

Federal Aid Road Construction

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The construction of Federal-aid roads is one of the more important cooperative activities of the Federal and State Governments. To this cooperation and other developments that have grown out of it is due in large measure the rapid progress that has been made since 1916 in the improvement of the main highways of the country and the consistency and harmony of the development of roads in all States.

This cooperation of the State and Federal governments has resulted, since 1916, in the construction of 69,536 miles of main interstate and intercounty highways, including 17,942 miles of concrete, asphalt, and brick pavements; 5,224 miles of bituminous and waterbound macadam road; 30,789 miles of gravel and sand-clay road; 15,385 miles of graded earth road; and 198 miles of bridges over 20 feet in length.

The importance of the Federal contribution to the improvement of the main highways of the country may be illustrated by the case of United States route 40. This great mid-continent highway, which extends from Atlantic City to San Francisco, is 3,305 miles in length. With the exception of about 400 miles the entire route is now in some degree improved, and the Federal Government has cooperated with the States in the improvement of nearly 1,600 miles.

In return for its cooperation the Federal Government has exacted of the States three requirements which have charted the course and insured the success not only of the cooperative work but also of the independent work of the States to which the same principles have been applied. These three requirements are:

- (1) That, to receive Federal aid, the State must create and maintain a State highway department adequate, in the opinion of the Secretary of Agriculture, to administer efficiently the work of construction and maintenance;
- (2) That the Federal appropriations and the State funds with which they are matched must be expended only upon a limited system of main interstate and inter-county roads until that system is fully improved as required by the traffic; and
- (3) That the roads built cooperatively must be maintained by the States, or, upon failure of any State, by the Federal Government with money apportioned to the State.

The first of these requirements was laid down by the original Federal Aid Road Act, approved July 11, 1916. At that time there were still 17 States that had no State highway department and a number of others in which the agencies that had been established

were weak and inefficient. The immediate result of the passage of the Federal law was the creation of reasonably effective State agencies in the 48 Commonwealths.

This act appropriated \$75,000,000 to be expended in five years beginning with \$5,000,000 for the fiscal year 1917 and increasing by \$5,000,000 each year until 1921 for which the sum of \$25,000,000 was provided.

The method of apportioning this first appropriation among the States was defined by the law and the same method, with a minor modification in favor of the small States, has been followed in the distribution of all subsequent appropriations. After deduction of 2½ per cent for the Federal administration, the balance of each annual appropriation is divided into three equal parts and each of these parts is apportioned separately among the several States and Hawaii; the first in proportion to land area, the second in proportion to population, and the third in proportion to the mileage of rural post roads and star routes; and the sum of the three portions makes up the allotment to each State. The share of those States which would thus receive less than one-half of one per cent of the total amount apportioned is increased to that amount and the apportionments of the other States are adjusted accordingly. The commonwealths which benefit by this provision are Delaware, New Hampshire, Rhode Island, Vermont and Hawaii.

The share of the Federal appropriations thus set aside to the credit of each State is available for allotment to particular road improvement projects, subject to two other provisions of the law. The first of these limits the amount that may be paid by the Federal Government in all States other than the western public land States to 50 per cent of the cost of labor and materials employed in the construction, and in each of the latter group to 50 per cent plus one-half of the percentage of public lands in each. The second sets an absolute limit on the amount that may be spent per mile. This limit - at present \$15,000 per mile - has been changed several times. At first it was \$10,000; then after the war it was \$20,000, and for one year it was \$16,250.

From 1916 to 1921 the Federal appropriations could be applied to the improvement of any road on which the United States mail was carried or might be carried. In the latter year the Federal Highway Act - most important of the amendments of the original act - provided for the designation of a system of main interstate and intercounty roads limited to 7 per cent of the total mileage of roads. This system which was designated jointly by the several State highway departments and the Secretary of Agriculture includes at present approximately 187,000 miles; and the Federal appropriations are available only for the improvement of the roads included in it.

Since 1916 appropriations have been made or authorized by Congress for each year up to and including the fiscal year 1929, the total amounting to \$840,000,000; and there is pending legislation authorizing appropriations of \$75,000,000 for each of the fiscal years 1930 and 1931.

The work of construction is carried on under the immediate supervision of the several State highway departments subject to the approval of the Secretary of Agriculture who has delegated the details of the Federal administration to the Bureau of Public Roads.