

Paper to be presented at the
Annual National Highway Conference of County Engineers and Officials
Sponsored by the
County Division of the American Road Builders' Association
at Springfield, Illinois

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Monday, October 1, 1962, 9:30 a.m.

I want to take this opportunity to discuss with you some of the more important items in our Federal-aid secondary highway program, as I view them at this time.

I think that 1962 will be a milestone in the history of Federal-State-County cooperation. At last I feel, we have stopped just talking about cooperation and are doing something about it. Full cooperation and understanding by each of these groups are indispensable to satisfactory highway administration, not only of the secondary program but in the ever-increasing responsibilities with respect to all of our programs, primary, urban, and Interstate from the Federal standpoint; State and local from yours. No one of the systems covered by these programs can function alone, for they all are interrelated. When our jurisdictions adjoin or overlap, cooperation calls for the exercise of a maximum of technical judgment, administrative ability, and willingness to cooperate in resolving mutual problems so that the greatest public interest can be served. We can no longer be provincial in our thinking or jealous of fancied individual prerogatives. Teamwork is mandatory in this highway transportation field if we are properly to serve our employers--the general public.

The first meeting of the Joint AASHO-NACO group in New Orleans in May of this year was most encouraging in that top representatives of the State highway departments and county road building agencies, representing two of the three major owner-operator highway organizations, mutually recognized the need for improvement in the administration of secondary highway programs. They unanimously endorsed full cooperation and a united front, and adopted an aggressive action program to that end. A determination to promote needed changes--either State or County, administrative or legislative--was an outstanding demonstration of organizational unity and mutual respect.

Today's meeting, where State and County representatives are again in joint session, is another indication of the desire to increase efficiency of operations through better understanding of each other's problems and matters of mutual concern. It is a tribute to Mr. Ostergren and Mr. Clauson--to name but two of many persons responsible--that this joint meeting is being held. It is a major contribution to the close State and County relations which the highway program needs--close cooperation needed whether or not Federal funds are involved in the road building job.

In our country we have no significant barriers to highway travel or transportation of goods. This easy mobility has been a major contributor to our national economy. Insofar as Mr. Average Motorist is concerned, there are no separate highway systems; we have in effect but one $3\frac{1}{2}$ -million-mile highway network that allows him the greatest flexibility of travel. Thus, it is easy to see why each county road portion of this network, for which many of you are responsible, is important to

the national economy just as is a section of the Interstate System. Each mile of this integrated network serves its special purpose in the overall transportation system. John Citizen can leave his driveway in Portland, Maine, with perfect assurance that he can drive to Portland, Oregon, on improved highways by any one of a hundred combinations of routes. It has not always been thus. We have developed this network over many years for the benefit of everybody in the United States. As we have physically integrated the system for uninterrupted continuity of travel, we must likewise integrate our highway administration for the most efficient operation in our several areas of responsibility. Cooperation and coordination are indispensable. Since traffic knows no jurisdictional boundaries there should be no differences, simply because of jurisdictional responsibility, in design standards, signing, safety measures, or maintenance practices. For example, there is every reason, both in common sense and engineering science, that a County highway and a State highway carrying comparable traffic should be built and maintained equally. We should all adopt the best of all highway features, whether it applies to State or County highways. The County highway organization has the same responsibility to the taxpayer as the State highway organization.

In this connection it is interesting to reflect that on the lower-volume roads, of which the counties have the predominant mileage, you are building some of our most "expensive" roads. The public has an impression that the multilane freeways in urban areas are the most expensive sections of our highway network. They are costly on a per-mile basis but not on a vehicle-mile basis, which is a much more valid comparison.

It is significant that the national average annual highway cost of owning and operating our urban freeways is only about one-half cent per vehicle-mile as compared to a cost of about two cents per vehicle-mile for rural secondary roads. The vehicle-mile cost of low-volume roads is thus four times, on the average, that of high-volume freeways through cities.

It is obvious that the low-volume roads are being subsidized by gasoline and other taxes collected from users of the urban and primary routes. Secondary roads are nonetheless important as essential parts of an integrated network, even though they frequently are not selfsupporting. This interdependence of each mile of our vast highway network calls for the same interdependence of highway administration and continuous cooperation among Federal, State, County, and City highway organizations.

The 1962 Federal highway legislation (pending at this time) will require such cooperation on comprehensive transportation planning in urbanized areas, many at which embrace both city, county and State jurisdictions. We have a tremendous responsibility to protect our economy by planning an efficient highway transportation system adequate for our expanding traffic volumes, and Congress through this feature of the legislation is making sure that we recognize it.

The proposed new legislation will also make it possible for the first time to use Federal-aid secondary funds for improvement of the extensions of the secondary system inside urban boundaries. This is good news to many States and Counties for it will eliminate a no-man's land for many of you. It will add, however, to your responsibility for cooperation for after 1965 transportation planning in urbanized areas

of more than 50,000 population will be a requirement of law.

The year 1965 is not far away, and it behooves all of us to give cooperative planning serious consideration and to initiate cooperative studies without delay. The Bureau of Public Roads is assisting in every way possible but the initiative is with the States, and through them, with the local government. There are Federal-aid funds available for the purpose--what we call one-and-a-half-percent funds--earmarked for planning and research purposes from each State's annual apportionment. Furthermore, we have specialists in the Bureau's division and regional offices who stand ready to advise and assist with this activity. So, if the State and County engineers will work out a cooperative working agreement, Public Roads will assist with the technical aspects and financing. I bring this to your attention because Public Roads does not want to see any State, County, or City lose out on a worthwhile project after 1965, as a result of apathy, lack of understanding, or for any other reason. The State highway departments are already at work to provide the leadership in this matter which cannot be delayed until 1965 if we are to meet this new requirement.

What I have just commented on is a mandatory requirement for urbanized areas of over 50,000 population; however, similar long-range highway planning is equally important in the administration of a purely rural highway program. Only through long-range planning can any highway program be managed efficiently, whether it is State or County. Federal one-and-a-half-percent funds are available for your long-range planning in rural as well as urban areas. In the past, the use of these one-and-a-half-percent planning funds has been optional with the States. Beginning

with the 1964 apportionment of Federal-aid funds, the one-and-a-half-percent funds must be used in full for planning and research; no longer can they be transferred to construction. Planning with or without Federal-aid assistance will minimize your administrative and public relations problems, and in the long run will save many of your highway dollars.

I think it is obvious that today's conditions present increasingly complex administrative and technical problems to a County or local road organization. In suburban areas there are increasing demands for roads, sewers, water, schools and drainage facilities, to mention but a few. In rural areas traffic requires stronger and wider bridges, and safer highways. As a result, a county engineer would seem to be an essential part of a well-organized county. At present only about 900 of the 3,000 counties have county engineers, a fact that gives all of us reason for pause.

To move onto a new subject, we are all interested in highway safety and service to the traveling public--that is one of our major responsibilities as highway engineers and administrators. This means that in addition to good design and construction we must give constant attention to traffic control. The new Manual on Uniform Traffic Control Devices recently published incorporates the results of years of experience in this field. It is important to the public that you update your signing, pavement striping, traffic signals, and other devices for traffic control, and make them uniform regardless of highway system or location. Adequate warning signs are indispensable to safety, and

adequate informational signs are a credit to your organization. They advertise your progressiveness. Federal-aid funds are available for the purpose of updating your traffic control devices on the Federal-aid systems either on a countywide or a Statewide basis. The Bureau's division offices working through the State highway departments can assist you in working up a program for sign and signal modernization. The value of such a project is obvious. It is hoped that all traffic signals that do not conform to the new standards will be replaced in the next three to five years, a goal for all of us working in all jurisdictions.

1962 also has been the publication of new AASHO Geometric Design Standards which replace the 1945 Standards for Secondary Roads and Highways as well as the 1941 Standards for Primary Highways. One of the significant features of the new standards is that they are based on functional rather than jurisdictional classification of highways. In other words, there are no longer primary and secondary differentials per se. The new standards are for all highways other than freeways, under whatever jurisdiction. This is as it should be since our highways should be built safely and economically in relation to traffic volumes and the service which they are called on to provide, for as I mentioned earlier, the public doesn't recognize jurisdictions in their travels. Another significant factor in the new standards is that they do not apply to roads having less than 50 vehicles per day. This permits you to use your own judgment on the design for such low-volume roads. The only dimension specified for roads having fewer than 50 vehicles per day

is the minimum width of roadway of 26 feet. On this minimum was considered there should be no compromise. These new standards for the first time have the approval of county engineers and officials. In the past, AASHO Standards have been adopted by the American Association of State Highway Officials and approved by Public Roads. This time they were also referred to the National Association of County Officials for consideration by the National Association of County Engineers. A number of significant recommendations made by NACE were incorporated in the standards as printed in August.

To shift to another subject of pressing importance to all of us, as of August 31, 1962, there were nine States which had more than one year's apportionment of Federal-aid secondary funds unobligated. There were on that date over \$170 million of Federal secondary funds waiting to be used. With the passage of the 1962 Federal-aid Highway Act over \$280 million more of secondary funds will be authorized for 1964. As soon as these funds are apportioned, which should be in the near future, there will be over \$450 million of Federal secondary funds waiting for action on the part of the States and Counties.

These unobligated Federal secondary funds, when matched by State or County funds, will provide for nearly \$1 billion of improvements on the secondary system. \$1 billion is a lot of money, and I am sure you all need your share of it. So, I urge you to get together with your State Highway Department and take a look at your program; see how and what you can do to speed things up. We can't afford to have \$1 billion lying idle--let's put it to work.

In conclusion, may I remind you of a subject that needs our constant attention--that is, integrity of operations. Everybody who is responsible for expenditures of public funds must be sure at all times that his activities are beyond reproach or suspicion. You have read too much about a few individuals who have done a disservice to the highway program, to the engineering profession, and to the many thousands of conscientious, devoted public servants involved in administering one of the largest public service functions of our Government structure. We cannot be complacent or assume that "it can't happen here." We must be sure that "it won't happen here." Human frailty can appear in any community--no State, County, or City is immune. I urge eternal vigilance on your part, and ask particularly for your aid where you are operating with the State under the 1954 Secondary Road Plan. It is up to all of us to demonstrate to the public that we are administering our program properly and efficiently. To do this effectively requires the combined efforts of all of us.

USCOM-PR-DC