# History & Progress

**Second in our Anniversary Series**

## *Georgia*

"Once Georgia had some 250 romantic 'kissing bridges' crossing her waterways. However, time, nature and vandals have taken their toll on these structures that sheltered many a lover's kiss and many a thief's clandestine deed. Now only 18 remain."

This is the opening paragraph of a pictorial booklet beautifully illustrating the eighteen remaining covered bridges compiled and edited by Bill Allgood, Jr. of the Georgia Department of Transportation.

As late as 1958 there were between 77 and 85 covered bridges in the state with the oldest known construction date of 1840 for Big Red Oak Creek in Meriweather County. This one has a length of 116 feet covered and is being preserved with the greatest care (as are the other remaining 17) by the Georgia DOT as they are classed as historical sites.

The longest remaining covered bridge spans the South Fork of the Broad River and is located in Watson Mill State Park. This is a four-span structure built in 1885 and is 236 feet long. It was restored in 1973 by the DOT using antique hand tools.

Allgood gives several reasons for covering bridges—a custom that was common in many states: "One said they were covered to keep horses from shying as they crossed over them. Another suggested the reason was to offer refuge from travelers who were caught in sudden downpours. Still another offered the explanation that the cooling shade offered by the shingled bridges gave the horse a respite from the hot sun. (and perhaps most importantly) . . . Undoubtedly young lovers found it a secluded place for a kiss, hence the nickname 'kissing bridge.'

"But the real reason was more practical; the covering protected the main structural timbers from the weather, adding more life to the bridge. In the late 18th century, Timothy Palmer, a bridge designer, patented a covered bridge which he calculated would add forty years to the spans."

However, others much earlier appeared to have an equal interest in osculatory activities as Babylonians were said to have built covered bridges as early as 780 N.C., but the kisses must have been somewhat fleeting as history records no events of that nature.

The story of road building in Georgia is very similar to that of other colonies—all of which were settled in a narrow strip along the eastern coast of the continent with the greater initial traffic movement in the north-south directions. In Georgia as well as other southern colonies the economy was based on the plantation system and at the outset, at least, road building was largely confined to the required passage within the plantations themselves and to the ocean front where cargo was loaded and unloaded.

There was, of course, some concern with the construction of roads to provide a means of communication with other settlements along the coast. As a matter of fact, Emory C. Parrish, Deputy Commissioner, Georgia DOT, provided us with some highly interesting historical information to be included in this series.

For example: the British Colony of Georgia in 1755 passed what was known as the "Statutory Method" relating directly to road building. Under this regulation the colony was divided into nine districts with each district given six surveyors whose duty it was "to survey and keep in repair the necessary roads or trails in each district."

The surveyors were authorized to assess a tax on all male inhabitants within the "road age" of sixteen to sixty and the "work itself was to be done by road hands who were required to work as many as twelve days in each year."

Parrish notes that there is no record of the initial work performed under this arrangement which was abrogated with the start of the Revolutionary War.

**The top photo taken during the period from 1916 to 1919 is of construction on the Gainesville to Dahlonega, GA road showing a shovel in action loading a truck. Dahlonega was the site of the first United States gold rush in the 1830's and 1840's — well before the discovery of gold at Sutter's in California in 1849.**

**Those who lived through the "Great Depression" will be reminded of those days by this photo from the 1930's showing a new bridge (right in picture) being built to replace the old and unsafe bridge at the left by a Works Progress Administration (WPA) crew in Georgia. New bridge construction was one of the important phases of the massive "make work" program instituted by President Franklin Delano Roosevelt to restore the depressed economy.**

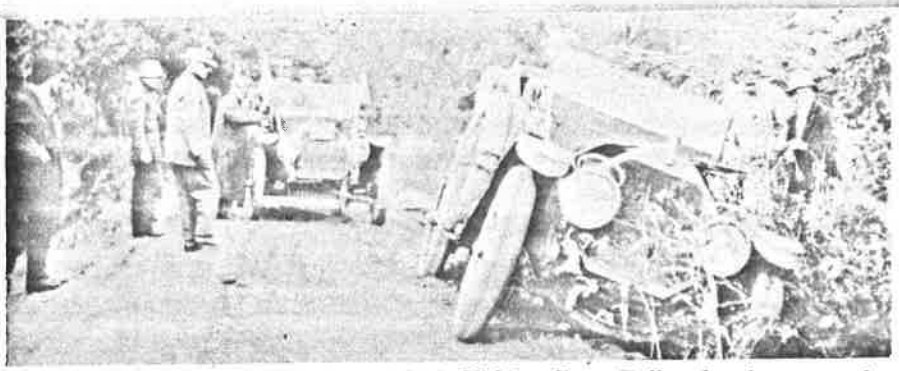
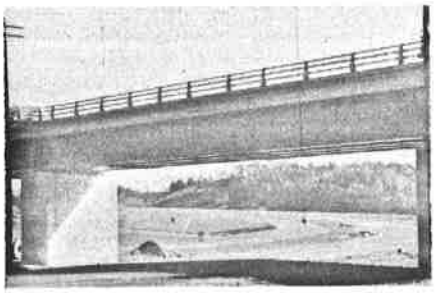
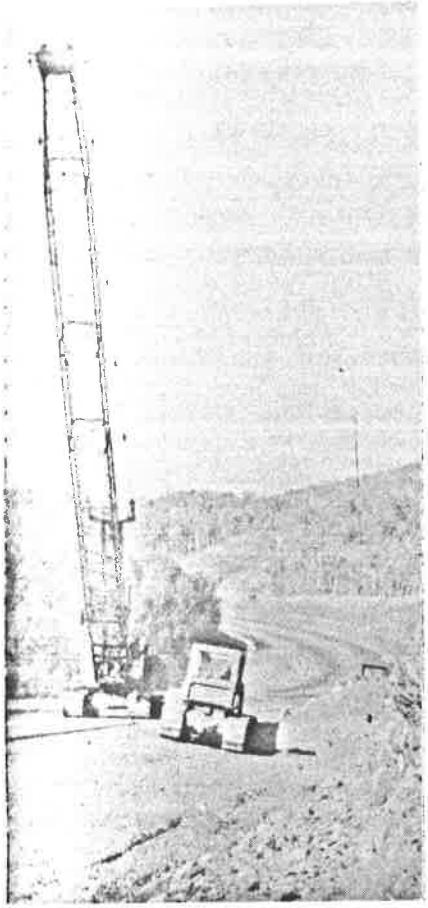


Photo (above) of cars in the 1911 Glidden Tour Rally showing an entry bogged down in a Georgia roadside ditch with interested onlookers appearing to offer little assistance. This was a frequent occurance for motorcars on the roads of the period.



At left is a photo of equipment moving along a highway which was one of the first paving jobs in Georgia. The picture is dated 1957.

Center photograph shows the last section of I-75 in Georgia was opened to traffic north of Marietta in the 1970's to complete that freeway through the state.



Immediately following the termination of the war the "Statutory Method" was renewed in a series of acts passed by the newly-organized State Legislature. This divided the various counties in the state into road districts and all males within the "road age" were required to work their local roads from five to fifteen days per year, furnishing their own tools.

With few changes, this road-working arrangement remained in force in Georgia until 1829 when the State Legislature appropriated $70,000 for the purchase of negro slaves to be used throughout the state to construct roads. Considerable dissatisfaction resulted in the rural areas of the state because most of the work under the act was in the vicinity of the larger municipalities at the expense of the rural settlers, and the act was repealed.

During this period the "Statutory Method" had remained in force which provided the principal activity until a wave of corporation chartering for the construction of turnpikes, locally controlled. From this point until the outbreak of the War Between the States these corporations provided considerable roadbuilding, but after the war the General Assembly in 1866 refused to renew the charters and the familiar "Statutory Method" again moved into the forefront—but accomplished little. As a matter of fact, practically nothing was done for the roads until 1891.

In that year the Legislature made its first real move toward improving the roads by passing an Act authorizing each County Commission, upon recommendation of the County Grand Jury, to levy a special two mills on the dollar tax for road building purposes. It also provided for a "commutation tax" of fifty cents for each male inhabitant for each day he was required to work on the roads. Parrish notes that "This Act comprised the first authority given any legal body to purchase mules and equipment and to pay a daily wage for the building of roads." And in those days fifty cents per day was pretty good wages.

An act passed in 1898 created the State Prison Commission and permitted leasing convicts to corporations or private individuals for industrial purposes. This leasing system was abolished in 1908 and replaced with authorization for counties and municipalities to use convicts in constructing public roads, bridges and other public works. Parrish reports that "Interest increased immediately in the building of roads and the way was paved for the subsequent enactment of legislation that revolutionized highway construction in Georgia."

In accordance with the 1916 Federal Aid Road Act the Georgia State Legislature, on August 16, 1916, designated the members of the state Prison Commission, the State Geologist, the Dean of the College of Civil Engineering at the University of Georgia, and the Professor of Highway Engineering at the Georgia School of Technology as the Highway Department of Georgia, "authorized to discharge all duties prescribed by Congress under the Federal Aid Road Act." Also, the legislature provide $10,000 for the 1918 maintenance of the Highway Department which was barely sufficient to pay the salaries of the chief engineer and his small staff. The reports adds that the funds were "totally inadequate for the organization or maintenance of an effective engineering unit." (Ed. — this was a condition repeated in state after state as highway departments were organized and assigned their duties. The amount of money appropriated varied from state to state, but in virtually every instance was much too little.)

In Georgia, because no space was available in the State Capitol the first commission used space in the Fulton County Court House donated by county officials.

The first commission was able to function, however, by a provision in the Federal Aid Act providing that ten percent of the cost of a project could be expended for engineering services and contingencies. The commission established a contractual relationship with 18 engineering firms approved by the U.S. Bureau of Public Roads.

These firms, subsequently designed as Project Engineers, were to make surveys, prepare plans and supervise the work in the launching of the Georgia highway program. Their compensation ranged from three percent to seven percent, based on the difficulties of the job.

Money may seem to be tight in highway departments today, but consider that in 1917 the Federal Aid apportionment was $134,329.48 and $268,658.96 in 1918. Nevertheless, the commission inaugurated 72 Federal Aid projects in 64 counties from 1916 to 1919, involving 555 miles of road and 41 bridges.

During 1917 and 1918 many counties in the state voted large bond issues for road-building purposes, which ena-

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bled the state to match available Federal Aid allotments. And highway building was under way in Georgia.

On August 18, 1919 an entirely new State Highway Board composed of three members was authorized and appointment by the governor. This board promptly appointed W. R. Neel, secretary of the original commission, as State Highway Engineer, in which position he served for ten years. The board members were each assigned specific responsibilities: Dr. C. M. Strahan, engineering responsibilities and direct operations of the department; R. C. Neely, equipment; and S. S. Bennet, control of lettings and contracts.

The first state system of highways was then compiled consisting of 4,600 miles on a "county seat to county seat" basis which was felt to be the ideal arrangement at that time. This mileage was immediately categorized as being under construction.

In 1921 this 4,800 mile limit was raised to 5,500 in 1925 to 6,300 miles with additional increases in 1929 and 1933. A 1938 law gave the State Highway Board the right to designate any public road in the state as a state-aid road with no mileage limitation.

It is interesting to note that Georgia was the fourth state to take advantage of federal aid funds for highways. Also, it is notable that in 1901 three Stanley steamers "clattered down Atlanta streets."

In 1924 the tax on gasoline was upped two cents per gallon to a three cent total. One cent was to be used to cancel a state-owned railroad debt; another distributed to the counties for exclusive public road use; the third penny went into a special fund for state aid roads. Then in 1927 the tax became six cents with the state highway fund getting four cents, county highway funds one cent, and the remaining penny to the Public School Equalizations funds.

Interest in roads continued with emphasis placed on surfaced highways. However, in 1935 the General Assembly dipped into highway funds for $2 million to pay teachers' and bus drivers' salaries and the Confederate veterans' pensions.

From 1937 and on the department underwent new organizations and the addition of new divisions as well. Georgia also led the country in setting up ideal no-passing zones as well as a number of other innovations before, during and after World War II. In 1972 the State Highway Department became the Department of Transportation with increased responsibilities, and the State Tollway Authority was created.

In addition to the years after 1919 being ones of great interest and activity in highway building, the entire department was subject to changes of various types before reaching its present well organized and efficiently functioning status.

In 1932 the state's Governor Russell was elected to the U.S. Senate to fill a vacancy caused by the death of Senator William J. Harris, and on January 1, 1933 was succeeded as governor by Eugene Talmadge.

The highway department's operating budget for the first three months of 1933 was submitted to Governor Talmadge for his approval, but he would not sanction it until certain changes were made. The revision were effected but "considerable friction between the Governor and the Highway Board was the result."

Soon thereafter the Governor issued an executive order reducing the Motor Vehicle Tag tax to a flat $3.00 for all types of vehicles, and when the budget for the second quarter of 1933 was submitted he deleted the names of five leading engineers in the Highway Department.

This brought about a spirited exchange of letters which were also given to the press, following which the Governor called out the National Guard on June 19, took charge of the Highway Department, forcibly relieved Board Chairman Barnett and Board Member Vereen, and placed the third Board Member J. P. Wilhoit in charge of the entire department.

On July 20 the National Guard was withdrawn and Talmadge appointed an entirely new board. Other organizational changes followed to make the year filled with excitement and turmoil. Despite this spirited controversy, the highway department was able to show expenditures for the fiscal year of about $11,300,000, bringing the total spent to $132,374,638.70, and 8,876 miles on the State System.

It is interesting and encouraging to note that despite the conflicts and controversies that have appeared from time to time in the various states during their organizational periods, the same indomitable spirit seems to prevail in all cases which has one driving motive—build roads. This our highway departments have done—with skill, determination and dedication. As Deputy Commissioner Parrish noted in the conclusion of his communication to us for this series: GEORGIA IS DEFINITELY OUT OF THE MUD. ■

## Solar Heat System Cuts Area Fuel Use by One-Half

A building heated by a solar system used only half as much fuel oil as a nearly identical conventionally heated building at the Straight River Rest Areas, according to the Minnesota Department of Transportation (Mn/DOT).

The buildings are located adjacent to the north- and southbound lanes of Interstate 35, six miles south of Owatonna. The rest areas were opened in May 1979. The overall design of the buildings is virtually identical; both contain 1,600 square feet of floor space.

The building on the southbound side of the freeway is heated by a conventional forced-air heating system. The building on the northbound side is heated by solar roof panels which heat the air. The heated air is in turn circulated by an air convection system. Part of the heated air is passed through a rock box in the building's basement. The rocks are warmed by the heated air and continue to heat the air circulated through them during hours of darkness. A back-up oil furnace supplies additional heat when needed.

Monitoring by Mn/DOT from December through April shows that the solar-heated unit used 820 gallons of fuel oil, less than half the 1,660 gallons used by the conventionally heated building.

Donald J. Larson, Owatonna area maintenance engineer with Mn/DOT's Rochester district, said the dollar amount of the fuel savings is about $850.

Larson notes, however, that overall visitor use of the southbound rest area building was much higher, possibly affecting overall fuel consumption. He said 119,324 visitors used the southbound building compared with 56,345 who used the northbound building. Heat loss due to door openings is a factor in energy consumption, he said, but an exact determination of heat loss from visitor use cannot be determined.

The solar-heated building constructed by Mn/DOT at the Straight River Rest Area is one of several rest area buildings which incorporate solar heat, earth sheltering and/or extensive use of insulation to promote energy conservation. ■

## EPA Reimburses Minority and Womens' Businesses

On Oct. 1, the Environmental Protection Agency (EPA) began to reimburse local governments for steps they take to implement Minority Business Enterprise (MBE) and Women's Business Enterprise (WBE) requirements under the EPA construction grants program. Such activities include records-keeping, technical assistance to MBE's and disseminating information on available business opportunities on EPA grant projects.