

THE HIGHWAY RECOVERY PROGRAM

Address of Thos. H. MacDonald, Chief, U. S. Bureau of Public Roads, before the Nineteenth Annual Convention of the American Association of State Highway Officials, Milwaukee, Wisconsin, October 9, 1933.

When the nation united to use its great strength to overcome depression and to restore a normal national life, it was necessary to plan attacks upon many major objectives. To achieve effective results, agencies capable of functioning on a country-wide scale were essential. It was inevitable that the State and Federal highway organizations should be called upon to take a prominent position on the front line of the offensive operations since, together, they constituted the only national agency actually organized to execute public works on a scale adequate to sustain existing and to provide increased employment through properly planned and competently executed construction projects. Even so, it was not so clearly evident as it is now that the highway organizations must become the shock troops to point the entering thrust of the "war against unemployment" army which the Public Works Administration has been rapidly marshalling into form and simultaneously driving into action. The disappointment recently expressed by the Public Works Administration that a larger number of projects is not now actually under construction, springs from no lack of appreciation of what has been accomplished but from the absolute necessity of a further acceleration in the rate of expenditure and of increase in employment.

The existing unemployment must be relieved to the fullest extent of the possibilities within the highway field. The responsibility that is imposed upon the State and Federal highway departments is one to test to the utmost their individual and organization competency. Against this, the high merit of the cause provides both an inspiration and an opportunity to put country before precedent and revitalize the public's appreciation of their highway administrative organizations.

Six months ago a careful survey of future employment in the Federal and State highway field indicated that the normal and emergency highway employment would reach its peak in June and, unless an additional construction program were undertaken, would rapidly diminish and about the first of September would fall precipitately. Actual State and Federal employment in June reached practically 360,000; in August it dropped to 330,000; and the preliminary estimate for September is 325,000.

During September the new program was just beginning to make headway. Our job now is not only to counteract the seasonal decline of highway employment but actually to increase the number employed, when weather conditions and past experience would indicate this to be the impossible. The drag of 30 days used to organize the whole program will be made up, and more, within the next 60 days.

Here is the immediate status as of October 7th:

Projects estimated to cost \$95,000,000 are under contract.

Additional projects estimated to cost \$45,000,000 are approved and ready for contract.

Work is actually under way in 45 States, the District of Columbia and Hawaii.

The rate of preparation, submission and approval of completed plans for new projects has now reached 1100 per month. This means that upwards of 4000 projects will be prepared and approved and a large percentage of them under actual construction by December 1. The number directly employed on highway projects is a wholly inadequate index of the amount of employment provided or of the number who share in the funds expended for such work.

While the actual relation of the direct job employment to the expenditure varies between wide limits by reason of the difference in the types of construction, it is well established that 80 to 85 percent of the total disbursements goes for labor and employment. At least 75 percent is distributed quickly to sustain employment.

This bare statement of the relationship between construction expenditure and employment creates no adequate impression of the disastrous unemployment consequences that have attended the breakdown of the construction industry. The most optimistic estimates would probably not place our total construction for this year above \$2,000,000,000 to \$3,000,000,000. This is less than one-third of the goal upon which the nation must fix its determination, including both private and public construction, before we can reestablish adequate earnings not only for those who participate directly and through industrial production, but for the growers and producers of food, manufacturers of clothing, retailers of goods, and for those not engaged in commerce but in all the professions.

In an informal memorandum addressed to the State highway departments in June, I stressed the point that the primary purpose behind the whole industrial program is employment relief on a widely distributed basis. The intervening weeks have accented this aspect.

That we might have an expedited though orderly plan of the work, every possible provision has been made by the Bureau, with the approval of the Secretary of Agriculture and the Federal Administrator of Public Works, to reduce the time required for each step to the minimum. Changes have been made in previous procedure, of which the most important are:

To the States which did not have adequate working capital and to those whose State laws did not provide for the use of State funds in municipalities or on secondary roads, the advance of working or revolving funds.

The reduction of time for advertising.

The preparation of agreements in the field.

The provision for abbreviated plans for secondary roads.

The authorization to proceed with direct labor construction of secondary roads without prior preparation of plans.

The provision for the immediate payment of bills through the revolving fund.

These and other time saving changes in method have been adopted in the belief that the States would operate in full cooperation with the Bureau to provide sound administration and adequate engineering. Several States do not yet have a sufficient number of competent engineers to carry the work into execution rapidly. Where these conditions exist, the approval of the Special Board for Public Works to begin operations has been contingent upon satisfactory engineering performance. Since, if necessary, the States have authority to employ engineering assistance as a part of the cost of the projects to be paid from the Federal funds, there certainly can be no excuse for either an incompetent or an inadequate force of engineers to handle the work properly.

An adequate engineering organization in each State is perhaps the one most important consideration. The failure to provide such an organization is more likely to result in friction between the State highway department and the Bureau or in slow progress of the work than any other cause.

From the beginning of the Federal highway work, policies have been directed toward the building of a national system of highways as the principal objective. Now, employment is the principal objective and the most important reason for making available to the highway departments an appropriation more than three times as large as the annual Federal contribution for highways heretofore. It is difficult to impress this point upon those whose whole-hearted efforts and ambitions have been wrapped up in the effort to bring to completion the major highway systems as such.

The employment needs are, in the main, proportional to population. Thus to relieve these needs, the highway departments are projected into fields which they have not heretofore occupied and for which they were to a considerable extent unprepared.

The undertaking of work both in the cities and on the secondary or feeder roads is a logical development and in keeping with the direction in which the public mind has been moving for some time. This legislation provides a means for correcting many objectionable conditions of long standing on the main routes within the cities, at the same time bringing employment to the worker rather than attempting to move the worker to some remote job.

Likewise, secondary road construction will prove a godsend by furnishing employment to carry many agricultural communities through this period of distress, while providing road facilities for which there has been a constantly increasing demand.

Both of these fields are important from the standpoint of public service which may be rendered by the highway departments. The entrance of the States and the Federal Government into these new fields of highway improvement accents the necessity for State-wide planning of highway facilities. Accurate surveys have definitely indicated the high percentage of the total traffic which is of municipal origin. This traffic has been a very large contributor to the annual income of the States devoted to highway purposes and it is now only just that the major routes within the cities shall be brought to adequate standards for the traffic.

The proper planning and limitation of the feeder road system are of vital concern. It is important that a proper relation be maintained between these roads and the major road system and that an annual income available for their further improvement and maintenance shall be assured. Planning, to be worthy of the name, must provide for multiple traffic lanes along many of the major routes, for wider rights of way and for projecting arterial routes into and through the hearts of the business districts of municipalities. This is the only way to maintain present property values and to prevent what may be termed the migration of wealth.

It is equally important that the improvement standards now in effect for major State highways be revised to meet the relatively lower requirements of secondary roads. Lighter surfaces are justifiable but all-weather service must still be provided. In the details of alignment and grades, lesser standards may be used.

In connection with the improvement of secondary roads, the States, particularly in the north, should proceed to do as much work as is possible this fall using force account methods under competent engineering supervision. It is expected that the maximum use of hand methods and local labor will to an extent affect both the economy and efficiency of the results, but the problem is to give jobs. It is much better to give employment on work that will remain as a public asset in the communities, with the loss of some efficiency, than to provide relief in the nature of a dole.

In the conduct of contract work we must steer a safe course between machine and hand methods. In the effort to provide increased employment on the highways there must be no destruction or starvation of the equipment industry or loss of industrial employment that should be generated by such a widespread road building program.

The higher-type work on the Federal aid system and on the municipal projects must be done with the essential equipment, while a large opportunity is afforded for the use of hand labor methods on the secondary or feeder road projects.

In this legislation stress is placed upon the promotion of highway safety. Railroad grade crossing elimination is one of the best means for providing employment, particularly during the winter months, and probably no expenditure will provide a more permanent public asset. Sidewalks or footpaths along the suburban roads, particularly those adjoining the larger cities, must be taken seriously as a safety provision; likewise the closing of deep ditches with the drainage carried underground.

Numerous safety projects, involving largely hand labor methods, can be found in the widening of narrow roadways, the correction of alignment at bad curves, and the raising and widening of shoulders. Such work does not require extensive planning. It can be undertaken by direct labor methods and will provide much winter work, but such work does require highly competent engineering supervision.

Active steps are now being taken toward coordinating transportation services in several practical directions. Of chief immediate concern from the standpoint of highway construction are

the studies which the Bureau is now making of the possible substitution of highway service for unprofitable branch rail lines to the extent of several hundred miles which the railroads have signified their desire to abandon. Further, recommendations have been made by the railroads for a very large mileage of feeder highways which they believe would be of advantage both in providing better combined transportation facilities into rural sections from rail stations and also in developing more traffic for the railway lines.

These practical steps in the field of coordination are being actively pressed by the Bureau, not only in the interest of better transportation service for the public, but for the purpose of generating a greater degree of mutual confidence and cooperation on the part of those working in these two great transportation fields.

While this period of economic distress is largely responsible for the acute differences of opinion that have arisen between rail and highway commercial operators, it should be remembered that, after all, only a small percentage of the highway traffic is responsible for most of the adverse criticism that is made by supporters of the railroads.

There are a number of matters of sound public policy in which highway administrative officials are most highly interested in securing remedial legislation, as for example, the hours of continuous employment of commercial vehicle operators. No matter how theoretically correct traffic laws may be, they will only be practically serviceable when enforced by a sufficient and efficient highway patrol. The States which have not yet established such a force are negligent of both the lives and the property of their people.

The whole problem of rail-highway relations has been competently explored during the past year by such agencies as the National Transportation Committee and the Joint Committee of Railroads and Highway Users. Further intensive studies are being made by the Federal Coordinator of Transportation, Mr. Joseph B. Eastman.

Undoubtedly there will be resulting legislation that should compose to a degree at least the present conflict of opinions. Such legislation, however, will have small limiting effect upon the use of the highways as a whole. Our efforts now ought to be directed toward the reorganization and revamping of our total transportation facilities against the time when these will all be needed to carry the normal commerce of the country.

In the directions which have been indicated, that is, in the provision of highway facilities to substitute for unprofitable branch railway operations and in the extension of feeder roads from

rail systems, the Bureau hopes to have the cooperation of the States, since both of the general proposals appear to be in the public's interest.

There is yet another field in which large support and assistance are available in every part of the country. This is roadside improvement, consisting largely of finishing the roadsides to heal the scars of construction operations by the addition of seeding and well designed planting. A prominent place has been given improvements of this kind in the rules issued for the conduct of the recovery highway program.

It is universally recognized that a very large percentage of the total use made of the highways is for recreational and social pursuits. Reasonable expenditures for providing pleasant and beautiful roadsides are wholly consistent with sound public policy, particularly now since this type of work can be used to advantage in providing employment that reaches rather different classes than normal highway operations.

As highway executives, we will fail to realize the changed sentiment if we are longer content to build roadways only and neglect to improve and to plant the roadsides. The highway departments have been called upon to submit projects for roadside improvement on a reasonable mileage. A few miles in each State will not be considered a reasonable mileage of such work. It is hoped, with the cooperation of the States, that work of this character will be sufficiently extensive to accomplish an adequate demonstration of the tangible benefits to be derived from roadside improvement, to indicate the most appropriate methods, and to establish the basis for an organization in each highway department which can carry forward continuously such work.

In this connection, wider rights of way, particularly for major highways, are necessary. The acquiring of land is slow and expensive. Most of the States need better laws for this purpose. Adequate planning for the future is dependent upon adequate right-of-way dimensions. Property values are lower and more easily secured now than they will be again in our generation. There will be opposition, but the result will be profitable to both the private owner and the public.

We can confidently expect that in the near future communities which have been relying upon well improved roadways to attract outside traffic, will be placing greater reliance upon beautiful highways. Already provision has been made for extensive work of this character in one or two States through the use of work relief labor, with other costs furnished by the use of highway funds. There is no reason why such cooperative work cannot be greatly extended.

As a final thought, while the major accent has been placed upon the need for furnishing employment as widely and as rapidly as possible, the other principles here touched upon are highly important from the standpoint of the future development of our highways and the influence exerted by our highway organizations.

The planning of highways to meet both metropolitan and rural needs, the coordination of highway transportation with other forms, the inauguration of a national campaign for beautiful highways and the inauguration of widespread activities to do away with safety hazards of all kinds on our highways, these in themselves are worthy of our most intelligent efforts. They are all demands of the times. There is great public support to be had for the asking if we rise to these demands. Since the opportunity is now presented, we can rely upon future public support of these efforts. No other course should be considered.

The spirit of the moment is cooperation. In the National Administration there are many agencies which can be of great assistance to the State highway departments and which will also need the cooperation of these departments. Among these most closely related to our immediate problems are the Federal Emergency Administration of Public Works, the National Industrial Recovery Administration, the Federal Emergency Relief Administration, the U. S. Employment Service, the National Planning Board and the Federal Coordinator of Transportation. The activities of all of these organizations will have an intimate relation to, and considerable effect upon, the future of highway development and utilization.

The possibility of accomplishing results in these widespread activities will largely be measured by the confidence and cooperation that are generated throughout the nation. I have full faith in the reliance that may be placed upon the highway departments of all the States in advancing every proposal for meeting present conditions and building toward a better future.