

Part I

PLENARY PRESENTATIONS

FEDERAL VIEWPOINT

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Good morning, ladies and gentlemen. I think people have a right to ask what is the federal role in low-volume roads? In fact, many of you, particularly those of you who traveled here from other countries, might even ask, what's the interest of the United States, in general, in low-volume roads.

If you read about the highway system in the United States, you obviously see heavy concentration on the interstate highway system--if you landed at the airport in Des Moines and traveled here by way of high-speed highways, you don't really get a flavor for the bulk of the highway and road network in the United States. I'm happy to see that the program includes a tour, so that those of you who are not familiar with United States highways, particularly in the Midwest States, will have a chance to look at the part of the system that feeds onto the interstate system. These roads don't get nearly as much attention as the interstate system, although they have their own problem, and there are a number of financial requirements on all levels of government.

The federal interest, in general, stems from some authorization by the United States Congress. That is, we in Federal Highway Administration can't invent an interest in low-volume roads or in any other phase of highway development. We need to be authorized to get into that activity by the Congress, and, in general, Congress follows the United States Constitution. In the case of the highway program, it's the Constitutional requirement to provide for interstate travel and also for national defense.

That, in turn provides a reason for the federal government to be involved in highways in general; and if you want to go back into history, in 1916, Congress first recognized that the state and local governments were not able to completely finance the development of a road network around the country, and, therefore, they began a program of federal aid to state and local governments to help finance the improvements that the lower levels of government desire. I want to emphasize that the federal funding is to help state and local governments in correcting system deficiencies that they see. The Federal Highway Administration has no role in managing the highways once they are completed; has no role in developing the priorities around the state or around the country.

The initial goal of the federal aid highway program beginning in 1916, was to provide something that the United States didn't have then--in fact, almost nobody around the world had, and that is an interconnected system of highways tying together towns and cities around the country.

In 1916 obviously all roads in the country except in some of the largest cities were low-volume roads, so you might say that we have been involved

in the federal aid highway program with low-volume roads since 1916. Congress, though, began to realize that there were too many roads to really tie together a system of improvements, so beginning in 1921 the federal funding was directed to a small portion of all the roads and streets around the country, a seven percent system. The principle was that the federal government's role in seeing that highways were improved should start with the ones that carried the heaviest traffic. So even though everyone's volumes in the 1920 period were really low, we were working on the highest-volumes highways.

Then about thirty-one years after the initial federal aid activity Congress saw some other problems that were not being solved, and in 1944 authorized federal funding beyond the seven percent system, for a new federal aid secondary system. The concept here, the overriding goal of these dollars, was to provide an efficient way for farmers to get produce to market or for any other rural activity of production, timber or ore, or anything like that, to be delivered to the marketplace. The concept again was that within the ninety-three percent of all roads and streets that didn't previously have any federal aid on them, we would look to a system of collector highways that would serve as the principal feeders into the arterial network that we had been working on for thirty years. In 1944 the original federal aid secondary highway system generally included low-volume roads. Even today, about fifty percent of the system is classified as low-volume roads, if you break at, say, four hundred vehicles per day. One other feature of the 1944 legislation was that on the secondary system, for the first time, the county level of government was given a proper role in the identification of where the problems are and how they want to solve them with the federal funds. Beginning in 1944, we had a three-party system in managing federal aid highway funds. The funds are provided through us, through the Federal Highway Administration, but they are used either at the state or the local level.

Another thirty years, roughly, passed after 1944 and Congress again retailored the federal aid system to try to take care of some problems that the earlier programs hadn't done. Beginning in 1973 and carrying through last year, Congress began to provide federal funding for the large numbers of highways that previously hadn't had any funding available. Roughly seventy-five percent of all the roads and streets in the country are not on the federal aid primary or secondary system. Until 1973, it was totally a state and local problem to correct any deficiencies in those systems. However, in 1973, Congress authorized new programs, not for routine maintenance activities, but to take

care of the non-repeating very high costs that are involved when you resurface a road for the first time in twenty years, or perhaps rebuild a bridge that was initially built in the 1920's.

These programs again were focused primarily on activities that are the responsibility of the local level of government; and the principal goal that Congress was reflecting there was not so much interstate travel, or national defense, but it was recognizing that these occasional high costs are beyond the capability of most local levels of government to finance. Most counties cannot budget for a once-in-a-lifetime two million-dollar bridge repair project, and, consequently, a lot of problems were being deferred and bridges were being closed.

Now, in today's market, we have a battery of federal aid highway programs, some of which go back sixty years, some of which go back thirty years, but which in total are designed to take care of some of the severe problems on any eligible road and street around the country. There are two points worth making. The first is that the level of attention that's being given to the top segment of the highway system is still greater, because given the interstate program, federal aid primary and other programs, many times the number of dollars are made available per mile of highway on the primary system, the seven percent system, as there are at the eighty percent level. In other words, Congress still recognizes considerably more of a federal role in the larger traffic-carrying parts of the system, than in the local roads. And the second is, that in no case is there enough money to do all of the improvements that are required--not at any level--not at the state level--not at the county level--not within cities--so that everyone who has a part in the federal aid highway program management in the United States has as his principal role to try and decide what improvements he is going to make with the dollars that are made available.

Looking at what might happen in the future, I think it's been somewhat of a coincidence that the earlier actions by Congress seem to fall in a thirty-year cycle, so I would say there isn't necessarily another big change coming twenty-four years from now. It may well be that Congress will keep the current battery of programs for a long period of time. I'll repeat again that the dollars that exist now are not sufficient to correct all the problems in the years ahead. By 1995 or the year 2000, we can still forecast that the highway and bridge needs of the country are going to be very considerable. In fact, at our current level of spending--federal, state, and local, given the impact of inflation and other financial problems we have, we'll be lucky to even keep up with the deterioration that takes place in the system each year. Beyond the money, there are other activities at the federal level that are worth mentioning to this group. They tie into a number of sessions that you are going to have later on in the program. The principal one of these that I would like to mention is an effort on the part of the federal government to take care of roads and streets that the federal government owns and maintains. I mentioned that the federal aid program involves no federal maintenance, no federal operating requirements. However, within such areas of land as national parks or national forests, or military reservations, which are under the control of the federal government; federal agencies also have a responsibility to operate, maintain, and rebuild highway and road systems to provide access within their areas. One role of the Federal Highway Administration is to act as an engineering resource to the other federal agencies, to help in the design and construction of road and bridge improvements.

Roughly 300,000 miles of road and street around the country are under federal control and just about all of those could be classed as low-volume roads, so we have in effect our own little laboratory, our own little group of facilities on which we can practice what we might preach on other terms. We also manage a very small program for highway dollars to concentrate on economic development. The reason that the pool is so low is that by comparison with the road networks in most developing countries, our road and street network is almost all in place. We don't look for a number of years of increasing system expansion. We look to try and make better use of the system that we have.

Another FHWA activity that is very significant to the meeting here is in the area of transportation-planning and in highway research and development. Here, there is a principal federal role. A lot of activities are cooperative through the Transportation Research Board, through the state organizations, and with NACO, and some other local organizations. We have a level of federal interest in identifying the best or most productive areas of research over the next few years and to report to Congress periodically on the long-term highway needs on this local segment of the system, which primarily includes low-volume roads. We also have projects underway to study local and state level financing capabilities, again at the request of Congress.

Another activity which we have underway relating to your program includes research projects designed to improve maintenance, or engineering equipment, or construction, or design methods, or just our general level of knowledge of how to get the most improvement for the limited number of dollars which we have.

A final area in which the federal role is very significant is in the area of highway safety. Even though on an absolute basis, there aren't many fatalities on a typical mile of low-volume road, simply because there isn't very much traffic, the accident rate on low-volume roads is twice as high as on higher-volume roads. Our total national accident picture is one that we cannot live with for a long period of time.

So, to summarize, the federal interest that we have might be surprising to those of you making your first visit to the United States. There is a very extensive mileage of what anyone would consider low-volume roads in the United States, and there is a fairly extensive federal role in trying to identify the proper methods of correcting deficiencies on this part of the system. As mentioned, I have to leave for another meeting in a different part of the country; but before I leave, I would like to point out that there are staff people here from Federal Highway Administration, and they'll be available for the entire conference if you have any questions about what we are doing, or if you would like us to do something. I would like to ask the FHWA staff people to stand up so that your neighbors in the audience can have a look at you. I enjoyed being here, and I wish you a very successful conference.