



# **Road Building in Georgia**

## A Historical Summary

## Road Building in the 17th and 18th Centuries

The first roads built by European colonists linked the coastal settlements to the colony's interior and provided routes of expansion. These early roads were built both to encourage settlers to move inland and to facilitate military transportation. Later roads were meant for general travel and trade and to connect existing settlements.

American Indian trails consisted of footpaths that evolved by continual and traditional use. They typically followed the easiest routes, running along ridges and drainages, while avoiding stream crossings and swampy areas. Where crossings were necessary, they were facilitated by rocky shoals or shallows.

The routes of American Indian trails often influenced the locations of Colonial roads and settlements. For example, in 1734 General Oglethorpe established the Town of Ebenezer at a site where several American Indian trails met at a ford on Ebenezer Creek. Similarly, in 1736 Oglethorpe founded Augusta at an important convergence of Native American trade routes near the fall line of the Savannah River. Over time, many Indian trails were incorporated into the colonial road network and ultimately became parts of the permanent and modern road system. Georgia's transportation structure continued to expand through the 1700s and by the end of the century an extensive network covered most of the state.

In 1755, Georgia passed its first road law. This act by the General Assembly divided the colony into nine districts, each of which received six surveyors charged with laying out and overseeing the maintenance of roads in their districts.

Early roads were built and maintained in some areas by hired labor paid for with special taxes. Mostly, though, private citizens were required to spend a certain number of days per year working on the roads. During periods when citizens were called for service, they had to bring their own tools, including mattocks, picks, shovels, axes, and plows.

Roads in Georgia have been built from different materials. Early on, the most common, easiest, and cheapest material to build with was dirt, and the first trails and roads were simply cleared pathways. Roads in Georgia were not surfaced until after the end of the American Revolution in 1784.

## 19th Century Road Building

During the early nineteenth century, there were movements in the United States to develop more integrated and better quality transportation systems to tie together the expanding country. National roads were viewed as military necessities, as well as being important for transportation, communication, and administration. Georgia began its first large-scale road project with Federal grant money in 1829. Of this money, the Georgia Assembly appropriated \$70,000 to purchase slaves for road construction and maintenance work, as well as other transportation tasks, such as clearing navigable rivers. Two superintendents were appointed to direct and oversee road projects and make reports to the Governor.

Local roads continued to serve as important links between towns and cities and to stimulate trade. Additionally, their construction assisted in communication, as post roads were expanded.

In 1834, the first turnpike was authorized for Georgia. Turnpikes were private corporations that built and maintained roads for the right to charge tolls for use. Between 1834 and 1850 the General Assembly granted charters to more than 25 turnpike companies, although not all of these were built. Turnpike construction in Georgia took place mostly in the mountainous parts of the state where conditions made road construction more difficult. Turnpikes grew less popular after the Civil War and few new charters were granted for them.

Until the twentieth century, decisions on when and where to build roads were mostly made at the local and county levels. Planning was informal and routes tended to follow the most convenient directions. Because nineteenth-century roads were used mostly for foot and wagon traffic, they did not have the same requirements for access and speed that modern roads do.

After the Civil War and the loss of enslaved labor, Georgia reprised the statutory method, which required local residents to donate labor for road projects. This practice resulted in poor design, construction, and maintenance.

To improve quality, in the 1890s the state stopped calling on private citizens to provide labor and instead began imposing special taxes to cover costs. Day laborers and convicts took over the actual work. This new system improved the quality of maintenance, but did not provide funds for the relocation and construction of roads.

During the nineteenth century, compact earth remained the most common roadway surface in Georgia. Improving the quality of dirt roads meant finding the best combinations of soil for strength and drainage. More solid materials that were used for road surfaces included stone, gravel, and macadam. In coastal areas, crushed shell would sometimes be used for surfacing. Heavy machinery that was in use by the end of the 1800s included graders with movable scraping blades that were pulled by draft animals or tractors. Also in use were rollers for compacting and smoothing road surfaces. These could be powered with the use of animals or steam engines.

In marshy or wet areas, earthen roads were not stable and a common alternative consisted of log (or “corduroy”) roads. These consisted of logs or half logs placed across the direction of the road to create a solid surface.

Plank roads, built the same way as log roads but using sawn planks as a surface, were a more expensive method and the planks did not last long, increasing costs. Some of the turnpikes built in Georgia were surfaced with planks, but most were dirt. Plank roads seem to have been more common in the southern part of the state and developed out of efforts of Gulf Coast towns in Florida to provide outlets for South Georgia cotton growers. Gravel was often used to fill rotten sections of plank roads, leading to a wider use of gravel and stone as a surfacing material.

## **Road Building in the 20th Century**

In the twentieth century, state and federal agencies took over more of the responsibility for road and highway planning, management, and construction. In the early 1900s the government created the US Highway system, marking the first time that a national standard was set for roads and highways. Later in the century, the government established the Interstate System.

Until the twentieth century most roads were not very well built or efficient, and did not connect distant places. Most road traffic was local. When people took long journeys over land they usually traveled by railroad. When automobiles went into mass production, however, cars became more affordable and by the late 1910s they were within reach of most people. As car ownership became more common, people began calling for better quality roads and more formal route designs. There was also a need for better roads to aid transportation, commerce, and communication, as well as for supporting national defense or civil emergencies.

The twentieth century saw important changes to the way roads and highways were designed and built. Modern road construction follows a planning and design process that ensures both safe and effective roads and that takes into account terrain, safety, lines of sight, and other qualities. Modern road planning is also concerned with the needs of communities and the state.

Present-day road design in Georgia has a more sophisticated preconstruction process. GDOT monitors conditions and makes decisions about the need for new roads and improvements to existing ones. In making determinations, GDOT receives input from counties and municipalities about their needs, and provides preliminary plans at public meetings to allow communities an opportunity to comment.

The preplanning process also takes into account the possible environmental consequences of new projects so that endangered species and their habitats can be avoided. The process does the same for archaeological and historic resources, such as districts, sites, buildings, structures, and objects so that sites with historical importance can be avoided or studied. Ideally, environmental and historic sites are accommodated in the design stages of projects to limit impacts. (For additional information about the modern design and construction process, link to the main GDOT web site.)

In accounting for archaeological and historic resources, GDOT first looks for sites in the area where construction will take place. If any are found, then a decision is made about whether the site is worthy of preservation. If yes, then efforts are made to avoid the site by designing the project so that the site will not be disturbed by future projects. For archaeological sites, excavating and studying the site rescues and preserves the research information the site contains so it is not completely lost.

### **Administration of Twentieth Century Roads**

For the most part, county governments were responsible for road building in Georgia until the twentieth century. During the twentieth century, however, planning began to become more systematic and the state government took a larger role in the process. The Georgia State Highway Commission was established in 1918. The commission's roles included making

surveys and plans for road projects throughout the state. The Federal government also became more active in highway projects during the twentieth century, mostly to coordinate construction and management of cross-country roadways.

In the 1950s, the Federal Government started the Interstate System. Georgia interstate highways are owned and maintained by the state but are funded with Federal money. The more than 1,200 miles of interstate highway in Georgia link major cities within the state and connect the state to the rest of the nation. More locally, they provide routes into cities for suburban commuters. Also, because they connect to urban areas and large population centers, the interstates can be used as evacuation routes during emergencies, such as hurricanes. On a daily basis, though, the Interstate System makes automobile and truck traffic easier and promotes economic development.

### **Twentieth Century Road Labor**

During the later 1800s, Georgia had adopted the convict lease system, which employed crews of mixed convicts and day laborers. The state abolished the system in 1908 and to replace it, counties were authorized to create permanent roadwork crews made up solely of convicts. The money saved by discontinuing the use of day laborers was put toward building new roads and improving existing ones.

Georgia was the first state to use the chain gang system, which put misdemeanor convicts into roadwork programs. This widespread practice continued until the 1950s when it was abolished in all states. Today, full-time workers perform a variety of skilled and semi-skilled tasks and complete general construction and maintenance tasks.

The major developments in road building materials during the twentieth century were the introduction of concrete and asphalt. Although dirt, gravel, and other materials continued in use, by 1910 asphalt was used almost universally for surfacing new roads.