

bare hands, but I immediately got rid of it and hollered, 'Look out below, Jim,' but he didn't hear me and the rivet went down his shirt and into his trousers and he looked up at me and said 'for heaven's sakes, Joe, please try to be more careful.'"

Now, I am sure that those from other countries never get letters from ladies nor phone calls from irate citizens telling them how to run their departments. It could be a uniquely American story. But I think not.

Those of us here charged with the administration of low-volume roads can use standards as a defense in what is becoming a real problem in the United States -- "lawsuit-happy" citizens. We are becoming more and more involved in lawsuits at every level of government. Good standards can help us. Without a documented basis for construction -- no matter how minimal -- court battles become more difficult and an adverse court decision can result in jeopardizing the already short supply of funds available for low-volume roads.

There is no doubt that we need some kind of identifiable standards, but those standards should be flexible and allow local knowledge to prevail. Local conditions should temper the general rules whether they are promulgated by the federal gov-

ernment, AASHTO, the state, or by other jurisdictions. The local authority must be allowed sufficient latitude to adjust standards to local conditions, so long as we are definitely improving the safety of that facility.

Many times we look at the standards and say, "Well, if we can't meet the standards we'll do nothing." In so doing we deprive the road user of safety improvements. For example, a decision might be made to not improve a road from a safety level of 2 to 7 on a scale of 10, because we can't reach the ideal of 10. Obviously, that is not a reasonable, logical solution to the problem. We should move as rapidly as we can to make everyone of our facilities safer, and our safety standards should be designed to allow us to do that!

Standards for low-volume roads must be viewed as guides -- not maximums, nor minimums. They must be adaptable to the many changing circumstances and needs as interpreted by knowledgeable public officials working with the local road jurisdictions.

Good low-volume roads don't cost -- they pay.

For the farmer or the factory they are an investment in production.

Thank you very much.

## COUNTY VIEWPOINT

Howard E. Schwark, Kankakee County, Illinois

Attempts have been made by many persons to define a low-volume road. When discussing low-volume roads today we still find a rather broad spread in traffic volumes making a precise definition nearly impossible. This is understandable when considering the vast differences that can be found in traffic volumes as you move about the world. A low-volume road in an urbanizing area, for example, may have a traffic count that exceeds the traffic count on what may be considered a high-volume road in open country. A low-volume road classification in any given location is basically relative to the traffic volume on the balance of the roads within the location under consideration. This classification, with some exception, is the road classification that is under the jurisdiction of local agencies and is their responsibility to construct and maintain. For this reason it is obvious that counties do have an interest in low-volume roads.

The evolution in development of our total transportation system from the early paths and trails laid out many years ago to accommodate man and horse and wagon to the present system of paved roadways which converted these paths and trails into an integrated transportation system that can accommodate motor vehicles has taken place in a relatively short period of time, most of it within this century. Even though the early pioneers of our road system recognized that all-weather travel for motor vehicles required some reinforcement of the earth roadways with logs, flagstones, bricks and other innovative materials to make the roads passable during inclement weather it has been only in recent years that we have seen dramatic progress in the use of concrete, asphalt and steel as materials to provide a network of surfaced highways for the motorist.

What does this have to do with counties' interest in low-volume roads? I feel this relatively rapid change from paths or trails to the present highway system and the phenomenal progress in road building technique has a direct relationship to and has a considerable effect on the low-volume road system.

In the beginning of the development of our transportation system virtually all of our roads were low-volume roads by today's standards. We would have to make some exceptions and not include the interstate, tollways, bypasses and other roads constructed on new alignments. There was not always the millions of cars and trucks using the highways as there is today. Traffic escalated from a few motorized vehicles in the early part of this century to the present high volumes as the demand for more and more vehicles by the public developed. There became a need to provide a highway facility of higher standards to accommodate these vehicles. The paths or trails were gradually transformed into highways which were improved by upgrading the surfaces improving the geometrics, etc., all of which required the expenditure of more and more funds. As traffic continued to increase, some of these low-volume roads were becoming high-volume collectors and primary routes. It soon became too costly for local governments to construct and maintain these roads. The motorist was traveling long distances which required some continuity in routing so he could find the way to reach his destination. Local governments sought help from their respective states for financial aid and in addition requested them to take over part of the system of highways for purposes of constructing and maintaining them as state marked routes. The need for continuity on a national basis arose as traffic and the length of trips increased, eventually resulting in the federal government aiding states in a federally-marked system designed for transcontinental travel. A good example of the progression in changing roles is the first transcontinental highway in the United States. It was called the "Lincoln Highway" and it was conceived in 1912. After twenty years of construction with what we could now call primitive tools it was finally completed and stretched from New York to San Francisco, a distance of 3,385 miles. A little over 40 years later a project

consisting of over 40,000 miles which connected every major city in the country was completed nearly in the same length of time it took to build the Lincoln Highway. This feat could not have been accomplished either by the counties individually or by the states individually. It had to be planned and coordinated at the federal level. The great progress we have seen in building an integrated transportation network is affecting the low-volume road system in many ways.

In round figures, there are approximately 3.1 million miles of rural roads in this country today. Of this 3.1 million-mile system, approximately 2.3 million miles are still under the control of local agencies and it is estimated that approximately two-thirds of this mileage can be classified as low-volume roads with a traffic count of approximately 400 vehicles per day. Through several procedures of development, low-volume roads have been integrated into the national highway network and have become significant collectors of all types of traffic which feed the main arteries of the national transportation system.

During the process of developing national state and local highway systems there were also the attending laws, funding constraints, standards, and other requirements which each layer of government required in the administration of its respective highway program. When the states began working with the counties, standards were developed and policies were written to uniformly guide both the state and the county on the best use of the funds made available. The basic consideration each state and its respective counties had to determine was how to obtain the maximum benefit from each highway dollar and still provide as uniformly designed and as safe a road system as possible. Each project undertaken by the counties was designed with the economics of the area, topography, traffic, traffic volumes in mind and was constructed using state standards that were reasonably flexible. The low-volume road systems throughout the country generally bear the variable characteristics of the particular state in which it is located.

In the first years when federal funds became available for counties before the interstate project was undertaken, counties were able to use federal funds very much as they had been using state and local funds. However, the interstate project had tremendous impact on this simple and workable procedure. Environmentalists, safety groups, labor interests, minorities, to name a few, all had a hand in molding self-serving laws and directives which were intended to apply to a national highway program, the interstate, which was to cost billions of dollars. I do not question the need for special consideration for a project of this immensity which crisscrosses the country on new alignments. It should be considered differently from highways on existing alignments that have been in existence for many years. The trouble counties are experiencing is that the laws and directives were attached to the federal dollar and not to the type of project as I feel it should have been. When using federal funds a county must go through a process very much similar to the process required for major highway construction even though the county may be working on a low-volume road.

The reason for the ever-growing mountain of red tape, the oftentimes unnecessary spending of highway funds, and a continued attempt to develop uniform standards nationwide for the low-volume road system is, I believe, understandable when we realize that there is a large segment of highway administrators who are not familiar with a low-volume road

system. They have no idea what counties must do in the way of planning and prioritizing of projects to keep in as safe an operating condition as possible their share of the 2.3 million miles of roads which are under their jurisdiction. The political realities are in themselves overwhelming when you consider, for example, in the county in which I am located there are 28 elected county board members who have employed me to administer a 265-mile county highway program. This results in one elected official for less than 10 miles of county roads. The township road system, on the other hand, consisting of 878 miles of roads which are almost entirely in the low-volume category is administered directly by 17 elected highway commissioners with my assistance when required as specified by statute. In addition, each township has five elected officials serving on the town board of auditors who have certain statutory functions concerning the commissioners' position. This results in one elected official being directly responsible for an average of 52 miles of township roads and, indirectly, one elected official for an average of 10 miles of township roads.

The interest of the counties is to work side by side with both local state and federal governments to formulate laws and directives which fit the low-volume system and not encumber the progress of its development with unnecessary red tape.

The traffic count on the low-volume road is at the bottom end of our transportation system. Instead of using the same laws, policies, and directives designed for the top of the system, we should realize that problems will occur and consideration should be given to this divergent traffic pattern. Low-volume roads may be an insignificant title, but pause for a moment and think what would be the result if all of the low-volume roads in the country were closed for a day. factories, farms, businesses, industry, schools, hospitals--and the list could go on--would all be adversely affected. The low-volume road is important and it should be recognized that it is a category of roads which needs special attention just as the interstate was given special attention.

I have not directly addressed those in attendance who have traveled here from other countries. I express the appreciation of the counties in this country for your attendance. We are extremely pleased that you could be with us. The need for funding highways must be somewhat the same in your land as we are experiencing here in the United States. We are aware of the proliferation of automobiles and trucks all over the world. Problems, I am sure, will vary from country to country. I realize that when receiving financial aid from any segment of our government, the acceptable philosophy is that with the money certain restrictions on how it is to be spent are included in the grant, I personally do not agree entirely with this philosophy because government is not really paying the bill. The taxpayer who really is paying the bill is the one and same person who pays his local, state and federal taxes. He expects the work to be done, and could care less what the name of the government that furnished the funds might be. It is sometimes difficult for government officials especially if they are so far removed from the actual location of where the money is to be spent, to realize that they might do things differently if it really was their dollar that was being invested in the work.

To briefly summarize, counties do have a very real interest in low-volume roads. The counties are, in the main, responsible for the construction

and maintenance of these roads. It is only logical that counties should be involved when matters affecting low-volume roads are being discussed. Counties should have the opportunity to fully utilize every funding source available. There should also be a reasonable degree of uniformity on how the money can be spent. States and their respective counties have distinguishing features that set them apart from one another which cannot be lumped into one uniform set of laws, regulations,

directives and standards and expect it to work out properly. We who have low-volume roads can understand this because we are struggling with the problem. I am certain that I speak for the majority of the counties when I say we stand ready to offer our assistance to the decision makers in helping make the low-volume road system as good and as safe as we possibly can for the motorist of this country.

Thank you.