accidents.

Another important area of our research is in communication and control techniques for interchanges on urban freeways. The interchanges, especially their on-ramps, are critical points for both accidents and traffic turbulence.

In the NCHRP (National Cooperative Highway Research) program, undertaken jointly by the State highway departments with a portion of their Federal-aid highway research and planning funds and operated by the Highway Research Board, safety research has a prominent place also. One study is seeking better means of communication between vehicles on expressways for such purposes as signaling intended speed changes to following vehicles.

These are but a few examples of the safety-oriented or related research projects being conducted by the Bureau, both itself and cooperatively with the States. While we are undertaking important basic, long-range research, too, we are especially searching those areas likely to produce the quickest results in safety.

The accident record of many of our highways is their shabby side, figuratively speaking. But they have a literally shabby side as well, all too often. An just as last year President Johnson called for positive action against accidents, this year he has called for positive action against shabby roadsides.

I might add, lest we wholly succumb to a guilt complex, that the President found many other flaws in the landscape; that his beautification program encompasses more than roads alone. And I might add, too, that many of us who are highway administrators and engineers are neither averse to nor ignorant of esthetics in general and roadside beautification in particular.

If we are at fault, it is perhaps in only keeping abreast of the march of public opinion, or even falling behind, rather than anticipating it. A generation -- even a decade ago, we would have been upbraided for any substantial expenditure of public funds on highway beautification, except on parkways. In fact, we talked of landscaping work primarily in terms of erosion control and reduction of maintenance costs.

In contrast, the current favorable response of the press and the public to the President's program for a beautiful America has been overwhelming. I think there is no question that we have direction from both President Johnson and the people.

The response of the public, in fact, has created an embarrassment of sorts. Garden clubs, youth groups, and other organizations, enthusiastic over the President's beautification programs, have been quick to volunteer their help. However, the hazards of working close to high-speed traffic are so

great that in general only those with appropriate training and experience should be allowed to do landscaping work, under proper supervision, within the highway right-of-way.

But the sight line from the highway does not end at the right-of-way line. Citizens' groups should be encouraged in all possible ways to undertake local beautification improvements outside the right-of-way. State and local highway agencies can benefit greatly in both contributed landscape work and good will by moving promptly in this direction.

The President laid the groundwork for the beautification program in his State of the Union Message when he said: "A new and substantial effort must be made to landscape highways and provide places of relaxation and recreation wherever our roads run. Within our cities imaginative programs are needed to landscape streets and transform open areas into places of beauty and recreation".

In his Budget Message, the President announced that legislation would be proposed during the year in three areas related to those objectives.

The first proposal would require the States to use a portion of their Federal-aid secondary funds for scenic roads and for access roads to recreational areas. I think you will realize that in some respects this is recognition of the changing character and needs of our population.

The second concerns the provision in existing law which permits the States to use up to 3 percent of all Federal-aid highway funds, without State matching, to acquire and preserve areas of special beauty or scenic interest along the roadside. The President proposes amendment of the law to give the Secretary of Commerce authority to make this use of 3 percent of apportioned Federal-aid funds mandatory, rather than permissive.

While the non-matching use has been available for some years, only very recently have any States taken advantage of it -- Maine, Minnesota, and New York have now programmed such projects. Because of its apparent obscurity, we issued an explanatory statement on the subject in January, and have urged you to take full advantage of the existing law.

The third of the President's proposed legislative changes would launch a mandatory program to control outdoor advertising and auto junkyards along highways. This would replace -- and obviously greatly expand -- the voluntary incentive plan for advertising control on the Interstate System which, after seven years, has only been entered into by 20 States.

All of these proposals, incidentally, were reaffirmed in the President's subsequent Message to Congress on the Natural Beauty of our Country.

Meanwhile, in his letter of January 21 to Secretary of Commerce John T. Connor, the President pointed to a number of actions that need not await changes in legislation. The Bureau of Public Roads promptly took those actions:

... We have required that landscaping be an integral part of all Interstate, primary, and urban Federal-aid construction projects. This means beautification as well as the usual conservation and erosion control work. And I would quote here from the President's Message on Natural Beauty -- reinforcing what we have said many times -- " ... highway beautification is more than a matter of planting trees or setting aside scenic areas. The roads themselves must reflect, in location and design, increased respect for the natural and social integrity and unity of the landscape and communities through which they pass."

... We have urged you to increase your use of Federal-aid funds for landscaping projects, especially to screen junkyards, excavation scars, or other unsightly areas.

... We have asked you to double the number of safety rest areas on the Interstate System; and to build similar ones on the primary system. We have authorized use of Federal aid of comfort facilities at these rest areas. And we have authorized use of Federal aid to build less elaborate rest areas, and scenic overlooks, as well.

Just last week we issued an instructional memorandum providing considerable new detail on the use of Federal aid in undertaking these several kinds of work. I think this will be helpful to all of us. So, too, will be the Policy on Landscape Development, adopted by the American Association of State Highway Officials in 1961, and the new AASHO Landscape Design Guide.

But most important of all, I think, is the wholehearted interest and cooperation of you who, as highway officials, will actually plan and direct the beautification of our highways.

I am delighted to say that your responses to the President's program -- while seasoned with some very practical comments -- have been generally quite as enthusiastic as the response of the public.

We have in the past been concerned largely with the capacity of our roads and streets in terms of traffic movement. We must turn equal attention to their capacity for safety, and to their capacity to afford pleasure as a travel and sight-seeing medium and as an attractive but unobtrusive part of the landscape. Highways can and should have an important esthetic as well as economic role in American life.
