

Submitted Feb. 1937.

Highway Improvement with Federal Funds in the Southern States

by

Thomas H. MacDonald
Chief, U. S. Bureau of Public Roads

In the past three years the southern States have made notable progress in road improvement - probably greater than that made in any other similar period. This progress has been due in considerable measure to the large sums made available by the Federal government for highway construction as an emergency measure. These authorizations have provided thousands of miles of useful highway improvements and at the same time have created widespread employment.

One of the major efforts of the Federal Government to relieve unemployment through a large-scale road-construction program began with an authorization of \$400,000,000 as a direct grant to the States by the National Industrial Recovery Act of June 16, 1933. One year later the Hayden-Cartwright Act of June 18, 1934 authorized a supplementary \$200,000,000. These funds are known as the 1934 and 1935 Public Works highway funds. The Hayden-Cartwright Act also provided \$125,000,000 as Federal aid to the States in each of the fiscal years 1936 and 1937. The emergency program was continued by allocations of \$200,000,000 for highways and \$200,000,000 for grade-crossing work, as direct grants to the States made from funds provided by the Emergency Relief Appropriation Act of April 8, 1935. These various acts also provided lesser amounts for the improvement of highways in national parks, national forests, public lands, and other Federal areas.

The 15 southern States listed in table 1 were apportioned \$323,655,227 of the highway funds and \$61,622,399 of the funds for grade crossing work. The highway funds were apportioned on the basis of area, population and mileage of post roads. The grade crossing funds were apportioned according to population, Federal-aid mileage and railroad mileage with population given a weight equal to the other two factors combined.

On November 1 there had been completed in the 15 States listed 14,734 miles of road, costing \$234,697,068, of which the Federal Government paid \$204,785,520. Projects approved for construction or under construction total 4,564 at a total cost of \$82,822,949 involving \$61,482,341 of Federal funds. The roads already completed in the southern States constitute nearly half of the mileage completed in the entire country.

Details concerning the work being done in each of the States are shown in table 1.

The \$200,000,000 authorization for elimination of hazards at grade crossings under the Emergency Relief Appropriation Act of 1935 has made possible the largest program of crossing elimination ever attempted in the southern States. These States were apportioned \$61,622,399. Already there have been completed 153 crossing eliminations, 21 elimination structures reconstructed and 11 crossings protected by signals. Work under construction or approved for construction includes 464 crossing eliminations, 70 grade crossing elimination structures reconstructed, and 372 crossings protected by signals or otherwise.

There remains \$15,985,492 available for additional projects already included in the program. The work being done includes numerous costly structures of considerable traffic importance that were not constructed previously because of the high cost and reluctance to concentrate large amounts of general highway funds on a single improvement when there was a general need for improved highway surfaces. Details concerning the grade crossing work are shown in table 2.

The scope of work done with Federal assistance and administered by the Bureau has been greatly broadened in recent years. From 1916 to 1933 all Federal Aid was concentrated on the Federal-aid system. This policy was a desirable one so long as considerable portions of the system remained unimproved. In 1933 when the first large emergency appropriation was made, the system was in large part improved to some degree of adequacy and there was urgent need of supplying widespread employment. There was also need for municipal highway improvements, particularly the extension of main routes through cities, and for the construction of secondary or farm-to-market roads. These classes of work were therefore included in the Federal program.

Improvement of extensions of the Federal-aid system into and through cities is now a permanent Federal-aid policy and special authorizations of Federal-aid have been made for secondary roads and for elimination of danger at grade crossings.

For the fiscal year beginning next July 1 there has been authorized \$125,000,000 for regular Federal-aid construction, \$50,000,000 for grade crossing work and \$25,000,000 for secondary roads. These funds were apportioned to the States in December. Similar amounts will be apportioned next December for the following fiscal year.

The funds for elimination of danger at grade crossings do not have to be matched by the States. The other funds are subject to the usual matching provisions.

In the expenditure of the new Federal-aid funds for secondary roads the Federal government will deal only through the State highway departments. It is planned to apply the funds only on a definite system of secondary roads.

In addition to work on highways with funds apportioned to all States the Bureau of Public Roads, in cooperation with other Federal agencies, has supervised construction in and adjacent to Federal areas, such as national parks, national forests and national monuments.

Work in national parks and monuments has been in cooperation with the National Park Service of the Department of Interior. In Shenandoah National Park, in Virginia, a road 65 miles in length has been constructed near the crest of the Blue Ridge from the vicinity of Front Royal to Swift Run Gap. An additional portion, part of which is now under construction, will extend to Jarman's Gap. This road, known as the Skyline Drive, will extend from end to end of the park and is already attracting visitors from all States east of the Mississippi River.

In Great Smoky Mountains National Park, the road crossing the park from Tennessee to North Carolina is of importance for interstate communication and to give access to a wonderful recreational area. The easterly half was improved by the State of North Carolina, and no construction has been undertaken by the Government itself except for a portion four miles long near the eastern boundary. The road up the west side of the range, in Tennessee, was not developed comparably by the State, and has been under construction by the Government. The greater part of the work (11.5 miles) has been completed.

From the summit of this road, at Newfound Gap, a road 7.5 miles long has been constructed out to the vicinity of Clingman's Dome.

The construction of other roads in the Great Smoky Mountains National Park is contemplated. They have been surveyed in part, but construction has not yet been undertaken.

Construction has been started on the Blue Ridge Parkway connecting Shenandoah National Park and Great Smoky Mountains National Park. This road, about 450 miles in length, will connect with the road systems in the two parks and make one continuous recreational roadway. The work on the Blue Ridge Parkway is well under way with about 125 miles under construction. This road follows high up in the Blue Ridge, dropping down occasionally at major stream crossings. It will be primarily a recreational road. Because of its length and location, it will be convenient to the large population in the plains area to the south and east and will also be a convenient route from large portions of the middle west and west toward Washington and the northeast.

Surveys are actively in progress for additional portions of this road, as well as for a proposed extension of it to Sevierville in Tennessee from the westerly side of the park.

In addition to the work in the areas mentioned above, roads have been constructed or are under construction in a number of other areas under the jurisdiction of the National Park Service in the south.

The Mount Vernon Memorial Highway was constructed by the Bureau of Public Roads under an Act of Congress, and was subsequently transferred to the National Park Service for administration. This extended from Mount Vernon to the Arlington Memorial Bridge. Extension of this road north from Arlington has been started, with Great Falls as the objective. These extensions with a possible future return down the Potomac on the Maryland side to a point opposite Mount Vernon would constitute a George Washington Memorial Parkway.

Near Fredericksburg, Virginia, roads have been constructed in each of the four major areas constituting Fredericksburg and Spotsylvania County Battlefields Memorial National Military Park, in order that proper facilities may be available for visits to the Civil War battlefields at Fredericksburg, Spotsylvania, Chancellorsville and the Wilderness.

At Petersburg, road construction is in part completed in Petersburg National Military Park. Practically all the roads in George Washington Birthplace National Monument, on the Potomac, have been reconstructed.

A Parkway has been constructed between Yorktown and Williamsburg, Virginia, in Colonial National Monument, and its extension to Jamestown Island is being studied.

At Kitty Hawk, North Carolina, roads have been completed in Kill Devil Hill National Monument, commemorated as the site of the first flights of the Wright Brothers.

Near Savannah, Georgia, work is to start shortly on a bridge which will make Fort Pulaski accessible by highway. Across the State, at Chickasauga, three important roads have been completed in Chickasauga-Chattanooga National Military Park.

South of St. Augustine, Florida, a road in Fort Matanzas National Monument will give access to the ocean and also to the Park Service ferry crossing the Matanzas River or Inlet to the fort of Spanish times.

In Kentucky, road surveys will start shortly in the new Mammoth Cave National Park, while in Tennessee roads have been completed in Meriwether Lewis National Monument, Fort Donelson National Military Park and in Shiloh National Military Park.

A road has been reconstructed in Hot Springs National Park in Arkansas, reaching from the town to the top of West Mountain, and surveys are in progress for roads on North Mountain and Hot Springs Mountain.

In Vicksburg National Military Park, two road projects have been completed and a third will start shortly on Confederate Avenue, the most important of the park avenues.

Near New Orleans, a highway has been completed in Chalmette Monument and Grounds National Battlefield Site. This area is relatively small, and the work included not only the road work itself, but the filling in and landscaping of the whole area.

Surveys are now in progress on the Natches Trace. A recreational parkway is contemplated under the jurisdiction of the National Park Service, from Nashville, Tennessee, through a corner of Alabama to Natchez, Mississippi. The Natches Trace, said to have been an Indian Trail originally, became famous as the route used in returning north by those who had taken cargoes down the Ohio and Mississippi to New Orleans. It was used in the advance to New Orleans in the War of 1812.

Numerous roads and bridges have been built in the national forests in the southern States in cooperation with the Forest Service of the Department of Agriculture. This work will be continued. These roads are constructed according to the traffic needs and under the same standards that are used in the general road work administered by the Bureau. In apportioning forest road funds area of forest lands is the most important factor. Increased funds will be available for forest roads in Louisiana, Mississippi and Texas as a result of recent increases in forest areas in these States.