Joint Highway Goals  
County and State  

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Bureau Control on Secondary Projects Relaxed  
The state's proposed standards and procedures were recently accepted by the federal highway administrator of the Federal Bureau of Public Roads. Effective last January 1, all projects financed in part by federal-aid secondary funds were placed under the plan. In other words, the state has assumed the bureau's normal responsibilities on federal-aid secondary projects from the programming stage to completion of construction. Upon approval of a program for a project, the state will be authorized concurrently to proceed with the development and construction of the project. This means that without further review and approval on the part of the bureau, the planning, surveying, and engineering may be developed, rights of way purchased, the project advertised, and let to contract.  

During the course of construction, secondary projects, whether county or state, will not be inspected routinely by any representative of public roads. Checks on compliance will be by means of annual inspection-in-depth on a state-wide basis. Therefore, construction supervision of a project is delegated to an approved, publicly-employed project engineer. He must be well-trained and qualified to handle the work and, above all, he must be a person of unquestioned integrity. He must be free from prejudices, pressures, and politics in the performance of his duties.  

After the state and/or the county has determined that the project is satisfactorily completed in accordance with the plans and specification requirements, that all record sampling and testing is completed, and all encroachments have been resolved, final acceptance of the project will be made by public roads. Our inspection will normally be limited in scope. It will include a check of the general location, compliance with previously agreed standards, installation of signing and markings, linear measurements of some of the finished work, and the
taking of record samples or review of results of the record samples if taken by state personnel.

Our next action will be a verification by an auditor that the amount claimed by the state for this work represents the actual costs which the state has paid, or is obligated to pay, as reflected in the state's accounting records.

*Vehicle-Miles Will Continue to Increase*

The United States, today, has the greatest collection of mobility the world has ever known. In motor vehicles, particularly, we surpass all nations; we own or operate 57 percent of all the passenger cars on earth. When it comes to automobiles, the rest of the world consists of underdeveloped nations.

The situation in this country is often described as a "transportation crisis." Actually, this crisis is the normal way of life in the transportation field. Imagine, for instance, a prognosticator stating that the number of motor vehicles will triple and highway travel will increase 350 percent within a 20-year period. On hearing this, most people would agree that we are face-to-face with a crisis. But, in fact, it has just happened. Since 1945, the number of vehicles in use in the United States has gone up from 30 million to 90 million and travel has increased from 250 billion vehicle-miles to 870 billion vehicle-miles.

The outlook is for more growth in the future, although vehicle ownership now is reaching the point where it is beginning to bump the population curve. As a result, the capacity and efficiency of our highway system present a problem today and will continue to do so.

These conditions and facts directly affect every person in Indiana and the impact of the expected continued increase in vehicle numbers and travel will be severely felt by all areas of government.

*Reasons for Joint Highway Goals*

Following are some reasons for having joint highway goals and an explanation of federal involvement in state and county matters.

Essentially the joint highway goal of county and state governments is to achieve a balanced and well-integrated highway system which will provide the public with highway facilities commensurate with anticipated future traffic volumes. This of course means that the highways should be planned, designed, constructed, and maintained in such a manner that they will accommodate traffic forecasted for many years into the future. In the highway business 20 years is the normal forecast period.
In view of the startling growth of vehicle ownership and miles traveled during the past 20 years, it does not appear that this growth will show any appreciable amount. As a minimum, it may be expected that the annual vehicle-miles traveled 20 years from now will at least double. Therefore, we should plan for this increased traffic and base our designs on standards which will adequately provide for the safe and efficient movement of the traffic volumes forecasted. To achieve these goals, namely, a balanced and well-integrated highway system, based upon adequate planning, good design, construction, and maintenance, the most important factor is a good county-state relationship.

**Basic Requirements for County-State Relationship**

The basic requirements for an ideal county-state relationship in the highway field consist of three major essentials:

1. A broad legal framework within which to operate. This must provide a definite division of authority and responsibility.

2. The mandatory requirement for an adequate engineering staff in each county.

3. The opportunity for state and county officials to meet as equals in resolving their problems.

Proper legislation is certainly of primary importance. Although it is not possible for legislation, in itself, to achieve good administration, the requirements of law often do insure or preclude the opportunity for successful operation. This has been particularly noticeable as a result of the wide range in legislation adopted by the various states in providing aid to the counties on their local road obligations.

Without exception, every state has provided some means of assistance to the counties for the maintenance and improvement of local roads. In some instances, this has encouraged the development of capable county highway administrations while in others it has had the opposite result. The determining factor often has not been the extent of financial assistance made available but the means through which it has been provided.

The least desirable form of state assistance is the outright grant carrying with it little or no accountability except for a statistical report at the end of the year. In this situation, the state shares no responsibility and gives the county no leadership or guidance except in grudging response to a direct request. This weak sort of an arrangement certainly does nothing to encourage the development of strong mutual ties or good working relationships between the counties and the state. Unfortunately, what it does do is to reduce the status of the counties from what should be a major, vital subdivision to one of minor, ineffectual importance.
Some local officials, in a mistaken belief that any semblance of state control is inherently detrimental to the counties, have strongly opposed all legislation that would grant state officials any authority over local roads. The fallacy of their position is clearly evident in those states where counties have been operating under this form of state assistance with highly beneficial results. They have found that it is to their benefit to have the state share certain limited responsibilities with local officials. Contrary to the critics of such cooperation, they have found that this can be accomplished in such a manner that there is no loss of any necessary or desirable local control or authority. In fact, it has been shown in many states that better results are invariably assured through such cooperation.

States enjoying the best and most harmonious relationship with their counties retain certain controls—such as system selection, establishment of design standards, supervisory review of construction projects, and the use of state-provided funds. These controls are generally shared with the counties and require joint or cooperative action. On the other hand, the counties retain exclusive jurisdiction over the direct expenditure of all authorized funds, the selection of their proposed projects for improvement, the preparation of surveys and plans, the awarding of contracts and direct control and supervision of all maintenance and construction operations. They are definitely “masters of their own households,” but they have the additional benefit of a highly qualified and competent partner having the technical skill and experience they might need.

It is important to note that this limited partnership arrangement has consistently produced both the best county highway administrations and the strongest of county-state ties. Under no other arrangement has every county, large or small, contributed its proportionate share of modern improvements properly located for the county’s anticipated traffic volume and constructed to provide adequate service at a minimum of expense for a period of many years. This is in sharp contrast to the temporary type of stop-gap work, often of questionable worth, performed by many counties when left to their own resources and lacking the services of a qualified engineer.

*County Engineers Vital*

The author firmly believes that each county should have a county engineer. In fact, some states have a legal requirement that every county must employ a registered professional engineer as the county engineer.
Good relationships cannot be accomplished on a legal, legislative, or jurisdictional level. Good and proper relationships are accomplished from a human relationship standpoint on a person-to-person basis. What better method exists than face-to-face discussions between people of similar background.

Lawyers can talk to lawyers, doctors can talk to doctors, and engineers can talk to engineers. But, to mix them up in discussions of professional problems in any of these fields will normally lead to confusion. Where counties employ professional engineers, county-state relationships are better, mainly because they have mutual respect for each other. Another point meriting recognition in this area is the savings in dollars. By using men who have been educated in highway engineering and who have acquired experience in their field, you can get the best design and construction at the least cost.

Where a county has a registered professional engineer as part of its organization, it insures that the county will have a man who can discuss their problems with the state engineers on a professional level. Equal partners in the same profession will tend to establish a close, frank relationship, which naturally brings about an informal face-to-face discussion of mutual problems. Possible differences of opinion and judgment can be aired, questions from both sides can be asked and answered before the inflexible stages of formal documents are reached. Satisfactory agreements, or compromises if necessary, will be arrived at more quickly and with less chance of irritation by this approach. The closer that the county and state people work together, the more likely it is that actions of the state will be found acceptable to the county and vice versa. There is no room in this relationship for autocratic or arbitrary attitudes. The parties to the relationship are professional men of integrity, skill and judgment, and therefore the partnership must be on an equal basis. Equally important, they should be men of good will who can work together in close and free cooperation.

*Adequate Design and Construction Standards*

The next point to be discussed is adequate design and construction standards and a few related items. A song popular some years ago had the line, "You've come a long way from St. Louis," and the following line, "but, baby, you still got a long ways to go." That is the way I feel about our county highway program in Indiana. Major progress has been accomplished in the last few years but a lot more remains to be done. There must be quality construction on the county as well as state highway systems. With quality construction, better
performance is automatic. A few examples are that the higher quality suit that you buy or watch that you obtain, house that you live in, or road that you ride over, the better service it is going to give you, the more enjoyment you will attain in having it or using it, and the longer it will last, provided the proper quality classification is selected for the performance to be given. We don’t have to prove these things; we know them from a lifetime of experience.

Placing a quantitative title to quality, however, is another thing—it doesn’t come automatically; it has to be planned or otherwise determined. For example, the type of quality relates to the service that is to be rendered. The relative qualities of materials and workmanship in a pair of overalls is inferior to a business suit. However, it would be economically unsound and the service would be inferior for a bricklayer to buy an expensive business suit to wear on the job.

It would be economically unsound for a highway engineer to require the type of workmanship called for on the Ottawa-AASHO Test Road Project for normal highway construction. On normal highway construction, the benefits of that kind of quality would not be worth the cost.

The point is that first the design quality must be carefully determined by the engineer in light of the services to be performed. Then he must plan and specify the materials and workmanship which will economically produce the facility which will meet as closely as possible the desired quality and service capabilities. Essentially, we should not be using interstate standards for low-traffic, local roads. Conversely we should not be designing and constructing roads and bridges in locations of high traffic-volumes that would be better fitted to the horse and buggy era. We should plan for the final product to fit the needs of the public. Only in this manner will we achieve our joint highway goals.