

Planning for Post-War Construction

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In a recent speech Major General Philip B. Fleming, Administrator of the Federal Works Agency, used the parable of Noah and the Ark to illustrate our present situation in the United States. It presents an apt parallel. We all know how Noah planned against impending calamity and so saved himself, his family and the animals, two by two. The sneers of his compatriots, who failed to make provision, died gurgling on their lips.

Of course, Noah had certain advantages to guide his planning which we do not possess. He had had a special weather forecast straight from an infallible source, and his determination as to what was necessary for him to do was beset with no complications. His decision to build himself a boat was based upon the simplest of considerations. Unfortunately, we find ourselves in a more involved situation than Noah's as we face planning to deal with a certain post-war flood of men seeking employment. As it seems unlikely that we shall receive any special guidance from any source beyond this world, it behooves us to do some straight thinking among ourselves.

Much thought and interest today are being devoted to the post-war problem. The words, "post-war problem," have become almost as familiar and inseparable as the words "ham and eggs." But the phrase means different things to different men.

My remarks are directed generally to but one phase of the problem; namely, the part which construction can play in the post-war period, and they are directed particularly to the role of public works in the construction field.

I doubt if I shall leave with you any pearls of engineering wisdom, but I do hope to stimulate your thinking. As a matter of fact, I doubt if ever before has there been so much interest in general planning for the future as there is at the present time. But there lies in all this thought and discussion a dark thread of fear. We fear the possibility of large-scale unemployment after our victory at arms; and thousands

of public officials, industrialists, educators, labor leaders, and just plain citizens are thinking and planning ways to prevent it.

The admitted complexity of the post-war problem also worries us. Many factors must enter into the solution, and public construction comprises but one of them. Among others are such matters as the liquidation of war contracts, conversion of war plants, new private construction, adaptation of new materials to the uses of peace, industrial training of returned servicemen, readjustment of war-time population concentrations, development of new and better foreign economic relations, and last, but not least, the development of an adequate and equitable tax structure. Construction, both public and private, is related to all these factors, and each is related in some way to every other. Our planning must take all factors into account and, so far as possible, work them out together. There also is a war on, and it is entitled to receive the full measure of our attention and energy.

Our primary interest today is, or ought to be, the winning of the war as quickly as possible. But, running a close second in public interest, is our desire for the establishment of a peace based upon the four freedoms. Freedom from fear and from want cannot be realized unless we have freedom to work and to prosper. We must have jobs at which to work when we shift from the business of war to the pursuits of peace. Construction, public and private, can provide worthwhile work for millions. What troubles many of us is whether or not we shall be intelligent enough to plan now for post-war construction so that it will be of the greatest possible benefit to the Nation.

No thinking person believes for a moment that all we have to do to banish the spectre of post-war unemployment is to develop a big private and public construction program. It is not so simple as that. Moreover, there are limits to the volume of employment that can be provided within the framework of sound economics through the construction of public works. All elements of the national economy must bear their proper share of the load. I am convinced, however, that the concept of planning now for public works, so that they will form a reservoir of worth-while future construction jobs, must take a high place in any national plan for renewed prosperity.

The public is particularly concerned about the post-war fate of the veterans of this war. The men now fighting have made it clear that they want to return to a country where there will be an *opportunity* to work and to live in reasonable security and happiness. Their fear is that when they come home they may not have a chance to work and they may fail to find the opportunity which should be the heritage of every self-respecting American. If the Nation now plans wisely to

bridge the transition gap, if the transition can be smoothly and intelligently made, most of such fears will be dissipated. Our veterans then will find in their homeland the employment and security they deserve, unhaunted by the gaunt spectres of want and enforced idleness.

It would be folly to expect that ways could be devised for the construction industry alone to stabilize a faltering national economy for long. It would be equally fallacious to expect public-works construction alone to long sustain the construction industry. After the war, and when and if we get through the transition period safely, we may expect, in my judgment, that construction activities can provide between ten and fifteen percent of the total national income and employment. Yet, with proper planning now, the industry can be prepared to shoulder, if need be, a far greater share of the load in the period of transition.

Construction can be a most important stabilizer because it is the one major industry that can shift from war work to peace-time work almost over night. It has virtually no problem of reconversion. In the so-called prosperous twenties, the construction industry ran to an annual volume of ten billion or more for new work alone. The all-time peak was reached in 1942 with thirteen and a half billion, mostly for war. If we assume the round, rough figure of \$6,000 of construction cost in 1942 to employ one man one year on the site of the work, we employed 2,750,000 men on construction in 1942. And, if one man on the construction site meant two more in the forests, mines, and factories, and in transportations, the industry that year carried a total employment load of 8,250,000 men and women. Construction cost per man-year in the twenties can be roughly estimated at \$5,000. On that assumption, a ten-billion-dollar construction year carried a total employment load of 6,000,000 men. Admitting that these figures are based on the roughest of assumptions, they are nonetheless formidable. It should be remembered, however, that they embrace both private and public building.

It is important to keep in mind that public works normally make up the smaller part of the construction volume. In the ten-billion-dollar years of the twenties, public construction, city, county, state, and federal, accounted for about one-third of the annual total. Obviously, there are economic limits beyond which public-works construction cannot be carried even in periods of the most prosperous activity. But for a short-run period of potential crisis, and if provided with a sufficiently powerful incentive, public-works construction could be readied to carry a tremendous load, and so help materially to bridge the gap between war and peace-time employment.

When we talk about planning now for needed public works for possible construction during the post-war transition period, the term "needed public works" should be clearly understood. Needed public works are those works we actually require now, or will require within the next four or five years, to permit the orderly functioning of our states, cities, towns, counties, and the national government. Local public works which are merely desirable and which we would build only if the national government would provide all, or a major portion, of their cost are not in my category of *needed* public works. My list would include only those projects which local subdivisions of government may decide are needed badly enough now, or within the next few years, to pay for themselves if there should be no federal help.

A rigid application of that criterion would eliminate from present planning considerations the long-range changes and the super-duper, fifty-year plans some of our professional planners appear to favor. We haven't the time, the money, or the men to devote to making plans now for long-range municipal face-lifting. We should confine ourselves to planning for the public works we cannot much longer do without. Such projects alone are numerous enough to provide a backlog, a reservoir of sound projects which ordinarily would go into construction during the years immediately following the war, but which could be built in a much shorter time if our post-war situation should be such as to make speed desirable.

The kind of public-works planning necessary to help fill a reservoir for future use must include these three basic activities:

1. Preparation of working plans, specifications, contract documents, and estimates of construction costs.
2. Selection of rights-of-way and other necessary rights, determination of their costs, and preparations for prompt acquisition.
3. Completion of legal and financial arrangements for immediate construction.

The cost of real plans for a project is only about three to six percent of the construction cost—comparatively almost insignificant. In normal times, most well-governed communities spend their own money for sound plans for needed projects. Even though the construction of a needed improvement may be long postponed, no other insurance against unemployment is cheaper than the cost of the plans and specifications for it. The time to obtain that insurance is now, before the flood of post-war employables looking for jobs engulfs us.

If private business and agriculture are able to absorb at once all the returning war veterans and the displaced war workers, without an

abnormal period of public-works construction, we shall indeed be fortunate. In a reservoir of public projects, however, we would have good insurance against a probable adverse eventuality. We don't consider a fire-insurance premium a wasted investment just because the house hasn't burned down. Yet, completed, well-conceived plans for public improvements are an even better investment than fire insurance, since our cities and villages can and will use them at a later day if their use is not required as an immediate buffer against post-war unemployment.

It is well to bear in mind also that the better our reservoir is filled with plans for needed public works the less is the likelihood that we will be required to drain it to help provide immediate post-war jobs. Public knowledge of the existence of a reservoir so filled would prove a powerful stimulus to private industry. Industrialists then would know that, come what might, there would be work for men to do and there would be money in their pockets to buy what industry could produce. It follows (with a shift of metaphor) that it is paradoxical but true that the more substantial our backlog of public works, the less likely are we to be required to burn it quickly.

Officials of every governmental unit in the country know, or can determine readily, the public works their communities will need in the immediate future. No community feels that it should defer to the national government for a determination of purely local improvements. The community is completely capable of making up its own mind as to what it needs and for what it should plan. It is the *construction* of public-works projects in the post-war period which will need national control. Their planning now needs encouragement and leadership. It is only through national control of a large reservoir of projects that public works can be held in their proper place, a place which is complementary to private enterprise and not in competition with it for available manpower and materials. Our reservoir cannot be brought into existence, however, unless our states, cities, counties, and villages develop plans to help fill it. For maximum success, our program must have its origin among the "grass roots" of the Nation.

Although many bills relating to various phases of the post-war period have been presented in Congress, the only legislation cleared to date to provide funds for making construction plans is in highway construction. Everyone here probably knows that \$60,000,000 of federal highway-aid money is now available to the states on a regular matching basis for the making of plans for highway construction after the war. Private engineering firms may be engaged by state highway departments for planning and may be paid from these funds. This

money may also be used in the regular way for aid in paying actual construction costs. Yet, although federal aid for highway planning has been available to the states for the last two years, only about half of the sixty million dollars has been called for to date. Some states are using their own funds to pay for all their planning and are saving their rights in the sixty million for use on construction later. This hardly seems an adequate explanation, however, for the fact that about thirty of the available sixty millions still remains in the federal till. The more plausible explanation is probably that most state highway departments, like most municipalities, are coasting along on the false assumption that there will be plenty of time to make surveys and plans a year or two from now. They are skating on thin ice. There are a few notable and praiseworthy exceptions to that attitude of procrastination, New York state being outstanding.

In recent speeches before the American Association of State Highway Officials' convention in Chicago, both General Fleming and Commissioner MacDonald urged state highway departments to delay no longer in the making of their finished plans for present and future highway requirements. Both emphasized that the highway program for the immediate future must be developed in detail now if it is to be ready for use as a stabilizing agent during the transition period. General Fleming is Administrator of the Federal Works Agency and Tom MacDonald is Commissioner of the Public Roads Administration of the Federal Works Agency. They speak with authority. Mr. MacDonald pointed out that, in addition to meeting normal future highway needs, we must make up for the lag in construction that occurred in the several years immediately preceding the war. Our highways were not even abreast of requirements when the war started, and they have fallen still farther behind during the last two years.

Let us assume that a normal highway construction year would be represented by the average annual volume of road building that occurred in the decade immediately preceding the war. In order to meet present needs and to catch up on the pre-war lag, we shall have to construct highways for several years in a volume at least one-third above the pre-war ten-year average. That is at least some measure of the task ahead. Mr. MacDonald estimates that a highway construction program—federal, state and local—amounting to two billion seven hundred million dollars will be required each year for several years after the war to meet our normal requirements. If highway construction is to be stepped up for employment stabilization while we shift gears, this annual volume must be further increased. I pass these figures on in the hope that they will impress you, as they have me, with the fact that

a staggering amount of work in connection with surveys, tracings, specifications, and state financing, to say nothing of straightening our right-of-way tangles, is yet to be done if an adequate highway program is to be achieved. Unless we are figuring on a ten- or twenty-year war, there isn't much time left in which to get ready to start construction, in volume, if need be, the day after that happy day on which the war ends.

Highway planning is but part of the whole program and the only part that is at all clearly charted. Nobody knows how broad may be the potential program for other public works. No one will know until plans for those works begin to fill the reservoir. Given time and money, a fairly good estimate could be made of the total of needed public construction in the country. Such an estimate would have little value in our problem unless we could at the same time estimate reliably how many and which among all our governmental subdivisions will soon engage in the three basic activities before-mentioned to obtain plans qualified to go into the reservoir. To date we haven't been told who is to be in charge of the reservoir or who is to assume the responsibility of looking over the plans offered in order that the Nation may be assured of storing only those which have been developed sufficiently to be immediately useful if required.

I doubt if many people, even engineers and construction men, realize how much time it takes to launch a large program of public works. The public in general has no conception of it. The snail-like pace with which our last big public-works program got under way has caused many who are seeking a way to aid employment to rule out public construction as ineffective. It is true that the 1933 Public Works program (not to be confused with WPA) almost died before it gave birth to a volume of jobs big enough to be noticed. It was eighteen months in labor. The principal reasons for the delay were lack of construction plans, enabling local legislation, and financing. When it became evident that millions of unemployed couldn't wait for months between meals, rather than adopt the principle of doles, the President re-allotted \$400,000,000 of PWA money to CWA so that men could be put to work somehow on improvised projects. Some of these projects were good, some fair, and some of little permanent value but, in working on them, men did earn wages and preserved their self-respect.

The government, late in 1933, was forced to create CWA, with its hastily improvised work projects, because no one then had in readiness any completed plans for better projects. The creation of CWA opened the door to its successor, the WPA, the continued spending of federal money for work relief and endless political argument. It took

a second World War to clear up a situation which probably would not have developed if the counties and cities and towns of the Nation had had plans for sound projects ready to go when they were so sorely needed.

Discussions on planning for post-war public works these days always raise the question of possible federal participation in the cost of making plans and even for the construction itself. Until Congress speaks, these questions cannot be answered. Few informed persons expect Congress to say now whether or not any federal participation in the cost of the construction of local public works will be forthcoming. Some kind of federal assistance, however, is expected for meeting the cost of planning. There is some question as to the form this probable assistance may take. Some persons around Washington who have tried to guess how Congress will act in the matter lean toward the opinion that federal assistance for general public-works planning, if offered, will be in the form of loans only. These loans would have to be repaid in full when construction is launched, no matter how the construction might then be financed.

If this is the correct guess, and I am personally inclined to believe it is, there seems little justification for local governmental units to wait longer to start their plans. Only those communities, now few in number, which cannot afford the comparatively small cost of plans and the other steps preliminary to construction need wait for federal help.

We need another Noah, yes, another thousand Noahs. We need at least one in the governing body in every state, county, city, town, and hamlet, if we are to fill our public-works reservoir in time with sound plans against a probable period of devastating drouth. And there is so little time. If we fail to use wisely the time yet available and the day of economic drouth does come, we shall then be faced with the unhappy alternatives of enforced idleness, doles, or a national made-work program. Our country cannot afford to submit again to those alternatives. We must take a better way. If we build our local arks of public-works plans now, our people will have a better chance to weather safely the coming storm. It is high time for an end to speculation and fruitless talk and for the beginning of real action on construction plans in every community in the Nation.