

Federal-Aid Highways and Their Future

By

Thomas H. MacDonald
Chief of the Bureau of Public Roads

For ten years road building in the United States has been a major improvement activity made necessary and also possible largely by the increase in the utilization of motor vehicles. During this period the number of motor vehicles has increased from 10,500,000 to 26,500,000 and the use of individual vehicles, as shown by the gasoline consumption, has materially increased. In meeting the needs of the motor vehicle the Federal Government has done its share by contributing practically half the cost of constructing 88,713 miles of important interstate highways during the period since the inception of the Federal-aid plan in 1916.

On July 1, 1931, the total going Federal-aid program, including emergency funds advanced for the relief of unemployment and State funds, amounted to about \$447,500,000 of which the total Federal share was \$275,250,000. This represented a considerable increase in the size of the joint Federal and State program of the years prior to 1930; an increase which was the prompt response to the country's need of work for the employment of idle labor. Up to 1930 the Federal highway contribution had been limited for several years to \$75,000,000 a year. In April of that year this sum was increased by \$50,000,000 in the authorization for the fiscal year 1931. This was the first move toward enlargement of the program. It was followed on September 1

by the early apportionment of the \$125,000,000 authorized for the current fiscal year, an act of the Secretary of Agriculture which further stimulated activity; and finally, on December 20, 1930, Congress approved emergency legislation advancing \$80,000,000 to be used in place of State funds to meet the regular Federal aid already available. In five months the \$80,000,000 advance fund, together with \$160,000,000 of regular Federal aid and States funds totaling \$240,000,000 was put underway on wholly new work to provide employment in all the States. The States also continued construction and maintenance programs from wholly State funds, and there were numerous uncompleted Federal-aid projects carried over from the preceding year.

Large as it appears, the Federal-aid program of course is but a relatively small part of the road development of the country made necessary by the tremendous increase in the motor vehicle. This increase in number of all types of motor vehicles which have proven to be so adaptable to an extremely wide range of utilization, could not help but produce tremendous impacts on our social and economic life.

The country has definitely entered a new era of transportation which means a new manner of development. The Federal Government is not assisting the States to build interstate highways merely in order that people may take pleasure trips in automobiles. What is happening under our eyes is the establishment of an entirely new system of

transportation in the United States which will have in all likelihood as great an effect on the country as the development of the railroads.

During the sixty years of their growth the rail lines opened up the vast area of our continental domain in an extensive way, quickly spreading a relatively sparse population over the whole territory. They were built into the world's most efficient major transportation system; and they developed the territory on and adjacent to their lines to a high degree. But the railroads do not now and never have performed a complete transportation service. Their freight must be brought to them and taken from them over the highways. So long as there was scope for development close to the rails the country could continue to prosper without much improvement of the highways; but the time was bound to come when further development would be hampered by the high cost of feeding the rail carriers from the more distant points within the network of their lines.

It seems almost providential that at the moment when this condition was reached the gasoline engine, applied to the motor vehicle, supplied the means of continuing the development beyond the point possible with the unaided railroads. What is happening now is simply that the motor vehicle, facilitated by improved roads, is opening up the undeveloped interior spaces that remain between the crisscrossing lines of rails. It is a process that must go on if

the country is to progress to new levels of economic development. Fears of its effect upon the railroads are groundless. Indeed, the rail carriers can not much longer perform an efficient service without the supplementary aid that the roads and motor vehicles alone can give.

Perhaps one of our troubles at the moment is that we have so highly mechanized agriculture that it has been possible for a relatively few people on the farm to support the rest of us. Agricultural labor, freed by this process, has gone to the cities and we have not been able to absorb it all at these great concentration points. In the meantime back on the farm the remaining labor is not fully occupied.

A possible solution may be provision for auxiliary labor opportunities for farm workers. The motor vehicle and the distribution of electrical energy will enable us to diffuse industry and bring us closer to the land. Development of the highway is the means to that end, being carried out unconsciously perhaps, but nevertheless definitely.

Federal aid is but one of the means by which the essential improvement of the roads required for this further extension of the transportation system is being accomplished. It is available for the improvement of only about 197,000 miles of the most important interstate routes within the larger systems of State highways that aggregate about 325,000 miles. Outside of both these main systems are 2,700,000 miles of local county and township roads.

The Federal-aid and State roads, as befits their greater importance, have been the first to feel the benefits of the improving process. With the main systems now in some measure improved, and traffic meanwhile grown heavier on the local roads, it is time that more effective means were devised for the betterment of these local facilities.

It must not be supposed, however, that the Federal-aid and State activities can be put aside to take up the local improvements. The main systems have been improved, but not by any means up to the needs of traffic. The process of gradual upbuilding which is needed, following exactly the similar process by which the railroads were built up in efficiency, will occupy many years; and rebuilding will increase as initial construction falls off. Road construction can never end. It must be a continuing process if the facilities of highway transportation are to be kept abreast of the always expanding needs of the country.

Federal-aid expresses the interest of the Federal Government in the roads which serve interstate traffic. In amount it bears about the same proportion to the expenditures of the States as the interstate traffic on State roads bears to the total traffic carried. The reasons that have led the Federal Government into this very successful cooperative constructive venture with the States will continue as effective in the future as they have been up to this time. Whether the Government continues to cooperate is a matter of policy that rests with Congress; but whether it does or not the people of the country must continue without abatement the work of road improvement which is now paid for in part by Federal funds. The money spent for roads is not an expenditure that can be trimmed at will without public loss. It is not an expenditure at all, in the ordinary sense, but an investment, an investment in a most urgently needed transportation plant, without which the future economic development of the country will be retarded.