WPA CO-OPERATION IN ROAD AND BRIDGE WORK

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Inasmuch as I am not an engineer, I am rather hesitant about addressing a group composed of county engineers and highway superintendents, especially upon such a technical subject as roads and bridges. I am well aware that every one of you is fully cognizant of the details of modern road and bridge construction, and for that reason, I am not going to attempt to tell you how to build a road or how to build a bridge. You already know that better than I.

What I do want to discuss with you is how to acquaint yourselves better with what the Works Project Administration is doing, what it intends to do, and how it may assist you in solving road problems of your local county. I believe it was Blackstone, the famous jurist, who once said, “A speech to be immortal does not have to be eternal.” With that in mind, it is my intention to confine my remarks to a brief outline of WPA co-operation in road and bridge work.

To understand fully problems that confront a work-relief agency like the WPA in developing projects of a socially beneficial nature requires an understanding of the purpose and tentative goal toward which efforts of the agency are being directed. It also requires a knowledge of the limiting factors that govern the scope of the agency’s operations.

The primary purpose of the WPA is to provide useful work on public property for unemployed persons for whom industry, in its present state of technological development, has been unable to find places. These individuals are persons with family responsibilities who are able and willing to devote their energies toward the creation of additional public wealth and benefits. In return, for the time being, they expect only the security of a bare living, which, if it were not for our work relief agency, might have been denied them.

SELECTION OF PROJECTS

For this reason, WPA officials have a large responsibility in connection with the selection of projects. First, projects selected must provide employment for the destitute unemployed in the community. Second, the funds allotted must be expended in accordance with the mandate of Congress as expressed in the act appropriating the funds. The limiting factors governing the selection of projects are the skills of the unemployed in the locality from which the project application has been received, and the number of dollars available with which to give work to those persons.

In approving projects, these factors cannot be waived. For example, if we have in any given community one hundred
destitute unemployed persons to whom we must give work and one hundred thousand dollars are available to provide work for them for a year, we cannot approve a project in that community costing one hundred thousand dollars which provides employment for only seventy-five of those persons. Also, it is obvious that we cannot find any one project on which these entire one hundred persons can be given work. Therefore, we are confronted with the problem of working out cooperatively with local authorities the selection of a series of projects which, with the funds available, will employ the entire one hundred needy persons and be of maximum social and economic benefit to the community.

This selection of projects under the limitations that I have outlined is really a most interesting procedure. Let us take this hypothetical case of one hundred destitute unemployed persons in a given community with a hypothetical one hundred thousand dollars available to give them work for a year. The first step we must take is to examine the occupational characteristics of the one hundred certified workers.

We probably would find something like this: four carpenters, two bricklayers, two painters, one plumber, two plasterers, four truck drivers, eighteen men mill workers, eight women mill workers, twenty-two unskilled laborers, three bookkeepers, one barber, four stenographers, two automobile mechanics, one radio operator, three real estate agents, two boilermakers, one locomotive engineer, one music teacher, one millwright, one baker, two welders, one detective, four janitors, two elevator operators, one shirtmaker, two wood choppers, three cigar makers, and two teachers.

With this list in his hand, the local WPA representative meets with the county highway superintendent, who calls in the county engineer and perhaps several other officials. The highway superintendent in all probability has a list of projects that the county has been wanting to place in operation for a long time, and, of course, this list is used as a basis for discussion. Obviously, the fifty thousand dollar underpass which has been needed so badly for a long time, but which requires comparatively little unskilled labor and a maximum of material and skilled labor, cannot be accepted. For similar reasons, the county garage cannot be repaired. Likewise, several other useful and highly desirable projects are eliminated.

Finally, after a study of the secondary occupations of the group, it is decided that the four carpenters, the two bricklayers, the two painters, the plumber, the two plasterers, two of the truck drivers, and eight of the unskilled laborers can be used to make some badly needed repairs to the courthouse, to replace some obsolete small bridges on county highways, and to repaint several highway steel structures, the maintenance of which has been sadly neglected through lack of available funds. A project to cover this work in the amount of
twenty thousand dollars is agreed upon, with the county contributing six thousand dollars for the purchase of a part of the necessary materials.

The next project decided upon probably would be one in which the local town is interested. It would include the repaving of twelve blocks on Main Street. This project would provide employment for the eighteen men mill workers, ten unskilled laborers, one bookkeeper, the two remaining truck drivers, two janitors, and both wood choppers. It would be approved in the amount of twenty-seven thousand dollars, with the town contributing five thousand dollars for materials and the necessary skilled labor not available from relief rolls.

The next project decided upon probably would be a sewing room sponsored by the township trustee and designed to give employment to the eight women mill workers, one of the stenographers, and the three cigar makers. This project would be approved in the amount of twelve thousand dollars, with the township contributing two thousand dollars in the form of materials. Products of WPA sewing room incidentally are all turned over to trustees for distribution to persons on direct relief rolls.

The local representative of the WPA, working in co-operation with the county officials, the trustees, the mayor, and his advisers, would go on down the list and select projects of various kinds until some type of work had been provided for every one of the one hundred destitute unemployed.

Procedures similar to this have taken place in every community in the United States where WPA projects are operated. Obviously, both the county and WPA officials, too, would have liked to build the underpass or to have replaced the county garage; but if they had used the money for these purposes, all of the destitute persons for whom the WPA is obligated to provide employment opportunities would not have received work and their care would have been a direct responsibility of the county.

I think that it is entirely proper to request those persons who would judge our projects critically always to bear in mind the limiting factors to which I have referred. If they will do this, I feel that great praise will be given, not to the WPA alone, but also, and principally, to the local officials who actually selected the projects.

**ROAD IMPROVEMENT NEEDS**

In Indiana, two very important factors must be considered in the development of projects best suited to local conditions. First, WPA rolls in our state include an overwhelming number of unskilled laborers. And second is the proper use to make of this type of labor in the execution of projects that are wanted and needed in the communities affected.
In the final analysis, Indiana, in spite of her industrial sections, consists of a wide expanse of rural area. There exist in this state today more than one hundred and eighty thousand farms; and a recent survey made by the State Planning Board reveals that, of this number, approximately forty-two thousand still are situated on unimproved roads which are neither hard surfaced nor graveled.

For those of us who reside in towns and cities, it is difficult to realize the deprivations that are borne in this modern day and age by the typical rural family that still is compelled to live on a dirt road, and whose only communication with the outside world is regulated by the uncertain whims of the weather. They are confronted with the problems of obtaining medical assistance in times of sickness, getting the children to and from school, and receiving mail. All of these are problems that to city dwellers do not exist, but which to our rural citizens still are extremely important. Even the marketing of their crops is dependent upon the weather. What does it matter to a farmer if the price of corn is high when an obstacle such as a mud road prevents his bringing it to market at the most advantageous time? All these factors serve to exemplify the imperative need for farm-to-market roads in Indiana.

During the last two decades we all have watched the development of the automobile with its attendant changes in our mode of living. The increase in motor vehicles has been accompanied by an unprecedented advancement in highway development. Great ribbons of concrete now connect the towns and cities of the entire state. Additional revenue measures, such as the gasoline tax, unheard of a quarter century ago, have been devised to finance this highway network.

Today, after virtually completing the main arteries throughout the state, we now are thinking in terms of four-lane and super highways. As a result, Indiana enjoys the enviable record of ranking first among our states in improved highways.

Although we occupy first rank in the nation, we are not yet in a position to rest upon our laurels. Our efforts, as you all are well aware, have been concentrated on main artery highways with still much to be done by way of improving farm-to-market or feeder roads. We still face the problem of getting many Hoosier farmers out of the mud.

At the very inception of WPA it was found that by far the greatest source of eligible labor, especially in the rural areas, fell within the unskilled group. The problem with which both the WPA and local public officials were and have been confronted is the submission of useful and publicly desirable projects that can be executed successfully with this type of worker.
From the beginning of the work-relief program, there has been an almost unanimous opinion in rural areas that farm-to-market roads constituted the greatest need of the residents. By a fortunate coincidence, the type of labor available to WPA in those communities was the very type needed for the culmination of such projects. The results of this combination of circumstances speak for themselves. By far the larger portion of WPA allotments to Indiana has been expended on farm-to-market road construction.

SOME ACCOMPLISHMENTS

It is not my desire to burden you with statistics, and in view of a definition of an engineer once given me, I doubt my ability to impress you with figures. An engineer once was defined to me as a person whose idea of accuracy is anything to the nearest plus or minus ten thousand dollars. I rather suspect that this definition originated with some disgruntled client who possibly had played the lead in the sad experience of negotiating a loan of ten thousand dollars to promote some construction work only to find at its completion that he held unpaid bills in that amount and no tangible assets with which to meet them.

To give you some idea as to WPA participation in the development of farm-to-market roads, however, I should like to emphasize that approximately 8,000 miles of farm-to-market roads have been constructed or are under construction through the co-operation of the Indiana WPA. In addition, nearly 350 miles of road in the State Highway System are being improved with WPA assistance. The work consists of paving, mostly with black top, resurfacing, widening, relocating, and grading. In numerous instances, entirely new roads are being constructed.

In regard to bridge work, I am happy to report that the WPA has constructed or repaired a total of 727 such structures throughout the state. Of this number, twenty-eight represent new construction, and 699 constitute repairing or remodelling projects. (The new bridges were constructed on many county roads and were of various designs and sizes.)

The cost of this work alone totals approximately five hundred and fifty thousand dollars, of which the WPA has expended nearly four hundred thousand dollars, and the various sponsor's contributions have amounted to approximately one hundred and fifty thousand dollars.

Outstanding among Indiana WPA bridge accomplishments is the reconstruction of the West Tenth Street bridge over White River in Indianapolis. The bridge had been closed to traffic since 1928, thus depriving a large section of capital city residents of its use. The structure was completely reconditioned to meet the requirements of modern motor traffic.
Built in 1901 to support a five-ton load, this bridge was improved to support twenty tons. The structure is four hundred feet long, and now has a thirty-foot roadway and a six-foot sidewalk on the north side. To make the roadway level, it was necessary to raise the center pier of the bridge four and one-half feet. Several years ago, when a retaining wall was built along the west bank of the river, the west end of the structure was raised to conform to the level of the wall. In raising the pier it was necessary to rebuild it completely. Defective stones were removed, and the entire unit was covered with reinforced concrete. The east section of the bridge also was raised and the approach filled to make a level roadway from bank to bank. The east pier also was reconstructed and entirely covered with concrete. Supported by seven-inch I-beams, the roadway of the bridge was constructed of oak flooring four inches thick and topped with a two-inch layer of asphalt. The latest type of channel and angle steel guards designed to deflect high-speed motor traffic replaced the former old-fashioned latticed hub wheel guards.

Since the advent of WPA, more than forty-two million dollars have been expended or approved by the federal government for road and bridge work in Indiana. At the present time, monthly expenditures for payrolls alone on this type of construction work amount to nearly seven hundred thousand dollars. To this can be added approximately twenty per cent which is being supplied by sponsors as contributions. Accomplishments of the WPA road and bridge program are manifold. Already overtaxed county and township poor-relief funds are being materially relieved. Unemployed persons have been provided with work and wages with which they can obtain the necessities of life. By working, the unemployed are assisting in the creation of permanent public improvements both for themselves and their more fortunate neighbors.

Funds expended by both the WPA and the sponsors immediately find their way into trade channels. There is little doubt that the stimulus to business provided by the work-relief agency has played an important part in the upward industrial trend that followed the recent depression years. This means of providing useful public employment for destitute persons to keep them off direct relief rolls has another distinct advantage, which, while possibly less tangible than the others, nevertheless is equally as important. By providing work the person on relief has been given a job which is, I believe, the American way and by virtue of which he has been made a part of the great commonwealth of useful and productive workers.

I wish to thank you gentlemen for the co-operation and assistance you have so ably shown local WPA officials. You represent a large portion of the sponsors of projects throughout the state. The success of the program has to a large extent
been dependent upon you. As might well be expected, I earnestly believe that in no part of the United States has greater ingenuity and resourcefulness been displayed than right here in Indiana. But, as we return to our respective tasks, knowing that our state ranks first in improved highways, let's not lose sight of one of the most important factors responsible for our standing. When Elwood Haynes put together his horseless carriage in a city that now is less than an hour's journey by motor from the site of this meeting, he provided the background for the Purdue University Road School.

Fortunately the officials of this University were quick to see the need for what now has become a state institution. It took considerable foresight to establish a Road School back in 1914 at a time when self-starters and electric driving lights still were classified as added accessories and closed cars were mostly pictures we saw in catalogs.

The Road School has proved of great service to both the state and the nation during the twenty-four years that have followed its inception. Let us hope it will continue to bring together and assist city, county, and state officials, contractors, equipment men, and other persons interested in solving street and highway problems.

As I think of what Haynes started, what the Purdue Road School developed, what governmental officials made possible, and what road and bridge construction work has meant to the unemployed, I am most happy that the WPA has been, and is, able to co-operate.

THE COUNTY ROAD BUDGET

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This is in many respects one of the sacred spots in the history of our commonwealth, and I envy those of you that may have had the distinct advantages of the training offered by this institution. And I admire you for your foresight in choosing as a profession something which enables you to carve your way through adversity; to create monuments of highway projects and bridges; to eliminate hazards in travel offsetting in a measure the hazards that beset us as the path of progress is travelled by faster moving vehicles. Thus, one school of thought keeps pace with another as we move onward to new heights on many fronts.

I take it that you came here to learn what is new and practicable, so that you may apply those truths to your everyday task; that 1938 may be marked by its smoothing out of some of the more perplexing problems. In this connection, I assume that I have been invited to participate in an effort to acquaint you with some of the inevitable problems of local financing in the light of my experiences as secretary of another