Ent D (FMSF only)

Survey Log Sheet

Florida Master Site File
Version 4.1 1/07

Survey # (FMSF only) 25314

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (name and project phase) Florida's Historic Roads and Trails National Register Multiple Property Nomination Form.

Report Title (exactly as on title page) Florida's Historic Roads and Trails National Register Multiple Property Nomination Form.

Report Authors (as on title page, last names first) 1. Sidney Johnston 3. 2. 4.

Publication Date (year) 2002 **Total Number of Pages in Report** (count text, figures, tables, not site forms) 157

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)

Supervisors of Fieldwork (even if same as author) Names

Affiliation of Fieldworkers: Organization City

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)

1. National Register Form 3. Multiple property 5. Second Spanish Period 7.
2. Florida Trails and Roads 4. English Period 6. Civil War and Reconstruct 8.

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)

Name Organization

Address/Phone/E-mail

Recorder of Log Sheet Cody VanderPloeg **Date Log Sheet Completed** 8-16-2018

Is this survey or project a continuation of a previous project? ☐No ☐Yes: Previous survey #s (FMSF only)

Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)

1. 3. 5.
2. 4. 6.

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

1. Name Year 4. Name Year
2. Name Year 5. Name Year
3. Name Year 6. Name Year

Description of Survey Area

Dates for Fieldwork: Start End **Total Area Surveyed** (fill in one) hectares acres

Number of Distinct Tracts or Areas Surveyed

If Corridor (fill in one for each) **Width:** meters feet **Length:** kilometers miles

Survey Log Sheet

Survey # 25314

Research and Field Methods

Types of Survey (check all that apply): ☐archaeological ☐architectural ☒historical/archival ☐underwater ☐damage assessment ☐monitoring report ☐other(describe): _____

Scope/Intensity/Procedures This is a National Register Multiple Property Nomination Form for Florida's historic roads and trails.

Preliminary Methods (check as many as apply to the project as a whole)

☒Florida Archives (Gray Building)	☒library research- *local public*	☐local property or tax records	☒other historic maps
☒Florida Photo Archives (Gray Building)	☒library-special collection - *nonlocal*	☐newspaper files	☐soils maps or data
☒Site File property search	☐Public Lands Survey (maps at DEP)	☒literature search	☐windshield survey
☒Site File survey search	☐local informant(s)	☐Sanborn Insurance maps	☐aerial photography

☐other (describe): _____

Archaeological Methods (check as many as apply to the project as a whole)

☒Check here if **NO** archaeological methods were used.

☐surface collection, controlled	☐shovel test-other screen size	☐block excavation (at least 2x2 m)
☐surface collection, uncontrolled	☐water screen	☐soil resistivity
☐shovel test-1/4"screen	☐posthole tests	☐magnetometer
☐shovel test-1/8" screen	☐auger tests	☐side scan sonar
☐shovel test 1/16"screen	☐coring	☐pedestrian survey
☐shovel test-unscreened	☐test excavation (at least 1x2 m)	☐unknown

☐other (describe): _____

Historical/Architectural Methods (check as many as apply to the project as a whole)

☒Check here if **NO** historical/architectural methods were used.

☐building permits	☐demolition permits	☐neighbor interview	☐subdivision maps
☐commercial permits	☐exposed ground inspected	☐occupant interview	☐tax records
☐interior documentation	☐local property records	☐occupation permits	☐unknown

☐other (describe): _____

Survey Results (cultural resources recorded)

Site Significance Evaluated? ☐Yes ☐No

Count of Previously Recorded Sites _____ **Count of Newly Recorded Sites** _____

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) _____

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) _____

Site Forms Used: ☐Site File Paper Form ☐Site File Electronic Recording Form

*****REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)*****

SHPO USE ONLY **SHPO USE ONLY** **SHPO USE ONLY**

Origin of Report: ☐872 ☐CARL ☐UW ☐1A32 # _____ ☐Academic ☐Contract ☐Avocational ☐Grant Project # _____ ☐Compliance Review: CRAT # _____

Type of Document: ☐Archaeological Survey ☐Historical/Architectural Survey ☐Marine Survey ☐Cell Tower CRAS ☐Monitoring Report ☐Overview ☐Excavation Report ☐Multi-Site Excavation Report ☐Structure Detailed Report ☐Library, Hist. or Archival Doc ☐MPS ☐MRA ☐TG ☐Other: _____

Document Destination: _____ **Plotability:** _____

NPS Form 10-900-b
(Rev. Aug. 2002)

OMB No. 1024-0018
(Expires 1-31-2009)

United States Department of the Interior
National Park Service

National Register of Historic Places
Multiple Property Documentation Form

This form is used for documenting multiple property groups relating to one or several historic contexts. See instructions in *How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Complete each item by entering the requested information. For additional space, use continuation sheets (Form 10-900-a). Use a typewriter, word processor, or computer to complete all items.

__X__ **New Submission** ____ **Amended Submission**

A. Name of Multiple Property Listing

Florida's Historic Roads and Trails

B. Associated Historic Contexts

(Name each associated historic context, identifying theme, geographical area, and chronological period for each.)

I European Contact and First Spanish Period, 1513-1763 1-6
II English Period, 1763-1784 6-18
III Second Spanish Period, 1784-1821 19-24
IV Territorial and Statehood Period, 1821-1860 25-54
V Civil War and Reconstruction, 1861-1877 55-59
VI Late Nineteenth Century and Progressive Era, 1877-1915 59-74
VII Organization of the Florida State Road Department, Florida Land Boom, and Great Depression, 1915-1941 74-101
VIII World War II and Postwar Roads and Trails, 1941-1959 - 101-108

each of these is a separate context

add 2nd page

take up through Interstate + Turnpike (examples)?

C. Form Prepared by

name/title Sidney Johnston/Senior Historian, Bland & Associates, Inc. (BAI)
street & number 535 North Clara Avenue telephone (386) 822-2406
city or town DeLand state Florida zip code 32720

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation. (See continuation sheet for additional comments.)

Signature and title of certifying official — Date

State or Federal Agency or Tribal government — Date

I hereby certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Signature of the Keeper — Date of Action

Table of Contents for Written Narrative

Provide the following information on continuation sheets. Cite the letter and the title before each section of the narrative. Assign page numbers according to the instructions for continuation sheets *in How to Complete the Multiple Property Documentation Form* (National Register Bulletin 16B). Fill in page numbers for each section in the space below.

United States Department of the Interior
National Park Service

Need to label contexts as written down.

National Register of Historic Places Continuation Sheet

I. **European Contact and First Spanish Period, 1513-1763** Brief discussion of 1513 + Ponce de Leon, exploration + settlement attempts, founding of St. A. a century or two to include

Between the sixteenth century and the 1760s, the Spanish Crown experienced significant difficulties developing Florida into anything more than military outposts at Pensacola (1559, 1696), St. Augustine (1565), and St. Marks (1733). The development of paths, roads, and trails was secondary to the protection of Spanish treasure fleets departing from the New World. Spain built and armed its forts and settlements and supplied them from its depots, such as Havana, the northern capital in Spain's New World empire. But, even before those settlements were established, Spaniards under Hernando DeSoto in 1539 forged one of the earliest documented trails in North America. From Tampa Bay, the DeSoto expedition trudged north through forests, across rivers, in wetlands, and over sand hills. Much provisional remains about the landing point and route, but the Spaniards generally followed established foot paths in a curving interior line of march which extended from Tampa Bay, near Zephyrhills, Leesburg, Ocala, west of Gainesville, Live Oak, Tallahassee, and then northward toward Macon, Georgia. Presumably, the DeSoto's expedition exploited existing paths and trails trod for centuries by Native Americans. Various commissions and archaeological investigations in the twentieth century provided an approximate landing site and route with only the Anhaica site west of the Aucilla River, discovered by archaeologist B. Calvin Jones, the only undisputed location associated with the DeSoto expedition's four year journey (Ewen and Hann 1998; Gannon 1996).

DeSoto and other early European explorers found little evidence in Florida of the road systems to which they were accustomed in the Old World. Instead, they encountered what amounted to an informal system of paths and trails linked to waterways. Reliant upon creeks, lakes, rivers, and dugout canoes, Florida's pre-Columbian Indians appear to have subsisted on what has been termed the oasis or watering-hole model. Developing camps and villages near water crossings appears to account for the life systems of Florida's earliest cultures. Ambushing game at those crossings provided both food and alternative inland transportation paths worn by animals on which Indians then foraged away from their camps and villages. Over time, the use of a path created a trail. As villages grew too large, several households formed a new camp nearby with a trail linking old and new. The river and trail system limited contacts between Florida's earliest Indians, most of which came from the north and primarily along river systems. Little evidence has been found for direct contact between Florida's Indians and those living in the Caribbean. The pre-Columbian population of Florida's Indians totaled approximately 100,000 with the heaviest concentrations in the eastern panhandle, or Apalachee region (±25,000) and the Timucuans (±40,000) in Northeast Florida. Aboriginal populations appear to have been thinly scattered in South and Southwest Florida. Cultural influences appear to have moved in north-south directions relying upon river systems rather than overland routes. The Chattahoochee-Flint-Apalachicola river system and Suwannee-Withlacoochee-Alapaha river system served as highways to stimulate trade and communication between cultures in Florida and those peoples farther north. The relatively short lengths of the St. Johns River and Ocklawaha River and their tributaries limited contacts within a smaller region. The location of Mount Royal mound near the midpoint of the course of the St. Johns River affirms the power of river travel over land travel. To cover longer distances, Florida's Indians generally traveled by canoe. The state's waterways, watering-holes, and native concentrations provide a structure for understanding footpath and trail systems at the time of European contact (Landers 2000:46; Milanich and Fairbanks 1980:16, 18; Milanich 1994:40-42; Milanich 1998:42, 49, 55).

Between 1535 and 1650, the Spanish extracted 180 tons of gold and 16,000 tons of silver from Potosi and the peoples of Central and South America. In 1584 alone, the king's income fleeced from the New World amounted to 6,000,000 pesos, but debts totaling 74,000,000 pesos drove officials to extract still more mineral wealth from those mountain mines. The Spanish Crown focused its primary attention on town building at Caracas, Cartagena, Havana, Maracaibo, Mexico City, Panama City, and Portobelo, developing fortifications, buildings, and treasuries, and fighting pirates and privateers operating from Port Royal and Tortuga. The burning of Panama City in 1670 by Henry Morgan caused far more fear and consternation in Madrid than the establishment of Carolina that year. More Spanish treasure was spent rebuilding Panama City in the 1670s than expended by the Crown on Florida between 1565 and 1763. In 1732, the Crown established a minting machine at Mexico City, which produced 2,680,000,000 silver coins over the next several decades. The Spanish Empire became a distorted search for treasure and the protection of those riches, singular aims of an inflexible monarchal government. Religious fervor turned to ceremony; bureaucracy stifled ambition. Florida with its settlements at Pensacola and St. Augustine represented the northern perimeter of a vast region covering thousands of miles, but held no jewels, gems, or wealth to feed a hungry royalty in Madrid and Seville. The construction of the Castillo de San Marcos represented the largest single outlay of capital in Florida to protect the treasure fleets before their Atlantic crossing. Building, protecting, and supplying mines and towns in the Caribbean and the Americas diverted the attention of the Crown from any internal improvements in a Florida wilderness that held little hope of providing wealth in Europe (Talty 2007:28, 30, 248, 277; Cusick 2003:44).

Florida's earliest European settlements, whether French or Spanish, were battered by violent storms, and attacked and burned by other marauding Europeans. Established by the French in 1562, Fort Caroline on St. Johns Bluff several miles west of the mouth of the St. Johns River was the site of the first recorded warfare between Europeans in North America. Having founded St. Augustine in 1565, Pedro Menendez captured the fort and renamed it San Mateo. Menendez then slaughtered the shipwrecked French farther south at Matanzas, followed by the French returning to San Mateo to exact revenge against the Spanish soldiers stationed there. A small part of the turmoil and warfare associated with larger European politics, Florida occupied a peripheral point at the northern tip of the Spanish Empire, which funded most of its activities in Cuba, Florida, Mexico, and elsewhere from silver mines in Central America. Interest in developing paths, roads, or trails in the Florida peninsula remained a distant priority behind the transportation of silver from the New World to Madrid and Seville. The trails and footpaths followed by wagons laden with silver in Central America contained the wealth and security that Spain craved and that the Florida wilderness only promised and never yielded (Tebeau 1971:32-39; Gannon 1996:62-63).

Some of Florida's earliest trails came through the work of religious leaders who ventured out to Christianize native Floridians, first along waterways and then inland. Between 1587 and the 1620s, Jesuits and then Franciscans established missions between St. Augustine and Santa Elena, then broadened the objective to include Florida's east coast and the St. Johns River region. Those early systems were heavily reliant upon water routes for communication and transportation. Subsequently, a chain of missions was extended into the interior reaching Apalachee, but transportation between St. Augustine and Apalachee was dependent on Native-American footpaths and trails, not roads built by Europeans. A lack of paths and trails hampered east-west travel. Consequently the

Spanish had their least amount of contact with Florida's Indians in the region embraced by the Apalachicola River and the Perdido River, northward to the Oconee River. An outpost with Indians to the west and warring Europeans from the north and east, St. Augustine presented an easy target for raids and attacks. In 1668, an English privateer, Robert Searles, sacked St. Augustine, prompting Spain to refocus its attention on protecting its northernmost outpost. The construction of the Castillo de San Marcos, built over a twenty-three year period between 1672 and 1695, consumed 138,000 pesos, an amount that diverted scarce resources away from any anticipated internal improvements (Hann 2006:1-3; Gannon 1989:67, 73).

In addition to native paths and trails, Florida's beaches served as important transportation route in the colonial period. A day mark at sea and clearly delineated on land, beaches provided access to various points whether the traveler walked the sandy alignment or followed it by boat. In 1696, shipwrecked Jonathan Dickinson, a Quaker merchant, led survivors from near modern-day Hobe Sound several hundred miles north to St. Augustine relying upon the beach system as the most direct route to the Spanish settlement. Using a small boat rescued from the *Reformation* to transport the ill and frightened, Dickinson and other survivors encountered Native Americans, some of whom detained them. Ultimately, they relied upon the beach as a navigational tool to reach safety. Detained by Ais and Timucuan, Dickinson and his companions passed several Spanish sentinel's houses. Traveling along one of Florida's most inhospitable regions, the beach yielded little shade, comfort, or native berries, nuts, or animals for food, and generally served as a path or trail only for the most desperate of travelers (Milanich 1980:16; Andrews and Andrews 1945).

Figure 1. The Gordon Map of 1764 depicted the extent of grants during the First Spanish Period, but revealed none of the roads and trails built by the Spanish Crown and settlers. *Courtesy St. Augustine Historical Society.*

The Spanish made use of the network of Indian trails that connected Florida's uplands and interior with rivers and the coasts. One of the earliest trails or paths discovered by the Spanish was associated with "wacca pilatka," or the place of the cows crossing on the St. Johns River. Gentle sloping banks narrowed the swimming distance for humans and livestock. The crossing was at a majestic bend and narrowing in the river, which the Spanish referred to as Pass de San Nicolas, as well as El Boa de las Bacas and El Vado de las Vacas. The pass served as an important defensive position and river crossing in the overland trail system north of St. Augustine and beyond to the St. Marys River. During the first Spanish period, Governor Manuel de Montiano had the pass inspected as a potential military outpost against possible British aggression from the north. Recognizing its tremendous strategic value due its narrow width and hard banks, the Spanish apparently did not fortify Pass de San Nicolas during their first period of occupancy in Florida, an indication that Spain did little to improve the road between St. Augustine and San Nicolas (Wood 1989:22; Ward 1985:24, 250).

Between 1655 and 1702, Spanish settlers carved ranches out of the wilderness along the coast, Diego Plains, and the St. Johns River. Spanish governors issued land grants to encourage settlement of the region, to produce fresh foods and meats for St. Augustine's residents, and to create a diverse economy. Grants of the period included Aramasaca (near Switzerland and Julington Creek); Diego Plains; La Baria (east of Picolata); Palica (near the Matanzas River and Moses Creek); Picolata (astride Six Mile Creek); San Onofre y Pirirgirigua (near Deep Creek); and Tocoy (between Deep Creek and Tocoi Creek). These grants ranged on both sides of the St. Johns River, but all had access to creeks and rivers to ensure transportation between St. Augustine and their plantations and farms. As late as 1764, when the Gordon Map was published, those grants enjoyed waterfront exposure for shipping products and transportation from East Florida's coast to Choctawhatchee Bay and Pensacola (Hulbert 1915:56; Adams Bell Weaver 1985:18, 22).

Apparently, the Spanish cut few paths or trails in Florida during their first century of occupation. In 1686, Marcos Delgado traveled through Florida's backwoods, in part, as a preliminary investigation to awarding a government contract to Primo de Ribera to open roads to the Apalache and Timucua districts from St. Augustine. But, no significant road construction occurred. In the 1690s, Torres was ordered to explore the Pensacola section, and Diego Pena traversed Apalachicola and Caveta in 1718, conferring with the emperor of Caveta and learning the locations of French fortifications. Those early investigations were part of a larger inquiry as to the feasibility of building a road between St. Augustine and Mexico. For years, the Spanish discussed three general questions: (1) could such a road be built? (2) if it were, would matters improve? and (3) could the French and English cut the road? The questions remained unanswered and more pressing concerns resulted again in no significant road construction (Manucy 1947:330).

The founding of Carolina and Charleston in 1670, followed by an attack on St. Augustine in 1702 by Carolina's governor, and then the establishment of Georgia and Savannah in 1733 effectively ended Spain's mission system and greatly hampered settlement of the Crown's granted lands. Persistent encroachment from the north by England included settlements at Darien, Midway, and Sunbury with supporting roads and ports, which took some of the pressure off the defensive works at Charleston and Savannah. Fort King George near Darien and Fort Frederica on St. Simons Island further threatened the Spanish, who perceived the settlements as military outposts rather than permanent towns organized for trading, shipping, and military purposes (Sastre 1995:26-35; Adams Bell Weaver 1985:18, 22).

The Spanish were also threatened by Charleston's merchants whose aim was to redirect Indian trading goods away from the Pensacola and Mobile region to their Atlantic port. The resulting trading path between Pensacola and Charleston was developed by the feet of Indians transporting goods to Charleston rather than by any English or Spanish trail-building effort. In the process, southern planters in the Carolina upcountry and Middle Georgia felt threatened by the increased presence of Indians traveling through the region, while the Spanish were less successful than the Spanish building a market for goods and animal skins. Indians remained the neutral party that bound the English-Spanish ports. In 1717, however, Spain achieved a diplomatic coup, sending seven Apalachee and Creek chiefs who had gathered at Pensacola to Mexico to give their allegiances to the King of Spain through his viceroy. No area of the South held as much international political intrigue as the region defined at its center by a convergence of Indian trails on the Chattahoochee River from Apalachee, Charleston, and Mobile. Pensacola

served as an important base from which the Spanish influenced the Lower Creeks (Crane 1981:198, 254-255, 258).

In 1702, the Spanish erected a series of fortifications to protect St. Augustine. Later, additional forts were installed to broaden their line of defense. Those included Fort Matanzas to the south of St. Augustine, Fort Picolata to the west, and Fort San Diego to the north. Work on those fortifications began in the late-seventeenth century, and improvements were made during the eighteenth century. The Spanish Crown maintained paths to Fort Picolata and Fort San Diego, but no road-building activities have been documented (Adams Bell Weaver 1985:17, 20).

While the English pushed south establishing new settlements, Spain consolidated its outposts at St. Augustine and Pensacola, the latter of which was permanently founded in 1696. Spain did little more than strengthen the defensive network around St. Augustine and Pensacola. Building few roads even for military purposes, instead the Spanish Crown appears to have appropriated Indian trails for its roads. Most of those significant trails led to waterways. Fort Pupo and Fort Picolata protected the St. Johns River at a narrows west of St. Augustine. The forts were serviced by roads and a ferry. On the west side of the river, Fort Pupo stood only seven feet from the river's banks with the road to Apalachee winding around the south and east elevations of the fort. On the east bank of the river, Fort Picolata defended the river and St. Augustine-Picolata Road. The forts, garrisons, and cannons were too small to afford the mutual protection for which they were designed. In 1739, British forces destroyed Fort Picolata, and in 1740, when James Oglethorpe attacked Florida, he captured destroyed Fort Pupo and Fort Mose. Oglethorpe's subsequent 1740 siege of St. Augustine failed. Prepared by a British engineer, a siege map noted the presence of "The road to St. Juans" extending north from St. Augustine, and ending at St. Juans Point, roughly present-day Mayport. To the south, a "Little Fort" stood on the mainland near the mouth of present-day Moultrie Creek with an unnamed path or trail extending to the south towards an unnamed destination. The Spanish government only replaced Fort Mose in 1752 and Fort Picolata in 1755, but abandoned the site of Fort Pupo. The rebuilding of those forts a decade after their destruction indicates Spain's retrenched defensive position on the east side of the St. Johns River, limited resources for internal improvements, and a wavering commitment to the northernmost outpost in its New World empire (Sastre 1995:28-35; Chatelain 1941).

By the 1740s, incursions and attacks had sufficiently disrupted the villages and folkways of Florida's aboriginal Indians that Creeks had migrated south to settle Apalachee. Carolina slave raiders, disease, and war initiated about 1702 the first Creek migration into Florida, a process that would continue into the early nineteenth century. Attracted by wild cattle, Lower Creeks moved onto the Alachua prairie. Linked to the Ocmulgee River and their ancestral homeland in Middle Georgia, the Creeks had been displaced by white English settlers pushing inland from Augusta and Savannah. In turn, the Creeks displaced many of Florida's remaining aboriginals in river valleys and prairies that remained relatively untouched by the Spanish nearly 200 hundred years after the settlement of St. Augustine. In the process, the Creek migration route established between the upper Ocmulgee River valley in Georgia and Apalachee and Alachua in Florida included rivers, trails, and paths that built on the existing localized transportation system (Hann 2006:183; Covington 1968:340-357; Gannon 1996:186-187).

To the northeast, a debatable land radiated between the Altamaha River and the St. Marys River. Both Carolina's trustees and the Spanish Crown claimed the region. Largely unsettled for decades, first Carolina and then Georgia

trustees granted tracts to planters, further complicating ownership patterns. Incursions by the British into East Florida and by Spanish authorities into Georgia in the 1740s and 1750s made the region between the Altamaha River and St. Marys River among the most unstable and dangerous places to reside on the eastern seaboard. A Native-American trails known as the St. Marys-Alachua Trail extended through the region. Documented as early as 1748 by Emanuel Bowen, the trail was known as the "Latchokowae Path" and "the Path from Latchahoa," which extended from as far north as the Altamaha River to the Alachua Prairie, and would later prove useful to the British. Its use, however, was confirmed from a crossing of the Satilla River to a point on the St. Marys. The Spanish Crown increasingly placed more attention on military readiness than internal improvements. The construction of Fort Mose in 1738 and Fort Matanzas in 1742 bracketed an attack by James Oglethorpe of Georgia in 1740. Connected to St. Augustine by a two-mile road, the former was the first free black settlement in the New World and part of St. Augustine's outer defensive network. Located near Matanzas Inlet, Fort Matanzas protected an important waterway into the south end of St. Augustine. A primary impetus for Spain to settle Pensacola permanently in 1698 was to prevent the French from intruding into Florida from the west. A wooden fort provided little protection to farms and plantations outside the palisades. Native Americans burned Pensacola's plantations in 1707, and into the 1760s Indians cut off Spaniards at Pensacola from the interior and hampered overland connections (Gannon 1989:94,102,114; Tebeau 1971:61-63; Savery 1769; Bowen 1748).

Spanish occupation of Florida ended at the close of the French and Indian War, a name given to the North American component of the larger Seven Year's War in Europe. Fought between 1756 and 1763, the war pitted France and its ally Spain against England. It was the last of four major colonial wars between England, France, and Native Americans who lined up on both sides of the conflict. Regardless of their allegiance, most Indians lost ground after the war. England won the conflict, capturing Havana, ending French claims in North America, and Spain ceding Florida to England. With the close of the war and the Treaty of Paris, Georgia began the process of legitimizing its claim in the debatable lands in the region north of the St. Marys River through treaties in 1763, 1783, and 1795. In that process, the St. Marys River became the boundary between Georgia and England's new province of East Florida. During the first Spanish period, Pensacola and St. Augustine had survived as a necessary expense and annually cost the Spanish treasury thousands of pesos. Any roads built in Florida by Spain between 1670 and 1763 served a military and defense function rather than for trade, settlements, or public travel (Tebeau 1971:67-68; Anderson 2000).

II **English Period, 1763-1784**

In 1763, the Spanish Crown, for its part in backing the defeated French in the Seven Year's War, agreed to surrender Florida to England. The British Crown appointed James Grant as governor of East Florida, which was divided from West Florida at the Apalachicola River and from Georgia by the St. Marys River. St. Augustine became the provincial capital of East Florida. Governed initially by George Johnstone, West Florida extended from the Apalachicola River to the Mississippi River with the 31° latitude as the northern boundary. Both Grant and Johnstone were Scots known for their leadership ability and prowess. Trade with established cities in other colonies contributed to the development of the new provinces. Charleston became a trading center of East Florida and New Orleans for West Florida. Spanish and French influence at New Orleans soon eroded those ties and some Pensacola merchants turned to Charleston for trading partners. Charleston merchants served as brokers for

interests in both England and Florida. But, a lack of high quality planters in East Florida and West Florida stalled development. Most Carolinians and Georgians were reluctant to move into the sub-tropical wilderness, and instead remained in their established colonies to carve out plantations from sea islands and river valleys. In 1765, Indian leaders and Crown officials met at Picolata, where they agreed to limit English expansion in East Florida to the northeastern part of the province, thirty-five miles inland from the coast between the St. Marys River and Spalding's Lower Store. The boundary extended west of the St. Johns River, but conveniently coincided with the Proclamation Line of 1763, which extended along the divide of the Appalachian Mountains, restricting English settlement. Although the British broke the agreement by pushing farther south of the lower store, the breach was largely ignored by the Indians who believed their most productive hunting grounds lie farther west, not south. The British governors invalidated the earlier Spanish land grants, and implemented a liberal land grant system. British accounts, including those of Johns and William Bartram in 1765, indicated that extensive citrus groves sprinkled the east bank of the St. Johns River and near St. Augustine. Within several years, Grant's Villa, the governor's plantation, became a model plantation producing indigo and functioning like a modern agricultural experiment station (Gannon 1993:20-23; Harper 1958:118; Schafer 1982:49-50; Rogers 1976:479; Siebert 1929 1:68; Mowat 1943:21-26, 53-55, 61; Hoffman 2002:215).

The British found Florida with few remaining European settlers, for more than 3,000 people left with the evacuating Spanish. Having learned from its experiments with trustees and grants in settling the Carolina and Georgia colonies, the English government realized its plans for developing the province relied heavily upon awarding land to colonists. Consequently, Grant and the British Crown launched a vigorous public relations and land grant program to encourage settlers and development. The effort enjoyed some success, for between 1764 and 1770 approximately 3,000,000 acres of grants were issued by the Crown in East Florida alone. The peak year for English land grants in East Florida occurred in 1767, when the Crown issued 122 grants. But, only sixteen grants were settled by English grantees by the outbreak of the American Revolution. Indeed, by 1772, upon his departure from East Florida, Governor Grant measured only "...very little concrete accomplishment" in East Florida. In West Florida, the governor commented on the 20,000-acre Eglington grant, which in 1722 contained the largest cattle herd in the region. Some British colonials in West Florida, such as William Gregory, made peace with neighboring Creek Indians and settled in South Alabama, where he herded stock (Rogers 1976:479; Siebert 1929 1: 68; Mowat 1943:21-26, 53-55, 61; Schafer 1995:1-11; Landers 2000:11; Akerman 1999:23-24).

Beyond the tropical wilderness of Florida and the rich soils farther north, the British Crown conceived settlement in Florida far different than that in Georgia and South Carolina, where colonial and trustee grants had been for relatively small tracts of land. By contrast, in East Florida, large blocks of properties ranging from 5,000 to 20,000 acres were awarded to grantees. Because of the large grants, Henry Laurens of Charleston saw little of promise in the colony. An agent for several prominent English investors, Laurens cautioned Governor Grant and several prominent grantees about the difficulty of securing good plantation lands in large quantities. He also believed that one young, motivated South Carolinian could "...do more essential service in that Young Colony than fifty Noble Men with pattents for 20,000 acres each" (Rogers 1976:485).

Still, East Florida and West Florida played an important role in England's North American policies, which encouraged settlers to move either to the north or south of existing settled areas. The Crown policy attempted to

block movement west of the Appalachians, where contact with Native Americans disrupted England's foreign affairs. The opening of the Floridas to settlers from colonies to the north in the 1760s and 1770s briefly helped England displace some of its westward frontier pressures. In the process, East Florida and West Florida became the fourteen and fifteen colonies, albeit small loyal provinces, in Great Britain's North American empire (Rogers 1976:479, 484, 486-487; Mowat 1943:21-26, 53-55, 57-61; Notes and Comments 1927:120-121; Harper 1958:118; Bailyn 1986:431-434, 451-452).

Documented by Mowat, Rogers, Siebert, and other historians, grantees who occupied their lands and established plantations in Florida prior to 1776 consisted of Thomas Ashby, Robert Bisett, Witter Cumming, William Duncan, Edward Hawke, William Knox, Francis Levett, Richard Oswald, Denys Rolle, Richard Russell, Henry Strachey, Peter Taylor, Christopher Thornton, Patrick Tonyn, John Tucker, and Andrew Turnbull. Other plantations were established by managers and overseers; some owners and investors never visited their Florida plantations. With few exceptions, those planters, overseers and grantees relied upon waterways to travel between their properties and Pensacola and St. Augustine. Among the earliest and smallest grants was Thomas Morris's 500 acres, granted in 1767, along the St. Marys River. The narrow width of the long rectangular tract embraced the river; midway through the grant extended "Hastings Path" on its alignment between the St. Marys River and the St. Johns River. William Mills's 1,000 acres granted in 1770 radiated back from the South Branch of the St. Marys River. To the east was Jeremiah Poulton's 500 acre tract with both grants supported by the "Path from Poulton to St. Marys Ferry." The path's alignment suggests another crossing of the St. Marys River in modern-day Baker County, well upriver of the traditional King's Ferry-Coleraine site. At the south end of Mills' grant another path extended across his property and into that held by William Drayton, East Florida's chief justice (Rogers 1976:479; Mowat 1943:21-26, 53-55, 57-61; Notes and Comments 1927:120-121; Harper 1958:118; Bailyn 1986:431-434, 451-452; Siebert 1929 1:68).

In the decade before the American Revolution, East Florida real estate attracted more British colonial investment than any other Crown province from the Bahamas to West Florida to Nova Scotia. Many of the grantees were Scots who became associated with the East Florida Society of London, which, in part, contributed to the Scottish renaissance of the late eighteenth century. Perhaps the most famous of East Florida's investors was the Scottish physician Andrew Turnbull and the large colony he planned at New Smyrna on the Atlantic coast. By March 1767, the society consisted of dozens of English and Scottish noblemen, including Robert Bisett, Sir William Duncan, Lord Adam Gordon, Sir Alexander Grant, Richard Oswald, and Lord George Townshend. Apparently, some of the grantees also included Irish noblemen, such as brothers George, John, and William Beresford. Each member received an order in council that served as a warrant to survey lands. Most members appointed a person to select lands for them and prepare a survey. After the survey was recorded in the governor's office, the Crown's official would issue the land grant. One of the requirements to obtain permanent title to the land required a grantee to "settle the Lands with Protestant White Inhabitants within ten Years from the Date of the Grant in proportion of one person for every hundred Acres" (Rogers 1976:479, 484, 486-487).

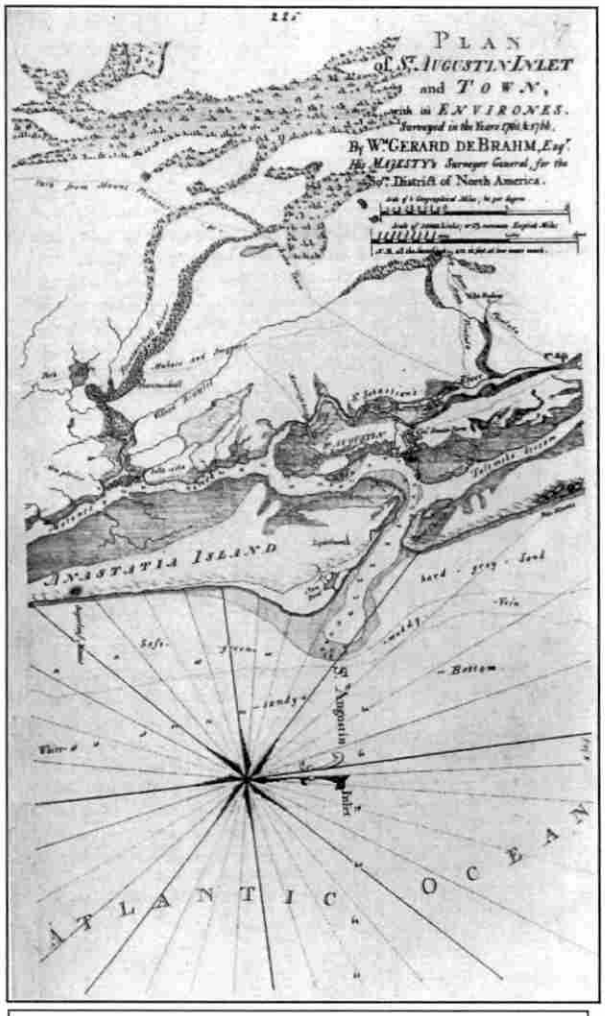


Figure 2. Engineer DeBrahm composed a series of maps of East Florida and West Florida during the 1760s, most of those depicting and naming roads and trails. *Courtesy DeVorsey (1971).*

In 1768, following an explosion of grants in East Florida, the British Crown commissioned William DeBrahm with a detailed survey of the East Florida province. A native of Germany trained as an engineer, William Gerard DeBrahm immigrated to America in the 1740s, arrived in Georgia in 1751, and published his first map of the colony in 1752. DeBrahm's skill as a cartographer soon extended beyond Georgia, and England's surveyor general called upon the German engineer to develop plans for defenses and coastal maps. He was appointed surveyor general for the southern district of North America in 1764, and relocated to St. Augustine in 1765 to serve as East Florida's surveyor general. On his journey to the planned colony of New Smyrna, DeBrahm was accompanied by William Bartram, the naturalist who reported on an Indian mound supported by what Bartram called an "avenue [that] ran straight on a straight line back, through the groves, across the ridge, and terminated at the verge of natural savannas and ponds." That was one of many Indian "avenues" or paths reported by Bartram in his journal and located on DeBrahm's map. In 1769, DeBrahm published a detailed a map of Northeast Florida. As part of the effort, DeBrahm carefully charted the contours of the Atlantic coast, the St. Johns River, and the mouths of its tributaries south to Lake Monroe. For many grants, especially those along the St. Johns River and near the coast, DeBrahm drew grant boundaries with the names of grantees and the acreage of the awards. In general, grants ranged between 20,000 acres to 5,000 acres. At Woodcutter's Creek (later renamed Moultrie Creek) and other points in close proximity to St. Augustine, DeBrahm resorted to noting only the names of grantees, but not the acreages or property boundaries (DeBrahm 1769; Landers 2000:46; Rogers 1976:479; Siebert 1929 1: 68; Mowat 1943:21-26, 53-55, 61; Schafer 1995:1-11; Floridahistoryonline).

DeBrahm noted the presence of several established paths in Northeast Florida in 1769, but none that he judged worthy of the name road or trail. DeBrahm recorded his own "surveyor-general's path," which extended southwest of St. Augustine, crossed the headwaters of Cicilia Creek, curved west at the latitude of Matanzas Inlet, and then followed an inland route roughly parallel to but several miles east of the St. Johns River. DeBrahm's path took him through the upland portions of grants awarded to the Earl of Moira, Earl of Cassillis, and Edward Southwell. Because of the winding nature of the path DeBrahm clearly named it as such in several locations. DeBrahm referred to the region between plantations on the St. Johns River and the New Smyrna colony along the coast as

"Land which as yet is not surveyed." DeBrahm's surveyor-general's path ended northeast of Lake Monroe. Northwest of St. Augustine DeBrahm noted the "Path to Cow Ford," which meandered from the colonial capital to the river crossing and through the grants and plantations of Robert Bisset, Henry Cunningham, James Penman, Vila Rubin, Andrew Turnbull, and David Yeats. Other paths referenced by DeBrahm included the "Path from the upper to the middle Trading House," a north-south alignment on the east side and parallel to the St. Johns River. The trading houses were apparently associated with James Spalding and Donald McKay, trading partners until McKay's death, after which Spalding reorganized the business as the Spalding & Kelsall Trading Company with Roger Kelsall. The senior member of the firm, James Spalding lived on St. Simons Island and moved between his trading posts in East Florida and West Florida by boat and Indian paths. By 1774, Spalding & Kelsall maintained no fewer than five trading posts in East Florida alone. Spalding & Kelsall was succeeded by William Panton and John Forbes in the 1780s. The upper store occupied a site on the east bank of the river about five miles south of Lake George. The "Path to St. Augustine" and the "Path from Mount Pleasant" both extended east to St. Augustine from the St. Johns River, the former from Fort Picolata and the latter from Rollestown and the plantation of Denys Rolle. South of St. Augustine, DeBrahm's path along the coast appears to have been only by boat; he made no references or notations about a path between the East Florida capital and New Smyrna. He documented an "Indian path" extending through William Faucett's grant south of New Smyrna, and an "Old Indian path" from Dunn's Creek near the mouth of Crescent Lake eastward toward St. Augustine. None of DeBrahm's paths coincided with the subsequent King's Road (DeBrahm 1769; Coker and Watson 1986:15-16, 33-34; Siebert 1929 1:9).

Soon after the publication of the map, friction developed between Governor Grant and DeBrahm, who was ordered to London in 1771 to answer charges of malpractice in his official capacity. In 1773, while in London awaiting his hearing, DeBrahm published a lengthy textual report replete with maps of the coasts of South Carolina, Georgia, and East Florida. In 1774, he was reinstated as East Florida's provincial surveyor, all the while retaining the title of surveyor general of the southern district of North America. In addition to financial compensation, DeBrahm received various land grants in Georgia and Florida for his loyalty and services to the British Crown. DeBrahm played an important role in charting Northeast Florida's coast and interior, marking the contours of rivers and locations of grants, an important contribution to the cartographic history of Florida's brief English period. Despite his superior ability at mapping, DeBrahm was not "as not a great planter and did not understand how to use slavery and land to gain riches..." (Gallay 1989:98; DeVorsey 1971:6-8, 33-35, 46-47).

Naturalist William Bartram documented a few of the avenues, roads, and trails he encountered in Florida, but focused primarily upon flora and fauna. He had traveled part of the province with his father, John Bartram, in 1765, and returned in 1774 to conduct additional investigations. In September 1773, he shipped baggage to Spalding's Lower Store near Stokes Landing south of Palatka. The largest of the Spalding & Kelsall stores, the lower store served as a base for Bartram's four expeditions into East Florida. As Bartram made his way south, he stopped at Fatio's New Switzerland plantation, crossed the river twice south of Fort Picolata, arrived at an Indian village near Palatka, and stopped at Rollestown. He found some of the right, or east, bank of the St. Johns River cleared for plantations, but much of the left bank untouched. Most of his travels were by canoe along the river as far south as Blue Spring. He toured as far west as the Suwannee River, traveling overland by foot and one horseback. At the Cuscowilla village near Micanopy in the Alachua savanna Bartram enjoyed a feast supplied by

Cowkeeper and received a guarantee of safe passage farther west. Bartram also found nearly twice the number of Seminole villages in peninsular East Florida between 1763 and 1774, a growth pattern he attributed to the availability of wild game and trading posts on the St. Johns River. In addition to the few paths and trails reported by Bartram, he found "...Seminole women paddling canoeloads of oranges, melons, and other exotics to the St. Johns trading houses to exchange for trade goods." Seminole and English efforts to occupy separate spheres of East Florida resulted in British plantations generally remaining east of the St. Johns River and along the coasts, representing one of the few brief peaceful periods of coexistence in Florida between the races (Coker and Watson 1986:34; Landers 2000:141; Hoffman 2002:216; Spornick, Cattier, and Greene 2003:125-130, 139, 144).

In 1774, Jonathan Bryan, a prominent Georgia planter-politician arranged to lease an extensive area of East Florida from Cowkeeper. Having been expelled from Georgia's executive council in 1770 and the house of commons in 1773, Bryan turned to East Florida to reorganize his plantation empire, which extended between Stoney Creek near Port Royal in South Carolina to Cumberland Island in Georgia. To negotiate the lease, Bryan traveled from his base in Savannah to Cumberland Island, and then along the St. Johns River by boat. Overland on horseback he traveled into the Alachua interior. At a meeting with Cowkeeper, Bryan promised the Indians a method by which they could undermine British hegemony on the southern frontier, and gain a trading partner in an area east of the Apalachicola River, where he intended to build plantations and a new society. A pie-shaped tract, the lands he proposed to lease extended from the mouth of the Apalachicola River north to the Georgia border, east to the St. Marys River near Coleraine, and southwest to near the mouth of the Suwannee River. Patrick Tonyn, the new governor of East Florida who arrived in March 1774, bristled at what he perceived to be Bryan's breach of colonial protocol and the Picolata Treaty, and ordered Bryan's arrest. Bryan eluded Tonyn's grasp, escaping by boat to Cumberland Island. Although the lease was never executed, Bryan's political intrigue extended through three British colonies, included two governors, two chief justices, and other governing officials. Intriguingly, one of the largest leases proposed in the Floridas during the British period involved a prominent Georgia planter-politician and one of the colony's least developed and documented regions (Landers 2000:58; Gallay 1989:133-135, 140, 147).

Bryan had his first encounter with East Florida's governing officials in 1765 over a road project. The Georgia planter had traveled the thirty-eight mile route between St. Augustine and Cow Ford, and then forty-five miles farther north to the Nassau River. He found both roads in miserable condition, and estimated that the "...road must be causeway almost the whole way." He proposed to rebuild the alignment as a thirteen-foot wide road with a ditch on one side in low and swampy areas for £1,100 sterling. Possessing insufficient funds and lacking surveys, Grant deferred on Bryan's proposal and delayed road construction and internal improvements (Adams, Schafer, Steinbach, and Weaver 1997:6).

A road south of St. Augustine soon became even more pressing as settlement plans to shape in the region. In December 1767, Governor Grant commissioned "Grey Eyes," an Indian, to blaze a trail southward to Mosquito Inlet. In August 1768, Andrew Turnbull settled 1,400 indentured servants near the inlet, a colony that rivaled any other single colonization experiment attempted in British North America. Looking back nearly two decades later, Grant would write Count Shelburne of London in 1786 that "This, my Lord, I believe is the largest importation of white inhabitants that ever was brought into America at a time." Historian Bernard Bailyn later subsumed New

Smyrna with Rollestown and other British colonization experiments in Florida as "Failure in Xanadu." An uprising in New Smyrna in 1768 persuaded Grant that the trail blazed by "Grey Eyes" was inadequate to move troops quickly between the colonial capital and new settlement. Also hard-pressed by planters along the Halifax, Indian, and Tomoka rivers about the need for a reliable road to St. Augustine, Grant adopted a piecemeal approach by repairing "...the worst spots of that road first, by making causeways and bridges in the swampy marshy places and afterwards to complete the whole by degree." In September 1771, Moultrie reported that part of the piecemeal roadwork that Grant had contracted out between St. Augustine and New Smyrna had been completed. Moultrie commented that "The Bridges are firm and substantial; the causeways well made, and the road well opened. A Cart or Waggon, or any number of them, may pass with ease on twenty miles of good road toward Musquito" (Adams Schafer Steinbach Weaver 1997:1-2, 8-9; John Moultrie to James Grant, September 6, 1771 St. Augustine Historical Society Archives and Library).

Planters endured the piecemeal system until March 1772. That year, the commissioners of trade and plantations in London authorized Grant to initiate a large-scale internal improvement program in East Florida. Having left the province, Grant wrote Lieutenant-Governor John Moultrie, instructing him to hire Captain Bisset to build the road between Matanzas Swamp and the Tomoka River, and then to New Smyrna and to its southern terminus near the Eliott plantation at Stobbs. For a maximum payment of £1,200, Bisset was to complete the road with supporting bridges, causeways, and ditches. The governor warned Moultrie that "I shall travel that road in a Post Chaise and four in November 1773 and if there is a stop or bad step or an insufficient bridge there will be no living in the house with me." Richard Payne was selected as the contractor for the road between the St. Sebastian River at St. Augustine and the Matanzas River. Moultrie personally assisted in laying out the northern route between St. Augustine and the Cow Ford, a segment that he hired Captain John Fairlamb and Joshua Yallowby to build. For the road between the Cow Ford and the St. Marys River Moultrie contracted with Georgians Charles Wright and Jermyn Wright, brothers of Sir James Wright, Georgia's governor. The alignment for the northernmost route was guided by an established trail at the Cow Ford and the settlement of King's Ferry, a narrows in the St. Marys River well inland from the coast. Visited by Bartram in the 1770s, King's Ferry stood on the Florida side of the river, and the settlement of Coleraine was established on the north side of the St. Marys River. For the bridge over the St. Sebastian River and the causeway leading into St. Augustine, Moultrie used four of his African-American bondsmen and an Irish overseer. The contracts and activities between the colonial English government in East Florida and Bisset, Payne, and Moultrie has been deemed "...the first major public works program in Florida history." (Adams Schafer Steinbach Weaver 1997:1-2, 8-9; Johnston 1995:2).

The road work in Florida spurred Georgians to complete their primary north-south road from the Satilla River to the St. Marys River. In September 1773, the Georgia colonial assembly declared William Armstrong, Sampson Ball, and Jermyn Wright as commissioners and surveyors of the road. Their responsibilities included laying out, clearing, building, and repairing the roads in St. David, St. Patrick, St. Thomas, and St. Marys parishes. To help provide labor for road construction, the colonial legislature declared that "...male white inhabitants, free negroes and mulattoes and all male slaves" liable for road work within those parishes. They completed the final leg in the King's Road in Georgia in 1775. Supplemental routes in what became Camden County in 1777, the Old Jeffersonton Road, Old Post Road, Old River Road, and Old Wells Road were important legs in the overland route

between South Georgia and East Florida during British colonial rule and the American Revolution (Reddick 1976:76-77).

In October 1772, David Yeats, a planter-physician and secretary of the province of East Florida, traveled a completed section of the road south of St. Augustine. His found Bisset busy at work near New Smyrna, where his slaves cleared obstructions, cut trees sufficiently low to permit carriage wheels to pass over stumps, dug drainage ditches, and packed the roadways. In January 1773, Frederick George Mulcaster, then the province's surveyor-general, reported that "Bisset is on the New Road. He has made seven miles of it fit for a coach and six. It will be a very good one." In April 1773, Grant resigned his position as governor, and Moultrie was appointed as acting-governor. In June 1773, he reported that Bisset's work went "extraordinarily well," and then made plans for James Penman to build another road between St. Augustine and Picolata. In February 1774, the Reverend John Forbes praised the effort, stating that "the road really may with propriety be called the King's Highway: it forms a wide beautiful avenue, not a stump or tree to be found." Grant's replacement, Colonel Patrick Tonyn, arrived in March 1774, but Moultrie continued to supervise road-building activities. In May 1774, Yeats reported that the Spruce Creek bridge had been built better than those structures that spanned the Matanzas River and St. Sebastian River. In August 1774, Mulcaster reported that "Bisset's Road is finished to John of Groat's home." Later that year, Bisset received £1,150 for construction of the road (Siebert 1929 2:16, 48, 329, 379; Coombs 1975:37-74; Adams Schafer Steinbach Weaver 1997:1-2, 8-9; Landers 2000:62).

Moultrie found the route between St. Augustine and Tomoka, where he maintained a rice plantation, a "pleasure to self and horses." The King's Road extended through the middle of Moultrie's 1,500 acre grant at Woodcutter's Creek (later renamed Moultrie Creek), passing through pinelands, savannahs, and swamps. Farther south, the King's Road ran through one of DeBrahm's several grants in East Florida. Through October 1775, Moultrie made monthly trips to his Woodcutter Creek and Tomoka River plantations by horse and coach. That year, Fairlamb, Yallowby, and the Wright brothers completed the road between St. Augustine and Coleraine, Georgia, concluding the first documented road construction project in Florida. Various plantation and regional roads extended off the King's Road, including those maintained by DeBrahm and Tonyn for their respective plantations, and the St. Johns Bluff and St. Johns roads. Elsewhere, Hope's Road extended north from the St. Augustine-Picolata Road toward Six Mile Creek. Measuring approximately 150 miles, the King's Road was built in three years by four contractors. Two years later, in the summer of 1777, the New Smyrna colonists abandoned Andrew Turnbull's settlement, migrating north to St. Augustine. The King's Road made possible the evacuation of a colony that mapmaker Bernard Romans described as a "Bashawship from the Levant" and Pulitzer-prize winning author Bernard Bailyn regarded as a "death camp." In general, the King's Road followed a relatively long, circuitous inland route through pine forests to avoid a shorter, but more expensive alignment near the coast with its creeks, marshes, and rivers. In addition, the road bordered or extended through grants awarded to planters and Crown officials alike. Uncharacteristic of many English colonial governments elsewhere, East Florida's crown officials do not appear to have published a map or chart of the King's Road with established landmarks or mile posts for official reference and to guide travelers. The outbreak of hostilities associated with the American Revolution permanently shelved plans for any additional significant road building activities in the Floridas (Coombs 1975:37-74; Adams Schafer Steinbach Weaver 1997:1-2, 8-9; Landers 2000:62).

The King's Road was the first major internal improvement in Florida undertaken by the English Crown related to regional transportation. The road extended between the St. Marys River to the north and on the south the New Smyrna settlement with St. Augustine near its center. But, the impact of the road extended well beyond its alignment. Located well inland, Coleraine, Georgia and King's Ferry, East Florida bracketed a narrows in the St. Marys River which accommodated by a road-and-ferry system to Midway and Savannah, Georgia, and Charleston, South Carolina beyond. The completion of the King's Road served a much broader context than simply linking settlements and towns in the province of East Florida. In the finest British tradition, the road and its accompanying ferries and fords to the north bound the province to Britain's older colonies, and contributed to one of the southeast's first regional overland transportation systems. In the mid-1760s, when Henry Laurens and Jonathan Bryan had visited East Florida to investigate plantation possibilities, they relied upon waterways for transportation; ten years later, travelers had another choice: a reliable road connecting Georgia's and South Carolina's capitols with that of East Florida. Later called by historians, Florida's First Highway," the King's Road encouraged travel between the colonies, but its impact was limited by the American Revolution (Adams Schafer Steinbach Weaver 1997:1-2, 8-9).

Oddly, Bernard Romans' *Map of East Florida*, published in 1776, failed to depict the King's Road south of St. Augustine, but illustrated other important features of the provincial colonies. Using earlier maps prepared by Collet, DeBrahm, Mouzon, and other well-known cartographers, Romans' compilation showed the connectedness of St. Augustine with Savannah and Charleston by road and ferry. He also revealed an important convergence of trails at the former site of Fort Pupo, across the St. Johns River from Picolata. There two routes extended west, one into the Alachua prairie and the other to the St. Marks settlement, but not to Pensacola. A third path ran north from Fort Pupo to the Altamaha River, where it intersected with a path that connected Charleston with Pensacola. Labeled "Old Trading Path," the route passed through trading points on the Apalachicola River, Altamaha River, and Savannah River. Rather than showing the significance of the new King's Road between St. Augustine and New Smyrna, Romans emphasized the St. Augustine-Rollestown trail, connecting the colonial capital with the St. Johns River and another colonial experiment in town building. Indeed, Romans' map depicted roads and trails like spokes in a wheel radiating out from St. Augustine to several points on the east banks of the St. Johns River, and from the west bank of the St. Johns River at Fort Pupo to distance points in Florida and Georgia. For Romans, established paths and trails connecting Pensacola and St. Augustine extended deep into South Georgia along a circuitous route. For the British, the importance of the colonial capitals in Florida lay with their trading partners farther north, not with one another (Siebert 1929 1:44).

Several historians provide a cautionary note about the original alignment of the King's Road in East Florida. They believe that "...more than one path or road in East Florida was created between 1774 and the times when surveyors began calling out the roadway as a reference point on township maps. Whether the road that the east Florida survey teams in 1834 and 1849 named the King's Road was the same track established by British engineers in 1770-1774, or a road along a slightly different route created in the course of the 1828 construction, or a military path carved out between 1835 and 1837 may forever remain open to conjecture. During the next century, as development and settlement changed the face of east Florida, people on many occasions erroneously attached the name "King's Road" to an old path, creating a confusing legacy" (Adams Schafer Steinbach Weaver 1997:33).

Following the construction of the King's Road, surveyor Joseph R. Purcell mapped what is believed to be the primary colonial overland route between East Florida and West Florida. DeBrahm described Purcell as a "draughtman, mathematician, navigator, and surveyor" who worked for him as a deputy surveyor. In the 1760s, after drawing a plan of Andrew Turnbull's New Smyrna Colony, Purcell drafted a plan of Beauclerc Plantation on the St. Johns River and then moved to Savannah to work for John Stuart, England's superintendent for Indian affairs. In Georgia, Purcell documented lands ceded to the colony by Native Americans, which he published as "A Map of the Southern Indian District of North America." Events associated with the American Revolution compelled the surveyor to return to St. Augustine, still a Loyalist haven, where he drew a town plan in 1777. Then Purcell was off to West Florida, where he drew a plan of Pensacola in 1778. Purcell's attention to detail yielded a map depicting two major roads extending north out of Pensacola. Roughly corresponding with Alcaniz, Cervantes, and Palafox streets, those roads and paths provided overland access to Mobile, into Indian territories to the north, and into South Georgia and to Charleston to the northeast and east. That year, Purcell completed one of his largest projects for Indian agent John Stuart, "A Map of the Road from Pensacola to St. Augustine" (Schafer 2001:144-117; Boyd 1938:15).

The impetus for the survey and publication of the Stuart-Purcell map was, in part, to unite East Florida and West Florida against Patriots in Georgia, in part, to document the location of existing Indian villages and develop allegiances with them, and, in part, better understand the overland distance between the provincial capitals, and the topography and other roads and trails in the region. In particular, however, Purcell's journey was part of a forced march between the colonial capitals. The journey began in Pensacola on July 14, 1778 and ended at St. Augustine on August 29, 1778, too late to assist Governor Tonyn in repelling a Patriot incursion from South Georgia. Beginning with ten militia and twenty-two Upper Creeks led by Captain David Holms, Purcell covered the route twice in the last half of 1778. The resulting map played a key role in locating Indian villages and secondary north-south trails along the primary overland route between the colonial capitals (Hurst 2004; Boyd 1938:15-16).

Purcell surveyed the length of the Pensacola-St. Augustine Road as 465 miles. Intriguingly, the first leg of his "road" was by water, rather than by land, a fifteen-mile canoe or boat trip between Pensacola and Mount Pleasant at the east end of Pensacola Bay. Purcell's division of the road into four sections reveals another important insight: what he called a road in the title block of the map was instead a series of interconnected paths. He divided the "road" into four general sections that he named (1) Lower Creek Trading Path, (2) Red Ground Path, (3) St. Pedro Path, and (4) Picalata Path. For each path, Purcell assigned mileages between natural and man-made features, recording, for instance, the distance between Pensacola and the Fork of the Lower Creek Trading Path as 79¾ miles, and from the Yellow-Water and Fork of the Lower Creek Trading Path as 14½ miles. At the 79¾ mile mark the Lower Creek Trading Path yielded to the Red Ground Path. Purcell measured the distance between Pensacola and Old Coosada Town on the east side of Chacta Hatchee (Choctawhatchee) as 125¾ miles and Coosa Old Fields at 155 miles. At the east end of the Red Ground Path, Purcell recorded Ekanachatte, or Red Ground, a distance of 186 miles from Pensacola. Purcell inventoried an alternative path to Ekanachatte, via waterway to the head of Santa Rose Bay, then by the branches of the Ekonfeena (Econfina River) and the Chanpooly (Chipola River), a shorter distance of 160 miles (Boyd 1938:15-16).

East of Red Ground, Purcell recorded the St. Pedro Path, first inventorying Burge's on the east side of the Flint River at 211½ miles east of Pensacola and then the Forks of the Harmonia Path at 219 miles from the West Florida capital. The Forks of Harmonia Path was the first important fork onto which Purcell diverted to record natural and man-made features. Purcell recorded the Harmonia and St. Pedro paths as parallel courses that converged on the village of Micasuky farther east. Purcell traveled 41 miles along the Harmonia Path to Micasuky, along the way recording the east and west branches of Little Big Creek and the Okalocknee village at 19½ miles from the fork. On the St. Pedro Path, Purcell traveled 46¾ miles to reach Micasuky, documenting distances to the Okalocknee River and Old Field town. Beyond Micasuky, Purcell recorded the Aucilla River, the remains of a fort near St. Pedro Pond, another fork in the St. Pedro Path, and the Seguana River (Suwannee River) 326¾ miles from Pensacola. From the east bank of the Suwannee River, Purcell documented the Picalata Path, recording the Santa Fe River 368¼ miles east of Pensacola and "Hekopockee a noted Indian camping place" 1½ miles east of the Santa Fe River. The first and last branch of "Latchua" (Alachua) were 21 miles apart, and Purcell recorded the west bank of the St. Johns River and "Old Fort of St. Francisco de Pupa" 440¾ miles from Pensacola. Purcell recorded the path between Fort Picalata on the east bank of the St. Johns River and St. Augustine as 22¼ miles. A network of paths and roads extended west of St. Augustine, including the "Post Road to Georgia," "Road to Smyrnea," and a fork to Six Mile Creek and Fatio's plantation at New Switzerland (Boyd 1938:15-16).

Purcell noted the presence of several other forks intersecting with the main paths, including the "Path to the Beach" south into the Santa Rose peninsula; "Path to Little Ockchoyce" near present-day Curry Ferry; two forks labeled as "Path to Ockchoyce," one at Oak Hill and the other near Little Crooked Creek; and "Path to the Forks" near Porter Pond in Washington County. West of the St. Johns River, a fork provided access along a "Path to Lower Store," a reference to the Spalding & Kelsall Trading Post several miles south of Palatka, Bartram's departure point on his several expeditions into the peninsula (Boyd 1938:15-24; Hurst 2004).

Figure 3. The Purcell Map of 1778 was one of the first cartographic resources to depict trails between Pensacola and St. Augustine. *Courtesy Florida Historical Quarterly.*

The Stuart-Purcell map was among the most significant cartographic resources published during Florida's British period, and the last major work by Purcell in Florida. In the mid-1780s, Purcell moved to Charleston, where he conducted surveys for numerous planters in Berkeley, Charleston, and Dorchester counties. In 1792, the South Carolina Assembly appointed Joseph Purcell as state geographer with his first assignment to draft an accurate map of the State of South Carolina. Historian Mark Boyd argued that if an Old Spanish Trail existed in Florida, then the path documented by Purcell in 1778 represented the most accurate route (Schafer 2001:144-117; Boyd 1938:15-23).

Purcell and many other colonists left Florida near the end of the American Revolution. During the conflict, the royal provinces of East Florida and West Florida remained conspicuously loyal to the Crown. Floridians realized that the amount of money expended in the province by the British government greatly exceeded the taxes they paid. They also needed the protection of the Crown. Residents of the sparsely settled region could not afford to protect themselves from Indians. In addition, African-American inhabitants outnumbered whites two-to-one, and an exposed coastline, vulnerable to French and Spanish warships, also required security. The presence of the British Army irritated colonists in heavily populated areas in England's older colonies, but in Florida their presence gave residents a sense of well-being. In East Florida, communications intensified between St. Augustine and Loyalists in Charleston. In West Florida, Governor Chester built Fort George at Pensacola and strengthened Mobile. Only a few battles occurred within the provinces with roads and trails contributing to several actions. In May 1777, the Battle of Thomas Creek occurred east of the King's Road between the headwaters of Thomas Creek and the Trout Creek. Moving north along the King's Road from St. Augustine, a British force known as the East Florida Rangers was led by Lieutenant Colonel Thomas Brown. He defeated Patriot troops commanded by Colonel Samuel Elbert and Colonel John Baker from Georgia, who arrived in East Florida by boat and overland. In April 1778, Lieutenant Colonel Fuse led 1,900 regulars, rangers, and Indians north on the King's Road to the Altamaha River, where they attacked and burned Fort Barrington. On their return, the British forces herded 2,000 cattle along the King's Road through South Georgia and Northeast Florida, fording the St. Marys River at King's Ferry and the St. Johns River at the Cow Ford, and then into St. Augustine. In West Florida, Spanish forces marched from Mobile to Pensacola to contribute to a joint attack with a Spanish fleet assembled from Havana and New Orleans. In May 1781, the first shot fired upon Fort George exploded in the powder magazine, which destroyed a redoubt, breached the fort's walls, and resulted in its surrender (Proctor 1978:1-7; Ward 1985:73-76; Tebeau 1971:85-86).

In the early-1780s, many Loyalists from Charleston and Savannah fled to Florida during the American Revolution to avoid persecution by Patriots. The population of East Florida increased from 3,000 in 1776 to nearly 17,000 by 1784. Some of those arrived in St. Augustine and then acquired plantations. Among the Loyalists evacuating Savannah for East Florida was merchant William Moss. Moss's experiences at St. Augustine suggest a reliance on East Florida's rivers and roads for his newly-organized business ventures. In the East Florida capital Moss acquired a town lot and acquired parts of larger plantations, one six miles south of St. Augustine and 1,200-acres out of the 20,000-acre Beresford Plantation at Lake Beresford, a tributary of the St. Johns River approximately eighty miles south of St. Augustine. Moss's plantation choices suggest that he used the King's Road for his St. Augustine plantation and his ship, the *Maria*, for the Lake Beresford plantation. It remains unclear whether a road or trail then extended south-by-southwest of St. Augustine to the St. Johns River. A native of England, Moss arrived in Savannah in October 1772 as an agent for two Liverpool merchants. In addition to meeting his commitments to his sponsors, Moss established his own mercantile business. He built a wharf and supporting buildings on a small island in the Savannah River, bought a wharf lot in Savannah, and then 200 acres for a plantation in Christ Church Parish. In 1775, Moss embarked on a shipyard project in Brunswick, investing in land and equipment to construct new ships. The American Revolution curtailed his mercantile and ship-building activities. In 1776, when British ships sailed up the Savannah River seeking provisions, they found the City of Savannah in turmoil with the colony's royal officials and the city's Loyalists clamoring to board the warships for

safe refuge. Frustrated that Patriots would imprison or kill him, Moss left Savannah with hundreds of other refugees. In 1776, Moss sailed in his schooner, *Maria,* to St. Augustine. Moss abandoned various trade goods at Savannah, including 6,000 bushels of salt, ninety tons of coal, and dozens of chimney tiles. He counted his total investment losses at £9,246, including his burned shipyard. He later salvaged and sold some of his hardware from the Brunswick site, but still claimed shipyard losses amounting to £1,644. Based in East Florida, British forces captured Savannah in December 1778, but Moss elected to remain in the more stable economic environment of St. Augustine rather than return to Savannah to begin anew. Events in 1782 confirmed his course of action, when Loyalists again evacuated the war-torn colony. In the latter interval, approximately 12,000 refugees flooded into East Florida, primarily into St. Augustine from the capital cities of Georgia and South Carolina (Wright 1975:58, 126; Roberts 1968:270-275).

Based in St. Augustine during the closing years of the American Revolution, Moss built a new home and counting house on a town lot in St. Augustine. In 1782, he hired overseers for his plantations. Eight years earlier, William Bartram had visited Beresford Plantation, recording the events associated with a hurricane and general observations about the plantation. Moss's plantation holdings extended from the midpoint along Lake Beresford's shore to the south end of the lake, leaving out Blue Spring, but included nearby Hontoon Island. The nature of Moss's lakefront and island plantation of 3,150 acres suggests a planter seeking refuge from the turmoil associated with the Revolutionary South. A plat prepared for Moss in June 1783 depicted a building and a corn field, along with wetlands that separated those man-made features from uplands farther east, but no evidence of a road or trail (Schafer 2001:237-238; www.floridahistoryonline.com).

Moss and many other Loyalists and settlers abandoned East Florida the latter year, when the British Crown returned Florida to Spain as part of its agreement outlined in the Treaty of Paris in 1783, which ended the American Revolution. Loyalists fleeing Charleston and Savannah in the late-1770s and early-1780s had hastily assembled the towns of St. Johns and Hillsborough, the former on the St. Johns River, latter along the St. Marys River. At those towns, the evacuating British dismantled buildings worthy of salvage and shipped them to Nassau, Providence, and other locations in the British Empire. In June 1785, to make room for the incoming Spanish authorities, former Governor Tonyn shifted his command from St. Augustine to the Town of Hillsborough on Amelia Island, from where he sailed for England later that year. The seizure of West Florida by Spanish troops in 1781 had immediately halted planting operations around Pensacola as British planters evacuated the province. Still, a few British colonials remained despite the impending change of flags. William Gregory had arrived in Pensacola in the 1770s, but soon moved inland, where he befriended Creek Indians as a superior cattle herder. By the close of the British period Gregory's herd and those he tended for Creeks amounted to 2,000. His residency in Indian lands spanned the British and second Spanish period. In East Florida, planting and trading operations at dozens of plantations ceased in 1783 as residents and planters made arrangements to relocate. The last British ship departed from the St. Marys River in November 1785. The St. Marys River had again become an international boundary, this time between the emergent United States of America and the Spanish Crown (Murdoch 1951:3; Proctor 1978:1-3; Schafer 2001:263; Akerman 1999:23-24).

III

Second Spanish Period, 1784-1821

Development in East Florida and West Florida slowed following the transfer of the colonies to Spain. By 1785, only 450 whites and 200 slaves remained in East Florida and much of the progress made under British rule had unraveled. Florida's economy stagnated as the provinces returned to the status of obscure Spanish outposts. The Spanish Crown began conveying property to incoming loyal subjects, but rejected the claims of most British settlers and planters. One of the claims affirmed by Spanish authorities was to Francis Philip Fatio, a wealthy soldier-planter from Switzerland who had arrived in East Florida in 1771. Too deeply invested in Florida to relocate at the close of the British period, Fatio remained at New Switzerland after the British ceded Florida to Spain. In 1785, impressed with Fatio's 10,000-acre New Switzerland Plantation on the St. Johns River and his resilience and advice on how to encourage settlement, the Spanish governor, Vincente Manuel de Zespedes, placed a guard at Fatio's hacienda to protect the riverside plantation from marauders. In the late-1780s, after conducting a brief tour, Zespedes found East Florida an abandoned colony and worked hard to protect Fatio's plantation, which he recorded as the only such place left along the St. Johns River following the evacuation of East Florida's English residents. Fatio's New Switzerland was among the few riverfront plantations supported by a road into St. Augustine. The road into Fatio's plantation converged with the St. Augustine-Picolata Road several miles west of St. Augustine. By 1801, in addition to several plantations, Fatio maintained five houses in St. Augustine and two country homes. His acquisition of Blue Spring south of Lake Beresford added to an already impressive list of holdings in East Florida. Fatio died in 1811, never having converted to Catholicism. Because of his religious beliefs, the Spanish authorities refused to bury his remains next to his wife in St. Augustine. Consequently, his body was interred at his New Switzerland plantation. The following year, marauders burned the estate, including a 1,200-volume library, and slaughtered 106 sheep, sixty cattle, and fifty pigs (WPA 1940 3:69-70; Willis 1985:174-188).

To promote settlement, the Spanish Crown emulated British policy by awarding large land grants. In 1790, the Crown issued a royal order that opened the Floridas to all English speaking settlers professing the Roman Catholic faith. Among the few requirements for land ownership leading to the establishment of a farm or plantation included evidence of financial resources and the swearing of an oath of allegiance to Spain. Contrary to official policy elsewhere in the Spanish empire, the Crown permitted non-Catholics to settle and receive land grants in Florida. Military conflict became endemic in East Florida in the 1790s, in part, because of the economic and social unrest prevailing throughout Europe that persisted between the French Revolution and the Napoleonic Wars (Tanner 1963:13-36; Miller 1974:1-10).

Headright and service grants accounted for thousands of acres awarded to settlers and loyal subjects. Between 1815 and 1818, the Crown awarded seventy-eight headright grants, amounting to 47,496 acres, or twenty-two percent of all grants later confirmed by the United States Board of Land Commissioners. In contrast, service grants to veterans and government officials during the same four years amounted to 322,884 acres, which accounted for more property than all the headright grants awarded during the entire second Spanish period. The service grants were most often associated with military service or government duty. Eighteen individuals received most of the service grants awarded by the Spanish Crown; eleven persons received more than 10,000 acres each

during those four years (Hoffman 2002:269-271).

The Spanish Crown granted many grants near the coast, along rivers, and radiating out from the proximity of Pensacola and St. Augustine. Some grants occupied sites bordered by the King's Road, or paths, trails, and roads running outside of St. Augustine. Others sprinkled the Atlantic coast and the banks of various rivers, and a few occupied inland sites spreading across prairies and savannahs. Northwest of the Tomoka River, John Addison's grant of 1,414 acres was depicted in a color rendering by Robert McHardy in 1816. One of the most colorful of all Spanish land grant plats, the Addison grant was bordered on the southwest by the King's Road at a critical segment in its alignment: the Tomoka River bridge. Forming the west boundary of the Addison grant, the King's Road also served as the western boundary monument and legal limit of grants abutting Addison to the north. Also acquired in the 1810s, those grants were awarded to Thomas Dummett, Robert McHardy, James & Emanuel Ormond, Charles Bulow, and Francis Pellicer. Near the confluence of the Halifax and Tomoka rivers, a path extending from the King's Road into Dummett's plantation meandered by "negro houses" and ended at the riverfront across from Mount Oswald. Intersecting with the King's Road midway through the Bulow grant, a "road to sea beach" extended to the east, and to the west Indian trails ran toward Volusia, a settlement on the St. Johns River that corresponded with Spalding & Kelsall's upper trading store. North of the Pellicer grant, the King's Road skirted to the west of the Black, Clarke, Fish, and Hernandez grants, separated from those plantations by approximately one-quarter mile wetlands and hammocks. To the south of Addison, grants awarded to Thomas Fitch, Thomas Briggs and John Robinson, and Francis Bethune had segments of the King's Road extending through them, rather than the road serving as a boundary. On some plats, the road was labeled as *camino publico*, *camino real*, King's Road, or simply *camino*. On others, no reference was provided, but later surveys would confirm its boundary location (A4, F8, F24, O5 Confirmed Spanish Land Grants; Adams Schafer Steinbach Weaver 1997:21; Hoffman 2002:243-244, 292-293).

On the interior near modern-day Gainesville, Cooley's Hammock was granted to Domingo Fernandez in 1818. Born in 1766 in Vigo, Galicia, Spain, Fernandez arrived in St. Augustine about 1786. He worked for the Spanish government as a harbor pilot at Amelia Island and captain of a gunboat. For his service, several Spanish governors awarded Fernandez grants on the island, and later inland regions. In 1800, Fernandez retired from the service to engage full-time as a planter. Between 1797 and 1816, Domingo Fernandez acquired additional lands through service grants and outright purchase, and became one of the most prominent planters in East Florida. Consisting of 6,000 acres, his Cooley's Hammock was bordered on the southwest by Bay's Trail, which extended between Hog-Town at Alachua and the Santa Fe River. The trail served as the boundary between Fernandez's grant and the northwest section of the huge Arredondo & Son grant of 289,645 acres, which included most of Orange Lake. Based on an old Indian path, Bay's Trail extended through the Arredondo grant, and also and connected with other trails supporting grants carved out of the Arredondo grant itself. The Spanish Crown awarded Fernandez another 3,000 acres at Bernard's Ford downriver from Lake Beresford on the St. Johns River. There the "camino Semfeloky desto San Augustine" extended through Fernandez's property on the west side of the river, and on the east side of the river the road made a sweeping curve to the north toward St. Augustine. At Moody's Creek west of the St. Johns River, Stephen D. Fernandez received 3,000 acres in the 1810s. Consisting of "mixt land and hammock," Fernandez's grant lands were divided by the road to Ocklawaha Creek and Charlie Emathla's Town farther north. Located several miles south of what became Newnansville, the 500-acre Francis

R. Sanchez grant was divided by both Ray's Trail and the Alachua Road (*East Florida Herald,* 19 September 1833; Jaccard 2000:89-90; F24, S8 Confirmed Spanish Land Grants).

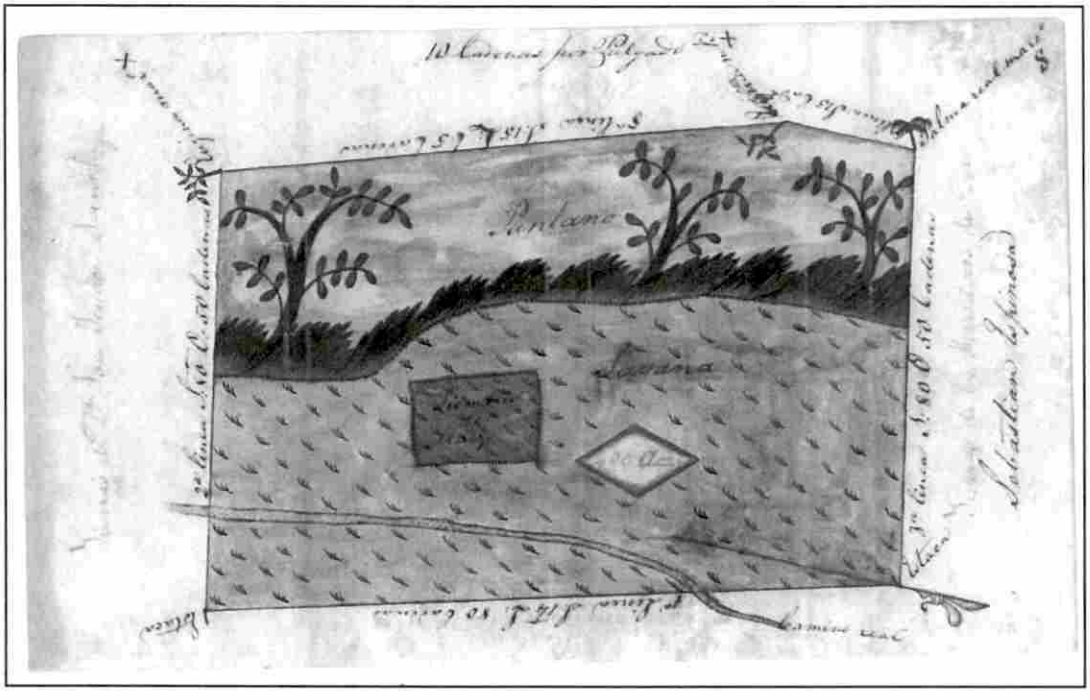


Figure 4. The Thomas Fitch Grant in the Diego Plains north of St. Augustine was among the few colorful grant plats to depict roads and trails within or along their boundaries. *Courtesy Florida State Archives.*

Northwest of the Cow Ford approximately six miles the King's Road made a sweeping arc through the 640-acre donation grant to Seymour Pickett, crossing Six-Mile Creek on the north side of his property. Several miles south of the Cow Ford the King's Road defined part of the south boundary of the Francis Bagley grant, but then abruptly turned to divide the rest of the grant in half. East of the headwaters of Durbin Creek, the King's Road ran through the Mary Ann Davis and Christopher Minchen grants, while other grants made to George I. F. Clarke, Samuel Fairbanks, and James Hall occupied tracts approximately one-half mile east of the road. West of St. Augustine, Spanish officials divided the former Penman plantation of the British period into smaller grants that it awarded to John Geiger and F. P. Sanchez. The latter assembled the grants into a 900-acre plantation divided by the St. Augustine-Picolata Road. To the north of St. Augustine, Sanchez received a 600-acre grant east of the "Road to the Twenty Mile House and St. Vincente Ferrer Bluff," where the Spanish built a battery to protect the south bank of the St. Johns River. To the east, Dr. Mateo Guadarrama was awarded 3,000 acres west of the "camino de San Pablo," which he subsequently sold to Thomas Fitch. Along the Little St. Marys River, the McIntosh Causeway extended through several grants (A4, B4, F24, F43, S9, S10 Confirmed Spanish Land Grants).

Some grants showed clear evidence of roads and trails on plats and in testimonials produced in the late-1810s and early-1820s as settlers and planters prepared for the transfer of Florida from Spain to the United States. But, many others did not. Along Escambia Bay, plats from the 1810s failed to depict roads or trails in grants awarded to Manuel Barco, Manuel Bonifay, Richard Keith Call, Domingo Fernandez, Manual Hernandez, John Innerarity, Jacob Kelker, and Joseph Noriega. Elsewhere in the Pensacola region many places were equally depended on waterways rather than overland travel. At Bayou Mulatto and Escambia River grants were awarded to Pedro Philibert, Miguel Quigles, and Henry Wilson. Near Perdido Bay were several large grants ranging upwards of 1,800 acres, tracts awarded to Joseph Cruzat, John Innerarity, and Alexander Love. In South Florida, George Fleming's 20,000 acre grant took in the confluence of the Indian River and Sebastian River, but did not support any roads or trails. Farther south, the Gomez grant near Jupiter Island contained 12,000 acres with extensive riverfront exposure, but no evidence of a road system. Farther south, the Lewis family maintained three grants along Biscayne Bay. They showed evidence of old fields and settlements, but no roads or trails in the 1810s or 1820s (B10, B44, C2, C91, F37, F55, G24, I4, I5, L15, L16, L17, L28, K2, N11, P44, Q1, W32 Confirmed Spanish Land Grants).

Beyond land grants and Crown activities, probably no single entity did more to promote trade and trail building in Spanish Florida than Panton, Leslie & Company and its successor John Forbes & Company. Scottish Loyalists William Panton, John Leslie, and Thomas Forbes fled to Florida during the American Revolution and acquired the Spalding & Kelsall Trading Company. Organized in the early-1780s, Panton, Leslie & Company specialized in trading English-made goods--guns, powder, and shot--for furs and deerskins brought to their stores by Indians and white hunters. Panton had fled from South Carolina to St. Augustine in 1776 and relocated to Pensacola in the 1780s. A native of Scotland, Forbes arrived in St. Augustine in 1784. He emerged as a leader in the firm after the death of William Panton in 1801. Their trade began with Florida's Native Americans and then expanded to Indians of the American Southeast. Based in Pensacola and St. Augustine, the partners were granted by the Spanish Crown the exclusive right to trade with the Creeks in 1785. In 1788, Spain broadened the grant to include the Choctaws and Chickasaws. Between 1783 and 1795, Spain and the United States held claims over a disputed vast region between the Flint River, Mississippi River, and Tennessee River. In the latter year, Spain ceded what became Mississippi Territory to the United States. In 1796, Panton, Leslie & Company built its headquarters in Pensacola. The trading firms operated within the large region, maintaining stores at Bon Secour, Fernandina, Memphis, Mobile, New Orleans, Pensacola, Picolata, Prospect Bluff, Pupo, St. Augustine, two at St. Marks, on the St. Marys River presumably at King's Ferry, Stokes Landing, and Volusia. The partners and their successors monopolized southeastern Indian trade between 1783 and 1821, and became feared and respected by both Indians and Spanish (Coker and Watson 1986:20-21, 66, 235, 250, 327-329).

The trading partners relied heavily upon boats and ships, such as the *Shark* and *Sisters*, to move between their headquarters and stores, and to transport goods to stores and American and European markets. Their trading partners--primarily Creeks and Seminoles--used footpaths, rivers, and waterways to deliver goods to trading stores. Consequently, those stores became commercial and cultural centers around which paths and trails were established. Some evidence suggests the company also established its own trails between headquarters and

stores, such as Stokes Landing and Upper Store at Volusia and St. Augustine. By the War of 1812, the company's founders were dead and the new partners made alliances with the United States, anticipating the collapse of Spanish rule in Florida. In addition to its trading stores, the partners maintained several plantations, including the Panton-Leslie rice plantation downriver from Stokes Landing and San Pablo near the mouth of the St. Johns River. Although Forbes relied heavily upon his boats to transport goods to market, he improved the road between St. Augustine and San Pablo. At the plantation, Forbes maintained a workforce of approximately 100 slaves. The Patriot Rebellion of 1812 disrupted development and in February 1815 sixty-two of Forbes's slaves, assisted by Forbes's plantation manager, stole a boat and escaped to Cumberland Island. Forbes tracked his bondsmen to various British ships, but realizing that their return was a lost cause. Forbes settled the account through legal and diplomatic channels, and then sold his San Pablo plantation. Between 1804 and 1818, Creeks, Florida's Seminoles, and the Spanish Crown conveyed to Forbes several million acres in West Florida in return for debts they owned him for supplies and losses associated with the War of 1812. Following the war, the company received $2,700,000 from Spain for additional losses. But, unsettled conditions in Florida compelled Forbes to withdraw from the company in 1817. He relocated to Cuba, where he died in 1823. The firm supplied Indians with munitions, rum, and other goods in exchange for deerskins, furs, bear oil, honey, and foods. The company expanded its reach as far as the Bahamas, Louisiana, Texas, and Yucatán as John Forbes & Company. Headed by John and James Innerarity, the company survived at its headquarters in Pensacola until the 1840s, a victim of Indian removal programs initiated by President Jackson (Coker and Watson 1986:3, 31-35, 210, 212).

Although some grants were awarded in the 1790s, especially those in Pensacola and St. Augustine, most were conveyed by the Spanish Crown between 1800 and 1818. Even as Spain expanded its grants system, the government of the United States sought to acquire the Floridas from Spain. The largely undeveloped area tempted the expansionist government and private land speculators lobbied in Washington for its acquisition. Over the years, West Florida had presented the federal government with several problems. The region extended from the Apalachicola River to the Mississippi River, and inland some thirty miles from the Gulf of Mexico. The Spanish-held region and its rivers and port settlements stunted economic growth of the Lower South. Planters in the Alabama and Mississippi territories faced shipping their products overland rather than by rivers across the international boundary that divided those regions. Both East Florida and West Florida provided a haven for runaway slaves and Seminole Indians, who became involved in armed conflicts with settlers residing in Georgia and Alabama. Florida provided a setting for contraband trade and slave smuggling. Amelia Island, especially, with its close proximity to Georgia and a deepwater port, was a center of this activity. Due to its strategic geographic location, Florida was perceived by the government to pose a threat to national security. The area could serve as a base for attacks against the United States if acquired by a foreign power, particularly England. Key politicians maneuvering to acquire Florida included presidents James Madison, James Monroe, and John Quincy Adams. In 1810, President Madison ordered troops to occupy West Florida from the Mississippi River to the Perdido River, and then kept Great Britain at bay with the No Transfer Resolution. In effect, Pensacola and West Florida were largely leaderless and development stalled after 1810. Overlaying the political unrest was the uncertainty of the Spanish Crown with Ferdinand VII not yet seated as king and negotiations with Spain over the southern limits of the Louisiana Purchase of 1805 (Weeks 1992:27-29, 69-70).

In 1812, federal troops and militia forces from Georgia invaded East Florida, occupying Amelia Island and ranging deep into the interior along the St. Johns River. During the rebellion, United States forces invaded East Florida under the command of General George Mathews. Some of the attacking force spilled south of Fernandina and the St. Marys River region to burn plantations, including the Kingsley plantation and Fatio's New Switzerland on the St. Johns River. A contingent of Army troops advanced on St. Augustine, and assembled a blockhouse and supply depot on Davis Creek in 1812. Only an ambush by Seminoles and free blacks compelled the American forces to withdraw. Still, during the 1812 conflict, many buildings were destroyed outside of St. Augustine, rural plantations were plundered, and livestock was slaughtered or driven off. In 1815, at the close of the War of 1812, British Admiral Sir George Cockburn occupied Cumberland Island and published a proclamation offering slaves in Georgia and Spanish Florida freedom if they could make their way to the sea island. Although federal troops withdrew from Amelia Island in 1813, patriot militiamen continued raiding plantations and seizing slaves. The extent of significant plantation development and road construction in both of the Floridas had effectively ended by 1813 (Cusick 2003; Patrick 1954:302; Coker and Watson 1986:293-294).

General Andrew Jackson had initiated the Indian removal process in the southeast with the Creek War of 1812-1813, and gained stature and popularity after his victory at the Battle of New Orleans in 1815. In April 1816, a federal gunboat destroyed Florida's "Negro Fort," a former British fortification at Prospect Bluff on the Apalachicola River. The fort stood at the center of a settlement that harbored the largest slave refuge in North America until its destruction. In 1817, Amelia Island was seized by pirate Luis Aury, who had abandoned Galveston, Texas as his base of operations for Fernandina. His force wrested control from Gregor McGregor, a Scottish adventurer who had moved in the aftermath of the withdrawal of federal troops and Georgia militia. Aury's assent as leader of the provisional "Republic of Florida" further threatened United States officials and especially Georgians. Then, after Andrew Jackson invaded West Florida in early 1818 as part of the First Seminole War (1815-1818), it became clear that Spain's hold on Florida was slipping fast. Jackson's march through West Florida became legendary with the route extending down the east bank of the Apalachicola River to Fort Gadsden, northeast to Lake Miccosukee and the Miccosukee towns northeast of present-day Tallahassee, and then southeast to Covington on the Aucilla River and Old Town on the Suwannee River. Jackson's return march covered much of the same ground until he reached the St. Marks River. The march extended along the west bank of the river southwest to Fort St. Marks, where he took possession of the fort from the Spanish. From St. Marks he turned northwest along the east bank of the Wakulla River, then west to Jackson Bluff on the Ochlockonee River, and crossed the Apalachicola River at Ocheesee Bluff. On 22 May 1818, after enduring a "fatiguing, tedious, and circuitous march," Jackson's forces arrived in Pensacola twelve days later. In 1819, mounting pressure from the secretary of state John Quincy Adams and the United States government compelled the signing of the Adams-Onis Treaty. The treaty was negotiated over several months by secretary of state Adams and Spanish minister Don Luis de Onis, which transferred power in 1821. As part of the treaty, the United States relinquished all claims to Texas, transferred most of Spain's claims in the Pacific Northwest to the United States, and assumed the unpaid damage claims of Florida's citizens, which amounted to approximately $5,000,000. Spain's loss of Florida was part of a hemispheric struggle to retain its empire. In 1817, Buenos Aires and Chile had established their independence from European Spain, and the chaotic state of the Spanish government in the post-Napoleonic restoration prevented the creation of a workable policy to confront the crisis of a crumbling empire (Dovell 1952 1:169-170; Merk 1963:15; Weeks 1992:27, 64, 69-70, 106; Knetsch 2003:27-40).

IV **Territorial and Statehood Periods, 1821-1860**

In 1821, the United States government created the Territory of Florida and named Andrew Jackson as its military governor. Jackson initiated the Americanization of Florida, initially adopting the Spanish designations of East Florida and West Florida as provisional jurisdictions divided by the Suwannee River. He then renamed the counties Escambia County and St. Johns County. The names were derived from significant waterways that ran in close proximity to the respective seats of government assigned to administer the respective jurisdictions. Pensacola and St. Augustine were named as the respective seats of county government. Before his resignation in October 1821, Jackson also provided for county courts and trials by jury. President James Monroe appointed as governor William Duval, then a federal judge in Pensacola. Florida's governors served at the pleasure of the president and remain appointees until statehood in 1845. In March 1822, the Congress reorganized Jackson's provisional dual structure with a single territorial government. In the process, the Congress disregarded formal requests from Alabama and Georgia to incorporate West Florida into their states, predicated on river systems, trails, and similar cultures. Similarly, requests were denied from representatives of East Florida to form two territories--East Florida and West Florida--because of their differentiated geography and cultures, divided by a large unsettled region (WPA 1936; Gannon 1996:207-208).

The Legislative Council met in Pensacola in July 1822 and again in St. Augustine in March 1823. Meeting in alternating sessions proved difficult and unsatisfactory, a finding emphasized by the deaths of several councilmen while making the journey by ship between the county seats. At the St. Augustine council meeting delegates decided to find a centralized location between the older cities. Duval appointed Dr. William H. Simmons and John Lee Williams to locate a site midway between the county seats, somewhere between the Ocklockonee River and the Suwannee River. After receiving their recommendations, Duval selected Tallahassee as the permanent capital. In 1826, the Congress made the legislative council elective and then bicameral in 1838. East Florida sugar planter Joseph M. Hernandez became the most important elected official in the territory. Appointed to the first territorial council in 1823, Hernandez was appointed the congressional delegate from the Territory of Florida. In 1824, Richard Keith Call succeeded Hernandez. Not voting members of the Congress, Florida's delegates lobbied for the interests of its citizens. Those interests included several internal improvements, such as bridges, lighthouses, military construction, and roads, but were mitigated by traditional antebellum southern fears of federal intrusion in state affairs (Gannon 1986:210).

The survey and sale of public lands and removal of the Seminoles were the fundamental issues of territorial Florida. Roads were not at the top of the territorial government's legislative agenda. In 1822, legislation "concerning roads, highways and, ferries" came deep into the session, published on page 95 of the *Acts of the Legislative Council*. The council affirmed that "...all the roads in the several counties in this Territory that have been laid out by order of any court according to law, shall be and they are hereby respectively declared to be public roads." The council gave the county courts "...full power and authority on application, to order the laying out of any public road or roads throughout their county, when the same shall by them be deemed necessary, and to discontinue such public roads as now are or shall hereafter be found useless, burthensome and inconvenient, and to alter the roads now, or hereafter to be established, as often as occasion shall require." The council

provided that a legal petition presented to a county court to establish a public road required the signature of "...twelve or more householders inhabitants of the county." The court would then appoint between three and five commissioners "...not interested or living in the direction the road is to be run out...to view and mark out the said proposed road, the nearest and most practicable route, and to the greatest ease and convenience of the inhabitants and as little as may be to the prejudice of any person or persons" (Legislative Council 1823:95-102).

Cognizant of due process, the legislature provided "aggrieved persons" holding property through which the "road so laid out shall pass through" the right to a jury trial with twelve householders resident of the county. Florida's early statue law stipulated that the court could alter the proposed road to do the "least possible injury" to the aggrieved property holder, which consisted of running the road through unimproved lands and providing just compensation for the property. The legislative council also took steps to improve existing public roads, stipulating that they and all new public roads "...shall be cleared of all trees and brush at least twenty feet wide, and such limbs of trees as may incommode horsemen or carriages shall be cut away and no stump shall exceed twelve inches in height; all bridges or causeways made or to be made over small water courses and causeways over swamps or low lands shall be made and kept in repair by the hands subject to work on the roads where the same may be necessary, and the materials wherewith the same shall be made, may be taken from any land the most convenient to such causeways or bridges, and shall be laid across the road and he at least twelve feet long, well secured and made fast and covered with earth." To make these repairs and construct new roads, the council legislated that "...all able bodied free white males between the age of sixteen and forty five years, and residents nor ninety days within any county in this Territory, and all able bodied male slaves of the same age and residence, shall be subject to work on the public roads and highways in such county." The council left it to the discretion of the local courts and local treasuries to compel the labor and provide the funds for materials associated with road construction. Justices of the peace were appointed as overseers of road work. They were required to give residents at least two days notice with respective to pending road work, and those unwilling to work could be fined $1.00 per day. Persons building fences or otherwise blocking a public road had two days to remove the obstacle or face a $15.00 fine. Each overseer of a public road was required to "...put up road signs or directions, painted on boards with capital letters and safely secured on posts or trees, and at every conspicuous fork." The law also stipulated "That all bodied free white males, between the age of eighteen and forty-five years, residents of any county of this State for twenty days, and all able bodied slaves, free negroes and mulattoes, between ages fifteen and fifty years, residents as aforesaid, shall be liable and subject to work on the public Roads and highways in such counties: That all licensed and ordained ministers of the gospel, Teachers of Seminaries of Learning, postmasters, millers, ferrymen, Light house keepers, Pilots and their crew shall be exempt from working on public Roads in this state." Approved under the guidance of Edmund Law, the president of the legislative council, the road law was enacted on 13 September 1822. The legislative council provided no funding for the construction of public roads (Legislative Council 1823:95-102).

In 1822, the Congress appointed a board of land commissioners, who reviewed and either confirmed or rejected private claims. A process that often included translating Spanish documents and obtaining decades-old land grants from archives in England, the reviewing of claims slowed the survey and land sales. By the end of 1825, the East Florida commissioners had confirmed 325 claims and rejected sixty-one others. The commissioners in West Florida confirmed thirty-eight private claims, most of those radiating around Escambia Bay. The Congress

furnished final adjudication for eighty-eight other claims that consisted of 3,000 or more acres. Several large grants, including those claimed by John Forbes and Fernando M. Arredondo, were settled in the 1830s. In 1825, the first territorial census enumerated 5,077 persons in East Florida and 5,780 in West Florida (Tebeau 1971:117, 123-124, 134; WPA 1940).

Internal improvements sparked significant congressional debate in nineteenth century America. In general, the Northeastern, Midwestern, and Middle Atlantic regions of the country supported internal improvements in the form of bridges, canals, roads, and railroads. In the South, however, most planters and legislative bodies viewed internal improvements as state issues and feared federal overtures to build roads and canals. Few congressman supported internal improvements as much as Henry Clay, also known as "Henry of the West." Congressman, secretary of state, and finally United States Senator from Kentucky, Clay was the statesman who held slaves but held moderate views about slavery. He helped negotiate the Compromise of 1820, the Compromise of 1850, and the American System, the latter proposed by Clay in 1824 to improve and modernize the economy through protective tariffs, a national bank, and internal improvements. In the Congress, Clay and John C. Calhoun were primary sponsors of the system with John Randolph of Virginia objecting because of its perceived unconstitutional precepts usurping the power of the states. Elected officials from New York and Pennsylvania seized upon the system as a method for industrializing their economies. Clay promoted the system to help improve transportation and markets in Kentucky; Calhoun for its military aspects associated with better transportation and a stronger economy. Both believed that good roads made trade easier and faster; poor roads made transportation slow and costly. The program became the leading tenet of the Whig Party of Henry Clay and Daniel Webster. It was opposed by the Democratic Party and its various presidents during the antebellum period: Andrew Jackson, Martin Van Buren, James K. Polk, and James Buchanan, all of whom were southerners with the exception of Van Buren. Among the most important internal improvements created under the American System were the Erie Canal in the Northeast and the Cumberland Road from the Mid-Atlantic to the Midwest. The latter was the first major improved road built by the federal government. Construction began in 1811 at Cumberland, Maryland and was completed to the Ohio River at Wheeling in 1818, a year before Florida became a territory. Carved stone mile markers indicated the total mileage from Cumberland, and distances to towns and cities. Its completion fired Clay and other Whigs to finance the construction of a chain of turnpikes connecting Baltimore to the National Road. Clay conceived of the Maysville Road to Lexington, Kentucky as an extension of the National Road, but President Jackson vetoed the measure and killed to project. Although Jackson objected to the National Road, many western leaders grasped its significance, and funded its extension across the Mississippi River. Construction continued until 1839, when Democrats ceased its funding and the National Road ended at Vandalia, Illinois. Providing access between two major river systems, the Potomac River and the Ohio River, the 620-mile National Road or Cumberland Road became a gateway to the west on which thousands of settlers traveled during the antebellum period (Remini 1966; Remini 1996).

Floridians benefited from the actions of Clay, Calhoun, and other congressional proponents of internal improvements and the American Plan. Unlike the Cumberland Road, however, the first federal appropriation for road improvements in Florida was for an intrastate system, rather than extending outside the boundaries of the territory. Reflecting the political power emanating from West Florida and the influence of Richard Keith Call, the Congress referred to the development of the road from Pensacola to St. Augustine, rather than extending

from the Atlantic Coast city to West Florida. On 28 February 1824, the first session of the eighteenth Congress approved:

> "An Act to authorize the laying out and opening certain Public Roads in the territory of Florida. ...that the President of the United States be and he is hereby authorized to cause to be opened, in the territory of Florida, a public Road from Pensacola to St. Augustine, commencing at Deer Point, on the Bay of Pensacola, and pursuing the old Indian Trail to the Cow Ford on the Choctawhatchy river; thence direct to the Natural Bridge on the Econfinan river; thence to the Ochese Bluff on the Apalachicola river; thence in the most direct practicable route, to the site of Fort St. Lewis; thence, as nearly as practicable, on the old Spanish road to St. Augustine, crossing the St. John's river at Picolata; which road shall be plainly and distinctly marked and shall be of the width of twenty-five feet." The Congress appropriated $20,000 for the project (Boyd 1935:74).

At the same session, the congress authorized the president "...to cause to be surveyed and marked out, the direct and practicable, route for a public road from Cape Sable passing by Charlotte Harbor and the bay of Tampa, to the point: where the Suwannay river will be intersected by the road to be opened from Pensacola to St. Augustine, and to cause to be surveyed and marked out the route for a public road from Cape Florida to St. Augustine." For the surveying projects the Congress appropriated $3,000 (Boyd 1935:74).

Preceding the congressional action, the United States Army had taken several steps to help secure the territory and determine the best route to connect Pensacola and St. Augustine. General Thomas Jesup directed Captain Daniel Burch of the quartermaster's department to provide estimates of such as route. Regarded as the "father of the modern quartermaster corps," Jesup began his military career in 1808, fought in the War of 1812, and was appointed quartermaster general by President James Monroe in 1818. Monroe's personal interest in acquiring Florida from Spain and opening the frontiers of the American South to plantations provided impetus for better roads in Florida Territory (Boyd 1935:83-84).

From his headquarters in Pensacola, Burch became a keen observer of road systems and the possibilities of interconnecting Alabama, Florida, and Georgia with good roads to improve settlement and increase security. His far-reaching recommendations for construction in the early-1820s included roads and bridges over the Perdido River toward Mobile and New Orleans; north out of Pensacola into Claiborne and St. Stephens, Alabama and to Nashville, Tennessee; another Pensacola road to Beauman's Ferry and Frazier's in Alabama; and a road to St. Augustine. Burch also reported that "Pensacola, although possessing no importance at present in a commercial point of view, will gradually become a place of considerable export. There is a vast tract of fertile Country rapidly populating of which she is the natural place of deposit. The roads proposed to be opened are important in promoting the Settlement of the Territory, as well as highly important for military purposes." Burch emphasized that most roads in the Pensacola region could be readily built by Army troops and re-emphasized that road-building would alleviate garrison fatigue and improve security (Carter 1956 22:765-766).

In January 1823, Burch reported that "From Pensacola via Fort Crawford to the Choctawhatchee there is a waggon road, a distance of 172 miles, requiring only the repair of the causeways and two or three small bridges,

from thence the road should be opened direct to the Ochesee Bluffs on the Appalachicola, thence until it intersects the old Spanish road (now grown up) near the Mickasukee towns, leaving St. Marks about 20 miles to the south, and continuing on it to St. Augustine, crossing the St. Johns at Fort Picolata, from whence there is a road to St. Augustine. It is about 200 miles from the Choctawhatchee to St. Augustine making the whole route 462 miles, in which distance there would be about 240 miles new road to open, provided this route is approved, and I will here take occasion to remark that it is the nearest practicable route. From this place to the Suwannee I have a personal knowledge of it. In making this estimate I have calculated the road will be opened only wide enough for a waggon to pass with ease and experience proves that such roads, being shady, are most proper for a southern climate. The provisions for the troops ought to be transported by water and placed in deposit at Fort Crawford, at the crossing of the Yellow Water, Pea River and Choctawhatchee, and Appalachicola, at Fort St. Marks and at the crossings of the Suwannee and the St. Johns." Burch's remarks about shipping supplies along waterways to be crossed by the road indicated the poor condition of Florida's roads and trails in the early territorial period (Boyd 1935:83-84).

In October 1823, Captain Burch was assigned a detachment with Lieutenants Allen and Triplett and about twenty privates of the 4th Infantry Regiment to explore and survey the route of the road from Pensacola to St. Augustine. Upon his arrival in St. Augustine in December 1823, Burch reported that

> "From Pensacola to the Choctawhatchie, the country is very broken and intersected with a great number of small branches and swimming creeks, which caused great delay and difficulty to me, but a good road can be made along it. Between the Choctawhatchie and this place the country is very favorable for a road. From Pensacola it is about 180 miles to this river and I judge about 200 more from here to St. Augustine." I have the honor to report my arrival at St. Augustine on the 25th ultimo, having marched 445 miles since the 22 October last. I experienced no difficulty on the march from the Indians, on the contrary they proved to be very friendly, and more particularly so at the Mickasukee towns where I was informed they would be most unfriendly. The route I have chosen for the road, commences at Deer Point and follows the old trail to the Cow ford of Choctawhatchie, thence direct to Ocheesee Bluffs on the Appalachicola river, crossing the Iconfinan at a Natural Bridge on that creek and the Chippoola about fifteen miles south of the natural bridge of that river, from Ocheesee on the most direct practicable route to the site of Fort San Luis, and thence as nearly as possible on the old Spanish road to St. Augustine crossing the St. John's at Picolata. I spent two days in the vicinity of San Luis endeavoring to trace out this road, but found it impossible and I could not procure a guide at any of the neighboring towns to pilot me along it, the Indians pretending to be ignorant of it, thought they stated it had been used in former years but was then grown up. The Mickasukee chief however furnished me with a guide, when I arrived at his town, who was perfectly acquainted with it. The Indians it appeared had kept up a trail on this road until within a few years, otherwise it would have been impracticable to follow it, as but few traces of it remain, and then only in the vicinity of the old Spanish stations or posts, a number of which are yet plainly to be found. That part of Florida between the Ockolockony and Suwannee Rivers, appears to have once sustained a dense population, as the forest is entirely of second growth wherever the lands were susceptible to cultivation. There are also appearances of the lands having been cultivated in several places east of the Suwannee.

The proposed road will pass wholly through Pine Barrens excepting for short distances between the Appalachicola and Suwannee where it occasionally crosses oak uplands. The good lands are chiefly north of the road. The richest lands known in Florida are I believe on the Chippoola River, being about twelve miles east to west on both sides of the river and thirty-five miles from north to south. There is also a district extending from east to west along the Georgia line between the Suwannee and Appalachicola, being about twenty miles wide and one hundred in length, of first rate oak and hickory lands. These tracts are the only extensive bodies of fertile lands between this city and the Perdido and north to the territorial line.

The route designated for the road is much better than I had reason to suppose from the information I had formerly received. From Deer Point to the Choctawhatchie it will require considerable labor to make a good road, but it can be effected, by bridges over the numerous creeks with which it is intersected and ditching and throwing up the road through the low pine glades and cypress ponds. From the Choctawhatchie to a point 56 miles east of the Suwannee the land is chiefly high pine barren and very favorable for making a road, in this part of the route there is not more than. twelve miles of the low wet glades, besides the swamps of the Toologia and Ausillee rivers which will require long causeways to each, from that point to St. Augustine the country is lower and more level and the glades nearly equal in proportion the high lands.-It will be necessary to erect a bridge over St. Sebastian's river one and a half miles from this city. It is fordable at low water only, and when the tide is full extends for a considerable distance over the mudflats on each side of the main channel.

The road does not pass through any of the Indian towns or settlements, and as all those that are now settled east of the Appalachicola are shortly to be concentrated in a district of country, pursuant to the late treaty, the northern boundary of which will be more than eighty miles south of the road there will be none in its vicinity even, excepting those few who are allowed reserves on the Appalachicola river and at the Topulgee village. I do not deem it to be either necessary or expedient to establish any posts on this route as the Indians are very friendly disposed, and if they were not, their number is inconsiderable and the troops employed on the road will afford ample protection to both settlers and travellers, and also by that time the road is completed the Indians will have been removed. I however, consider it to be indispensably necessary to the present security of the frontier that Fort St. Mark be occupied until the Indians are removed or the troops actually engaged on that section of the road north or north-east of it, and also that two companies be located at Tampa Bay, so soon as the Indians occupy the district of country allotted to them. The road or rather trail could be travelled very well at present by persons on horseback provided there were ferries over the large rivers. This difficulty I have endeavored to obviate as far as practicable by encouraging those persons settled near them to establish regular ferries at the different crossing places and promising that I will solicit for them the right of continuing their ferries when the road is opened so long as the lands are public, on condition, however that they should keep up good ferries and charge reasonable rates. - I hope that the promises I have made them may not be disapproved, for I thought it would not only meet the views of the Department to have ferries established on the road by private individuals, but be an immediate accommodation to travellers, and I have no

doubt but that most, if not all of those who have spoken to me on the subject will build flats and put them in forthwith, trusting that they will not be disappointed. I enclose as estimate of the probable expense of opening the road, founded upon the supposition that it be cleared thirty feet wide, that proper and strong bridges be constructed over all the small creeks and streams, that it be ditched and thrown up through the low glades and ponds and that permanent causeways be laid down through all boggy swamps or other grounds requiring to be causewayed, and in fine, so well finished that loaded wagons or pleasure carriages may pass it at all seasons of the year. Though I have estimated for so large a sum, still a tolerably good road (far better than the main road leading from Georgia to Alabama) can be opened on this route for the amount of the estimate I made last January, a copy of which was forwarded to your office. The distance from Pensacola to St. Augustine by this road is 367 miles, 30 miles less than myself or any other person had supposed it possible to get a road. By calculation I found it to be 3621/2 miles in a strait line, provided the latitudes and longitudes were correctly laid down, which however is evident, could not have been the case. I was unable to cross my pack-horses over the St. John's river and left them and the detachment opposite to Picolata. So soon as I can get my supplies of provisions and corn to that place I shall return to Pensacola. There is no road from this to Picolata, as I had always been informed, hence the delay and difficulty in getting my supplies out" (Boyd 1935:92-96; *Pensacola Floridian,* Oct. 25, 1823).

Burch estimated the cost for the military to construct the road at $51,136. In September 1824, Duval wrote secretary of war John C. Calhoun that Florida's legislative council had recommended John Bellamy, who bid $23,000 to build the entire length of the Pensacola-St. Augustine Road. Duval added "Mr. Bellamy resides in Florida and has a settlement near the Mickkeesukkee Towns. I know him intimately and do not hesitate to recommend him as a man who may be confidently relyed on." But, instead of awarding the entire project to Bellamy, military and federal officials determined that an even less expensive road might be built if the project was divided into segments based on river systems. Using Burch's expertise, Jesup decided that the quartermaster's corps would build the road between the Choctawhatchee River and Pensacola. For the other segments the contract prepared by Captain Burch read, in part, that

"The road is to be opened, sixteen feet wide throughout, and all timber, brushwood and other rubbish to be removed from it. The stumps are to be cut down as low on the ground as possible. All marshy, miry swampy ground must be causewayed with poles from 5 to eight inches in diameter, at the smallest end, laid down close and permanent. The causeways are to be fifteen feet wide, and secured at each end with heavy riders, firmely staked down. Ditches four feet wide, and three feet deep are to be dug on each side of the causeways and the dirt thrown up on them, leaving the highest in the centre. At proper intervals, in long causeways, or through very wet ground, open log bridges must be constructed in them, to let the water pass through. Where any one causeway shall exceed one hundred yards in length, it will be opened in the centre, or at each distance of 100 yards as the case may be, to the width of 20 feet for a distance of at least 40 feet. When the swamps or other ground causewayed shall be of such a nature as not to afford dirt sufficient to cover the causeways, it must be carted on to them.

It is contemplated to establish a ferry to the Suwannee river as it will be required to build a flat there 45

feet long and 11 feet wide according to a plan which shall be furnished to the contractor. All the other branches, streams, creeks, lagoons or rivers are to be bridged. If such stream shall be less than ten feet wide, with staunch frame bridges built upon the trestles or arches none of which are to be more than 14 feet apart. None of the main timbers of the bridge are to be less than 12 by 12 inches square and hewed excepting the mud sills which must be of logs hewn on the upper and lower side the bark taken off of the other sides, and the log itself not less than two feet in diameter and to extend at least four feet at each end beyond the exterior sides of the uprights at the cap sill. The flooring of the frame bridges is to be of sawed plank three inches thick. The other bridges may be covered with puncheons hewed to the three inches in thickness, the whole to be pinned firmly to the beams at each end. No other timber will be admitted in the construction of bridges except "light wood" or heart of pine, or some other wood known to be equally hard durable and lasting. The bridges must be built so high as that no part thereof from bank to bank shall ever be exposed to danger from the effect of the highest freshets. Good and staunch hand rails will be required to the bridges. Such small branches as are never deep enough in freshets to obstruct carriages in passing, and halve firm sandy bottoms, with firm banks, may be cut down and left as fords, but in this I reserve to myself the right, when reviewing the road to decide whether they ought to be bridged or not. Special instructions to the manner of opening the road etc and more particularly plans and descriptions of the bridges will be furnished to contractor, no deviations from which will be allowed.

Any information respecting the country that I can give, will be communicated by me to any person wishing to make proposals, while I am at the seat of government and before the last day of receiving said proposals. The distance from the Ocklockny to St. John's river, is about 185 miles, and from the St. John's river to St. Augustine is seventeen miles.

When either of these parts of the road is reported ready for delivery and is about to be received by me, should any difficulty respecting it arise between the contractor and myself, such difference shall be decided by some disinterested third person chosen by us jointly; and all expenses attending such references shall be at the cost of the contractors.

The privilege likewise to examine the road as it progresses will be reserved by me at all times before its completion; when, in my judgment the contractor is not proceeding in his work according to my instructions and his contract, and shall refuse to obey or disregard my directions, I shall then be empowered to annul the contract forthwith he forfeiting all claims for compensation for work done (Boyd 1936:168-169).

In December 1824, the various bids for road segments were awarded by the federal government: John Bellamy from the Ochlockonee River to the St. Johns River for $13,500; John Robinson from the Apalachicola River to the Ochlockonee River for $3,000; James Bright from the Choctawhatchee River to the Appalachicola River for $4,500. Later, Bellamy would also be awarded the road between the St. Johns River and St. Augustine. Jesup assigned Burch with overseeing construction of all the road segments (Boyd 1935:100; Boyd 1936:160-161).

Although Burch often underestimated cost for road construction, he was particularly adept at expressing his views on road conditions and development activities. Some of his correspondence leaves us with a broad understanding of Florida road building in the early nineteenth century. In October 1824, from his base in Pensacola, Burch communicated with the general in Washington, D.C. about the Pensacola-St. Augustine Road. In finalizing the bid specifications, the captain had agreed with Jesup that

> "The reduction from 25 to fifteen feet will greatly expedite the work and will be in my opinion sufficiently wide for all practical and useful purposes. No road could be opened wide enough to prevent trees from falling across it, and in the open woods, especially in the pine barrens, these can always be avoided by turning out. Many of the roads in this country have been made by people moving with their carts and wagons into it, along the old trails or newly blazed trails, without being out the trouble and cost of opening them regularly. This however can never be the case on this road, because the route being from west to east, it intersects the numerous creeks and small streams with which the country abounds and which require immense labor in bridges and causeways to render them passable for carriages of any kind, or even for people on horseback.
>
> The road is now opened near 35 miles, 20 of which is at the full width of 25 feet, and hereafter should it be deemed advisable when the troops are on their return march it can easily be opened to the full width provided for by the law. About five miles from where the detachment is now at work the creeks commence, after which the road will for some time progress very slowly, there being six considerable bridges to build in eight miles of distance with causeways to each. It is expected that the company now at St. Marks will be here in about fifteen days when all the men in it who can labor will join the detachments on the road, and as there will not be more than one hundred men at work, I shall keep the whole in one camp under my immediate direction. At all events, I beg leave to assure the General that I shall employ the men to the best possible advantage according to my judgment, both for effect and economy.
>
> I have with me but few carpenters and neither of them such as I think competent to direct the building of a large and permanent bridge, and in case I should find it necessary, will I be authorized to hire citizen carpentry to superintend and assist in the construction of some of the larger bridges? I have no doubt but that the appropriation will be exhausted before the road is completed, and in that case will you be pleased to inform me whether my arrangements ought to be such as to continue the work on account of the Quartermaster's department? I suppose that any deficiency will be made out by additional appropriations. That part of the appropriation vested in teams will of course be so much on hand according to their value even after the money is expended, though not available as funds unless realized by a sale (Boyd 1935:104-107).

Burch married the daughter of John Bellamy just after the planter began construction of his segment of the road in December 1824. In early April 1825, John Rodman of St. Augustine wrote to secretary of war James Barbour about

"...the public road which was to be laid out and opened between this city and Pensacola, in virtue of the acts of Congress of the 28th Feb'y 1824 and 3rd March, 1825. I find that a notice for proposals for making a part of this road, to-wit, from the Ocklockny river to this city, was published by Capt. Burch in the *East Florida Herald* in January and February 1825, a copy of which publication I beg leave to send you enclosed. In consequence of this advertisement, a contract was made with Mr. John Bellamy, of Tallahassee for the construction of this part of the road. It appeared from the publication for the contract that the road was to be made only sixteen feet wide, where by the above mentioned act of Congress of 28 Feby, 1824, it is expressly required to be made twenty five feet wide. I am ignorant of the cause of this discrepancy. Sixteen feet is certainly much too narrow for any public road in this country. The advertisement for the contract states, that, it is required that the road, causeways, and bridges must be made in substantial manner; and the stumps cut down as even to the ground as possible. Under this contract Mr. Bellamy has indeed opened the road as far as the St. Johns river, and I understand that he pretends it is thus far complete. But sir, I am sorry to inform you that it is in no respect made according to the terms of the publication for the contract. All travellers agree in stating that the work is done in the slightest manner possible; that the road cannot possibly last a twelve month: that even in its present state, travelling in any kind of wheel carriage is extremely difficult. The stumps of the trees on the road are left standing to a great height, instead of being 'cut down as low to the ground as possible'. An ordinary rain must make the road absolutely impassable. No part of the road from the St. Johns river to this city had yet been opened. The causeways and bridges constructed on this road, from the Ocklockny to the St. John, are absolutely good for nothing.

I sincerely hope that, the sum stipulated in the contract for this road has not yet been paid to the contractor; for if the contract was made in conformity with the advertisement for proposals, it certainly has not been faithfully performed." (Boyd 1936:161, 162).

Not all travelers agreed with Rodman. In April 1825, Richard Keith Call wrote Jesup from Pensacola that "On my arrival at this place I was pleased to find that the progress made by Capt. Burch in opening the road from this place to St. Augustine had greatly surpassed my most sanguine expectations. The road is not nearly completed by the troops as far as the Appalachicola, and I am told by those who have travelled it that the work is admirably executed." In June 1825, Burch reported to Jesup that Robison "... had not completed his contract nor was likely to do so in any reasonable time--the continued high waters in the winter and spring he assigned as the cause of the delay-a cause which I knew myself to have existed." Burch released Robinson from his remaining contract and work, and employed quartermaster troops to complete the road between the Apalachicola River to the Ochlockonee River (Boyd 1936:161, 162).

With regard to Bellamy and complaints about the road between the St. Johns River and St. Augustine, Burch revealed that Captain Clark from Cantonment Brooke had arrived in St. Augustine "... after swimming near half the way. My bridges have had a severe trial, I swam my horse over many of them, they are all safe but one seven miles from here over a creek. The country is so much under water I cannot tell whether the bridge is there or not, I am in hopes it is still standing. This very same country last spring and early in the summer would have scarcely afforded water for the traveller and his horse to drink, so that persons unused to such a country or bred

in towns would take their ideas of any road in it according to the season when they happened to be travelling." For his part, Bellamy asserted he had built the road satisfactorily and even agreed to rebuild a bridge that the Seminoles had burned. Burch indicated that Bellamy had built the road to specifications, and the route between Pensacola and St. Augustine was completed in 1826 (Boyd 1936:152-153, 181)

In his closing letter to Jesup regarding the Pensacola-St. Augustine Road on 23 December 1826, Burch revealed how he had arrived at his low estimate to build the road, and some of the extremes he had witnessed in Florida, a "wilderness country." He reported that "When this road was surveyed, the country was remarkably dry, and the streams low, and I had not then anticipated it possible that so much difficulty could occur in opening the road by reason of the water, which I subsequently found flooded the flat pine woods, & swelled the creeks into rivers. My estimates was therefore one-fourth lower than I should otherwise have made it. Indeed I do not know that but under different circumstances I should not have reported it to be an impracticable undertaking. And during the whole time the road was making, unprecedented rains and wet weather opposed every difficulty to its proper construction and retarded its progress. Yet notwithstanding these difficulties, a road of more than four hundred miles has been constructed in a wilderness country, where supplies of forage etc were very scarce and excessively dear, the numerous small creeks and streams bridged, swamps causewayed with timber and many miles of low pine woods ditched and thrown up for a cost not exceeding one-half of my original estimate, underrated as it was in comparison with the actual situation of the country and the extent of road to open" (Boyd 1936:187-188).

Burch provided a cleared-eye assessment of other challenges associated with Florida road construction. Earlier, Jesup and Burch believed that the Army's primary concern should be opening a road from the St. Mary's River to Tampa Bay. Burch had assessed, surveyed, and estimated road costs for Jesup in the fall of 1824, which was subsequently authorized. Based at Cantonment Brooke at Tampa Bay, Captain Clark had completed the south end of the road from Tampa Bay to Wanton's with the labor of federal troops in 1825. Burch began opening the north end of the road from Wanton's to Colerain, but halted construction after expending his appropriation. Burch again found his estimate for road construction in Florida too low, not unlike his estimating experience of the Pensacola-St. Augustine Road. In the summer of 1825, Captain Clark moved his troops farther north and resumed construction from Wanton's north to Black Creek. Burch resumed construction of the road from Black Creek to the St. Mary's River, and by December 1826 the military road between Tampa Bay and the St. Marys River, twenty feet in width, was complete (Boyd 1936:189-190).

Burch reported that the road from Tampa Bay through Wanton's (Micanopy) and across Black Creek intersected with the King's Road six miles north of the St. Johns River. While construction of the new road was sufficiently challenging, he found the King's Road from the St. Marys River to St. Augustine "... by far the most difficult to repair," and especially the segment between its intersection with the Tampa Road and the St. Marys River. He estimated the distance along the King's Road between the intersection of the Tampa Road and King's Road south to St. Augustine as forty-six miles. Measuring the width of the King's Road at twenty-five feet, he also reported in December 1826 that "The whole distance from the St. Mary's to St. Augustine is eighty miles and the work now done on this road not quite half the distance, embraces much more than half the labor necessary in completing the repair of this road. South from St. Augustine the want of proper communication having been

reported on fully by Col. Gadsden shows the necessity of continuing the military communication by reopening the King's Road to New Smyrna as therein recommended." Using a perspective that crossed jurisdictional lines, Burch went on to recommend connecting "...Pensacola with Mobile Point and Blakely, and the latter places with each other, by roads, which in a state of war will become very important, and even in the present state of peace will be very useful. Between Pensacola and Blakely there is already a good natural road, formed entirely by the travelling of carriages on an Indian trail without any labor whatever. This route might be much improved and shortened, but a personal examination of the country would be necessary for me to determine the most proper direction on which these roads should be opened if ordered to be done. The whole of these routes is open pine woods and the expense of opening the roads would be inconsiderable." In the wake of the annexation of Florida to the United States, the military found new roads between Tampa Bay and Georgia, Pensacola and St. Augustine, and Pensacola and points north and west of a more pressing nature than repairing the King's Road south of St. Augustine (Boyd 1936:189-190; Carter 1958 23:1058).

At Pensacola, Burch recommended deferring on a bridge over the Big Bayou to Barrancas. He intimated that the project was the purview of the United States Navy. To the north, he reported that "The approach to Pensacola was by a road which had been formed only by wagons following along on the Indian trail which communicated with it from the State of Alabama." With the Pensacola-St. Augustine Road less than a year old, he reported on settlers and planters extending neighborhood roads from it southward to St. Andrews Bay and St. Marks. Burch indicated to Jesup that in the region north of Pensacola and other Florida terrain similar to it, and especially upland open pine forests, "...present great facilities for opening roads, and in a direction from north to south where the ridges universally extend to the coast parallel to the course of the large water-courses, no obstacle is interposed. It is only such directions (from east to west) as cross the streams and rivers that difficulty in opening roads is to be found. In other cases but little is required than to blaze the trees and by a little use the road is improved into a good road. A military force with a few pioneers in advance, in ordinary seasons would effect a common day's march through Florida on any of its roads, and even through the forest itself, pursuing only an Indian Trail merely as a guide for the direction." As part of his dispatch, Burch prepared a sketch of the roads and countryside north of Pensacola and west to Mobile Bay (Boyd 1936:189-191; Carter 1958 23:1058).

In his closing paragraph to Jesup, Burch believed that in the sparsely settled territory "...it cannot be expected that the inhabitants will apply much of their labor to keeping these roads in repair. The roads used altogether for the business of the country are in a direction towards the sea coast and along the ridges where neither labor nor repair are hardly ever wanting on them. The road from Pensacola to St. Augustine is opened in a direction necessarily crossing all the streams and their swamps in the country. It is of consequence more liable than any other to receive injury in the bridges and causeways from constant freshets, and will require more attention to keep it up and in repair, in its bridges more particularly, as timber in that climate is subject to a speedy decay when exposed, and as it is not in the route to be used for the business transactions of the country, it will be more neglected than any other road." Perhaps Burch's assessment was off only by degrees; the Pensacola-St. Augustine Road survived into the twentieth century, not because of a lack of "the business of the country," but instead because Florida's politicians came to depend on it for access to the state capital. Indeed, the segment between St. Augustine to the Ochlockonee River became affectionately known as the Bellamy Road by

residents who resided along its alignment and those who regularly used it, a name ascribed for its builder that forsook its political and military origins and nomenclature (Boyd 1936:191-192).

Within several years, the road began to show signs of failure. In 1830, the Congress came to the rescue with $2,000 to repair the Bellamy Road between St. Augustine and Tallahassee. The Congress also acted to open new roads, appropriating $2,000 to open a road between Marianna and the mouth of the Apalachicola, and more resources to open a road from Pensacola to Blakely. Those federal resources funded important internal improvements, which were both interstate and intrastate. In 1835, an appropriation of $7,000 repaired the Pensacola-St. Augustine Road, and the road between Bayard and Newnansville. In 1838, a road was opened from Apalachicola through St. Joseph and Marianna into Georgia. As settlers continued to arrive in Florida, they repeated the process of clearing forests, blazing trails and building roads and trails between the settlements. In 1837, John Lee Williams wrote about some of these activities, commenting that "A great variety of public roads have within the last three years, been constructed by the several counties of the Territory; so that in general, communications from one part to another are much more convenient than formerly... Much, however, still remains to be done, to facilitate traveling through the Territory" (Whitman 1938:31-32).

Although from a military perspective the King's Road may have appeared rather inconsequential in the 1820s and early-1830s, the residents of East Florida begged to disagree about its usefulness. Through territorial delegate Joseph Hernandez, they requested appropriations for its improvement. They resorted to several arguments, including a shorter distance for delivering the mails and facilitating transportation between Florida and Georgia. In February 1823, the House of Representative acted upon the request, authorizing $15,000 to open the road "...from the river St. Mary's to the old town of Smyrna, at Mosquitto...in the old track of a road known by the name King's road, passing by Jacksonville, on the River St. John's and St. Augustine to the old town of Smyrna." But, the Senate failed to act sufficiently quickly before the end of the session to sustain the appropriation. In August 1824, General Jesup appointed Colonel James Gadsden to survey a route from "Cape Florida, the South Eastern extremity of the Peninsula of Florida, to St. Augustine." The orders failed to mention the King's Road, instead directing Gadsden to locate "The most direct practicable rout, near the Sea Coast." Gadsden was to mark his way by blazing trees, and provide a report on a host of items from construction costs, bridges, ferries, harbors, Indians, and soil qualities. Gadsden began his survey at St. Augustine and stopped work at the St. Lucie River after confronting swarms of mosquitoes and angry Indians. Several members of the survey team died from exposure. He blazed the trail only as far south as the Tomoka River (Adams Schafer, Steinbach, Weaver 1997:24-25, 31).

A subsequent survey conducted by Lieutenant Harvey Brown found that "There is not the slightest remains of the old road to be found and I very much doubt, whether one ever existed." Brown also doubted that even a repaired King's Road south of the Tomoka River would survive, in part, because lack of use. He referenced the Bellamy Road, "constructed a few years ago," which he claimed had fallen into disrepair and in places had disappeared. A petition from residents of the Tomoka region requested a diversion of funds to open a canal between the Halifax River and Matanzas River rather than reopening the King Road south of the Tomoka River. Still, Brown obeyed his orders, drew up specifications, and directed the reopening of the King's Road. The contract, in part, stipulated that "The road is to be made sixteen feet wide; all trees, stumps, palmetto roots, and

brush & are to be entirely and clearly removed; the stumps to be cut in such as manner that the edges shall be even with, and the centers not more than 3 inches above the level of the ground; all low and swampy places must be well and substantially causewayed; and when the ground will admit, a ditch of three feet wide and two feet deep, will be required on each side, and then well covered with brushes and palmettos, the whole well covered with dirt will be required; the causeways must be made so high as to be above the water during the wettest seasons, when the causeways are of any length, or there is any run of water, good substantial culverts...will be required; across the creeks, bridges of substantial light wood, heart of pine, or cypress timber, and covered with good three inch plank...bridges to be so high as to be above the reach of the highest freshets; they will be surmounted by substantial handrails." Work began in December 1829 and further delays prevented completion of the road into New Smyrna until the summer of 1831. By July 1834, the new congressional delegate, Joseph White, received complaints about the King's Road, ranging from a burned bridge at Spruce Creek to its "wretched condition" between Pellicer's Creek and Tomoka River to repairs of the Tomoka River bridge (Adams Schafer, Steinbach, Weaver 1997:30-31).

Beyond military protection in the territory, public outcry for better and more mail service encouraged road improvements. It appears that among the earliest documented use of a mail route using the existing roads and trails into Florida, as differentiated from mail shipments by boat, was between Manuels, a small village in West Florida, and Pensacola, a distance of fifteen miles. A missive from Governor Andrew Jackson, the letter arrived in Pensacola on 16 June 1821 for Governor Callava, the outgoing Spanish official. Initiated through the nascent mail system, Jackson and Callava exchanged pleasantries and worked out the formal transfer of West Florida in Pensacola, which occurred there on 17 July 1821. Initially, the mails were delivered using established paths, roads, trails, and waterways contracted out to the lowest bidder. Mails then traveled on established shipping lanes and Post Roads. A common thread ran through most correspondence regarding the mails: irregular, slow, expensive deliveries. In February 1822, St. Augustine's residents complained about the length of time to receive mail by boat from St. Marys, Georgia. Instead, they requested than the mails travel by road between Jefferson, Georgia into St. Augustine via the King's Road, a request that the Congress approved later that year. In May 1822, the Congress authorized five Post Roads for the transportation of the federal mails within and into Florida. The routes extended between Pensacola and New Orleans; Pensacola and Fort Hawkins, a settlement south of Macon, Georgia; Pensacola and Road Forks, a settlement near the Aucilla River; and two routes between Pensacola and St. Augustine. These Post Roads appear to be the first federal action taken associated with Florida's roads and trails, and provides an indication of the major overland roads developed in Florida during the colonial period. Two of the five extended to out-of-territory locales; initially, St. Augustine's mail was supported by Pensacola and Jefferson, Georgia, but no mail service ran out of St. Augustine to New Smyrna (Carter 1956 22:73, 367, 487; Gannon 1996:207).

In July 1822, the postmaster general advertised for contracts to carry the mails along four of those routes. One of those was between Road Forks, a place name in township 2, range 5, and Pensacola, a distance of eighty miles, once a week. The distance was to be traveled in two days between 1 PM on Monday and Wednesday at 10 AM. Road Forks was then located in East Florida near the Aucilla River and would soon become part of a rich planter belt that stretched across Middle Florida. Another route extended from Pensacola to St. Augustine, following a route through St. Marks, Volusia, and Picolata to St. Augustine. Calculated as a distance of 460

miles, the route was to be traveled once a month and required a travel period of fourteen days. Another route was established between Jefferson, Georgia, via Coleraine and Cow Ford, to St. Augustine, a distance of ninety-seven miles. Mails were to be delivered once a week with the distance traveled between Tuesday at 5 AM and Thursday at 10 AM. Extending north from Pensacola, another route ran to Fort Hawkins, Georgia, once a month. It covered an unspecified number of miles over eleven days (Carter 1956 22:487)

By 1828, postal routes had branched out well beyond these initial Post Roads. They included the Pensacola-Blakely (Alabama) Post Road, Pensacola-Burnt Corn (Alabama) Post Road, Pensacola-Ft. Crawford (Alabama) Post Road, St. Augustine-Jefferson (Georgia) Post Road, St. Augustine-Palatka Post Road, St. Augustine-Pensacola Post Road, St. Augustine-St. Marys Post Road, St. Marys-Jacksonville Post Road, Tallahassee-Milledgeville (Georgia) Post Road, and Tallahassee-St. Marks Post Road. In addition, the United States Army carried its mails along the territory's roads and trails. Postal roads were not static in antebellum Florida; as new settlements emerged legislative requests for route changes were submitted to the postmaster general and the Congress. The creation of counties and establishment of new towns provided impetus for changes in post roads. Created in 1824, Walton County was named for George Walton, the territorial secretary between 1821 and 1826. Its initial county seat was Alaqua and then ten years later the county seat was relocated to the larger settlement of Eucheeanna. Changes in postal routes accommodated those seats of government. In January 1828, the legislative council requested another change in the route of the Pensacola-St. Augustine Post Road to accommodate the creation of new towns and new counties. John Doggett, president of the council, wrote Florida's congressional delegate that "the present rout goes through a dreary unsettled Section of Country missing several of the principal settlements and seats of Justice for many of the counties in this territory" (Carter 1958 23: 626, 640, 744, 922, 933, 958, 979, 1002; McKinnon 1968:60, 129-130).

The establishment of post offices necessitated existing road systems to support a new branch office. Beyond Fernandina, Jacksonville, Key West, Pensacola, St. Augustine, and Tallahassee, territorial post offices established during the 1820s included Alaqua in Walton County, Almirante in Leon County, Apalachicola in Franklin County, Aspalaga in Gadsden County, Brownsville in Jackson County, Campbellton in Jackson County, Jena in Leon County, Lipona in Jefferson County, Magnolia in Leon County, Marianna in Jackson County, Monticello in Jefferson County, Mount Vernon in Gadsden County, Palatka in Putnam County, Quincy in Gadsden County, Rockhaven in Gadsden County, Rocky Comfort in Gadsden, St. Johns Bluff in Duval County, St. Marks in Wakulla County, Seminole Agency in Gadsden County followed by a subsequent agency in Alachua County, Spring Grove in Alachua County, Tuscawilla in Leon County, Uchee Valley in Walton County, Wanton's in Alachua County, Waukeenah in Jefferson County, Webbville in Jackson County, and Whitesville in Clay County. Those place names represented some of territorial Florida's oldest place areas through which Florida's earliest roads and trails extended. Some served as permanent county seats, such as Marianna and Monticello; others faded into obscurity as new settlements were established nearby; still others went through name changes, such as Mount Vernon to Chattahoochee, Robinson's to Monticello, Wanton's to Micanopy, and Whitesville to Garey's Ferry. More settlements, towns, and federal post offices emerged in the 1830s. By 1845, the United States Postal Service had established 106 post offices in the Florida Territory as far south in the peninsula as Tampa Bay. Cultural, military, and social centers, these locations ranged from the state capital to port towns, Indian agencies, and rural inland settlements. Beyond the federal imprimatur of a post

office and with the notable exception of Key West, these places shared a common linkage being bound by roads and trails (Dike 1963:1-6).

The formation of counties and the establishment of seats of government played an important role in the development of roads and trails in the territory. Between 1821 and 1824, the legislative council organized nine counties from the original two jurisdictions; by 1831, the territory was divided into fifteen large political jurisdictions. In the same way that prominent delegates from Pensacola and St. Augustine were unwilling to alternative between the respective seats of government for legislative sessions, regional leaders became unwilling to travel into Pensacola and St. Augustine to conduct their legal affairs and record conveyances of property with court officials. Bitter political posturing often preceded county division. In the process, those towns and settlements appointed as the seat of government for a new county gained in political strength, but then spawned a new county division fight with citizens of another distant town or settlement. By 1845, Florida territory had been divided into twenty-six counties. Among the seats of government at the close of the territorial period were Apalachicola, Euchee Anna, Enterprise, Fernandina, Jacksonville, Key West, Lake City, Madison, Marianna, Milton, Monticello, Mount Vernon, Newnansville, Pensacola, St. Augustine, and Tallahassee. Superimposed over the broader network of post offices, the county seats suggest an extensive network of connecting roads and trails (Morris 1985:386-388; WPA 1940).

Some counties organized in the antebellum period relocated seats of government as settlers moved into new areas and organized towns and villages. Established in 1824, Alachua County installed its first courthouse in Newnansville, only eight miles from the natural bridge over the Santa Fe River and the Bellamy Road. But, its location in the northeast corner of the jurisdiction soon became inconvenient for new settlers. In the early-1850s, the news of the Florida Railroad building tracks farther south near Hog Town sparked an election, which moved the seat of government from Newnansville to the newly-organized Town of Gainesville. Created in 1825, Washington County installed its first seat of government at Moss Hill, then Arcadia, followed by a move to Mount Vernon. In 1927, voters elected to move the seat of government to Chipley. Organized in 1836, Dade County first had a county seat at Indian Key, moved to Miami in 1844, relocated to Juno in 1889, and returned to Miami in 1908. The relocation of county seats was often preceded and followed by the creation of new roads and trails within the county (Morris 1985:386-387; Hildreth and Cox 1981:1-2).

Few Florida counties retain their nineteenth century boundaries and several early names of counties no longer exist. The counties of Benton, Fayette, Mosquito, New River, and St. Lucia rose and fell in the nineteenth century. Perhaps the most ill-advised name of all the designations, Mosquito County was organized by the 1824 legislative council. An expansive jurisdiction, the original Mosquito County was 190 miles long by sixty miles wide, extending inland from present-day Ocala to Lake Okeechobee. Along the east coast, the county stretched from south of St. Augustine to Broward County. In its original form Mosquito County also opened onto Charlotte Harbor. But, lacking a town sufficient in size to support a seat of government, Mosquito County was initially administered through the court system of St. Johns County. In 1835, eleven years after its creation, citizens voted to designate New Smyrna as the seat of government. In 1843, another election relocated the courthouse inland to Enterprise on the St. Johns River. The establishment of Enterprise in 1841 compelled the opening of a road from the coastal village of New Smyrna to the inland settlement of Enterprise on the St. Johns

River. But, only twenty years old, Mosquito County was rapidly divided to create new counties--Benton (1843), Marion (1844), and St. Lucia (1844)--and then its name legislated out of existence in 1845 with the more attractive designation of Orange County. A river settlement, Enterprise remained the county seat of Orange County until its relocation to Orlando in 1856. By then, a network of roads radiated out from Orlando and the nearby Fort Gatlin. For a brief period, Enterprise served as the seat of government for two counties, Orange County and Volusia County, the latter organized out of Orange County in 1854 (Blackman 1927:31; Gold 1927:45-73).

The growth of Florida's county system and the accompanying road network that supported seats of government was made possible, in part, through the surveying and sale of public lands by the surveyor-general's office in Tallahassee. Land sales encouraged permanent settlement and plantation building. In the 1820s, the federal government had initiated the process of surveying the public lands and reviewing private claims throughout Florida. Surveying began in Tallahassee in 1824, laying out the parallel basis, then range and township lines, followed by the subdivision of those areas with sections and private claims associated with Spanish land grants. Deputy-surveyors contracted with the state office to survey townships and range lines, after which the townships were divided into sections, followed by placement of the boundaries of private claims within the limits of each township and range. From the baseline established at Tallahassee, townships and ranges were measured in six mile intervals with a resulting survey township containing thirty-six square miles. Each section contained one square mile, or 640 acres, of property, notwithstanding private claims and bodies of water. The complicated process of clearing lines along appropriate compass points to run transits with metal poles, chains, and links, setting township corners and section posts, making offsets or meander calls along the margins of creeks, lakes, and rivers--the act of surveying--created countless miles of blazed paths in the Florida wilderness. The process comprehensively accurately measured the territory's landscape for the first time in Florida history. Within a matter of months of a survey, however, most of those blazed paths had been reclaimed by nature. Remarkably, surveyors in the early twenty-first century still occasionally locate township corners, often inscribed with the initials of the surveyor and the date of its installation (Knetsch 2006).

As part of their contracts, deputy-surveyors maintained survey logs, recording natural features, especially hammocks and the quality of forested lands, but also man-made features, such as fences, fields, landings, pastures, and roads. Generally, a deputy-surveyor noted the location of a road from a section post or corner, calling its location from that corner in chains (1 chain=66feet) and links (1 link=7.92 inches; 100 links=1 chain). Reconstructed from measurements and field notes, the surveyor-general prepared township plats depicting many of those man-made and natural features and recorded land sales in journals. The resulting township plats provided the first accurate measuring system, albeit broken into hundreds of township plats, for locating private claims and selling the public lands, and indicating the location of Florida's network of roads and trails. Some townships were surveyed twice, generally to complete unfinished measurements left in haste because of the impending Seminole war, or to reconcile inaccuracies or especially difficult private claim boundaries. Most instances of township plats published in the early-1830s and again in the late-1840s were the result of the Second Seminole War, but also reveal and expanding road system and sometimes slightly different locations for the same road (Knetsch 2006).

The naming of roads and trails by deputy-surveyors and even the surveyors-general varied greatly. In the second quarter of 1825, almost a year before the completion of the Pensacola-St. Augustine Road, deputy-surveyor David Thomas surveyed township 1 south, range 9 east, approximately fifty-five miles east of Tallahassee, noting the presence of the "road to St. Augustine" intersecting various section lines. In February 1826, only months before the completion of the road, surveyor-general Robert A. Butler reviewed Thomas' notes and measurements from which he published the corresponding township plat that depicted the "road to St. Augustine" arcing across its lower half. In the first quarter of 1826, deputy-surveyor Henry Washington surveyed the next township to the west, that is, township 1 south, range 8 east. Again, Butler reviewed Washington's notes and measurements, and published the plat for the township. Extending along the southern boundary of the plat he labeled the "Federal Road." But, for the next township west, township 1 south, range 7 east, Romeo Lewis conducted the survey in the first quarter of 1825. Either he or surveyor-general Butler missed the calls for the Pensacola-St. Augustine Road, which did not appear on the township plat issued in 1825. To the west, township 1 south, range 6 east was also surveyed in the first quarter of 1825 by David Thomas and again in the second and third quarters of 1853 by A. M. Randolph. For the first plat issued in 1825 Thomas and surveyor-general Butler settled on the name Burch's Road to St. Augustine, an euphemistic name appropriated from the Pensacola captain overseeing construction of the federal road. But, for the updated plat issued in 1854 Randolph and surveyor-general John Westcott adopted the popular name of Bellamy Road for the alignment. For their final product associated with the township, Randolph and Westcott prepared one of the most descriptive Florida township plats of the antebellum era, a plat that depicted plantations, fields, rivers, and roads. Few before-and-after plats in antebellum Florida reveal the dramatic changes that occurred in Middle Florida during the second quarter of the nineteenth century. Randolph's survey and Westcott's 1854 plat depicted the rich plantation culture and road system in the Aucilla River Valley at the Madison-Jefferson County line in the decade before the Civil War, a change, in part, the result of the construction of a federal road across the state in the 1820s (Butler 1825).

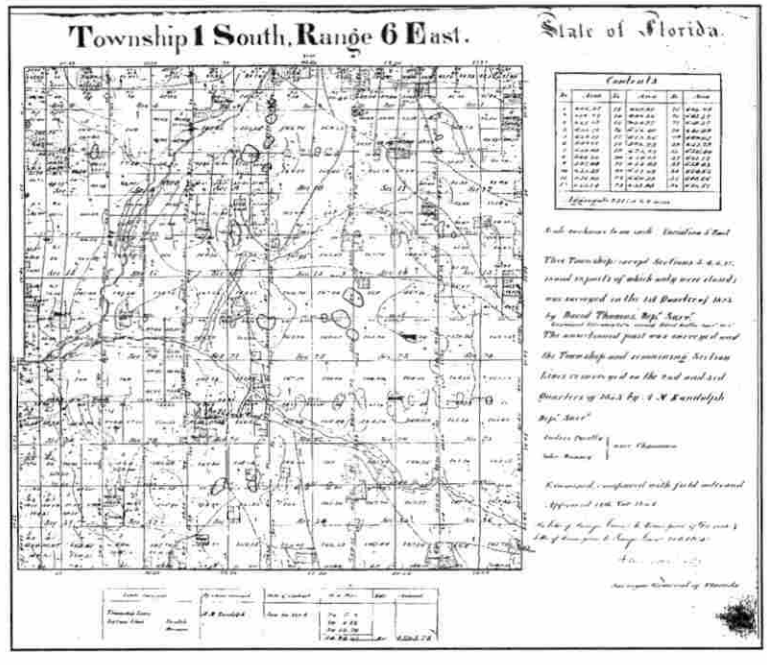


Figure 5. Few of Florida's township plats depicted as much evidence of settlement, roads, and trails as those prepared of the Middle Florida region. Located in the Aucilla River Valley, Township 1 South, Range 6 East contained numerous roads by 1854, clearly and accurately depicted as to location in this plat prepared by Surveyor-General John Westcott. *Courtesy Department of Environmental Protection.*

The Aucilla River region contributed to a large region that became known as Middle Florida in the antebellum era. Middle Florida extended between the Apalachicola River and the Suwannee River, a vast region that had remained largely untouched by Europeans during the colonial period. Historians Clement Eaton and Daniel Schafer identified Middle Florida as one of the flourishing cotton regions of the lower South. A nineteenth century agricultural reformer believed that the region's farmers represented some of the South's finest money-makers, but were also "real land destroyers" because of their aggressive and reckless planting techniques. Settlement of the region began in the late-1820s with planters from Virginia and the Carolinas looking for rich soils and cheap land to establish plantations. In the process, settlers pushed Seminole Indians farther south. One of the primary methods to obtain capital for plantations came in 1833 with the creation of the Union Bank, a Tallahassee financial institution modeled on the Union Bank of Louisiana. Borrowing capital to build plantations included the construction of plantation roads to more established roads, such as the Pensacola-St. Augustine Road. Elected as the bank's president, John G. Gamble developed Florida's first real estate mortgage institution designed to assist planters. Gamble arranged the sale of bonds and then offered mortgages of real estate and slaves for cash. In 1837, he directed the recapitalization of the Union Bank for $3,000,000, which placed the institution at the highest financial level of any bank in Florida and made Gamble an influential financial broker in the territory (Carter 1960 25:111, 117, 428-429; Schene 1975:65, 68-70; Tebeau 1971:145; Gannon 1996:212-213; Eaton 1961:40-41; Deed Book F, p. 268, Clerk of Court, Suwannee County Courthouse).

Other prominent planters and bank officials included Hector W. Braden. A native of Virginia, Braden arrived in Middle Florida with the Brown, Cabell, Gadsden, Gamble, and Wirt families each of who developed a series of plantations that radiated out from Tallahassee. Braden especially speculated in land and was among the first land speculators to purchase large tracts of public lands around Tallahassee. Braden, Gamble, and others borrowed heavily from financial sources in Pennsylvania and Virginia, thereby using out-of-state money in the development of Middle Florida's plantation culture. Their establishment of the Union Bank brought more resources into the territory. The process encouraged additional migration and settlement from the Mid-Atlantic states into Middle Florida. By 1835, Tallahassee had grown to 1,500 residents. Braden, Francis Eppes, John Gamble, Robert Gamble, William Nutall, Samuel Parkhill, and Benjamin F. Whitner comprised a small circle of associates borrowing money, "pyramiding their wealth upon overlapping mortgages." The appearance of wealthy planters in Middle Florida spawned the construction of more roads (Baptist 2002:52, 95, 96, 118, 196).

The Union Bank of Tallahassee, as most banks of the antebellum period, was operated by businessmen and planters who expressed Whig political beliefs of federal support for banks and credit, internal improvements, and protective tariffs. Part of a larger national context, Democratic political forces in Tallahassee gained strength, in part, from the excesses and failure of Florida's banks. The Union Bank's close ties to the Whig party and the few loans made to persons outside a close network of planters, coupled to the countervailing Democratic Party forces in the state legislature, contributed to the unraveling of the institution. The Panic of 1837 found the bank overextended with too many loans and too little collateral, caught in a regional economic downturn caused by credit inflation, speculation in land and slaves, and overproduction of cotton. Pressures applied by the administration of President Andrew Jackson to destroy the National Bank of the United States spilled over into a general distrust of local banks by many Americans who favored "hard money," or a gold and silver standard, and

despised the system of mortgages. Benefits offered primarily to Whig planters and businessmen became a Democratic Party tool used against Whig leaders and their banks. Based in East Florida and West Florida, those Democrats were led by Robert Reid, David Levy Yulee, and James D. Westcott. The cycle of the Florida's banking boom and bust of the 1820s and 1840s coincided with the nationwide Panic of 1837, the Second Seminole War, and a temporary collapse of the cotton market. The Union Bank's misfortunes in the late-1830s and early-1840s compelled some of Middle Florida's planters and investors to look elsewhere for properties to begin new pursuits. As they sold and lost their land holdings in Middle Florida, new planters acquired and developed plantations between the Apalachicola River and Suwannee River, leading to still more plantation roads connecting to the primary roads in the region. In addition, Braden, Gamble, and a few other planters based in Tallahassee moved to the Manatee River region, which they established new plantations and opened roads. The Bank of Pensacola and the St. Augustine Bank were associated with similar economic, political, and social forces, leading to the spread of plantations and roads around those older towns (Hoffman 2002:307-309; Tebeau 1971:144-145, 172; Gannon 1996:221).

Beyond the Aucilla River valley and Middle Florida, township plats in other regions of the territory display the expansion of roads and their precise location even as they were produced at varying qualities. In 1834, deputy-surveyors Benjamin and J. B. Clements, assisted by John Hagan, Jack Yowell, and two other chainmen, surveyed township 8 south, range 29 east, which was located southwest of St. Augustine. In their field notes, the Clementses noted mostly third-rate timber pine lands, saw palmetto, and bay, cypress, and gum trees. At several points they recorded dry land, but many points stood in swamps. Along the south line of section fourteen they documented the "Tomoka Road," a regional name for the larger King's Road. The plat produced from their efforts depicted the road, but few other man-made features in the township. Later, in 1850, deputy surveyor A. M. Randolph, along with chainmen John Masters and Andres Pacetty, re-surveyed the township, noting the natural features as swamp and pine across the general terrain and the trees as "third rate." Their surveying efforts revealed a more extensive road network in the township developed as part of the Second Seminole War and the spread of new plantations. In 1850, the surveyor-general's office published a revised township plat depicting an expanded road system that consisted of the King's Road on its north-south alignment with forks supporting the Palatka Road and Moccasin Branch Road. Improved during the Seminole War, those roads connected St. Augustine with Palatka and the recently-settled community of Moccasin Branch. Plats farther southwest depicted the road extending past Fort Buena Vista on the St. Johns River, as well as numerous plantations. Established as a trading post on the west bank of the St. Johns River in 1821, Palatka gained significance during the Second Seminole War as an army post. By 1850, township plats depict roads extending northwest, west, and southwest of the river settlement (Butler 1835; Putnam 1850).

To the northwest, the Clementses also surveyed the public lands associated with township 7 south, range 28 east in 1834. In their field notes, they noted that the township contained primarily third-rate timber pine lands, open woods, and level swamp timber bays. The plat produced from their efforts depicted few natural or man-made features in the region. Later, in 1848, deputy surveyor Ralph W. Norris re-surveyed the Huertas' private claim, as well as claims maintained by Flora Leslie, Jose Papy, Miguel Papy, and Philip Weedman. Along the south line of the Huertas grant Norris found much of the property in "pine & palmetto." Paying close attention to plantations and road systems, Norris recorded in his filed notes and on the plat of the private claim the locations of the "road

to Pacetty's" and the "road to C. Solana and Mill Creek Road," both of which extended north from the St. Augustine-Picolata Road. In 1853, the resulting plat produced from Norris' field notes and prepared by surveyor-general Benjamin Putnam depicted the meandering alignment of the "stage road to St. Augustine from Picolata." To the south, the township plat revealed the "path to Rogero's," neither of which had appeared on Butler's 1834 township plat (Butler 1834; Putnam 1853).

Elsewhere in the territory other surveyors paid equally close attention to roads and even historical events. In 1826, David Thomas surveyed township 2 south, range 4 east, where he recorded courses of the Aucilla River and farther west the locations of the "Natural Bridge Road" and "Jackson's Trail." The latter was a reference to the trail used by General Andrew Jackson in his invasion of Florida during the First Seminole War. Closer to Tallahassee, Benjamin Clements located an extensive network of Indian trails in township 1 south, range 1 east. The main trail extended north-south with side trails extending to the east. Farther west, Clements surveyed the "Road from St. Marks to Tallahassee." Equally mindful of details in West Florida, Clements recorded roads projecting east and north of Escambia Bay at Floridatown and Mulat. The roads in Santa Rosa County extended from the bay front at Stern's Steam Saw Mill at Mulat and the Florida House Ferry in Floridatown. Those roads extended to Bagdad, Milton, Alabama, and towards Pensacola (Butler 1825; Butler 1828; Putnam 1853).

Florida's deputy-surveyors had only completed surveying a small portion of the territory when the Second Seminole War (1836-1842) erupted. In 1823, the territorial government and the Seminoles had signed the Treaty of Moultrie Creek southwest of St. Augustine near the King's Road. The Seminoles yielded 28,253,820 acres to the United States, while reserving only 4,032,940 acres in an Indian reservation in the peninsula. Disputed by various Seminoles, the treaty nevertheless had little effect in stemming encroachment by whites into those Seminole lands. In addition, the treaty had the affect of concentrating the Seminoles in a confined region with little access to major waterways and their established paths and trails. West of Silver Springs, Joshua A. Coffee, Alachua County's survey, compiled with a request from Indian agent Gad Humphreys to survey a tract in 1825 for the superintendent of Indian Affairs to build an agency. Comprised of a black hammock, the tract contained 1,000 acres west of the confluence of the Ocklawaha River and the St. Johns River. The agency also had the advantage of road convergences. Four roads and trails converged in the agency lands: Road to Fowler Hicks Town, Tampa Bay Road, Trail to old store on St. Johns River, and Trail to Alachua. No fewer than four Indian villages bracketed the Tampa Bay Road on the south side of the agency. Camp McKinney occupied a site just to the north of the proposed agency, and soon Fort King would be built nearby (Carter 1958 23:323-325; Mahon 1967:48-49, 150-151, 326; Dovell 1952 1:418; Knetsch 2003:60, 83, 105-106).

At the Treaty of Payne's Landing on the Ocklawaha River in May 1832, some Seminole leaders agreed to relocate from Florida to Oklahoma territory. Part of the federal Indian Removal Act of 1830, the Payne's Landing treaty further concentrated and aggravated the Seminoles. In preparation for Indian removal, the federal government under the leadership of President Andrew Jackson improved Florida territory's fort and road system. Indeed, during the territorial period (1821-1845), the United States Army constructed about 250 forts in Florida, many of those built during the war and linked by roads and trails. The development of forts and roads in the interior influenced subsequent settlement patterns. Raids by settlers and Indians preceded open warfare, which began formally with the Dade Massacre on 28 December 1835. The conflict when Major Dade and his command were

ambushed by Seminoles as they marched north along the military road between Fort Brooke near Tampa Bay to Fort King near Ocala. That road had been opened in the 1820s to connect Tampa Bay with Northeast Florida. It extended through the Seminole's reservation lands, and to the chagrin of the Native-Americans was used by settlers to establish squatter homesteads. The conflict altered the landscape of the region, resulting in new roads and bridges, an increase of steamboat traffic, and the establishment of numerous forts. The Army opened numerous roads and built interior forts and posts. The war caused panic and alarm across Northeast and Middle Florida. The conflict raged throughout much of the territory, but was particularly brutal in Florida's peninsula. Bloody engagements took place from Jacksonville to the Suwannee River and deep into the Everglades. Frontier settlements were especially vulnerable to Indian raids. Many plantations were abandoned as settlers withdrew to fortified areas and established communities, such as Fernandina, Jacksonville, Newnansville, and St. Augustine (Mahon 1967:48-49, 150-151, 326; Dovell 1952 1:418; Knetsch 2003:60, 83, 105-106).

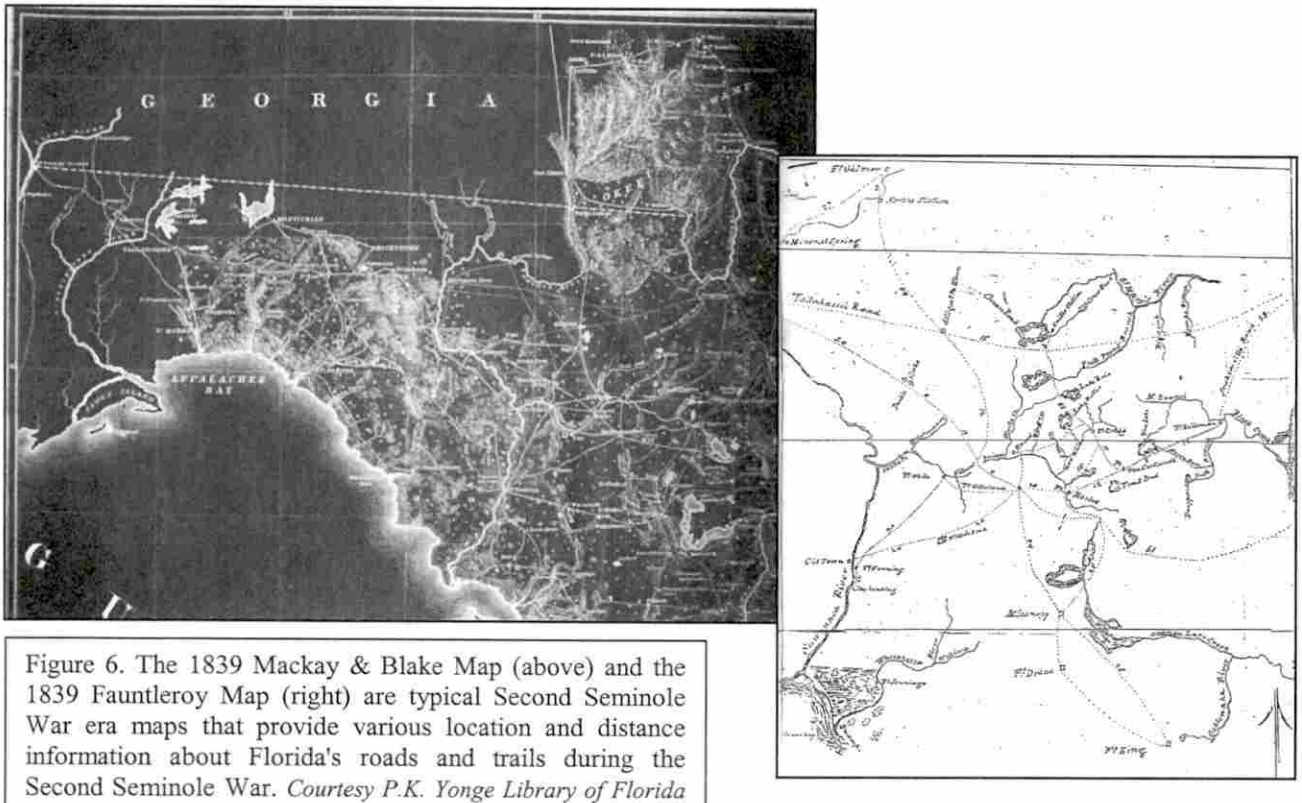


Figure 6. The 1839 Mackay & Blake Map (above) and the 1839 Fauntleroy Map (right) are typical Second Seminole War era maps that provide various location and distance information about Florida's roads and trails during the Second Seminole War. *Courtesy P.K. Yonge Library of Florida History.*

A major setback for the militia, planters, and white settlers of East Florida, Seminole successes at New Smyrna and the Battle of Dunlawton in January 1836 opened the country south of St. Augustine to Seminole depredations. Writing in February 1836, one correspondent for the *Niles Weekly Register* reported that "The whole of the country south of St. Augustine has been laid waste during the past week, and not a building of any value left standing. There is not a single house now remaining between this City and Cape Florida, a distance of

250 miles, all, all have been burnt to the ground." Joseph M. Hernandez and two other major planters—John J. Bulow and Orlando Rees—bore the brunt of the destruction with their plantation and personal losses amounting to $300,000. One estimate assessed the losses throughout the region attributed to Seminole incursions in early 1836 to $2,500,000. Still, a few established towns provided staging points for federal troops and safe havens for planters and settlers compelled to abandon their lands. Many of America's highest ranking military officers--Thomas Jesup, Winfield Scott, Zachary Taylor, William Jenkins Worth--were outfought by Seminoles, who engaged federal forces and the militia in guerilla-style warfare. In the second year of the war, on 21 October 1837, the Seminole leaders Osceola and Coa Hadjo were captured south of St. Augustine under a flag of truce near the King's Road, setting off further debates in Congress about the nature of the war and its continued funding. Still, by January 1838, federal troops had broken the Seminoles's organized resistance, but, amid continued sporadic guerilla violence, the war sputtered to a fitful and bloody end four years later. Peace of sorts came in 1842, when most of the remaining Seminoles were shipped west to Oklahoma Territory, and a few of the tribe moved south into the Everglades. The United States's early nineteenth century Indian removal policy met some of its fiercest resistance from Florida's Seminoles. The Second Seminole War proved to be one of America's longest and costliest Indian wars, amounting to approximately $40,000,000 with the additional effect of destroying much of the incipient plantation growth and plunging the territory's economy into a recession (Mahon 1967:150-151, 326; Dovell 1952 1:418; Knetsch 2003:83, 105-106; *Niles' Weekly Register,* 27 February 1836; Tebeau 1971:134; Graham 1978:36-39; Dibble 1999:209).

In 1842, as the war ground to a halt, it was apparent that the conflict had brought some benefits. Land was cleared, roads and trails constructed, and fortifications built. New roads and trails extended deep into the peninsula, the final wilderness associated with the territory. Those roads and trails included the Hernandez-Capron Trail along the east coast, Aqua-Vista Trail in Dade County, Fort Basinger Military Road near the Kissimmee River, and the Twiggs Trail north of Lake Okeechobee. The government also stimulated a demand for land with a promise of a land grant to any volunteer over eighteen years of age who enlisted to fight the Seminoles. Enacted in 1842, the Armed Occupation Act encouraged settlement by granting a 160-acre homestead tract to a head of a family who maintained five years' residence in the former battle zone and would resist Indian raids. The legislation promoted development throughout the peninsula. But, because the grant lands lay south of a line just north of Palatka, most of Northeast Florida was not affected by the federal legislation. Indeed, statewide land sales increased only slightly after the war, rising from 5,198 acres in 1842 to 36,840 acres in 1846. In 1827, the peak year for territorial land sales, the Tallahassee office had sold 138,323 acres, most of that in Middle Florida. That land sales was finally surpassed in 1854, when public land sales offices at Newnansville, Tallahassee, Tampa, and St. Augustine sold 264,396 acres, the high water mark in public land sales of the antebellum period. Only 370 land patents were issued in Northeast Florida from the St. Augustine land office; far more acreage was distributed from the Newnansville office (Mahon 1967: 250, 314; Hoffman 2002:299; *St. Augustine News,* 29 May, 5 June 1840).

The war spurred the preparation and publication of maps of the territory. Surveyed and drawn by officers in the United States Army's topographical corps, those maps were published on the orders of the several commanding generals directing the war effort. Many of those maps were based on a pre-war map prepared by Lieutenant William H. Swift (1829), which depicted the nascent road system, newly-organized Seminole Agency, and

settlements. Its dual-lined roads contrasted from single-lined trails, one of the earliest attempts to distinguish between the transportation alternatives. Still, the map did not include secondary roads and trails that supported plantation development (Swift 1829).

Maps prepared during the war included the 1837 John Lee Williams *Map of East Florida* with place names, forts, natural features, and roads; superceded by the 1838 J. J. Abert *Map of the Seat of War in Florida* with the locations of battles and forts, names of roads and trails, and natural features; the 1839 Mackay and Blake Map of the Seat of War which depicted the numbered twenty-mile square scheme employed by Zachary Taylor to develop a more evenly distributed fort system; and the 1839 Thomas Fauntleroy map that listed mileages between forts. Other maps depicted individual squares associated with the Taylor system or regions of the territory associated with a particular campaign or troop movement. Township plats prepared in the late-1840s and 1850s often depicted the locations of Seminole war forts and supporting roads and trails, such as township 10 south, range 14 east that depicted Fort Fanning, "Road to Newnansville," "Road the Waccahotee," and several other unnamed roads and trails in 1857, fifteen years after the close of the war (Williams 1837; Abert 1838; Mackay and Blake 1839; Fauntleroy 1839; Knetsch 2003:101, 117, 120, 121, 128, 132, 133; Westcott 1857).

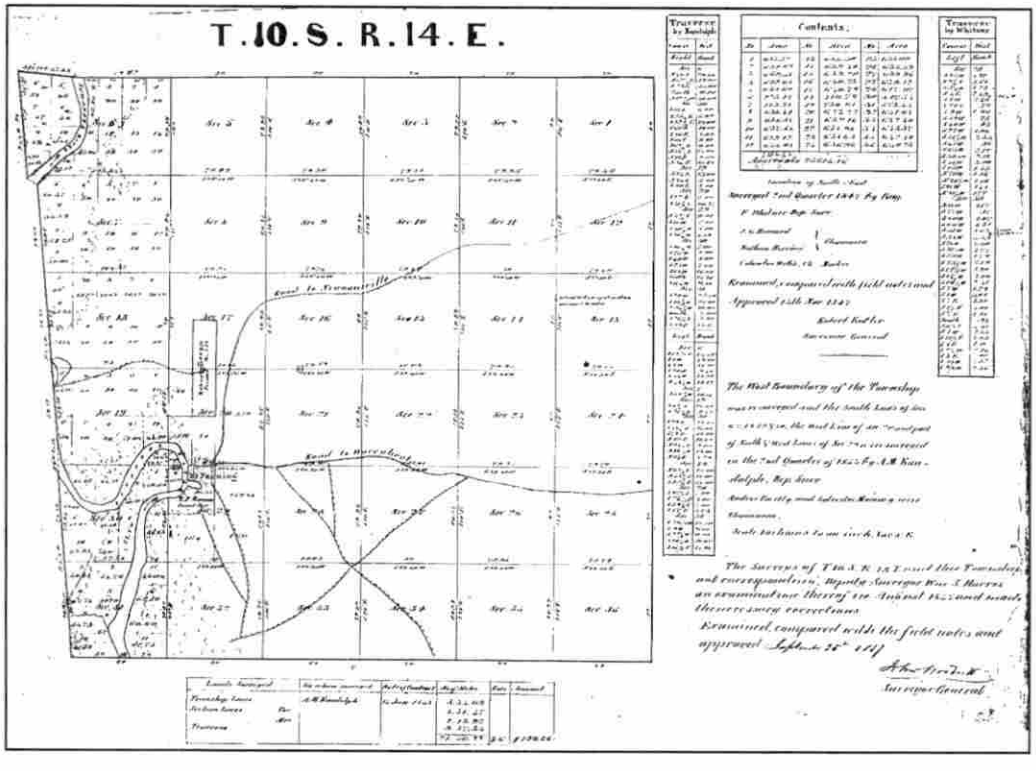


Figure 7. Township plats often include the alignments and names of roads and trails, as well as the nineteenth-century settlements and forts to which they led. *Courtesy Department of Environmental Protection.*

If the Seminole war did not discourage settlement in the territory, then settlers and planters were frustrated by the delay of surveying Florida's public lands into townships, which completely halted land sales in undocumented regions. In 1845, three years after the official close of the Second Seminole War, Florida gained

admittance as the twenty-seventh state into the Union as a slave state, paired against the free-state of Iowa, which maintained a balance between the free and slave state representation in the United States Senate. Planters and settlers continued to move into the state with the population increasing from 87,000 to 140,000 between 1850 and 1860. Key West was the largest city in the state. The Florida Legislature organized ten new counties between 1854 and 1858, a number only rivaled by county re-division of the 1920s. With three exceptions, LaFayette, Suwannee, and Taylor, those new counties were in Florida's upper and central peninsula, the Middle Florida and West Florida regions previously rounding out most of their county jurisdictions. Despite the increase, Florida remained the final wilderness region to be settled in the Southeast. By way of comparison, St. Louis, Missouri, then the eighth largest city in the United States, supported a larger population than the State of Florida. Still, planters in Middle Florida continued to expand their holdings and soon Jefferson County annually produced the second largest cotton crop in the state. Despite the high price of cotton, bondsmen were the most valuable property in Florida. Lumber in West Florida, cotton in Middle Florida and sugarcane in East Florida served as the primary cash crops of the state (Gannon 1996:225; WPA 1936).

Into the mid-1850s, some overland transportation systems in Central Florida and South Florida still consisted of Indian trails. When the army garrison at Fort Meade evacuated that installation in 1854, the troops marched nearly 100 miles south on an ancient Indian trail to Fort Thompson on the Caloosahatchee River. In the late-1850s, the United States Army continued to improve and build roads in Florida, primarily in the Peace River valley and South Florida. Those included the Tampa-Fort Meade Road and the Fort Meade-Fort Ogden Road. Those roads included bridges over several creeks and the first bridge over the Old Indian Ford over the Peace River at Fort Meade (Brown 1991:101, 123-125).

Upon achieving statehood, the Florida Legislature took steps through chapter 53 of the Laws of Florida to define the state's roads. Differing little from 1820 statute law, the 1845 road legislation was again buried deep in the Laws of Florida, far behind provisions for legislative terms, state and county courts, justices of the peace, and other measures. The 1845 road law offered neither financial incentives nor grants, and, in part, stipulated that

> Section 1. That all the Roads in several counties in this State, that have been laid out according to law, shall be, and they are hereby respectively declared to be Public Roads; and the judge of Probate and County Commissioners, while sitting for county purposes, shall have full power and authority, on application, to order laying out of any Public Roads or Roads, throughout their county, when the same shall be by them deemed necessary, and to discontinue such public roads, as now are or hereafter be found useless, burdensome, and inconvenient; and to alter the Roads, now or hereafter to be established, as often as occasion shall require.
>
> Section 2. That the width of all Public Roads shall be thirty feet; and the overseer shall have authority to appropriate any stone or wood most convenient and adjacent thereto, to the building of repairing of the same: That no wanton or unnecessary trespass shall be committed upon the private property of any citizen.

Section 3. That whenever a petition shall be presented to the board of county commissioners, signed by twelve or more householders, inhabitants of the county, praying for the establishment of a neighborhood or settlement Road, from a certain place therein specified, if the signers to the said petition shall be residents in the neighborhood of the Road prayed for in the petition it shall be the duty of the Board of County Commissioners, thereupon, if the petition shall appear reasonable, to appoint not less than three Commissioners, shall be householders, residents in said county; and the said Commissioner shall take an oath before any Justice of the Peace for said county, to view and mark out the said proposed road, the nearest and most practicable route, and to the greatest ease and convenience of the inhabitants, and as little as maybe, the prejudice of any person; and it shall be the duty of said Commissioners, to proceed as soon as maybe convenient, to lay out said road, and make return thereof, under their hand, to the County Commissioners, at the next meeting of their Board for county purposes, noting thereon the distances and courses, as near as practicable, of such proposed route, which return, so made, shall be filed in the office of the President of the County Commissioners.

Section 4. That if any settlement or neighborhood road shall be desired by any person or persons, the same measures shall be taken to establish the same, as are directed in the case of public Roads; and said settlement or neighborhood roads shall be made of such width as the Commissioners may direct.

Section 5. That each and every Commissioner appointed to view or mark out any public road or highway in this State, shall, as a full compensation for his services, be exempt from working on public Roads, on his or their respective Road divisions, so many days as he or they were actually engaged in viewing and laying out said Road.

Section 6. That when the road so laid out, shall pass through the improved lands of any person or persons who shall object to, or consider themselves aggrieved by the same, it shall be the duty of the President of the board of County Commissioners to issue his writ, Directed to the sheriff, Coroner, or Constable, ordering him to summon a jury of twelve households in said county, and to proceed to the ground through which said objections has been made to the passage of said Road...

Section 9. That all bodied free white males, between the age of eighteen and forty-five years, residents of any county of this State for twenty days, and all able bodied slaves, free negroes and mulattoes, between ages fifteen and fifty years, residents as aforesaid, shall be liable and subject to work on the public Roads and highways in such counties: That all licensed and ordained ministers of the gospel, Teachers of Seminaries of Learning, postmasters, millers, ferrymen, Light house keepers, Pilots and their crew shall be exempt from working on public Roads in this state...

Section 18. That when any person shall hereafter make any fence or cut any tree, or make any other obstructions, in or across any public Road, unless removed within one day, such person for every offense shall pay a fine not exceeding twenty dollars to be recovered before a Justice of the Peace to be applied as hereinafter to be directed; and it shall be the duty of the overseers of the road to cause the said obstruction to be removed... (State of Florida 1845).

In 1850, the Florida Legislature outlined the steps necessary to develop plank roads by private companies, the same session it authorized the incorporation of the Florida, Atlanta & Gulf Railroad Company for the construction of tracks between Jacksonville and Lake City. Defined as "a road made of a flooring of planks laid transversely on longitudinal bearing timbers," plank roads became a common internal improvement by Florida's antebellum government. Introduced in Canada in 1834, the plank road appeared in the United States in 1846 in Syracuse, New York. Abundant timber and saw mills hungry for work spurred the development of plank roads. Despite the transient nature of wood, the plank road became a popular structure with thousands of miles being constructed in many areas of the country. Within a decade, however, the public found what engineers had predicted: the wood decayed and had to be replaced at any alarming rate. Without sufficient grading and drains, rain percolating through plank cracks puddled in troughs under the planks, often floating them off their bases of traverse logs. In cases where traverse logs were not used, stringers approximately three feet apart supported the weight of wagons, which generally used a wheel span of four feet, eight inches. Earth side roads required maintenance for use a turnouts when wagons met. By 1855, most northern states had abandoned plank roads, turning instead to railroads. In the South, however, plank roads endured longer, in part, because of its vast forests, availability of wood to build and repair those structures, and resistance to using newer technologies (American Association of State Highway Officials 1953:70-71).

The Florida Legislature took limited steps through chapter 321 of the Laws of Florida in 1850 to encourage the development of plank roads. A typically tight-fisted southern antebellum government, Florida's legislature focused on state's rights, slave codes, and land grants for canals and railroads, but offered no funding mechanisms to assist in the development of the state's roads. Owners of plank roads faced the same tax consequences as businessmen, planters, farmers, and other property holders. The legislature codified the state's plank road law in thirty-five sections. To build local and regional plank roads, the legislature empowered not fewer than five citizens to incorporate for road-building purposes, a process that began with the drawing up of articles of incorporation, filing them in the office of the Florida Secretary of State, and issuing capital stock. Capital stock could not exceed $4,000 per mile for each mile of each plank road projected by the company. The corporate officers then hired an engineer to lay out a projected route, and drafted the alignment on paper with the surveyor's seal and signature of the company's president. The survey was reviewed by the appropriate county commission, which was authorized to alter or modify the route, and then filed the plan in the clerk of court's office of that county. If the projected road extended through multiple counties, the company followed the same review, filing, and comment procedure in each county (Florida Legislature 1851:51-52).

The company then applied to the respective county commissions to physically survey the route, make any necessary adjustments along with reviews, and then "...enter upon and take the real estate necessary therefor, as designated in the survey." The company then presented a copy of the survey to the local probate judge or other presiding county official, who set a date, time, and place for hearing the application to be published in a newspaper printed in the county. In the event no newspaper was published in the county, the company could post the notice on the courthouse door. The company bore all expenses associated with the special board of county commissioners meeting. In cases where a proposed plank road was "...laid out over or upon the route of any public highway, or any road which is recognized as such by the cont commissioners, then the said board of county commissioners may surrender and release the same to such plank road company and allow to them the

right to take and use the same for the purpose of constructing such plank road, either without compensation, or upon such term and conditions as may be agreed upon between the said company and the board of commissioners..." (Florida Legislature 1851:53-55).

For private property, the company purchased outright the land necessary to construct the plank road. In cases where the company and owner could not agree on a price, three appraisals were prepared of the property and presented to owner, company, and county judge prior to a hearing. Regardless of the circumstance and outcome, the company was not permitted to extend through "...any dwelling house or building connected therewith, or through any garden, yard, or ornamental grounds connected therewith and necessary for the use and enjoyment of such dwelling, with the consent of the owner..." Plank road companies were to observe the right to navigation along the state's navigable waterways. The plank road company was "...where the same is navigable for vessels or steamboats" built a suitable drawbridge. The draw was to be sufficient in size to "...permit the passage thereunder of all vessels or steam boat navigation said stream or in any manner that will prevent or endanger the passage of any raft of twenty-five feet in width." (Florida Legislature 1851:54-55).

In Section 15 of the chapter the legislature provided that "...every Plank Road made by virtue of this act, shall be laid out not less than three nor more than four rods wide, as the directors may determine, and shall be so graded that the ascent shall not, in any place, be more than one foot in twenty, and shall be so constructed as to make, secure, and maintain a smooth and permanent road, the track of which shall be made of timber, plan, or other hard material, at least eight feet wide, so that the same shall form a hard, even surface, and be so constructed as to permit wagon and other vehicles conveniently and easily to pass each other, and also to permit all wagons to pass on and off when such road is intersected by other roads" (Florida Legislature 1851:57)

County commissioners served as inspectors of completed roads with the exception of commissioners who were also officers in the plank road company. Once built and approved by the county commissioners, the plank road companies could install toll gates "...upon their Road, but not within three miles of each other, and may demand and receive toll at and after the following rates, to wit: For every waggon, cart, or other vehicle drawn by one animal, one cent per mile; for every waggon, cart, or other vehicle drawn by two animals, two cents per mile; for every waggon, cart, or other vehicle drawn by more than two animals, two cents per mile, and one-half cent per mile; for every score of neat cattle, one and a half cents a mile; and for every score of hogs or sheep, one cent per mile, and so in proportion for a greater or less number; and for every horse and rider, or led horse, one cent per mile; and the amount of toll to be taken at each gate may be proportioned to the above rate, and to the distance which such gate may be from the next gate thereto" (Florida Legislature 1851:58).

The legislation provided for due process through the county courts in the event that the county board of inspectors and the plank road company disagreed over a toll gate location, and the former found the gate location "...unjust in the public interest by reason of its proximity to diverging roads." Inspectors drew $2.00 per day for each day spent in performance of their office and five cents per mile for necessary travel, all paid by the plank road company. The legislature also provided for the surrender of the plank road by the company to the respective county commission after which it would take charge of the road (Florida Legislature 1851:59).

Although not providing any funding mechanisms or land grants, the road legislation had the effect of encouraging several companies to incorporate. They included the Escambia Plank Road Company, which issued $70,000 in capital stock to build a plank road from Pensacola to the Alabama state line with lateral plank roads deemed expedient. Officers and investors in the corporation and building of the road included brought together a few Democrats with several prominent Whigs to improve the region's road system. Incorporators consisted of Walker Anderson, Owen Avery, John Brosnaham, John Campbell, Francis Commyns, Alexander McVoy, Joseph Sierra, and Benjamin Wright. The corporation consisted of some of Florida's most powerful politicians and businessmen. A resident of Pensacola, Democrat Walker Anderson served in the constitutional convention in 1839, and the legislative councils of 1840 and 1845. He was elected to the Florida House in 1850, and then appointed to the Florida Supreme Court in which he served as chief justice between 1851 and 1853. Owen Avery, a staunch Whig, also served in the Florida Legislature between 1846 and 1864 in both the state house and senate. Pensacola planter and businessman, John Campbell had served as chief clerk of the Legislative Council in 1831 and 1832. Few Pensacolans enjoyed the level of success--economically, politically, and socially--as Benjamin Wright. A prominent Whig from Pennsylvania who had arrived in Pensacola in 1823, the attorney Wright served in the Legislative Council between 1824 through 1840. He published the *Pensacola Gazette* and succeeded Anderson as chief justice of the Florida Supreme Court in 1853. Their company was not allowed to charge "...any person at the gate nearest his or her residence, for passing from any one part of his or her plantation or farm to ay other part of the same, or from any person going to or from funerals, or their usual place of religious worship, or militia musters, when the person is liable to military duty, or elections when the person is authorized to vote, or any person travelling on foot."(Florida Legislature 1851:64, 67).

The less-ambitious Pensacola and Navy Plank Road was organized by Robert C. Daldwell, William B. Davis, and Gordon M. Newton of Pensacola. The company built a plank road from "Pensacola to any point of the Perdido River, connecting with the United States Navy Yard and Fort Barrancas." The Apalachicola and Middle Florida Plank Road was among the largest endeavors of the period. Incorporators consisted of W. A. Kain, John C. Maclay, David G. Raney, William H. Young, Robert H. Thomas, B. F. Nourse, Edward McCully, Anson Hancock, Henry F. Simmons, Thomas Ormon, Robert J. Floyd, John W. Babcock, Thomas L. Mitchell, Thomas H. Austin, Marshall P. Ellis, Samuel W. Spencer, James J. Griffin, A. T. Bennett, Benjamin Ellison, A. N. McKay, John G. Roan, Henry R. Taylor, A. G. Semmes, Chester G. Holmes, William A. McKenzey, Evan Jones, N. J. DeBlois, Daniel J. Day, and M. N. Scott. The charter stipulated that after receiving subscriptions amounting to $50,000 the corporation could elected officers, conduct formal surveys, acquire property, and begin construction (FL 1851:68, 72).

Other road companies approved by the Florida Legislature in the decade before the Civil War included the Leon and Gadsden Plank Road, which was capitalized at $10,000 and built a road between Tallahassee and Quincy. The Florida and Georgia Plank Road Company was chartered to build between Newport on the St. Marks River to Thomasville, Georgia. The ambitious undertaking included branch plank roads to Quincy, Monticello, and Tallahassee. In order to sustain its charter the company built twenty miles of plank road by 1853. Other overland route companies chartered during the period included the Jacksonville and Alligator Plank Road, which was capitalized at $75,000 and included investors from Jacksonville and Lake City. Incorporators from the former city consisted of politicians Charles Byrne, Stephen Fernandez, and Isaiah D. Hart. The most

prominent of those, Hart had founded the City of Jacksonville, having acquired the town site, laying it out in 1822, and selling sites for commercial and residential buildings. Hart's early leadership helped bring the river port to prominence. His son, Ossian B. Hart, served in the Florida Legislature and the Florida Supreme Court before being elected governor in 1873. Investors from Lake City consisted of William B. Ross, John W. Lowe, George E. McClellan, Silas Niblack, and William B. Ross. A member of the 1839 constitutional convention and the legislative council, McClellan was a prominent Columbia County planter. Niblack would rise to prominence after the Civil war, serving in the Florida Legislature and the United States House of Representatives. Built in the antebellum period, the Jacksonville-Alligator Plank Road was completed in the early-1850s and then supported military traffic during the Civil War as part of the Battle of Olustee (Florida Legislature 1851:76-78, 81-86).

Despite the development of plank roads in the 1850s, railroad fever diverted the attention of many of Florida's legislators, planters, and residents. In contrast to roads, railroads were made possible, in part, through Florida's internal improvement bond system. The first internal improvement state funds for the construction of canals, railroads, and roads became available in September 1841, when the United States government granted the territorial government 500,000 acres of land to be sold and the proceeds applied to internal improvements. These vast tracts became a source of land and dollars from which the state government could encourage the construction of transportation systems. In 1854, the Florida Legislature enacted the Internal Improvement Act, which permitted rail companies to defray some of their construction costs by issuing bonds amounting to $10,000 per mile along a proposed route. A board of trustees of the Internal Improvement Fund (IIF), composed of the governor, treasurer, attorney-general, and registrar of state lands, was established in 1855. Bonds were issued only after the company had graded and furnished ties for a ten-mile section. The subsidy, while significant in setting a precedent for future assistance, represented a small step and Florida's antebellum state government ranked among the most tight-fisted of all southern states in railroad building assistance. By 1860, the state claimed 380 miles of railroad tracks, less mileage than the Pensacola-St. Augustine Road built in the 1820s (Pettengill 1952:20; Johnson 1969:293).

In 1860, a system of sand roads tracked across the Florida wilderness, providing transportation to farmers and settlers, but primarily to deliver the mails. Hubbard L. Hart of Federal Point operated coaches that delivered the mails between North Florida and Central Florida, between Atlantic and Gulf, but also transported passengers between settlements and towns. Hart annually bid for the service The mail route between Palatka and Tampa extended through Orange Spring, Orange Lake, Ocala, Camp Izard (near Dunnellon), Augusta, Melendez (in Hernando County), Pierceville, and Fort Taylor (near Tampa). Stages departed for two-day journeys between Palatka and Tampa at 7 A.M. each Monday and Thursday, arriving at their respective destinations each Wednesday and Saturday. Traveling overland between port towns, Hart's inland mail runs were dependent upon steamboats, the primary system of transporting the nation's mails in the 1850s. Hart also maintained additional carriages, coaches, and horses for patrons to travel on excursions or business from Palatka to Alligator (Lake City), Flemington, and Micanopy. Hart's line extended across other stage routes that he owned, including one between Alligator and Ocala. That route extended between Flemington, Micanopy, Newnansville, and Alligator (Morris 1963:253).

Civil War and Reconstruction, 1861-1877

The Civil War curtailed plantation development, railroad construction, the nascent tourist trade initiated by steamboats, and the development of plank roads. The third state to secede from the Union, Florida joined the Confederate States of America in January 1861. Within months of that action, the Confederate government requested that Florida supply 5,000 troops. Many male residents abandoned their farms to join the army, leaving the rural economy without nearly one-half of its work force. The state's ten largest cities held only thirteen percent of the population. Key West maintained its top position in the state's population, and remained in Union possession because of its naval base and Fort Zachary Taylor. The other ranking cities consisted of Pensacola, Jacksonville, Tallahassee, St. Augustine, Apalachicola, Milton, Monticello, and Fernandina. The smallest of the top ten, Lake City then contained only 650 residents. Federal steamships patrolled the coastline and gunboats sailed into ports at Apalachicola, Fernandina, Jacksonville, and St. Augustine in 1862 and seized those cities. Jacksonville was occupied four times during the conflict; Fort Brooke at Tampa Bay was occupied by both Confederate and Union troops, and Confederate and Union forces faced off from Pensacola and Santa Rosa Island. Union gunboats sailed the length of the St. Johns River in 1862, in part, to destroy blockade runners and prevent Confederate troops from crossing to the east bank of the river (Buker 1986:3-9, 18; Brinton 1869:60; Gannon 1996:231).

From naval bases at Port Royal Sound and Key West, the United States Navy instituted the South Atlantic Blockading Squadron and East Gulf Blockading Squadron to curtail Confederate troop movements along Florida's coasts and major rivers, and prevent southern planters and businesses from importing and exporting goods and products. Some riverboat owners holding strong southern sympathies ran the Union blockade with their steamers. The first documented case of a rebel ship running the Union blockade was Brock's *Darlington,* which delivered supplies into Jacksonville. The blockade running exploits of the *Darlington* ended in March 1862, however, when Union forces in the *U.S.S. Pawnee* and the *U.S.S. Ottawa* captured the steamer near Fernandina. The *U.S.S. Beauregard, U.S.S. Gem of the Sea, U.S.S. Pursuit,* and *U.S.S. Sagamore* seized contraband from planters and broke up rebel blockade runners based on the Indian River. Only rarely did naval detachments pursue rebels inland along roads and trails leading to farms and plantations. More common were ocean-borne attacks on salt-works at Ocala Lake on the Gulf of Mexico and at Oak Hill on the east coast. The *U.S.S. Columbine U.S.S. Darlington, U.S.S. E.B. Hale,* and other gunboats regularly sailed the state's coastline and rivers. Captain John J. Dickison's light cavalry force made use of the roads of East Florida to disrupt these Union troop movements along the state's primary river, but also extended south to Fort Meade to northwest to Gainesville (Buker 1992:52, 55-56, 66; ORN 1921 Series 2 Volume 1:72; OR 1891 Series 1 Volume 35:374-375; Gannon 1996:231-243).

Several companies in the 2nd and 99th United States Colored Infantry regiments and 2nd Cavalry occupied Tampa and marched to the Confederate-held Fort Meade in Polk County, which they seized and burned. The cavalry-and-infantry detachment then marched north of Brooksville and raided Cedar Keys. Sailing from Southwest Florida, General John Newton led Union troops overland from St. Marks to Natural Bridge, which supported the Bellamy Road. There they encountered and were defeated by Confederates. Another Union attempt at the state capital materialized from Jacksonville. Those troops, too, were defeated north of the

Jacksonville-Alligator Plank Road at the Battle of Olustee. Those southern victories preserved Tallahassee as the only Confederate capital not captured during the war. Cattle drives from South Florida supplied Confederate troops as far north as Virginia with beef. Drovers herded cattle from the wire grass prairies of the Caloosahatchee River, Kissimmee River, Myakka River, and Peace River valleys. Orlando was on the main trail for drives coming out of those prairies. One drive began at Fort Meade, traveled by Orange Lake, and crossed the St. Marys River near Trader's Hill on their way to Savannah. In some weeks after the fall of Vicksburg in July 1864 approximately 2,000 cattle were driven north along Florida's roads and military trails into North Florida, Georgia, and beyond. Large North Florida stockyards were built at Madison, Sanderson, and Stockton, but lack of railroad access into Georgia required the herds to be driven from those pens by road to railroads farther north by roads and trails rather than by railroad cattle car. Perhaps the best map depicting the road system and place names of Florida during the Civil War was prepared by Union cartographers and later published in 1895 in the *Atlas to Accompany the Official Records of the Union and Confederate Armies* (Akerman 1999:85-94; Cowles 1891-1895; Gannon 1996:231-243).

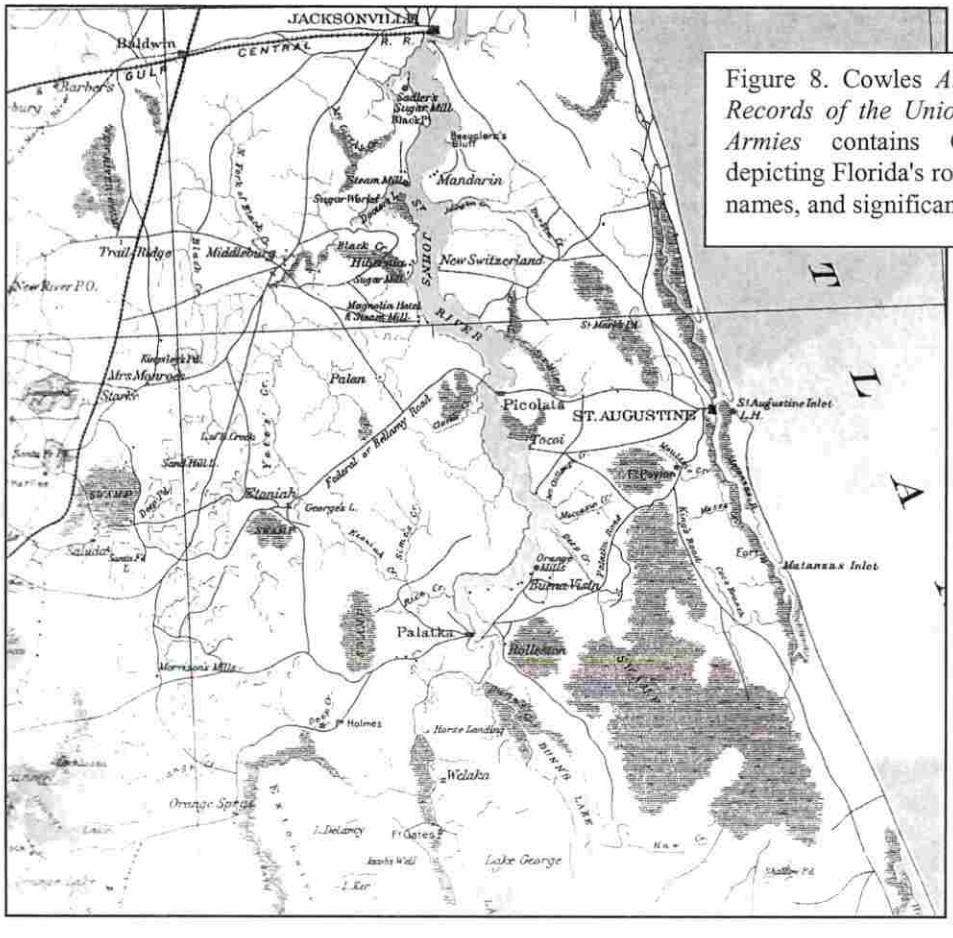


Figure 8. Cowles *Atlas to the Official Records of the Union and Confederate Armies* contains Civil War maps depicting Florida's roads and trails, place names, and significant features.

Some relatively small settlements on well-established roads supported Union forces. Protecting the western approaches to St. Augustine and the St. Johns River, Picolata at one point supported approximately 800 troops. Although most troops movements occurred by boat, regular patrols occurred along the St. Augustine-Picolata Road. Union troops from New Hampshire, New York, and Ohio were stationed there with the garrison occasionally supporting two regiments. In early 1862, a small detachment and battery were stationed at Picolata, a typical deployment at river posts during the conflict. Most of the 35th United States Colored Infantry Regiment was stationed at Picolata in mid-1864 following the Union defeat at the Battle of Olustee (Hewitt 1994 Serial 16:333, 337, 339, 350, 353, 355; Hewitt 1996 Serial 51:153; Hewitt 1997 Serial 54:482; Hewitt 1977 Serial 59:375, 381, 382; Sastre 1995:53-55).

In the decade following Lee's surrender at Appomattox, Florida, along with the rest of the South, endured a turbulent period of Federal Reconstruction. Although the state did not suffer the extensive war-related destruction that had occurred in other areas of the South, most of its cities had been occupied by Union troops and some interior settlements abandoned. Floridians faced the daunting task of rebuilding their society. The war decimated the state's economy and compelled Floridians to develop a labor system that did not depend on bondsmen for labor. Former planters and Freedmen struggled to work out a new landlord system that replaced labor lords. Throughout the state property values plummeted. Railroad tracks lie rusted and dismantled. Agricultural and industrial production declined, and the state's financial institutions collapsed. Although the Florida Legislature established one county during the Civil War, it created none during Reconstruction, a by-product of a lethargic economy and an unsettled political economy. Some planters in Middle Florida abandoned the plantation belt for the peninsula, starting again in Brevard, Hillsborough, and Orange counties, largely unsettled regions where they establishing new farms without the pressing concerns of Freedmen and Reconstruction. Those who remained in Middle Florida and other settled districts often divided over how best to re-establish local farms and economies. Punctuated by violence, lawlessness, and unscrupulous politics, Reconstruction proved in some ways as difficult as the war (Shofner 1974; Gannon 1996).

One of the first projects undertaken during Reconstruction to improve communications and resulting in one of the first roads or trails extending the length of the peninsula was by the International Ocean Telegraph Company. Chartered in 1860, the company had only started to make plans for establishing telegraph communication between New York and Cuba when the Civil War intervened. In 1866, after reviewing several routes through Florida, the New York company settled on a line that extended down the center of the peninsula between Baldwin and Fort Myers. Entering the state near Jasper, running to Lake City, the underground cable then turned east to Baldwin and then south through Gainesville, Ocala, Sumterville, Fort Dade, Bartow, Fort Meade, Fort Ogden, Fort Myers, and Punta Rassa. By submarine cable the line extended to Key West and Havana. Near the future site of Lakeland, the cable route diverted around Lake Wire, which offered a name to the road running atop the underground alignment: Wire Road and later Old Wire Road. In September 1867, cable service was initiated, providing telegraph service between New York City and Havana, and several towns and villages in peninsula Florida (Brown 1991:217-219, 223).

Most Reconstruction governors and legislatures focused on the formulation of laws associated with public schools, prisoners, and railroads. Little attention was paid to public roads, which remained a purview of county

jurisdictions. In 1873, when Governor Hart directed the Republican legislature to respond to the deplorable condition of the state's road, the legislative response differed little from Democratic legislatures of the antebellum period. The 1874 legislature charged county commissions with the responsibility for all public roads. Following in a tradition that dated to the 1820s, the legislative act directed counties to appoint road supervisors and summon able-bodied males between the ages of eighteen and forty-five for not more than eight days each year to work on public roads. Again, each county relied upon its own funding mechanisms for supplies, materials, and new construction. Volusia County was typical of the political jurisdictions that faced a stagnating economy and the diminishing financial capacity of its tax paying citizens to sustain their public roads. On 5 January 1874, the board of county commissioners took the drastic action of ordering "...all the Public Roads in the County of Volusia be and the same are hereby discontinued and abolished--with the exception of the following Roads: 1st The road leading from Enterprise to Sand Point; 2nd The road leading from Enterprise to New Smyrna and Port Orange; and 3rd The road leading from Enterprise and running by the house of S. J. Cook to Volusia." In effect, the commissioners reorganized and simplified its primary public road system around the county seat at Enterprise. In the process, the county abolished the King's Road as a public road, but in February 1874 after receiving a petition from several New Smyrna residents returned it to its historic status (Minutes, Volusia County Board of County Commissioners; Shofner 1974:292-293).

To improve or open roads, Volusia County relied on citizen petitions and commitments, annual work days, and the use of special referenda to form special taxing districts or bonded indebtedness. A cumbersome process, a referendum for issuing bonds or creating taxing districts often failed because farmers and residents had scarce financial resources and believed the roads they already used sufficient for their purposes. Indeed, during the nineteenth century, Volusia County's residents approved of only one bond issue in the second road and bridge district amounting to $10,000 in bonds of $25, $50, and $100 denominations. Enacted in October 1876, the bonds provided resources used to repair existing roads rather than create new ones. Indeed, most of those roads had been abolished by the county commission only two years earlier and by 1876 many had been returned to public road status in need of repair. Guided by state statutes, the county commissioners updated the county's road designation process, which included dividing the county into road districts, the assignment of millage rates for maintenance and repairs, and the appointment of district road commissioners. The road commissioners were responsible for collecting petitions for the creation of a public road from citizens of their district and forwarding those to the board of county commissioners. After receiving initial approval from the board, the road commissioners marked and laid out a public road. If the road already physically existed and the petition was legally binding, the county commission simply designated it as a public road, and increased the district's millage to support routine maintenance and repairs of the road and bridges. If the road did not physically exist, then the county commissioners held a series of public meetings with the taxing district's road commissioners and residents to determine the appropriate route, the cost of rights-of-way, and residents' willingness to grant property to the county for the road. After the road commissioners marked and laid out the public road, an election was held to issue road and bridge bond issues or special taxes. If approved, the bonds were sold to the highest bidder or the tax implemented and the funds used to acquire rights-of-way and build the road. The millage associated with the taxing district for those roads would be increased to manage repairs. Volusia County's board of county commissioners built no new roads during Reconstruction, but approved the petitions to re-designated several established roads as public roads, including the King's Road, the Stone Wharf-Indian

River Road, Lake Beresford-Cabbage Bluff-New Smyrna Road, Cabbage Bluff-Indian Springs Road, and Spruce Creek Road (Road Record Book 1, Volusia County Board of County Commissioners; Preston 1991:24).

IV Late Nineteenth Century and Progressive Era, 1877-1915

After the close of Reconstruction, several counties took steps to improve their public roads. Having repaired several of its primary public roads, the road commissioners of Marion County installed "mile-posts and guide-boards on all the roads." The primary forms of road improvement in the 1870s consisted of grading, ditching, and covering with pine straw. The use of skilled labor for road improvement and construction in Florida would not be legislated until the early twentieth century. Several newspapers took notice of Marion County's road-related activity and encouraged other county governments and road commissioners to follow suit. In Orange County, the board of county commissioners entertained hundreds of petitions to make private paths and trails into public roads. The board rejected many of those after hearing public protests by adjacent property owners and farmers concerned about higher taxes and increased traffic across the lands. Opening a public road in Orange County in the 1880s and 1890s consisted of little more than laying out a route, holding public meetings, approving the alignment, cutting down trees, filling in holes from sand along the rights-of-way, and covering the road with pine straw. Specifications for Orange County's public roads in the 1890s consisted of clearing "...palmetto and other roots, trees, bushes, etc., for a width of eight feet. Low places to be causewayed, poles 16 ft. long, well covered with dirt. Sand kept off bridges..." (Blackman 1927:40; *Weekly Floridian,* 15 May, 3 June 1877).

The editors of the *Weekly Floridian* appealed to Tallahassee's residents and Leon County's farmers to improve their road system, linking the issues of beautification and economic benefits. Six months after the pivotal election of 1876, in which Florida's Democrats returned to power and Reconstruction ended, the editors asserted that "One thing that adds greatly to the beauty of the country is good wagon and carriage roads. They make everybody feel good who pass over them and the noble horse rejoices from the bottom of his heart. In no country can they be so easily and cheaply constructed as they can in this country. And perhaps no where can there be as miserably worked roads found as there are here. Persons coming from Georgia into this State frequently remark that they can tell as soon as they strike the Florida line by the condition of the roads. The roads in Georgia are worked right up to the State line, while in Florida they are not. Everybody complains about the condition of the road leading north from Tallahassee and declare that it is driving all the trade in the northern part of the county from this city. How shall we prevent it? Are the citizens not able to work and can't each man afford to spend three or four days on the roads improving them? Everybody says that we ought to have a good wagon and carriage road to Thomasville. It is stated that it would be the means of bringing a great many visitors across, as it is through one of the most beautiful sections of the State. It is possible to build the road, and it can be done so easily. Let all the men in this city and along the road between here and Thomasville work on it two or three days each and they will make it one of the finest roads in the State. Are you for making a good carriage and farm road to Thomasville?" (*Weekly Floridian,* 15 May, 3 June 1877).

In addition, some newspapers reprinted articles lifted from farm journals that linked rural issues with those of Florida's growing cities. In the 1880s, the *Florida Agriculturist* in DeLand, the *Florida Dispatch* in Jacksonville, the *Planter's Journal* of Augusta, Georgia, and the *Progressive Farmer* in Raleigh, North Carolina published series of articles equating good roads with a good farm economy. Persuaded of those arguments, several urban newspapers reprinted some of those articles. The *Weekly Floridian* agreed with the editors of the *Planter's Journal*, urging its readers to understand "...the wisdom of making good public roads. The farmer is directly interested in securing good roads, because he had to travel over them, whether going on business or pleasure. The season of the annual road-working is now at hand, and road-overseers should use the utmost efforts to get the highways in good condition. Probably the most important point to be gained--and it is the one usually least considered--is proper drainage of the continuous land to the road. In the first place the road bed should be graded so as to slope from the centre toward each side. Should the surrounding land be low and flat, ditches must be cut to carry off the water, else work will be thrown away in raising a grade. For, if water stands constantly on both sides, the roadway must become wet, and with the passage of wagon and other vehicles over it be cut into holes or worked into an impassable bog. It is admitted that the road laws generally are defective and inadequate, and the greatest vigilance and activity can only partially attain the end sought, good roads. A few scrapers and plenty of shovels, furnished by the county, and a good deal of attention and supervision by the officers themselves, will be found wise and economical expenditures, both of money and time. One of the greatest needs of the South is immigration of small farmers--agricultural industrialists, who, to quote a homely saying 'live at home and board at the same place.' Good public roads are a public blessing, conducive to the prosperity and happiness of the people" (*Weekly Floridian,* 13 August 1885).

Despite these and countless other local appeals, most county governments accomplished relatively little road improvement or new road construction. In the early-1880s, a stage route extended between Gainesville, Brooksville, and Tampa. Left over as a Seminole War settlement with a house and citrus grove, Fort Taylor was a way station. John H. Graham and Chauncey Wilson operated the stage route between Alachua and Hillsborough counties. The stage route extended through Hernando County, organized in 1843 after the close of the Seminole War. But, beyond the stage route running through Brooksville, county commissioners took few actions to declare or improve any public roads. Instead, tourism by steamboats and then the arrival of railroad tracks riveted the attention of most legislators and county officials during the last quarter of the twentieth century. The tourist market emerged with Jacksonville as the gateway city and popular spas developed at Green Cove Springs, Magnolia, Orange Park, Palatka, and other river ports. Northern visitors traveled into Florida by steamboat and then road to interior destinations. Guide books published by George Barbour, Daniel Brinton, James Henshall, Sidney Lanier, Wanton Webb, and other writers recommended travel by steamboat and later by rail, but rarely by stage or road. George Barbour's 1884 *Florida for Tourists, Invalids, and Settlers* waxed eloquently about Florida's steamboats, rivers, trains, and railroads, providing extensive guidance by name of the preferred lines and routes. Although Barbour actually traveled extensively by stage and road, he deferred naming any of those lines or routes. North of Leesburg at a ferry near the headwaters of the Ocklawaha River Barbour found "The road on either side was, for a long distance, through a dense jungle, and we were glad to get well through it and reach our destination," hardly an endearing report designed to encourage road travel in Central Florida. In equally derisive prose, Barbour regarded the stage coach between Sumterville and

Brooksville as "...a little rattle-trap sort of affair." Wanton Webb's more extensive 1885 historical and biographical guide to Florida also commended steamship and rail lines by name and location, pointing out the quickest and cheapest routes, but was again virtually silent about the state's roads. In Northeast Florida, Webb's report was sublime: "One of the principal attractions of Fernandina is its magnificent sea-beach, which is reached from the city by a pleasant drive of two miles along a smooth shell road. For about 20 miles, in almost a straight line, the beach presents a hard-beaten, smooth surface, making it one of the finest drives in America" (Barbour 1884:49, 53; Webb 1885:81-82; Stanaback 1976:143-144).

Containing the longest coastline and one of the largest land masses of any southern state, Florida had the smallest population, least number of miles in railroad tracks, and one of the poorest road systems in the South. Indicative of the underpopulated and underdeveloped condition of Florida, in 1870 the City of New Orleans contained more residents than the entire Sunshine State. By 1880, only three Florida cities—Jacksonville, Key West, and Pensacola—supported at least 4,000 citizens, but none contained 10,000 residents. When growth came in the 1880s and 1890s, it was centered in the peninsula with citrus and tourism becoming the primary engines of the economy. Numerous new towns and cities were established, incorporated, and grew from villages to cities. Lakeland and Orlando became the largest inland cities in the peninsula. Miami, established in 1896, became the largest city in the state in the 1940s when it overtook Jacksonville. Most county governments struggled to sustain their courts, jails, and administration, and still relied on annual local road days with appointed overseers notifying farmers of the appointed day to repair a road. The few county roads built resulted from residents approving bond issues for roads and bridges with taxing districts or other funding mechanisms to construct Florida roads during Reconstruction. Rattle-trap coaches and jungle-like roads abounded and did little to encourage development, and generally were neither seen nor used by tourists and investors traveling in the Sunshine State during the late nineteenth century.

In the decade of the 1880s, Florida experienced more development than in the previous seven decades, in part, because of the introduction of railroad tracks deep into the peninsula. Although much has been published about the glamour and romance of Florida's steamboats, railroad companies built Florida in the late nineteenth century. Between 1880 and 1890, the state's mileage expanded a staggering 380 percent, from 518 to 2,489 miles, placing Florida fifth among southern states in track mileage. In 1885, near the height of the construction boom, *Railway Age* commented that "Florida built more railway tracks last year than any other state, adding 289 miles." In 1886, the United States Treasury Department noted that "In 1865, there were 420 miles of railways in operation [in Florida] and no material advance was made until 1880. Since then over 1,200 miles have been finished.... The cost of construction and equipment is estimated at $42,000,000." All eyes focused on railroad building. Numerous towns and villages were organized, especially in the peninsula with new counties formed and new county seats established. Some towns, such as Lakeland with Wire Trail and a military trail, were founded along existing routes; in other cases, such as DeLand, neither road nor rail initially supported the settlement. Within several years, both settlements and dozens more were supported by railroads, roads, and trails. Settlement apart from railroads also encouraged some road building. In 1904, Lake County supported 178 miles of railroad tracks, but only forty miles of roads had been improved with either clay or pine straw and none with brick. Dozens of additional miles in Lake County remained sand trails blazed in the antebellum era and since the 1870s. In 1893, after owners relinquished a right-of-way, St. Johns County's board of county

commissioners awarded a $2,000 contract to William Bennett to clear and build a dirt road from St. Augustine south to the Moultrie settlement. Two years later, the board instructed its clerk to notify loggers that they could not permit their logs to drift against the Moultrie Creek bridge, or haul their logs along the associated public dirt road. Undaunted, settlers continued to blaze trails that became public roads in the early twentieth century. In 1899, Francis Platt migrated across the state from Pine Level in Manatee County to the Allapattah Flats on the east side of Lake Okeechobee. Near Indiantown, Platt established the settlement of Annie, a village he named after his wife. In 1902, to help encourage settlement, Platt cut the Annie-Stuart Road. Both Stuart and Annie then were part of Dade County. Several years later, county commissioners declared Platt's wagon road as a public road. Its alignment later served as the basis for the Gaines Highway in the 1910s and 1920s, later the Kanner Highway, and eventually State Road 76 (Pettengill 1952; Hutchinson 1975:109; Kennedy 1929:135-137).

While Florida and the South generally lagged behind in the improvement of its roads, the Northeast and Midwest spawned several associations organized to promote good roads. Interest in improving roads came initially from urban areas of the Northeast in the 1880s. Ironically, one of the earliest associations to promote good roads used them for a popular diversion and pastime: bicycling. Although Leonardo DaVinci had sketched an inline two-wheeled device in 1490, the modern bicycle is variously attributed to Ernest Michaux of France in 1869 and the Penny Farthing of 1871. Invented by British engineer James Starley, the Penny Farthing followed after the design of the hobbyhorse and the French velocipede or boneshaker, all early versions of bicycles. In contrast to earlier designs, the Penny Farthing was the first efficient bicycle, consisting of a small rear wheel and large front wheel, often three times the size of the rear wheel, pivoting on a simple tubular frame with rubber tires. The bicycle was introduced in America and quickly became a popular pastime in the late-1870s. In 1884; Thomas Stevens completed the first North American transcontinental trip on a bicycle using roads and trails between San Francisco and Boston. The development of pneumatic rubber tires in 1887 by Scottish engineer John Dunlop accelerated the popularity and use of bicycles in the 1890s, known by some historians as the "golden age of bicycles," complete with clothes, clubs, races, and tour guides (Weingroff 1993; Herlihy 2004; Dodge 1996).

Early on, American bicyclists, generally known as wheelmen, confronted such obstacles as rutted streets, gravel, and soft dirt. In cities and towns, they often encountered aggravated horse riders, wagon drivers, and even pedestrians. Outside the nation's cities, rural roads made bicycling a laborious dangerous process. One contemporary slogan declared public roads as "wholly unclassable, almost impassable, scarcely jackassable!" To build support for the movement, some bicycle leagues attempted to interest the farmers and local governments with the message that bad roads increased transportation expenditures and cost more than good roads. But, most farmers did not want to be taxed to benefit what they perceived as "city peacocks" who wanted to relax riding bicycles at the farmers' expense. In turn, bicycle groups and manufacturers worked at the federal level to secure road improvement legislation. In May 1880, the League of American Wheelmen was founded in Newport, Rhode Island, the bicycle center of New England. The league soon became a leading proponent of good roads, especially in the Northeast. By 1890, several American manufacturers had produced approximately 1,000,000 bicycles. In 1892, the league began publishing *Good Roads* magazine to increase its membership and strengthen its advocacy for good roads. In Indianapolis, bicycling reached a frenzied pitch in 1898 with covered

grandstands, paid admission, road races, and daredevil stunts. Membership in the league peaked about 1898 with 103,000 members, but few of those were from the American South. Although virtually every Florida city and town supported a bicycle shop in the 1890s and early twentieth century, generally only wealthy Victorian Floridians owned and rode bicycles, and even fewer lobbied for better roads or joined the wheelmen's league. In the 1890s, few Florida cities claimed hard-paved streets with brick or concrete. No county then paved its public roads with brick or concrete. In 1898, Orange County's board of county commissioners approved the hard-paving of its roads with shell. For the road between Orlando and Winter Park, the board instructed road-builders Henry H. Dickson and H. K. Fuller to include bicycle paths on both sides of the Orlando-Winter Park shell-paved road. Dickson played an important role in promoting good roads in Central Florida. A native of Georgia, Dickson arrived in Orlando in 1887. Through his Dickson-Ives Company, he developed businesses in the fertilizer, grain, and grocery industries. As he developed a chain of stores in other Orange County and Lake County cites and towns, Dickson understood the benefits of good roads for businessmen and farmers. He served two years on the Orlando City Council and then sixteen years on the Orange County Commission, ten of those as chairman. During those years, Dickson led the county in paving its public roads and was vice-president of the State Good Roads and County Commissioners' Association in 1890 and 1891 (Stanford-Braff 2007:18-23; Blackman 1927:44, 120-121; Foster 2000:27-29).

Generally, Florida's local municipal governments employ more permanent materials--asphalt, brick, concrete, or macadam--for their streets. In 1893, the City of Jacksonville paved seven miles of its streets with vitrified bricks, one of the earliest examples of brick paved streets in the state. Progressive leadership in Lakeland resulted in several primary streets paved with brick about 1907. Using clay and shell for several decades and unsure of brick as a paving material, the City of Orlando re-paved Orange Avenue in 1911. On this occasion, the city left the center twelve feet in clay, bracketing those travel lanes with three-foot strips of vitrified brick paving. Other cities and towns continued to experiment with clay, marl, or shell, but many simply resorted to sand-and-pine-straw streets and avenues. Florida's public roads were still largely comprised of clay, marl, shell, or sand covered with pine straw. Completed in 1912, Florida's first rural highway paved entirely with brick extended from New York Avenue in Jacksonville to the Duval County line, and later was extended to Orange Park. The public roads of Escambia County and Orange County remained clay and marl into the second decade of the twentieth century, when brick paving programs were initiated. St. Johns County and Volusia County relied on biennial programs of shell for its public roads until the mid-1910s. Many small towns relied on clay, marl, sand, and pine straw into the 1920s, making bicycle riding difficult and dangerous in most of Florida's municipalities, and a rare sight at best in the countryside. Progressive leadership in Orlando and Winter Park built shell bicycle paths bracketing the shell-paved Orlando-Winter Park Road in 1898 (Stanford-Braff 2007:18-23; Blackman 1927:44, 106; McGovern 1976:28; Shofner 1982:80-81; Davis 1925:327; Foster 2000:27-29).

America's first Good Roads Movement was dominated by bicyclists and wheelmen until the late-1890s. Leaders of the movement rallied around a bill drafted in 1892 to create a two-year national highway commission. The bill failed in the house of representatives, but the following year Allan Durburow of Illinois and Clarke Lewis of Mississippi succeeded in adding a provision to the Agriculture Appropriation Act of 1893 to provide $10,000 to make inquiry regarding public roads and to collect and disseminate information on America's public roads. The Congress approved the act on March 3, 1893 and it was signed into law by President Benjamin Harrison.

The act established the Office of Road Inquiry, a predecessor of the Bureau of Public Roads and Federal Highway Administration. In part, because of the legislation, the office was subsumed under the United States Department of Agriculture. General Roy Stone, a civil and mechanical engineer, promoter of good roads, and author of the legislation, was appointed as its first director. Stone served as director until 1899, proposing the first parcel post and rural free delivery. By the time Stone retired, the automobile had replaced the bicycle as the new form of transportation (Stanford-Braff 2007:18-23).

Stone's retirement and the shift from bicycles to automobiles as the catalyst for America's Good Roads Movements coincided with the Progressive Era. Scholars often associate the Progressive Era with early twentieth century reform movements in banking, business, conservation, education, food and drugs, government, labor, and transportation in the United States. The "Square Deal" and "New Freedom" espoused by presidents Theodore Roosevelt and Woodrow Wilson became emblematic Democratic Party watchwords for the progressive generation and provided a backdrop for an even larger Democratic Party program, the "New Deal," implemented several decades later. Generally defined as the years 1896 to 1917, the Progressive Era also brought substantial changes to the American landscape. Tangible changes in Florida included land reclamation projects, the expansion of the citrus industry, the construction of new schools, highways, and railroad tracks, and a boom that resulted in thousands of new buildings in cities and villages alike. During the era, Florida's forests yielded more naval stores than any other state in the Union and hundreds of lumber companies harvested thousand of acres of Florida's vast pine forests to help make the boom possible. Lobbying by automobile associations, road builders, local governments, chambers of commerce, and civic organizations resulted in the Florida Legislature establishing the Florida State Road Department in 1915. Governor Park Trammel signed the legislation and appointed five board members to develop a state highway system. Despite the creation of the department, the construction of rural highways largely remained the responsibility of counties until the 1920s. Local proponents of road construction initially conceptualized paved highways as farm-to-market corridors that linked isolated farming communities with towns and urban centers. Eventually those advocates recast highway construction as regional and then national tourist corridors. Florida's population almost doubled in size, increasing from 528,542 in 1900 to 968,470 in 1920. The cities of Fernandina, Jacksonville, Key West, Pensacola, and Tampa emerged as major ports. Perhaps the most notable change was the introduction of the automobile (Tebeau 1971:308-343; Gannon 1996: 277-284).

In 1916, the Congress passed the Federal-Aid Highway Act, the first formal highway policy with a regular appropriation to the states. Over a five-year interval, the appropriation amounted to $75,000,000 with only $5,000,000 distributed to the states the first year. The legislation discouraged the haphazard construction of roads by counties without state supervision by requiring states to establish a highway department that met the approval of the Office of Public Roads. Approximately $5,000,000 was appropriated the first year, with the funding increasing in annual appropriations to a total $75,000,000 by 1922. Under the act, the federal government would finance up to fifty percent of construction costs not to exceed $10,000 per mile. Funded for only $5,000,000 the first year, the act coincided with World War I, which America entered in April 1917. Labor shortages compounded by scarce road-building materials and railroad cars for shipment stalled road projects. As the railroads faced their own shortages of manpower and rolling stock to keep up with military shipping, America's fledgling trucking industry seized the opportunity to secure interstate shipping. Heavier and more

trucks began to drive on roads ill-equipped to support their weight or number. After the war ended in November 1918, changes in the federal-aid highway program became evident. Some features of the program--the funding and definition of rural post roads and the $10,000 per mile limitation--hindered many states with mountainous or wetlands that required considerable more resources than roads on well-drained flat level terrain. The federal government generally left project selection to state highway officials, which often resulted in widely dispersed improvements, spread among political subdivisions and not connected with each other at state lines. In 1917, the first year of federal appropriations, the State of Florida received $55,976.27 for road construction. By way of comparison, the State of South Carolina, much smaller in size but with more public road projects than Florida, received $71,807.64 from the federal government. Florida's appropriation rapidly increased as engineers assigned projects for federal aid, reaching $111,952.54 in 1918 and then $744,521.08 in 1919 (Kendrick 1964:42; Moore 1987:45-46).

Expensive playthings for the wealthy, automobiles at the turn-of-the-century cost several thousand dollars. The first automobiles appeared in Florida in the mid-1890s. Most farmers distrusted the vehicles, which frightened their livestock, rutted their roads, and sometimes damaged fences and property. In 1896, under the auspices of the Orlando Board of Trade, a Good Roads Congress convened in Orlando and held annual meetings in the Central Florida city. Although the road congress formed the Florida Good Roads Association, it had little impact initially. One of the association's findings was the "...it is a waste of money to further continue to constructed roads out of clay and marl." Automobile dealers published advertisements in the *Florida Times Union* in 1903, the same year that automobile racing began on the hard-packed sands of Daytona Beach and Ormond Beach. Speed trials and racing on the beach encouraged others less daring to drive through Northeast Florida. Those journeys were fraught with stalled and stuck vehicles and other dangers on the nascent road system, which then was little more than wagon trails finished with clay, marl, pine straw, or shell. The State of Florida registered 300 automobiles in 1906, nearly double that number in 1908, 3,000 in 1913, and 10,850 in 1915. By 1911, automobiles registered in Florida were required to display license tags. Nationally, automobile registration reached 1,258,062 in 1913. In 1909, the state claimed 17,579 miles of public roads. The vast majority, however, were either unimproved sand or finished with pine straw. The most common improvements consisted of packed sand-clay composites (581 miles), marl rock or lime stone (278 miles), gravel (242 miles), and shell (110 miles). With the exception of several miles of concrete roads in Duval County, none of the state's roads was either brick or concrete. In 1909, St. Johns County's officials reported 200 miles of public roads, but only sixteen miles improved with either shell or sand-clay composites. Orange County's officials returned to pine straw after exhausting its clay pits and were unable to contract for lime rock deposits near Rock Springs. Bond issues for brick roads pertained to the primary roads, such as the Orlando-Apopka Road, but many secondary roads remained clay, sand, or pine straw until after World War I. In 1910, Duval County completed Atlantic Boulevard between South Jacksonville and Pablo Beach (later renamed Jacksonville Beach). Duval County's commission had approved the alignment as a public wagon road in 1892 and the use of convict labor for its construction. A change in the board's membership and the freezes of 1894-1895 compelled its abandonment. Fred Gilbert, a Jacksonville automobile dealer, provided the impetus to resume work on the road. He led the progressive forces in a long controversy with conservative political forces and urban and rural leaders. The Panic of 1907 further delayed the resumption of work until 1908. The nine-foot wide brick-and-oyster-shell road completed in 1910 set the initial standard for vitrified brick road construction in Florida.

Commenting on the brick road, historian T. Frederick Davis of Jacksonville considered the construction of Atlantic Boulevard as "...the beginning of highway development in Florida" (Preston 1991:48; Blackman 1927:59; Paxson 1946:243, 248; Tebeau 1971:332, 343; Hetherington 1928:174-77; Kendrick 1964:57; Cutler 1923 1:454-456; Davis 1925:237-238, 379-380; Shofner 1982:80-81; Wood 1989:331; United States Department of Commerce 1917:279).

Concomitant with the proliferation in automobiles, increased tourism, and the creation of the Florida State Road Department was the rise of several private associations that sought to encourage travel and lobbied for better roads in the South. The American Automobile Association (AAA) was founded in 1902 in Cleveland, Ohio, in response to a lack of roads and highways suitable for automobile travel. Among the personalities behind these organizations were Seymour Cunningham, Carl G. Fisher, R. H. "Pathfinder" Johnston, and John Asa Rountree. Ralph Owen of New York ran his Oldsmobile between the nation's financial capital and Daytona Beach, a famous run in 1907 that the *Florida Times Union* attributed to the beginning of Florida's Good Roads Movement. Charles Glidden, a Boston millionaire and automobile promoter, conducted highly publicized tours throughout the nation for the AAA, including the highly-publicized Glidden Tour of 1911 that extended between New York City and Jacksonville, Florida. The tour ended in Jacksonville, in part, because of the poor conditions of the roads and the lack of available fuel and repair facilities farther south. These people and organizations were part of the larger Good Roads Movement that swept the nation in the 1890s and early twentieth century. Representing commercial interests and tourist markets, good roads advocates generally were businessmen and developers in urban centers rather than farmers and agrarian reformers in rural regions. Largely an urban Midwestern and southern phenomenon, the Good Roads Movement spawned the creation of highway associations, which designated routes after revered heroes or geographical locations, including the Andrew Jackson Highway, Atlantic Coastal Highway, Bankhead National Highway, Capital Highway, Dixie Highway, Jefferson Davis Highway, Robert E. Lee Highway, Lincoln Highway, and Old Spanish Trail. The road movement improved accessibility into the South, especially for wealthy eastern and Midwestern automobile enthusiast, but addressed few issues associated with the South's persistent rural poverty and agrarian economy (Preston 1991:47, 57, 61-63, 69-70, 92, 96, 103, 129; *Florida Times Union,* 15 February 1907).

The brainchild of Indiana millionaire and Miami Beach developer Carl G. Fisher, the Dixie Highway extended from Sault Sainte Marie, Michigan to Miami Beach, Florida. A consummate promoter, Fisher never spent a dime to build the Dixie Highway; instead, he promoted the regional, hard-surface, all-weather highway concept in the Midwest, South, and Florida. Then, he persuaded local and state politicians, automobile manufacturers, and automobile associations of the profits to be gained from the idea, and waited as thousands of tourists flocked to South Florida and his properties at Miami Beach. Most of Florida's local governments scrambled to improve their roads in the hopes of being included in the designated route (Paxson 1946:239-240; Preston 1991:60-63).

In the opening decade of the twentieth century, Fisher had experienced breathless success with the two-and-one-half-mile Indianapolis Motor Speedway, nicknamed the "brickyard," an oval track surfaced with 3,200,000 bricks. In 1913, adding to his new-found wealth, he sold his Prest-O-Lite Company, which manufactured headlamps for automobiles, to Union Carbide Corporation for $9,000,000. Seeking new investment

opportunities, in 1910 he met John S. Collins of Miami Beach, from whom he purchased real estate and established a business relationship. He made plans to promote Miami Beach as a premier tourist resort. Fisher had envisioned the purpose of the automobile for more than local travel or even racing and time trials. In the early-1910s, Fisher began promoting the concept of a transcontinental highway, suggesting the name of the Lincoln Highway. In 1912, he helped organize the Lincoln Highway Association in Indianapolis, and eventually the $10,000,000 project connected New York City with San Francisco. Next, to link the Midwest with the South, and more specifically his real estate investment in Miami Beach, Fisher organized the Dixie Highway Association (*New York Times,* 16 July 1939; Preston 1991:60-63).

Conceptualized as a north-south automobile corridor, he introduced the interstate highway idea in November 1914 at an American Roads Congress held in Atlanta. Initially proposed as the "Cotton Belt Route," the highway concept was endorsed by the governors of Georgia, Indiana, and Tennessee. In April 1915, they convened another north-south highway organization meeting in Chattanooga, a convention attended by 5,000 people, including business leaders and politicians from Florida, Georgia, Illinois, Indiana, Kentucky, and Ohio. The convention adopted the name of the Dixie Highway Association and agreed that the governors of each state involved would appoint two members to serve in the Association. A proposed route of the Dixie Highway set off a spirited and often rancorous debate between villages, towns, and cities throughout the Midwest and South about which route would best represent the Dixie Highway. Interests in Atlanta and Savannah sparred over the best route through the Peach State, a similar argument that erupted between interests in Orlando and Tampa, and Daytona Beach and Jacksonville. At a subsequent meeting in May 1915, the Dixie Highway Association settled on a dual route system, divided into eastern and western alignments. Guided largely by Fisher and Clark Howell, a prominent Atlanta businessman, the Association revised its strategy, in part, to encourage participation in advertising the Dixie Highway to bring as many tourists as possible into the urban centers of Indiana, Kentucky, Ohio, Tennessee, and parallel alignments in Georgia, North Carolina, and South Carolina. Consisting of 3,989 miles, the dual route system also provided Florida with east coast and central peninsula highways. The Florida route proved especially daunting, in part, because the state represented one of the most undeveloped areas along its alignment, an automobile neo-frontier replete with "individualism, naturalism, and even heroism" in the language of historian Howard Preston (Preston 1991:52-58).

Florida's first statewide Dixie Highway Association was held in Jacksonville in September 1915. Governor Park Trammell welcomed association officials and hundreds of good roads proponents throughout the state and from Georgia. In October 1915, the Dixie Highway Association embarked on a seventy-five car "motorcade" of automobiles that covered 1,800 miles between Chicago and Miami Beach. On an inspection tour, the motorcade consisted of organizers M. M. Allison, Carl Fisher, W. S. Gilbreath, and other Dixie Highway officials. In some states, the motorcade included governors and elected officials who used the occasion and inspection tour to encourage counties to accelerate road-building activities and assure Dixie Highway officials of their willingness to cooperate with the association. The grueling trip occupied fifteen days and revealed huge gaps in the development of the highway. Fisher found that "...the roads in Tennessee and some parts of Georgia are simply Hell." He believed that a completed Dixie Highway would "...do more good for the South than if they should get ten cents for their cotton..." Essentially following much of the modern-day alignment of U. S. Highway 1 in Florida, the eastern route entered the state in Nassau County, passed through downtown Jacksonville, and

extended through St. Augustine, Elkton, Hastings, Bunnell, Ormond Beach, and then southward through Daytona Beach, New Smyrna Beach, Titusville, Melbourne, Vero Beach, Fort Pierce, Stuart, West Palm Beach, Lake Worth, and Fort Lauderdale to Miami Beach. Notable crossings of the Dixie Highway with older existing roads included the King's Road once several miles south of St. Augustine, again several miles north of Ormond Beach, and finally at New Smyrna Beach. The intersection of the public roads in 1916 consisted of a freshly brick-paved Dixie Highway and an eighteenth century graded shell-and-dirt road maintained by St. Johns and Volusia counties. The western route of the Dixie Highway extended through Tallahassee, Perry, High Springs, Gainesville, Micanopy, Lady Lake, Orlando, Winter Haven, Arcadia, and Fort Myers. Notable crossings of the Dixie Highway with older roads included the Bellamy Road near High Springs. In addition, east-west connectors intersected with the main highways: the connectors included Macon, Georgia to Jacksonville, Florida; Jacksonville to Tallahassee; Hastings to Orlando; the Cheney Highway through Orange County; Kissimmee to Melbourne; and Arcadia to West Palm Beach. The Orange County Chamber of Commerce weighed into the routing discussion, helping to insure that the Central Florida city would be included in a main route and supported an important east-west connector along the Cheney Highway to the east coast. Fisher's enthusiasm for the Dixie Highway peaked in 1916, after which his interests turned to investments in developing Miami Beach. The enactment of major federal legislation to support the construction of highways in 1916 and 1921 affirmed Fisher's vision of cross-country and regional highways (Preston 1991:52-58; Blackman 1927:60; *Florida Times Union,* 29, 30 September 1915; *New York Times,* 10 October 1915; Foster 2000:121,128; www.us-highways.com/dixiehwy.htm).

Based in Chattanooga, the Dixie Highway Association published a monthly magazine that reported on the progress of construction along the route. Other issues extolled the benefits of touring Florida by automobile. The Association sponsored the installation of highway signs to identify the route of the Dixie Highway. A long rectangular shape placed vertically on a post, the signs were executed with a black, red, and white color scheme. Visually divided into thirds, the signs bore a central red band flanked by white bands and trimmed with black borders between the colors and along the edges. The initials "DH" appeared as white cutouts in the central red band. Although the Association did not contribute financially to the construction of the highway bearing its name, it did lobby the Congress for funding. Challenged with several river crossings and swamps, residents and officials in Nassau County, Florida benefited from this process and received $25,000 in federal aid for construction of the Dixie Highway in the 1920s. Some of Florida's counties, however, sponsored road building through bond issues in the 1910s.

Florida's most ambitious road building project of the Progressive Era occurred in Polk County. In 1899, Polk County claimed five miles of improved roads, most of which had been built through public subscription and consisted of clay, sand-oil, and pine straw. Polk County then maintained more miles of railroad tracks of any Florida county and consistently ranked first or second in citrus production. Drawn from the county's commercial centers, proponents of good roads petitioned the county commission for a $500,000 paved-road bond issue, which failed later that year. The Good Roads Movement in Polk County began in earnest in June 1914 with the formation of the Polk County Good Roads Association. John S. Howard served as president. Board of trade members from Auburndale, Bartow, Haines City, Lakeland, Lake Wales, Winter Haven, and other cities contributed to the association. The association persuaded the county commission to authorize five

quarter-mile experimental stretches of asphaltic sand-oil roads of which farmers and city dwellers alike approved. The material to be used in constructing the road was advertised as "velvet asphalt." The Jaudon Engineering Company of Savannah, Georgia prepared a preliminary survey, which estimated the length of the road at 217 miles and a cost of construction of $1,500,000. Later that year, voters approved a $1,500,000 bond issue to build the county-wide road, the first bonded indebtedness issued by the county. The county commission divided the road-building contract between four companies--Edward Construction Company of Tampa, Eureka Paving Company of Houston, Texas, E. C. Humphrey Company of Hackensack, New Jersey, and the William P. McDonald Company of New York. Essentially a large asphalt loop around Polk County with interconnecting secondary roads, the road was completed in 1916. The primary road was sixteen feet wide and the secondary roads nine feet in width. Linking each city and town in the county, the massive undertaking inspired some local communities, most notably Auburndale, Lakeland, and Winter Haven, to hard-pave their streets and build connectors to the road. The AAA endorsed the Polk County undertaking as the only comprehensive county road system in the nation. Polk County's road served as the impetus for the larger Scenic Highlands Highway, completed in the 1920s along the Highlands Ridge through DeSoto, Hardee, Highlands, and Polk counties (Brown 2001:237-240; Hetherington 1928:174-177).

The success of the road-building program persuaded at least one prominent out-of-state road builder to relocate to Central Florida. Born in 1880 in New Jersey, William P. McDonald helped organize a road construction business in Flushing, New York in 1898. In 1911, he organized the William P. McDonald Construction Company in New York City. He acquired rock quarries in New Jersey and New York, and built roads in New York, New Brunswick, Quebec, and Virginia. In 1914, while on vacation in Florida, he visited Bartow and Lakeland, building a home in the latter city and later winning a bid to construct part of Polk County's road system. After winning the contract, McDonald opened a second road construction office in Lakeland and a third in Jacksonville. He purchased rock quarries in Hernando County, built a $250,000 rock plant near Brooksville, organized the Consolidated Rock Company, the Florida Crushed Stone Company, and built an asphalt plant at Brandon. To better manage his Florida holdings, he established the Macasphalt Company of Florida, a creative name derived combining McDonald's given name with the road material. He patented macasphalt, an asphaltic alternative road material that did not require heat to bond to road foundations. Subsequently, McDonald reorganized his Canadian, Florida, New Jersey, and New York road construction holdings into the Macasphalt Corporation of America, one of the largest road-building firms in the eastern United States. In the 1920s, McDonald turned to developing real estate. By 1923, he had joined Florida's millionaire club. In 1924, McDonald's paving of the streets in his Biltmore Park Subdivision introduced his macasphalt material into Lakeland's brick-paved streets. Since 1907, Lakeland had legislated use of vitrified brick paving for its municipal streets. The city initially balked at McDonald's asphalt proposal, but worked out a compromise to accept the streets with asphalt pavement. In September 1924, following the compromise, the city drew up a schedule of material depths in association with vehicular type traffic, permitting the use of asphalt pavement in Lakeland. In February 1925, McDonald earned $300,000 in lot sales in three weeks from his fashionable Biltmore Park Subdivision. In 1926, near the height of McDonald's road-building activities in Florida, his company constructed 660 miles of asphalt roads, primarily in Central Florida. In all, between 1923 and 1942, the company built 2,421 miles of paved roads, making the Macasphalt Corporation the tenth largest road builder

in the state (Hetherington 1928:281-282; Cash 1935 3:41-42; Brown 2001:243, 277; Kendrick 1964:98, 254-255; Stanaback 1976:189).

Asphalt, along with vitrified brick and concrete, emerged as the preferred paving materials in most Florida counties, as well as by the Florida State Road Department. Even so, many areas continued to rely upon shell, one of the various materials Floridians had experimented with for its roads. Since the 1890s, quirky and idiosyncratic paving alternatives had been offered by residents. In DeLeon Springs, Benjamin Wright owned a large portion of property around the natural springs. He described the material as a "clayey marine shell." After harvesting the substance from the muck, Wright claimed the shell "...becomes very hard after exposure to the air, and does not powder in dry weather, as in the case of other shell roadbeds..." Wright claimed that the substance had held up well on roads in the DeLeon Springs area, and made the overblown assertion that he held sufficient amounts of the material to pave all of the roads and streets of South Florida. A subsequent investigation equated Wright's shell compatible with other shell harvested for roads from middens along Florida's east coast and rivers (*Florida Times-Union,* 4 June 1890).

In Orlando, county commissioner and prominent merchant Henry H. Dickson patented heavy concrete blocks as a road material. In the 1890s, Dickson helped make Orlando a center of Florida's Good Roads Movement, serving as the association's vice-president and coordinating bond issues for brick paved roads as a county commissioner. Prior to the county's brick pavement program, Dickson had patented concrete blocks "...in a shape not unlike a common T rail laid on its side, except that they are much larger and only three or four feet in length. They have a mortise on one end and a tenon on the reverse end and so are locked together, making them a continuous road, but easily repaired if broken, as one block can be taken out and another one inserted in a few moments' time." In 1909, Dickson persuaded the county commission to pave a small stretch of the Orlando-Apopka Road with the concrete block invention and corresponded with several machine manufacturers about fabricating equipment to make the concrete blocks. But, before Dickson could garner additional approval his fellow commissioner for his invention, pressure from Apopka and other Orange County towns compelled the paving of the county's roads with vitrified brick. But, even here, at the center of Florida's Good Roads Movement, good roads did not come easily. Since 1895, Orange County had relied on clay and marl to improve its public roads, and in 1908 the county claimed 150 miles of hard-surfaced road, but "hard-surfaced" then meant any surface other than dirt or sand. In 1910, the board of county commissioner put to a public referendum a $1,000,000 bond issue for nine-feet wide brick roads, a measure soundly rejected by a margin greater than two-to-one. In 1913, after several good roads meetings in various Orange County cities and the board assembled a more modest bonding package of $600,000 for brick and clay roads, voters passed the road improvement program. The funds to finance construction became available in 1915, and vitrified brick roads were built between Orlando and Apopka, Orlando and Christmas, Orlando and Maitland, Orlando and Winter Garden-Oakland, Orlando and Taft, and Windermere and Ocoee. The construction of the Orlando-Apopka Road neatly coincided with the establishment of the Dixie Highway designation through Orange County (*Florida Times-Union,* 4 June 1890; *Christian Science Monitor,* 4 December 1909; Blackman 1927:44-45, 120-121; Shofner 1982:81, 154).

In contrast to Orange County, Dade County had no brick paved roads prior to 1920, instead relying upon native crushed lime rock. John Sewell, a superintendent in the construction of the Florida East Coast Railway between Daytona and Rockledge, had first used crushed shell as a roadbed for railroad tracks. Subsequently, he used the materials to build the foundation systems for the Breakers Hotel at Palm Beach and Royal Palm Hotel in Miami. In Miami, Sewell applied the crushed rock for Miami's streets and several of Dade County's roads. Sewell's initial hard-surface rock road extended between Miami and Buena Vista, and Sewell built a second road between Miami and Coconut Grove. James Jaudon, an Orlando road builder, had moved to Miami in 1895. There he built a lime rock road between the golf grounds of the Royal Palm Hotel in Miami to the Allappattah School. Public subscription and tax revenues supplied by the Dade County board of county commissioners built the road from Miami to the John Douglas Road west of the city. By 1921, Dade County claimed 450 miles of improved hard surfaced roads, but not a single mile was paved with either brick or concrete. As many tourists driving automobiles arrived in Dade County, officials confronted the limits of using the native lime rock as the finished paving material softened into quagmires by flooding from tropical storms (Blackman 1921: 64-65, 114-115, 170).

The residents of St. Augustine and St. Johns County abandoned native rock and shell for road building shortly after Dade County began employing the materials. As early as May 1913, St. Johns County's commissioners and St. Augustine's chamber of commerce had discussed plans for paving parts of the county's road system with brick, but none of those plans encompassed a countywide paving program. St. Augustine businessmen supported the use of brick for roads in the county, pointing out how St. Augustine's brick paved streets were relatively maintenance free. Despite their support, the county commission continued to rely on shell to pave county roads. In January 1914, twenty railroad cars filled with oyster shells from Melbourne, Florida were shipped to various locations in St. Johns County to surface the county's main public roads (*St. Augustine Record,* 28 December 1906, 15, 17, 19, 21, 28 May 1913, 6, 23 January, 10 July 1914).

Consequently, many of St. Johns County's main public roads had only just received a new surface of oyster shells, when, in late-1913, news of a brick road under construction in neighboring Duval County between the St. Johns County line and the Nassau County line compelled the board of commissioners to investigate a hard-surface road. In January 1914, county commissioners in Volusia County, upon receiving reports of activities farther north, began debating the benefits of concrete or brick in a countywide road paving plan. At a special meeting in early January 1914, commissioner A. H. Faver, a St. Augustine businessman, recommended that the county move forward as quickly as possible. Additional support came from an old ally, St. Augustine's chamber of commerce, and J. E. Ingraham, vice-president of the Florida East Coast Railway Company. Later that year, Ingraham traveled between Ft. Pierce and St. Augustine in an automobile, a tortuous nine-hour trip with the worst roads encountered near Bunnell. An advocate of Florida's public highways, Henry Flagler had admonished the businessmen and politicians of St. Johns County as early as 1906 for neglecting to build hard-surfaced roads. The railroad baron predicted that other cities would draw business away from St. Augustine if the city and county did not soon improve their county-wide road system. A keen observer of the essentials of transportation corridors, Flagler hailed from Ohio, a leader in the manufacturing of vitrified bricks and the first state in the nation to pave its public roads with bricks (*St. Augustine Record,* 28 December 1906, 15, 17, 19, 21, 28 May 1913, 6, 23 January, 10 July 1914).

In January 1914, St. Johns County advertised bids for "...paving the 'John Anderson Highway' from the Duval County line to the North City limit of St. Augustine...and...the County Road from Hastings to the Volusia County line..., a total of 64 miles." The general specifications included "asphalt macadam, concrete, vitrified paving brick, or other suitable material, nine feet wide, from outside to outside of four by ten inch concrete curbing, the width of the curbing to be included in the paved portion of the road..." The contractors were required to conduct the paving work at three points in the county simultaneously, and at each point pave at least one mile per month. Six companies responded to the bid request: W. H. Cochran Company, Everett P. Maule Company, Seth Perkins & Sons, Southern Asphalt & Construction Company, Wilson Construction Company, and C. S. Young Construction Company. The county commission awarded a bid for $527,155.20 to the James Y. Wilson Construction Company of Jacksonville to pave the public road with brick in February 1914. The county reserved an additional $26,844.80 for engineering fees, and retained the J. B. McCrary Company of Atlanta for engineering and design work on the road ("Road Improvement," *Bunnell Home Builder* (August 1913), 102; *St. Augustine Record,* 2 April 1914; *St. Augustine Record,* 16 January, 24 February 1914).

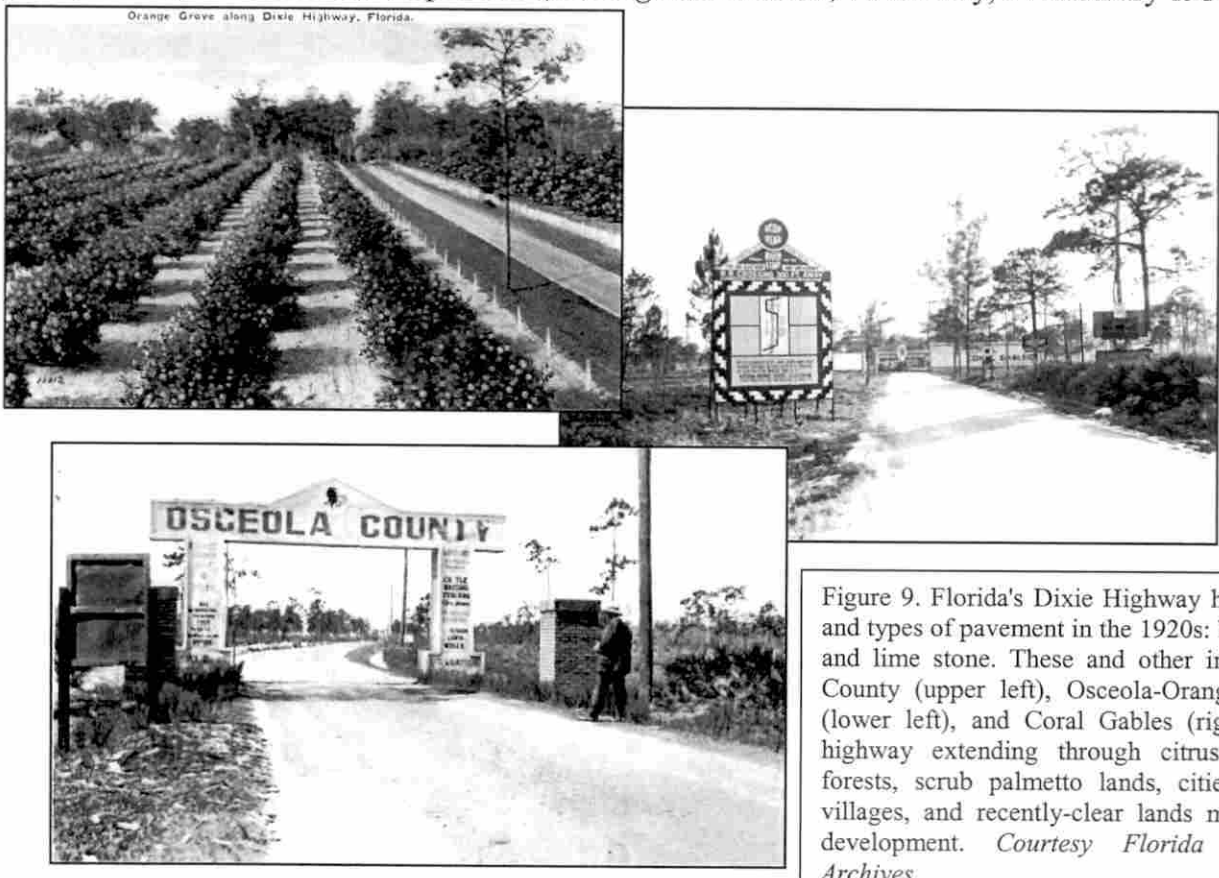


Figure 9. Florida's Dixie Highway had many faces and types of pavement in the 1920s: brick, concrete, and lime stone. These and other images of Lake County (upper left), Osceola-Orange county line (lower left), and Coral Gables (right) depict the highway extending through citrus groves, pine forests, scrub palmetto lands, cities, towns, and villages, and recently-clear lands made ready for development. *Courtesy Florida Photographic Archives*

Following the award of the construction to the Wilson Company, the county commission and chamber of commerce embarked on a massive public relations campaign to help ensure the bonding necessary to pave the highway. Using the banner of "Good Roads, Progress, and Prosperity," rallies were held in Hastings and St. Augustine. Business officials encouraged St. Johns County's residents to vote for the road bonds. Advocates held a "brick road rally" in St. Augustine's downtown plaza. Enacted by a voter referendum by an overwhelming majority of 822 to 432 in April 1914, the county's road bonds amounted to $650,000. Residents in the rural farming districts of Diego and Elkton voted against the bonds (*St. Augustine Record,* 30, 31 March, 1, 2 April 1914).

In September 1914, eight railroad cars of vitrified bricks arrived at the Durbin railroad in north St. Johns County with an additional twenty-five rail cars in transit. Wilson's brick laying crews remained in Seminole County, completing road construction jobs near Sanford in October 1914. After engineers with the McCrary Company laid the levels for the road, convicts graded the road, relocating some of the existing shell outside the curb lines to form the shoulders. Wilson's crews prepared the bed with graders and rollers. One of Wilson's innovations, four-by-ten inch concrete curbs were grooved on the ends for each piece to fit tightly against an adjoining section, thereby protecting the road from erosion and preventing the separation of the curbs. For most of the road, the Wilson Company used vitrified brick manufactured by the Graves Brick Company of Birmingham, Alabama, but also used bricks from the Southern Clay Manufacturing Company of Chattanooga, Tennessee. After the bricks and curbs were laid, Wilson's steam road roller smoothed the finished surface. Crews then replaced any broken bricks, and cleared brush and roots from the shoulders onto which they packed shell. On 4 March 1916, the *St. Augustine Record* declared the sixty-six mile road, designated as part of the Dixie Highway, completed between the Duval County and Volusia County lines. The following year, Flagler County was carved out of south St. Johns County and north Volusia County. In 1918, the latter completed its "Triangle Highway," a brick paved road between Daytona, DeLand, and New Smyrna. Additional brick-paved portions extended north to Ormond Beach and south to Oak Hill were part of the Dixie Highway. By the close of World War I, automobile travel between the north Duval County line and the south Volusia County line, a distance of approximately 150 miles and associated with the Dixie Highway, was an unbroken ribbon of nine-foot wide brick pavement. Although considerably shorter than Polk County's asphalt roads or Dade County's lime rock roads, the Dixie Highway in northeast Florida was one of the first multi-county brick paved sections of road in Florida (*St. Augustine Record,* 25 August, 3, 9, 12 September, 14, 18, 19 October 1914, 9 August, 6 October 1915; *Daytona Gazette-News,* 13 August 1915).

In rural counties and West Florida, good road associations produced less road building than larger counties in Central Florida and South Florida. In Madison County, advocates of good roads met in November 1902 to discuss arranging a convention. Representatives from Cherry Lake, Ellaville, Greenville, Hamburg, Hickstown, Madison, Moseley Hall, and Winquepin shared information and the contents of a letter were discussed from C. M. Scott of the Good Roads Machinery Manufacturing Company in Indiana. Members agreed to attend a good roads convention in Jacksonville later that month. But, farming interests and an unwillingness to incur bonded debt stalled the effort, an experience common to most of West Florida. In Hernando County, only eighteen automobiles had been registered in Brooksville by 1910. By then, county commissioners had funded few road

improvements, all of which were clay-sand paving and still intended for wagon travel. The few motorists in Brooksville traveling to Tampa first diverted east to Dade City and then southwest into Hillsborough County. In Escambia County and West Florida, north-south rivers, bays, railroads, and persistent shortfalls in tax revenues resulted in few improved roads. In 1911, automobile enthusiast S. R. Mallory Kennedy drove between Pensacola and Chicago in his "scout car" to stimulate interest in paved roads throughout rural Escambia County and Alabama. Linking economic growth of cities and farms with good roads, the promotional stunt inspired the editors of the *Pensacola Journal* to advocate a bond issue for hard-paved county roads. A subsequent plan called for a larger inter-county and interstate effort, linking Marianna with Mobile with hard-paved roads carrying the designation of Old Spanish Trail. In 1913, the concept of an Old Spanish Trail from Jacksonville to Pensacola and west to California was discussed at a meeting of the Florida Press Association. Two years later, the West Florida Old Spanish Trail Organization was established at a meeting of the West Florida Good Roads Association in Marianna. Despite those and other efforts, into the early-1920s Pensacolans wishing to travel from the Escambia County seat to Mobile, a line of sight distance of sixty miles, embarked on clay roads in a circuitous route that extended north to Flomaton, Alabama and then southwest to Mobile, a distance of 110 miles. Much of West Florida's transportation was characterized by the larger context of the slow pace of work on the Dixie Highway throughout the rural South. Although most of the route in Florida had been paved by the 1920s, some stretches of the Dixie Highway extending through rural areas characterized by grinding poverty and reluctant county commissions endured as unimproved lime stone roads into the 1930s (McGovern 1976:28; *Madison New Enterprise,* 13 November 1902; Preston 1991:60; *Milton Gazette,* 15 February 1921; Stanaback 1976:144-145).

VII **Organization of the Florida State Road Department, Florida Land Boom and Great Depression, 1915-1941**

Organized on 8 October 1915 through Chapter 6883 of the *Acts of the Legislature of 1915*, the Florida State Road Department was legislated into existence by twelve brief sections. In section two, the legislation defined the term road "...to mean and include all highways and ways for public travel including means of crossing streams by ways of bridges or ferries, under the jurisdictions or control of the several Boards of County Commissioners in the several counties of this State." Hard-surfaced roads were defined as "brick, concrete, asphaltic, or bituminous surfaced roads." Appointed by Governor Park Trammell, the members of the Florida Board of State Roads were selected from Florida's four congressional districts and one at-large member. The initial board members consisted of Edward Scott of Arcadia, W. J. Hillman of Live Oak, F. O. Miller of Jacksonville, Jefferson D. Smith of Marianna, and Michael M. Smith of Orlando. Those appointments carried significant political clout with members advocating the development of roads in their respective districts. Several initial members had previously served in the Florida Legislature; others were prominent bankers, merchants, or farmers who used the appointments as stepping stones into the legislature, or simply to improve roads in their respective regions of the state. The chairmanship of State Road Boards between 1915 and 1955 carried significant political influence and was largely responsible for the amount and type of road construction in Florida's various regions. The chairman acted as the chief administrative officer of the Florida State Road Department with every department head reporting directly to him. Plans made by one chairman were often

shelved by a subsequent appointee. A paid political post, the chairman traveled throughout the state collecting information from legislative officials, local politicians, businessmen, and civic leaders as to the needs of their respective regions. Florida's governors between Park Trammell and LeRoy Collins used the chairmanship of the State Road Board as a political plum to reward political supporters and major benefactors. The political patronage system remained untouched until 1955 (Florida Legislature 1915:193-195; Kendrick 1964:283).

Born in Arcadia in 1890, Edward Scott was appointed chairman of the initial State Road Board by Governor Trammell. Having worked closely with Trammell in the Florida Legislature, Scott used his post as chairman to help secure paving projects in South Florida, including several concrete roads in his native DeSoto County and Hillsborough County, gravel-and-dirt projects in Lee County, and bituminous macadam roads in Hardee, Manatee, and Sarasota counties. A graduate of Emory University, Scott became known as "Mr. Collier County," in part, because of his subsequent role supporting the development of Tamiami Trail. Scott served as chairman until 1919, when the original four districts were reorganized (Florida Legislature 1915:193-195; Florida Legislature 1917:167-169; Kendrick 1964:8-15, 253, 256; Florida State Road Department 1920; Marks 1974:222-223).

In West Florida, few early State Road board members were as politically connected and effective as Jefferson D. Smith. A native of Georgia, Smith moved to Marianna in 1881. There he established the West Florida Wagon Carriage Depository Company. Early on, Smith became aware of how roads were pivotal to the success of his business and travel through West Florida. Politically active, Smith was elected Marianna's mayor, followed by a term in the Florida Legislature. He also helped organize the Marianna Chamber of Commerce, West Florida Chamber of Commerce, and the West Florida Fair Association for which he served as manager for five years. Governor Trammell appointed the politically well-connected Smith to the Florida State Board of Roads in 1915, a position to which he was re-appointed by both Governor Catts and Governor Hardee. Smith's tenure on the board coincided with the decline of his Marianna carriage business and the necessity for better roads to accommodate automobiles in West Florida. During his tenure, Smith helped map out, plan, and approve funding for the construction of the highway system in Florida. In 1925, after ten years of service, Governor John Martin of Jacksonville replaced Smith with his own political appointee (Kendrick 1964:256-263; Cash 1938 3:224-225).

A native of Georgia, Michael M. Smith played an important role in the development of Florida's roads. After leaving Valdosta, Smith managed naval stores operations near Lake City, moved to Orlando in 1900, and settled in Winter Park in 1902. A merchant and banker, Smith organized the Orlando Bank & Trust Company in 1906, the Bank of Winter Garden in 1908, and the Bank of Oviedo in 1910. He supported Orange County in its bonding issues for road construction and in 1915 helped incorporate the Florida State Automobile Association. He served as the association's first president, holding that office between 1915 and the late-1920s. Governor Trammell appointed Smith to the State Road Board because of Smith's financial resources and contacts in the good roads movement. An advocate of state prisoners working on public roads, Smith lobbied for the 1917 legislative act that formed the Convict Road Force of the State Road Department. Smith served on the road board until 1920, and in his final year was appointed by Governor Catts to replace Edward Scott as chairman. In 1919, near the height of Smith's contributions to the State Road Board, the Florida Legislature abolished the

leasing of state prisoners to private companies. Since the late nineteenth century, Florida's state prisoners were leased to naval stores, phosphate, and other companies with high demands for unskilled laborers, where they were subjected to intolerable abuses. Only in 1917 did a few state convicts begin working on public roads. The 1919 legislation directed the Florida Department of Agriculture send the bulk of the state's convicts to work on public road projects associated with the Florida State Road Department. In 1920, the prison division of the Florida Department of Agriculture reported that it had sent 628 prisoners to state road camps. Smith helped organize Florida's initial prison-public roads work program, but was replaced in 1921 by Governor Cary Hardee with Henry B. Philips, a Jacksonville circuit court judge and one of the authors of the 1915 legislation that created the Florida State Road Department. At its inception, Florida's road prisons provided only a little better treatment for state inmates than the earlier prisoner lease system, and the public image of Florida's state road camps remained abysmal until reforms during the Sholtz administration in the 1930s (Blackman 1927:72, 160, 194; Kendrick 1964:45-48, 258-261; Cutler 1923 2:154-155).

In 1915, hopeful about the state's future roads, the State Road Board adopted a circular seal depicting an old mud road and a new palm-tree lined highway. William F. Cocke, an engineer from Richmond, Virginia, was selected as the state road commissioner, or state highway engineer, to oversee road construction. The budget for the department totaled $10,400, an amount sufficient to pay office personnel and purchase office equipment, but little else. To fund the department, the legislature initially designated fifteen percent of moneys collected from automobile licenses. Although the Florida State Road Department designated various roads by number and assigned state aid to several projects, the relatively few state road projects completed late in the Progressive Era were primarily bridges and sand-clay roads. In 1917, the Florida Legislature designated Florida's first state road, not surprisingly named State Road No. 1, which linked Jacksonville with Pensacola. Subsequent roads designated by the Florida Legislature followed in sequential order without regard to direction or location of the alignment (Kendrick 1964:8-15, 245, 253, 256; Florida State Road Department 1920).

The organization of the Florida State Road Department immediately preceded the creation of the direct federal assistance for the construction of highways and roads. In 1916, the Congress enacted the Federal-Aid Highway Act, the first uniform federal highway policy with a regular appropriation of funding to the states. The legislation discouraged the haphazard construction of roads by counties without state supervision by requiring states to establish a highway department that met the approval of the federal Office of Public Roads. The legislation permitted the use of federal funds for construction only, rather than planning, and defined eligible roads as those over which the federal mails were carried, thereby linking federal post roads with federal road construction. Funding, managed by the United States Secretary of Agriculture, was allocated by a formula based on a state's population, land area, and road mileage. Approximately $5,000,000 was appropriated the first year, with the funding increasing in annual appropriations to a total $75,000,000 by 1922. The State of Florida received $55,976 out of the initial federal appropriation, the smallest amount provided to any southern state. By contrast, Alabama received $104,148 and Texas $291,927 for their first federal appropriations. Indeed, Florida's federal allocation amounted only to one percent of the total federal resources available for the first year. The Sunshine State ranked narrowly ahead of several smaller states: Connecticut, Delaware, Maine, Maryland, New Hampshire, Rhode Island, Vermont, and West Virginia. Under the act, the federal government financed up to fifty percent of construction costs in a state not to exceed $10,000 per mile. Funded for only $5,000,000 the first

year, the act coincided with World War I, which America entered in April 1917. Labor shortages were compounded by scarce road-building materials and railroad cars for shipping materials. As the railroads faced their own shortages of manpower and rolling stock to keep up with military shipping, America's fledgling trucking industry seized the opportunity to secure interstate shipping, resulting in overcrowded and overloaded roads. Heavier and large numbers of trucks began to drive on roads ill-equipped to support their weight or number. Logan Page, director of the Bureau of Public Roads, who was instrumental shaping the initial federal aid program, died in December 1918 while attending a meeting of the Executive Committee of the American Association of State Highway Officials (AASHO) in Chicago. Page's death temporarily delayed further implementation of the federal road program (United States Senate 1916:24; Gutfreund 2004; USDOT 1976; Seely 1987).

Congress continued federal funding for highway construction with the passage of the Federal-Aid Highway Act of 1921, matching state funds on a 50/50 basis. The act expanded the definition of rural post roads and increased the $10,000 per mile limitation. It stipulated a minimum right-of-way width of twenty feet for federal aid roads, but some rights-of-way were as wide as thirty-three feet and even sixty feet in places like Maryland, Ohio, Oregon, and Pennsylvania. The federal government generally left project selection in the hands of state highway officials, which often resulted in widely dispersed improvements, spread among political subdivisions and not necessarily connected with adjacent states at state lines. The act also rejected the view of long-distance road advocates who wanted the federal government to build a national highway network. To satisfy those national advocates, as well as promoters of farm-to-market roads, the act provided states with financial aid for the construction of highways under the seven-percent system, in which each state was eligible for assistance for the construction of seven percent of its highways. The 1921 legislation created a nationwide system of trunk lines to be designated within a federal numbering system. Within two years, each state was required to designate three percent of its primary roads, or interstate in character, and four percent of its secondary roads as part of the federal-aid highway system. These designated roads were eligible for funding under the act. To qualify for funding, road designs were required to adhere to the federal government's standards for minimum width, grade, and adequacy of roadbed type for the traffic load. Materials for paving roads with federal aid included asphalt, brick, concrete, clay, gravel, and lime stone. Each state was required to submit their plans to the United States Secretary of Agriculture for concurrency and approval before funds were allocated. By retaining the federal-aid concept, the act also satisfied advocates of farm-to-market roads. The state highway agencies could be counted on to consider local concerns in deciding the mix of projects. In cooperation with the state highway agencies, the Bureau of Public Roads (BPR) completed designation of the federal-aid system in November 1923. It provided a numbering system to designate federal highways. The numerical system developed, in part, by the American Association of State Highway and Transportation Officials (AASHTO) and the Bureau of Public Roads, used even numbers for road extending north-to-south and odd numbers for east-west running highways. In Florida, federal designations were applied to various state roads, including State Road No. 1 (U.S. 90) and State Road No. 3 (U.S. 17) (United States Senate 1921:9; Gutfreund 2004; USDOT 1976; Seely 1987).

But, the federal, state, and local use of funds sometimes caused confusion and even consternation for many persons, including some federal legislators, even those serving on the congressional committee of roads. In

March 1924, William J. Sears, a Kissimmee lawyer serving in the United States House of Representatives since 1915, queried Thomas McDonald, chief of the federal government's Bureau of Public Roads, about federal and state expenditures for federal-aid projects in Central Florida. By the mid-1920s, Sears' home base in Kissimmee represented an important crossroad of federal highways 17, 92, 192 (State Road No. 24), and 441. Sears indicated that his 4th congressional district contained sixteen counties, but only seven of those currently had federal-aid projects. Ironically, Sears' own Osceola County had received $4,793 in road projects, but the ending points of those county-wide projects stopped well-outside the city limits of Kissimmee. At that, Osceola County had bonded $800,000 for brick-paved roads, and Sears pressed McDonald about why his home county could not get a good road paved to connect with his county's and city's recently-paved roads. McDonald deferred on directly responding to Sears' query and referenced him to the Florida State Road Department and their planning system. Sears indicated that many counties in Central Florida had bonded themselves to the limit to construct good roads while other counties in West Florida had taken little local action toward good roads, but were receiving substantial federal aid. He concluded that "...there is some friction because the counties that are progressive feel that they are being discriminated against." (House of Representatives 1924:187-190).

Osceola County was among a handful of Florida counties that enacted bond issues to improve their roads in the 1910s and 1920s. In 1919, Santa Rosa County sold $80,000 in road bonds to which was added additional funds from the State Road Department. Despite the combination of revenues, funds were sufficient only to build six miles of vitrified brick highway east of Milton with the remaining eight miles unimproved to the Okaloosa County line. In August 1919, the road construction contract was awarded to the Southern Clay Manufacturing Company of Chattanooga, Tennessee. The county supplemented the company's skilled work force with local labor. To build the road, the company used a ten-ton roller to pack the sloped grade and then the brick, followed by laborers installing the grout and curbing. Three-foot-wide sand-clay shoulders remained unfinished until 1921. Completed in May 1921, the nine-feet-wide six-mile pavement was locally heralded as "...one of as fine a pieces of road as can be found in the State." Designated as State Road No. 1, the new road complemented brick paved streets then being constructed by the Town of Milton. The *Milton Gazette* boasted the six miles were the first stretch of paved highway west of Tallahassee ready for traffic. In 1927, the Preskett, Paterson & Blackwell Company widened the original road from nine feet to eighteen feet using a system of concrete shoulders. In 1929, State Road No. 1 became part of the federal highway system and was officially renamed U. S. Highway 90 (*Milton Gazette,* 1 July 1918, 7 February, 7, 18 March, 11, 25, July, 19 August 1919, 21 February 1921; Florida State Road Department 1921:8, 13, 39).

By 1920, automobiles had become a common sight in Florida. That year, 73,914 cars and trucks were registered in the State of Florida, sparking many communities to build roads. In 1920, at the behest of citrus growers and sparked by the opening of the Vero Bridge that year, St. Lucie County's board of county commissioners declared a public road on the narrow barrier island bracketed by the Atlantic Ocean and Indian River east of Vero Beach. The road became known as Jungle Trail. Measuring nearly fourteen miles, the county road incorporated existing grove roads and trails into its alignment, which meandered along the banks of the Indian River Narrows lagoon by a schoolhouse, residences, and through citrus groves. Grubbed for stumps and roots in the 1920s, the road extended from the Vero Bridge northward to the Brevard County line. It remained unpaved as an unpaved dirt trail with grass shoulders. Nearby shell mounds were harvested for portions of the road's

base. Trees and shrubs contributed to its ambiance and provided scenic overlooks of the Indian River, prompting the Vero chamber of commerce to publish picture postcards of the road. Various adjustments in its alignment over time accommodated citrus growers, new roads, subdivisions, and connections with bridges at Wabasso and Winter Beach. Most commonly known as Jungle Trail, various informal and officially designated names were later attached to all or portions of the trail, including State Road A1A, Inlet Road, Johns Island Road, Narrows Road, Orchid Road, River Road, and Vero Road (Johnston 2000:73-74).

Some county road building projects were complemented by state and federal funds only after completing preliminary projects. Frustrated by a lack of state road improvements in Central Florida, the Lake County board of county commissioners organized the county's road department in 1921. Only fifteen miles wide and sprinkled with an abundance of lakes, Lake County radiated some fifty miles in length north to south in the heart of Central Florida. As late as 1918, travel writer Nevin Winter commented that "...it was an exceedingly troublesome matter to get an automobile down into the central part of the state." In 1921, the board of county commissioners persuaded the county's residents to enact a $600,000 bond issue to pave its public roads with asphalt in north Lake County. In 1922, the county organized another special road taxing district to build asphalt roads in south Lake County. Having successfully completed those projects, the board followed with smaller road districts in 1925, which extended its countywide paving program to include two bridges, a draw over the St. Johns River at Astor and a fixed creosote timber structure across Little Lake Harris. The bridge over the St. Johns River and supporting paved roads in Lake and Volusia counties completed what historian William Kennedy called the Jacksonville-Tampa Short Route. In the late-1920s, federal and state revenues paved several additional roads, adding to the system of public roads in Lake County. By 1929, Lake County claimed 234 miles of asphalt public roads. One of the few concrete roads paved in Lake County during the period extended from Mount Dora southeast to the Orange County line, a project attributed to M. V. Simpson, a merchant and county commissioner from Mount Dora. That stretch of road was later designated as part of U. S. Highway 441 and the northern entryway into Orange County's famous Orange Blossom Trail. In 1923, the Florida State Road Department completed its paving of Orange Blossom Trail with sheet asphalt north from Plymouth to the Orange-Lake County line. Politicians and businessmen who helped develop Lake County's roads included E. L. Ferran of Eustis, John C. Luning of Leesburg, state senator and later secretary of state William M. Igou of Eustis, W. H. Richey of Leesburg, and M. V. Simpson of Mount Dora. Elsewhere in Orange County, the State Road Department funded the construction of nine miles of brick highway south from downtown Orlando to the Osceola County line (Kennedy 1929:136-138; Kendrick 1964:252-253).

Duval County also relied primarily on local sources for its public roads. Few of its public roads were built with state road department funds between 1915 and 1923. In 1920, a federal aid project had been awarded to Healey & Abbott only for the grading of State Road No. 1 (later renamed U. S. Highway 90) between Baldwin and the existing brick road farther east. By 1923, the board of county commissioners had received numerous complaints about Atlantic Boulevard, which had deteriorated to a patchwork of repairs with at least five types of paving materials. In May 1923, the county's voters approved a $2,550,000 bond issue authorizing the building of highways, including sixteen miles of concrete surfacing for Atlantic Boulevard. From a simple re-paving project Atlantic Boulevard became a complete reconstruction that consisted of straightening curves and building two one-way concrete roads, each sixteen feet wide with a center median of three feet. Completed in late-1924 with

a white way, or lighting system, the thirty-five foot wide Atlantic Boulevard became one of the widest county roads in Florida. In July 1923, the residents of Jacksonville, Lake City, and Macclenny, and Baker County, Columbia County, and Dade County celebrated the opening of the twenty-eight-mile concrete road extending through parts of Baker, Columbia, and Duval counties. B. A. Inglis and C. F. Lytle constructed the road, but beyond the concrete surfacing at the Baker-Columbia County line bituminous macadam extended into Lake City. To the west of Lake City contractors hired by the State Road Department built the road with a sand-clay aggregate (Davis 1925:238-239, 283; Kendrick 1964:252-253; Florida State Road Department 1921:23-24).

In June 1921, Orange County endorsed a new bond initiative to build $2,500,000 worth of county roads. Part of that package included the construction of the Cheney Highway, which formally opened on December 31, 1924. The road was named for prominent Orlando Judge John M. Cheney. A native of Wisconsin, Cheney arrived in Orlando in 1886 and in 1906 was appointed United States attorney for the Southern District of Florida, a position he held until 1912 when he was appointed to a judge to the federal court. A supporter of the good roads movement, Cheney also organized the Orlando Water and Light Company. A Republican, Cheney ran for governorship in 1908 and the United States Senate in 1920, but was defeated by Democratic opponents in both races. Initially designated as part of State Road 22 and later re-assigned as State Road 50, the thirty-eight mile brick paved Cheney Highway connected Orlando with Indian River City in Brevard County on the Dixie Highway. For a brief period, the Cheney Highway was also called the Cheney-Dixie Highway for its east-west connector status of the larger regional highway. Enjoying the benefits the Cheney Highway and Orange County's good roads, the county's electorate in February 1926 approved another $7,000,000 for public roads. In the process, that part of State Road No. 2 which extended through Orlando became part of the federal highway system designated as U.S. Highway 441 (Blackman 1927:45, 60, 230, 232; Cutler 1923 3:276; Kendrick 1964:245).

These and other county initiatives were supported by state and federal appropriations, a combination of activities that began slowly early in the decade and then accelerated. In 1916, the State of Florida used only $1,135 in federal funds to construct highways. Between 1920 and 1923, the state received $3,715,703 from the federal government, an amount that helped build bridges across the Apalachicola River, Choctawhatchee River, Escambia River, Sebastian River, and Suwannee River. By 1923, the state had built approximately 175 miles of varying types of roads: bituminous macadam, brick, concrete, graded earth, and sand-clay. The thirty-three mile sand-clay road between Panama City and the Jackson County line was typical of state road projects in West Florida during the early-1920s. Bereft of any improved public roads, Citrus County received a 2.2 mile sand-clay road project from the State Road Department. Built in 1920, the road extended south from Floral City. By 1923, the road department had completed numerous relatively small paving projects distributed unevenly across the state. Plagued by politics, the distribution process relied heavily upon representation by board members. Still, the objective of the State Road Department was to benefit all Floridians with road improvements. Among the longest single projects of the early-1920s was forty-seven miles in Okeechobee County, built with bituminous macadam by the Maule Paving Company of Dade County. In Lee County, a 101-mile road segment was graded-and-ditched, and in Bay County forty-five miles were graded-and-ditched east of Panama City. In Suwannee County, thirteen miles near Live Oak were improved with a veneer of sand-clay composite. The few concrete roads of the early 1920s was a ten-mile section near Callahan in Nassau County, built by the Clayton-

Mitchell Paving Company, another twelve mile road south of Lake City, and a ten-mile stretch near Roberts in Escambia County (Kendrick 1964:252-253; (Florida State Road Department 1921:8, 13, 39).

Between 1918 and 1923, the federal assistance allocated most of its highway construction resources for concrete and gravel paving. In the latter year, 4,384 miles of concrete highways and 9,442 miles of gravel roads were built across the nation with federal assistance. But, only 342 miles of the nation's highways constructed that year with federal funding were brick paved. Indeed, most state road departments relied upon concrete and gravel to pave their highways. By the middle of the 1920s, concrete accounted for 27,874 miles nationally while brick highways amounted to 3,111 miles. Only the states of Ohio, Pennsylvania, and Florida had appreciable mileage of rural brick highways. In 1925, Ohio led the nation with 1,412 miles, Pennsylvania claimed 358 miles, and Florida had 337 miles. Florida's rural brick roads not assessed in the state highway system accounted for an additional 389 miles. In 1924, Thomas McDonald, chief of the Bureau of Public Roads, observed that Florida's brick-and-sand-base roads "...built before the advent of heavy traffic [were] being torn up badly by the heavy traffic. The State highway department, so far as these roads form a part of the Federal-aid State road system, are rebuilding them, and they are building new lines, but in every case the initiation of the Federal-aid projects lies with the State highway department, and we are unable to act until the State highway department itself submits the project; unless there are sections where, in order to secure interstate connection, the bureau or Secretary of Agriculture, under the law, must act to require the State to submit projects. For example, in Florida we are requiring the State highway department to complete a road from Lake City to the Georgia State line, because they are two years overdue on their promise to build this main entrance way into the State, to reach your main system of roads." (Rose 1953:97-98; USDA 1924:1196-1197; USDA 1927:1256-1259; United States House of Representatives 1924:190).

Politics and road construction were closely allied in early twentieth century Florida. District board memberships and the chairmanship on the State Road Department were highly-prized political patronage, rising and falling with each governor. Members lobbied for road construction projects in their respective districts, and responded to the needs of their constituents, the chairman, and the governor. Political scuffles over bond issues for roads in some cases spilled over into larger county division fights. Long beholden to St. Lucie County's politicians in Fort Pierce, Vero Beach's citrus growers and politicians viewed themselves as progressive Midwestern "Yankee" farmers pitted native Floridians and southerners in the St. Lucie County seat of government. As early as 1919, controversy had arisen between residents of Fort Pierce and Vero Beach over the Good Roads Movement. Many cattle ranchers and citrus growers in Fort Pierce had little use for improved roads, but possessed sufficient votes to kill a countywide road improvement measure in 1919. A smaller road improvement package approved by St. Lucie County's voters in 1920 did little to appease Vero Beach's residents. A small faction of "dyed-in-the-wool and blown-in-the-bottle good-roads boosters" in Vero Beach became inflamed by the setback and helped elect Andrew Young to the Florida Legislature in 1921. Sensing new opportunities, Paul Nisle, a local attorney and editor of the *Vero Press,* blamed Fort Pierce for many of Vero Beach's woes. He characterized Fort Pierce's residents as anti-good road conservatives and distancing himself from Fort Pierce, caustically observed that "Good roads aren't needed in St. Lucie County. They are not necessary to drive cattle over..." In 1925, mounting pressure from both sides resulted in Young, the chairman on the house committee for county organization, supported by a political contingent from Vero Beach, steering

legislation through the Florida Legislature to create Indian River County with Vero Beach as the seat of government. Among the first measures adopted by the new board of county commissioners was to enact a bond issue to improve public roads in Indian River County. Between 1921 and 1925, thirteen new counties were organized in Florida, several of those over road construction disputes and other political issues (Johnston 2000:85-86).

In 1924, just prior to the county division fight, the Florida State Road Department improved a fifteen mile stretch of the Dixie Highway from Vero Beach north to the Sebastian River with bituminous macadam. Demonstrating the necessity of good representation on the State Road Board and St. Lucie County's general disinterest in good roads, the Vero Beach-Sebastian improvement was the sole road project undertaken by the State Road Department in St. Lucie County between 1915 and 1924. More poignantly, that project was twenty-five miles north of Fort Pierce, the seat of county government. Built to a width of eighteen feet, the project was handled by the Maule Paving Company of Dade County and supported the Sebastian River Bridge constructed in 1924 with reinforced concrete. Just after its completion, one of Florida's most notorious early twentieth century gangs--the Ashley-Mobley gang--used the new state road trying to escape law enforcement authorities. A murder in 1911 and bank robberies in Stuart and Miami in 1915 escalated into wholesale plunder of Florida's southeast coast. The gang even turned to piracy on the high seas, preying on liquor distributors in the Bahamas and smugglers plying the waters between the Bahamas and Miami. Gang members became fugitives of federal, state, and local authorities, as well as the British government. Authorities and newspapers credited their ability to elude capture for over a decade to their intimate knowledge of the Everglades and Florida's nascent road system, and the use of automobiles and horses. The *New York Times* characterized the gang as brought up in "...the Jesse James school of felony...in the true western-story manner." Most members met violent deaths in shoot outs with law enforcement. In 1924, after a robbery at the Stuart Bank & Trust, Sheriff J. R. Merritt of St. Lucie County led a posse to the gang's hideout near Fruita. In a day-long battle complete with machine-gun fire, the posse burned the fugitives' home, killed several gang members, and captured seven others. Several surviving members were assaulted and killed on the FEC Railway bridge at Stuart. The last four fugitives escaped by automobile north on State Road 4, passing through Vero Beach, but meeting their end on the Sebastian River bridge, where they were trapped and killed by law officers (Johnston 2000:81-83; *New York Times,* 10, 27 January, 16, 24 March, 2, 3, 16 November 1924; *Vero Press,* 6, 13 November 1924).

Initially designated as State Road No. 4, informally known as the Dixie Highway, and later designated as U. S. Highway 1, the road improvement-and-bridge projects north of Vero Beach were cause for celebration in the village of Sebastian, which residents incorporated in 1924. Responding to the improvement, one of the town's initial activities was to build roadway arches with Mediterranean-inspired influences over the Dixie Highway at the municipal limits to welcome motorists into Sebastian. Encouraged by the state road and municipal activities, the San Sebastian Development Company of New York and Palm Beach built picturesque roadside billboards along the Dixie Highway adjacent to its Sebastian development. Complete with hip roof towers, wing walls, and textured stucco, the billboards complemented the town's roadway arches and Sebastian as the "sun porch of America." Lots sales were initially brisk, but the small towns of Sebastian and Vero Beach failed to hold the promises of riches offered in Fort Lauderdale, Miami, and West Palm Beach. The development scheme, complete with new roads, arches, and billboards, failed to fulfill the expectations of the real estate company.

Figure 10. Many rural regions along Florida's east coast enjoyed new bridges, new roads, and new developments during the Florida Land Boom of the 1920s. *Courtesy Indian River Historical Society.*

Farther south, residents of Stuart also revolted from St. Lucie County, organizing Martin County in 1925. Just to the north of Stuart, residents of Jensen also built a roadway arch over the Dixie Highway, another fashionable Mediterranean Revival design built in this case even without the benefit of a road-improvement project (Kendrick 1964:253; Johnston 2000:87).

Construction of the fifteen-mile road north of Vero Beach had been handled by the Maule Paving Company. The company was founded by Evertt P. Maule, a native of Philadelphia who owned a quarry and contracting business in Missouri, but moved to Miami, Florida in 1910. He established the Maule Rock Quarries at Ojus, a settlement in northeast Dade County. Maule initially quarried lime rock for roadbeds in Florida, shipping crushed rock between Jacksonville and Key West as track ballast on the Florida East Coast Railway. In 1921, Maule incorporated the Maule-Ojus Rock Company and expanded the business to road construction and building supplies. Several years later, he began supplying lime rock for road construction and paving. By 1923, Maule's employees harvested, crushed, and shipped 100 rail cars of lime rock daily. Much of the lime rock was supplied to Florida State Road Department as crushed rock for various road projects, including the Dixie Highway and other public roads in Broward, Dade, and Palm Beach counties. Maule Ojus rock was also quarried for various bridges in Miami and on South Florida's state roads. Beyond being South Florida's most prominent supplier of lime rock, Maule also organized a paving company. Early state road projects paved by Maule Paving Company included forty-eight miles in Okeechobee County and fifteen miles between Vero Beach and Sebastian (Cutler 1923 2:144; Kendrick 1964:215-216, 253; Moody 1940:712; Moody 1953:909, 1007; *New York Times,* 26 April 1955, 10 April 1977; *Wall Street Journal,* 26 June 1970; Dovell 1952 4:773).

Beyond William P. McDonald and Everett P. Maule, several other prominent Florida contractors built and paved hundreds of miles of roads in the 1920s. Those road builders included George H. Hodges' Duval Engineering and Construction Company of Jacksonville, Broadbent Construction Company, Herbert E. Wolfe's San Marco Construction Company of St. Augustine, James Y. Wilson Construction Company of Jacksonville, W. L. Cobb, and J. W. Allen Construction Company. The most active and prominent of those companies was the Duval Engineering and Construction Company. Organized in 1923, the company was founded by George H. Hodges, a native of Orange County, Florida. After leaving school as a youth, Hodges helped survey the Kissimmee River Valley branch of the FEC from New Smyrna to Lake Okeechobee, and then Lake Harney near the headwaters of the St. Johns River for reclamation companies. After World War I, Hodges returned to Jacksonville, where he worked for the Isham Randolph Company and then the George B. Hills Engineering

Company. He briefly attended the University of Florida and returned to Jacksonville in 1922, where he began building and paving roads for the J. M. Johnson Company. In 1923, Hodges organized the Duval Engineering and Construction Company and acquired the J. M. Johnson Company, which specialized in lime rock road construction. Several years later, Hodges acquired lime rock mines and quarries at Haile, Newberry, and Williston. During the mid-1920s, the company developed commercial buildings in Jacksonville, Haines City, and several other cites for income and resale. By 1938, Hodges had served several terms as president of the Florida Chapter of the American Road Builders' Association. Between 1923 and 1942, Hodges' company had paved 8,017 miles of Florida roads, their largest single year occurring in 1926 with 905 miles. In the 1950s, Duval Engineering and Construction Company built part of the Jacksonville Expressway and Interstate 95 (Kendrick 1964:254; Cash 1938 4:476-477).

Florida's third largest road-builder of the early twentieth century, Herbert Wolfe had moved from Tennessee to St. Augustine in the 1910s. Initially he worked for the J. Y. Wilson Company, a road-building firm in Jacksonville. In 1923, Wolfe organized his own road construction business, which he named and incorporated as the San Macro Construction Company in 1927. By 1942, Wolfe maintained a workforce of 100 employees and had built and paved nearly 7,000 miles of public roads in Florida. His single largest year came in 1941 with 841 miles of paved roads. A native of Jacksonville, Florida, James Young Wilson was born in 1870, served as an Army officer during the Spanish-American War, and returned to St. Augustine, where he was briefly attached to the United States District Engineer's office. About 1901, he returned to Jacksonville and established the Jacksonville Tile & Paving Company with J. J. Holmes. Wilson's business consisted of paving streets and country highways, primarily with bricks. His paving activities extended throughout North Florida, including Camp Foster and Camp Johnston during World War I, the Dixie Highway in St. Johns County and Sanford-Lake Mary Road in 1916, and the DeLand-Lake Helen Road in Volusia County. For some of those projects, Wilson sublet contracts from the Southern Clay Manufacturing Company of Chattanooga, Tennessee. Wilson operated the paving business for several decades and in the mid-1920s reorganized the business as the Wilson Construction Company. One of his employees, Herbert E. Wolfe of St. Augustine, initially hauled lime rock for Wilson before establishing the San Marco Construction Company in St. Augustine. In the mid-1930s, Wilson retired from the contracting business and served as an engineer in the Civil Works Administration (CWA), then as a district administrator in the Works Projects Administration (WPA). Before his death in 1940, Wilson was acting state administrator for the WPA (*Florida Times Union,* 11 September 1940; *Jacksonville Journal,* 10 September 1940; Kendrick 1964:81, 254-255; Cash 1938 3:192-193).

In 1923, acting upon recommendations from the Florida State Road Department, the Florida Legislature declared and designated thirty-eight state roads, most in West Florida and Central Florida. Until 1945, state roads were assigned a number in sequence as they were added to the system without regard to location or direction. Enacted under Chapter 9311 of the 1923 Laws of Florida, the legislative action proscribed the completion of State Roads No. 1, 2, 3, 4, 5, and 8 "...before any new contracts are made for work on any of the other roads." Those roads extended between (1) Alabama State Line at Nunez Ferry to Jacksonville, (2) the Georgia State Line north of Jennings to Fort Myers via Gainesville and Orlando, (3) Georgia State Line at the St. Marys River known as Wild's Landing to Orlando via Jacksonville, (4) Georgia State Line south of Folkston, Georgia to Miami, (5) High Springs to Fort Myers via Tampa, and (8) Haines City to Fort Pierce via

Sebring and Okeechobee City. During subsequent sessions the legislature added to the state's road system (Florida Legislature 1923:367-370).

In November 1924, the opening of the Gandy Bridge reduced travel between Tampa and St. Petersburg from fifty-six miles in a circuitous route north of Tampa Bay to nineteen miles across a causeway and toll bridge. Associated with George S. Gandy, a pioneer in electric transportation, the Gandy Bridge was initially conceived as an electric trolley, but evolved into an automobile bridge. By the early-1920s, bond issues in Hillsborough and Pinellas counties, coupled to state and federal dollars for highway construction, had provided a hard-paved road between the Hillsborough and Pinellas county seats that totaled fifty-six miles. Still, the twelve-mile Clearwater to Oldsmar Road, part of State Road 17, had been paved with brick; the connecting Hillsborough Road, also part of State Road 17, was a composite of asphalt, brick, and concrete. A tribute to World War I veterans of Hillsborough County, the concrete-paved Memorial Highway ran southeast from the Hillsborough-Pinellas line to downtown Tampa. Lined with live oak trees and oleanders, Memorial Highway was the widest road in the Tampa Bay region during the 1920s (WPA 1939:521; Kendrick 1964:246; Cutler 1923 2:288).

By 1923, Polk County added to its Progressive era countywide road paving program, continuing to rely upon county bond issues to improve its public roads. Between 1915 and 1923, Polk County had benefited from a single State Road Department project, a thirty-seven mile grade-and-ditch project between Frostproof, the southernmost city in Polk County to Lake Annie near Lake Placid in South Highlands County. Issuing additional bonds, the county built several new roads. In the early-1920s, Polk County designated State Road 17, later federalized as U. S. Highway 17/92, as the Lee-Jackson Memorial Highway, a tribute to the Confederate generals. Polk County's board of county commissioners took the name from a previously-designated route (U.S. Highway 50) between Washington, D.C. and Winchester, Virginia. Florida's version of the Lee-Jackson Memorial Highway ran from Haines City to the west boundary of Polk County near Winston, passing through Lake Alfred, Auburndale, and Lakeland. Its intersection with the Dixie Highway in Lakeland no doubt inspired Sons of Confederate Veterans organizations. Haines City also served as the northernmost point in the Scenic Highlands Highway. Inspired by Polk County's road building progress and led by Edward Scott of the State Road Board, DeSoto County built paved roads in association with the Florida State Road Department. The linkage of asphalt and brick through citrus groves and lake country stimulated civic leaders to name the multi-county road system the Scenic Highlands Highway (Cutler 1923 1:456; *Washington Post,* 24 September 1925, 16 June 1927).

By late-1924, the Florida State Road Department had paved 748 miles of hard-paved roads, an anemic combination of forty-one miles in asphalt, seventy-one miles in bituminous macadam, thirteen miles in brick, and 105 miles in concrete. The balance was a surface treated pavement consisting of graded roadbeds with veneers of sand-clay or shell. Jacksonville attorney John W. Martin viewed the state road system as anemic and an under-funded, and used its reform as a major political platform, promising improvements to the state's highway system. A native of Marion County and a three-term mayor of Jacksonville, Martin ran against four other candidates, including former Governor Sidney J. Catts. Martin focused on beating Catts and promised reforms in education and roads, pointing to deficiencies in the former governor's record. During Catt's term in office (1917-1921), the road department had received $2,914,435 and during Hardee's term (1921-1925)

$16,997,521. Martin promised more than planning, grading, and a patchwork of road surfaces; he promised hard-paved roads and won by a landslide. During Martin's tenure (1925-1929), the Florida Land Boom reached its zenith and then crashed. Still, tax funds for road construction during Martin's term amounted to $59,712,866 and 2,242 miles were paved. By 1930, the state maintained 3,254 miles of roads (Kendrick 1964:66, 90; Tebeau 1971:379, 382).

Martin's millions in 1920s road-construction included re-aligning some state roads less than a decade old. In May 1925, highway engineers announced the creation of a new route for the Dixie Highway, also designated as State Road No. 4 between St. Augustine and Bunnell. Impetus for the new alignment had begun as early as 1919, when hotel operators in Daytona Beach and Ormond Beach petitioned the Florida State Road Department for a new highway that would shorten the route of the 1916 Dixie Highway by approximately fifteen miles. The re-aligned route would bring travelers due south of St. Augustine, thereby avoiding the circuitous route with several dangerous curves through Elkton, Hastings, and Espanola. Completed in late-1925, the new Dixie Highway was initially paved with a lime rock foundation and asphalt with a surface twenty feet in width. To provide access between the old and new roads, extensions of the old Dixie Highway were built eastward to connect with the new Dixie Highway, one near the Flagler-St. Johns County line and another several miles north of Bunnell. Located at a prominent bend, the second intersection became the scene of various accidents in subsequent decades. For a brief period, both old and new Dixie Highway carried the State Road No. 4 designation; the older highway was re-designated State Road No. 189 in 1937 (*Flagler Tribune,* 15 January, 26 February, 28 May 1925, 3, 17 February, 2 June, 7 July 1927, 29 August 1935, 12 August 1937; Florida Legislature 1931:1152; Florida Legislature 1935:1244-1245).

To help divert automobile traffic into downtown St. Augustine, civic leaders and businessmen sponsored a beachfront road south of the city on Anastasia Island and farther south along the Atlantic coast. Maintaining several toll bridges along the route, the St. Johns Bridge Company advertised the oceanfront road as a shortcut that saved twenty-two miles driving between St. Augustine and Daytona Beach. St. Augustine's leaders succeeded in persuading political leaders in St. Johns County, Flagler County, and Volusia County to join the effort, enacting bond issues and building a bridge across Matanzas Inlet and completing what became known as Ocean Shore Boulevard into Daytona Beach. The villages of Crescent Beach, Summer Haven, Beverly Beach, Flagler Beach, and Ocean City benefited as the road opened development opportunities and additional bridges across to the mainland. Associated with the development of the Bridge of Lions that connected St. Augustine with Anastasia Island, Ocean Shore Boulevard opened in 1927. In the early-1930s, the B. B. McCormick Company of Jacksonville Beach constructed the road between St. Augustine and Jacksonville Beach, which became known variously as (north-to-south) Buccaneer Trail, Ponte Vedra Boulevard, and Coastal Highway. In 1946, those were designated by the Florida State Road Department as State Road A1A, along with Ocean Shore Boulevard, but the original names of Buccaneer Trail, Coastal Highway, Ocean Shore Boulevard, and Ponte Vedra Boulevard for relatively short segments were retained (*Flagler Tribune,* 3, 17 February, 2 June, 7 July 1927; Gold 1927:153; *Ponce De Leon Celebration,* April 6-8, 1927, n.p.; Kendrick 1964:248; Harvey 1980:157; *Jacksonville Florida Times-Union,* 1 February 1987).

Hernando County's residents approved bonding issues for paving twenty-five miles of public roads in August 1925. The C. B. Cox Construction Company began construction in 1926, grubbing and grading the road between Brooksville and Weeki Wachee Spring farther west. But, just as the first rock arrived by rail car, residents complained about the contractor's use of Alabama rock and slag, rather than Hernando County lime rock. Containing large deposits of phosphate and lime rock, Hernando County then was supplying lime rock for road projects in Palm Beach County and Pasco County. Indeed, farther south along State Road No. 5, which extended between High Springs and Fort Myers, lime rock shipped from Hernando County was then being used to pave the road through Drexel, Growers Corner, and Land o' Lakes in Pasco County. But, farther north to pave State Road No. 5 in Hernando County more expensive lime rock was shipped from Alabama. Disgruntled citizens submitted a petition to Governor Martin requesting an investigation. A team of state auditors conducted the investigation, finding that the board of county commissioners believed the more expensive Alabama lime rock was superior to Florida's lime rock, but the team found no malfeasance. The Cox company completed its grading and lime rock paving later than year. Hernando County's lime rock shipments were not inconsequential. Second only to Dade County in lime rock shipments, three companies in Hernando County in the late-1930s annually shipped 8,557 freight cars for road construction projects in Florida, Georgia, and ironically Alabama (*Brooksville Herald,* 18 June, 14 August 1925, 14 January, 4 February, 25, 29 June, 13 July 1926; Stanaback 1976:146-147, 190).

Few road projects matched the lengthy timeline or equaled the challenges posed by the Tamiami Trail. Its construction began during the administration of Governor Trammell, faltered during the Catts administration, was resurrected during Governor Hardee's tenure, and was completed at the close of the Martin administration. Initially conceived to extend from Miami on the east coast to Fort Myers and Naples on the gulf coast, the trail ran into the heart of the Everglades, through rural unsettled western Dade County and Lee County. Early plans for the cross-state road began about 1913, when James F. Jaudon, a Miami developer, lobbied the idea in Dade County and Tallahassee. Initial names attached to the route included Atlantic-to-Gulf Boulevard and Miami-to-Marco Highway, but in May 1915 the name Tamiami Trail was adopted after E. P. Dickey, a Tampa businessman and board of trade officer suggested that the route link Tampa and Miami, rather than simply Fort Myers, and combined the two names. The proposed route traversed the least settled region of Florida. In August 1915, the initial surveys were conducted in canoes with Seminole guides led by Jack Tigertail. Dade County engineer Hobart Crabtree, H. P. Highleyman, and Jaudon led the survey team. Crabtree's report indicated that the trail would lead through extensive wetlands, but none deeper than six feet. In 1916, Dade County's voters approved a $275,000 bond issue to build its portion to the Lee County line. The J. B. McCrary Company of Atlanta and Morgan Paving Company were awarded the bid later that year. Lee County, too, formed taxing districts to build the road, but the initial $500,000 provided only enough funds to grade-and-pave the trail in the north end of the county. Lee County then had one of the largest land masses of any jurisdiction in the state and one of the smallest populations. By 1918, the contractors had completed the Dade County portion of the trail to the Lee County line, but overwhelmed with wetlands and insects, they simply gave up on the Lee County portion. Lee County's government resumed grading portions of the trail in the northern part of the county, but World War I delayed any significant construction projects (Tebeau 1971:380; Kendrick 1964:68-73).

The failure of Atlanta's McCrary Company to complete the project was a poignant low episode in the trail's development, at once pointing to the woefully unfunded first phase of the project, exposing the lack of knowledge and experience of building in the Everglades, and the hardships endured by one of the Southeast's most successful engineering and construction companies. Between the 1890s and 1940s, the J. B. McCrary Company designed hundreds of highways, roads, and municipal light, water, and sewer systems throughout the Southeast. A native of Georgia, Joseph Boyd McCrary was graduated from the Georgia Institute of Technology in 1891 and worked for several engineering companies in Atlanta before organizing his own business in 1896. One of the company's first large jobs came in the late-1890s with the water works at Monticello, Florida. Initially specializing in water systems, the company soon expanded into road and highway engineering. In the 1910s and 1920s, the McCrary Company engineered approximately 2,000 miles of highways and roads in Florida alone, including the initial phase of the Tamiami Trail and the Ingraham Highway to Cape Sable. In 1926, the McCrary Company built fifteen miles of new concrete highway for $433,000 in St. Johns County, one of the largest contracts let by the Florida State Road Department during the 1920s. During World War I and World War II, the company engineered the design of many military installations and training camps. Eventually, the company completed projects between Everglades City, Florida, El Paso, Texas, and Jackson, Michigan. For its road projects, the company surveyed alignments, provided levels, designed bridges and culverts, superintended the work performed by contractors, and conducted other design and engineering work (Garrett 1954 3:67-68; Kendrick 1964:71, 80, 97).

The withdrawal of the McCrary Company from the Tamiami Trail in 1918 provided a new opportunity for Miami developer Jaudon who purchased 207,360 acres in North Monroe County through his Chevelier Corporation. Jaudon recommended to the board members of Dade and Lee counties to re-route the Tamiami Trail about five miles farther south of the original alignment. The new route would continue the road west of where the trail then ended at Forty Mile Bend, and of course extend through his recently-acquired land. The commissioners concurred and Jaudon began construction on the new route in 1921. With no additional funds available from Lee County or the State of Florida, the original route of the Tamiami Trail remained incomplete and dormant until 1923. That year, Ora Chapin, a Fort Myers businessman, sought to reignite enthusiasm for the construction of the Tamiami Trail by driving through the Everglades with a motorcade of ten automobiles to demonstrate the feasibility of completing the Tamiami Trail. In the first week, the motorists endured miles of soupy mud, cracked marl prairies, cypress swamps, and widely scattered fresh watering holes. Abandoned by their Seminole guides, the motorcade traveled only 100 miles in seven days. Suffering from inadequate water and food supplies and disabled automobiles, the motorcade took twenty-four days to travel between Fort Myers and Miami (Kendrick 1964:76-77).

That year, Barron Gift Collier, a native of Tennessee and a New York streetcar advertising businessman, resumed construction of the Tamiami Trail. Collier had first visited Florida in 1911, purchased the Useppa Inn at Charlotte Harbor, and made annual pilgrimages to his Southwest Florida resort. Intrigued with reclamation efforts in South Florida, he acquired 20,000 acres in 1921 and 600,000 additional acres in 1922. By 1925, Collier's Florida real estate holdings of 1,186,000 acres made him the largest single landholder in the state. By 1923, had become Collier convinced of the feasibility of building the Tamiami Trail and perceived its completion as a boom to his landholding enterprises. In 1923, Collier persuaded Governor Cary Hardee and the

Florida Legislature of its feasibility, and arranged an agreement that he would personally finance the completion of the original Tamiami Trail if the state government would create a new county out of southern Lee County, and name it for his family. The legislature obliged and Collier was as good as his word. Studying charts and maps of the Everglades, Collier saw that Everglades City was nearly halfway between Miami and Naples astride the ill-fated Tamiami Trail. Collier determined to base his operations there and convinced the legislature to name Everglades City as the seat of government when it created Collier County in May 1923. Collier purchased the interests of George Storer in the Everglades City settlement, and then began building a company town with a county courthouse, general store, bank, church, school, homes, automobile garage, meat market, and even a laundry. Collier based his road-building operations in Everglades City, the southernmost city in Southwest Florida. His Collier Line shipped laborers, supplies, and equipment by boat from Fort Myers to docks at the company town, where he leased homes and buildings to engineers, workers, and merchants (Tebeau and Carson 1965 3:9-10; Stone 1998:1-25).

Collier hired engineer D. Graham Copeland to design and grade the Tamiami Trail. A native of South Carolina, Copeland was graduated from the Citadel, the United States Naval Academy, and Rensaselaer Polytechnic Institute in Troy, New York. Between 1906 and 1922, he supervised naval engineering projects in Cuba, New Orleans, and Philadelphia. In 1923, Collier hired Copeland as his chief engineer of Alexander, Ramsay & Kerr, Inc., Collier's engineering company. Copeland found the highest point along the proposed alignment only twelve feet above sea level, and that the Everglades' water, wetlands, and muck yielded to beds of hard firm limestone. He used a carload of dynamite every three weeks for three years to construct thirty-one miles of grade from Carnestown in western Collier County to the Dade County line. Through the Everglades portion of Collier County large barges dredged limestone and muck, setting it aside for the raised roadbed and forming a canal that ran parallel to the road for approximately ninety miles. Taken from the south side of the alignment, the dredged limestone and muck became materials of the graded roadbed. Initially believed suitable as a roadbed and fill material, Everglades muck turned soupy when wet and easily ignited and burned when dry. As the muck burned, it turned to a dry powder, leaving holes and gaps in the limestone roadbed. In some cases, the South Florida heat caused the packed muck to spontaneously combust and burn, leaving potholes in the limerock-paved roadbed. Engineers and contractors settled on native limestone blasted out of the Everglades as the paving material of choice. The James Y. Wilson Company of Jacksonville performed some of the finished paving on Tamiami Trail. One of Wilson's employees, Herbert Wolfe,

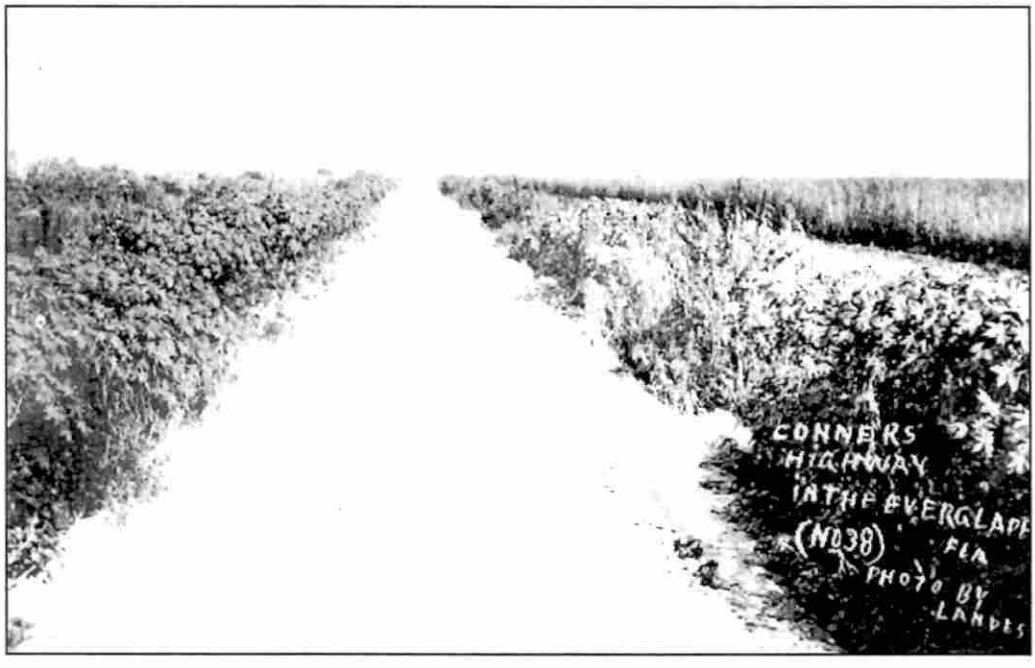
Figure 11. Tamiami Trail, 1927. *Courtesy Florida Photographic Archives.*

noted that laborers sorted through the dredged material to find suitable limerock for the roadbed. In some areas, insufficient native stone required the shipment of crushed rock from Naples, where it arrived by freight train from Central Florida, and then was trucked out to the Everglades job site. After the roadbed was graded, rolled, and ditched, some sections were finished with asphalt and slag, a mineral waste material, other sections were simply paved with crushed limestone (*Fort Myers Press,* 19 October 1949; Kendrick 1964:77-82).

In 1926, Copeland's dredging operations reached Everglades City, after which Collier initiated Tamiami Trail Tours to carry investors and tourists between Fort Myers and other points in Southwest Florida to Everglades City. Later, after the completion of the Tamiami Trail, Collier expanded the bus line to Miami and West Palm Beach, providing the first cross-state overland bus service in South Florida. By then, Alexander, Ramsay & Kerr, Inc. had constructed eighty-two miles of the Tamiami Trail for Collier County and the Florida State Road Department, all for which Collier paid approximately $1,000,000 between 1923 and 1928. In addition, Collier's engineering company built the forty-six mile-long Immokalee-Everglades Highway and the four-mile-long Collier City-Royal Palm Hammock Highway, later renamed San Marco Road. For his part, Jaudon chaffed at the resumption of construction on the original route by Collier and his associates, but his allies in Dade and Lee counties failed to stop Collier from completing the Tamiami Trail. Measuring approximately twenty miles, Jaudon's road became the South Loop of the Tamiami Trail, running through the settlements of Pinecrest and Trail City. For his part, Collier completed the Tamiami Trail during the administration of Governor John Martin, who joined in the formal opening the trail at Everglades City on 25 April 1928. On 29 April 1928, a motorcade celebrated the completion of the trail by driving the 283 miles from Tampa to Miami (*Collier County News,* 26 April 1928; *Fort Myers Press,* 19 October 1949; Kendrick 1964:76-77, 83).

Much shorter than the Tamiami Trail, but no less important to residents of Palm Beach County and Lake Okeechobee, the Conners Highway stretched from Okeechobee City on the north end of Lake Okeechobee to West Palm Beach. Developed by businessman William James Conners as a toll road, the Conners Highway was built as a farm-to-market road after its developer found no serviceable roads to transport his fruits and vegetables to Florida's east coast. A native of New York, Conners began his career as a freight contractor in upstate New York, built asphalt and stone roads in his native state in the 1890s, and in 1916 organized the Great Lakes Transit Corporation to transport freight across the Great Lakes. After World War I, Conners invested heavily in Florida real estate north of Lake Okeechobee. Still based in Buffalo, New York, Conners developed extensive truck farms in South Florida's rich alluvial soils. He initially used raised ridges of muck as roads to transport his crops to market, but many of his vehicles became mired in mud during wet seasons and drivers encountered the make-shift road smoldering or even on fire during dry hot spells. Conners attributed the failure of his initial agricultural venture to poor roads. Unaccustomed to failure and having built transportation enterprises in New York, Conners remedied the circumstances by gaining approval from the Florida Legislature to built a private toll road around the east shore of Lake Okeechobee. As planned, the alignment extended from Okeechobee City to West Palm Beach. He organized the Conners Highway Department and hired R. Y. Patterson as its manager. A civil engineer, Patterson served as a founding board member of the Florida Board of Professional Engineers in 1917. Other officials in Conners road building program included general

superintendent Daniel Downey, chief engineer F. E. Lawrence, and D. H. James, superintendent of the rock crushing plant (*Florida Times Union*, 4 July 1924; Kenrick 1964:26-33).



In 1923, Patterson began building the Conners Highway. At Port Mayaca and the west end of St. Lucie Canal, the approximate mid-point of the lake on its the eastern shore, Conners installed dragline excavators and a rock-crushing plant to distribute by a narrow-gauge industrial railroad washed limestone to the north and south of the central point. By April 1924, Conners had completed thirty miles of raised roadbed and grading between Okeechobee City and Canal Point, where the West Palm Beach Canal drained the lake. He applied limestone pavement to the grade using rail cars that ran on top of the grade, tracks that were dismantled before the application of the finished product. Side tracks made possible passing trains. The finished pavement measured seven-and-one-half-inches thick and sixteen feet wide with four-foot shoulders on each side. To help make the pavement impervious to water penetration, four-tenths of a gallon of motor oil was applied to each per square yard of pavement. By 1924, Conners had invested $2,000,000 in the project and estimated another $1,000,000 to complete the road into West Palm Beach. He built the final alignment from Canal Point to West Palm Beach parallel to and south of the West Palm Beach Canal. Conners celebrated the completion of the fifty-one mile highway on 1 December 1924. An estimated 5,000 automobiles traveled along the road that day from West Palm Beach to Okeechobee City. Conners included in his guest list influential New York businessmen who joined in the motorcade and invested in Conner's Everglades farmlands. The consummate businessman-promoter, Conners advertised his toll highway throughout the Northeast and in Florida. In 1927, he helped organize the National Tours Company, which advertised winter tours of Florida and Cuba by "deluxe motor coach." Twenty-seven-day tours consisted of a "Route of Wonders," which included Gettysburg, Natural Bridge, Washington, D.C., Endless Caverns, Shenandoah Valley, St. Augustine, Daytona Beach, Conners Highway, and Miami by bus and then Key West and Havana by boat. As part of the Conners Highway project, the businessman built toll booths at each end of the highway. Conners died in 1929 and the Florida State Road Department assumed management of the highway in the early-1930s, removing the toll system in 1936 (*Florida Times Union*, 4 July 1924; Kenrick 1964:26-33; *Florida Engineer and Contractor* 1924:20-21; *New York Times,* 16 January 1930).

The Conners Highway and Tamiami Trail were representative of Florida roads named before or during their construction and carried names associated with places and people. Beyond road building, road and trail naming remained a popular early-twentieth century activity of Florida's civic-minded citizens, legislators, boosters, and chambers of commerce. In some cases, those names were attached to roads after their completion; in other cases, the mapping out and naming of a road before its completion helped spark road building activities. Old Spanish Trail was among the interstate routes named during their construction. Extending between St. Augustine, Florida, and San Diego, California, the trail played on a popular if inaccurate theme of colonial Spanish ocean-to-ocean trail blazing exploits across the empire's northernmost holdings. No such trail had existed between those cities during Spain's colonial period, but the promoters and boosters in San Antonio, San Diego, and St. Augustine seized upon the name and theme to develop a route anyways. Opened in 1829, the original Old Spanish Trail ran between Santa Fe, New Mexico and Los Angeles, California, the two most important provincial capitals in the Southwest. Helping to open the West to settlement, the circuitous route extended through New Mexico, Colorado, Utah, Arizona, Nevada, and California. After the United States wrested control of the Southwest from Mexico in 1848 the trail faded as settlers blazed new more direct routes. The twentieth-century re-creation of an Old Spanish Trail was a romantic fancy of automobile boosters and chambers of commerce who fired the imaginations of promoters on the Atlantic and Pacific oceans and many cities in between. Not without irony, the proposed route of Old Spanish Trail did not extend through Santa Fe, New Mexico, the trail's original eastern terminus, but instead ran farther south through Las Cruces (United States Senate 2002:1-7; *Los Angeles Times,* 24 November 1926, 4 March 1928; Preston 1991:132; Kahl 2003:1).

Although the Old Spanish Trail movement was centered in Texas, Floridians played an important role in its development and promotion. Old Spanish Trail boosters convened in Jacksonville in 1913 as part of a meeting of the Florida State Press Association. Later, in November 1915, the West Florida Old Spanish Trail Association met in Marianna and the Inter-State Old Spanish Trail Association organized in Mobile, Alabama in December 1915. The largest group attending the latter regional meeting of 137 delegates hailed from West Florida. National meetings of the association were held in San Antonio, Texas, the epicenter of the Old Spanish Trail Association. Under the leadership of Harral B. Ayres, managing director of the Old Spanish Trail Association, members mapped, planned, and drove parts of the proposed 2,714-mile route. A native of New Jersey, Ayres had become successful in finance work for J. P. Morgan & Company, moved to the New Jersey shore, and served as president of the Asbury Park League of American Wheelmen. He easily adapted to the state's Good Roads Movement in which he became a leader. In 1917, while on vacation in Texas, Ayers was persuaded by the San Antonio chamber of commerce and prominent businessmen to re-organize and promote the Old Spanish Trail. Ayers agreed, retired from Morgan, and set up an office in San Antonio's Gunter Hotel. For the next twelve years, he promoted the transcontinental automobile highway. Using the finance skills honed at J. P. Morgan & Company, Ayers developed the association and promoted the highway. He contacted chambers of commerce in cities and counties of the eight Border and Gulf Coast states, and persuaded many of them to promote local construction of the road that the association had mapped out for the trail. In 1922, Ayers spent seven months in Washington, D.C., promoting the concept to War Department and federal highway officials, successfully arguing the merits of federal funding for a highway that would improve the nation's defense and automobile travel. In 1921, the association officially designated the route of Old Spanish Trail and

encouraged county and state governments to complete sections of the road not yet paved. As part of Ayers' publicity program, the association developed and installed heavy metal signs emblazoned with amour-clad Spanish conquistadors and information about the state and nearby towns. The popularization of the Old Spanish Trail sparked a response from the academic community. Joseph Hill's 1921 article in debunked the romanticized trail, documenting its western provenance, rather than continental sweep. By November 1926, two-thirds of the mileage between St. Augustine and San Antonio had been paved in asphalt, brick, or concrete. The State of Florida was still paving and building bridges over sections of its 440 miles of trail, but the largest single undertaking associated with Old Spanish Trail was the fifteen-mile bridge over Lake Pontchartrain near New Orleans, which was completed in 1928. Some of the poorest links and last paved sections of the road were in Liberty County, Texas. In addition, public subscriptions in San Diego were used to build and pave sections of the trail in western Arizona. In all, between 1921 and 1928, federal, state, and county governments invested $113,000,000 to clear, grade, and pave Old Spanish Trail. In October 1929, Old Spanish Trail motorcades traveled west-to-east and then east-to-west, signaling the completion of the trail (Kahl 2003:1; *Los Angeles Times,* 24 November 1926, 4 March 1928; *Milton Gazette,* July 1921, September 1921; *Pensacola Journal,* 29 July 1977; Hill 1921:444-473).


Old Spanish Trail Highway, Entering Milton from East, Milton, Fla.

The continental automobile trail across the United States' borderlands caught the attention of the Mexican press and Spanish aristocracy. In April 1930, the King of Spain, Alfonso XIII, presented Ayers with the Condecoration of the Royal Order of Isabel la Catholica, making him a Spanish knight. Not to be outdone by its northern neighbor, Mexico embarked on its version of Old Spanish Trail in 1933 with its Federal Highway Commission paving a 770-mile road from Mexico City to Acapulco. The National Geographic Society encouraged American motorists to tour the Americas on the proposed Pan-American Highway, a 10,000-mile road linking Washington, D.C. with San Antonio, Laredo, Monterrey, Mexico City, and Buenos Aires. Advertised as the "snow-free path to California," the United States' Old Spanish Trail in Florida was initially designated as State Road No. 1 and then U.S. Highway 90. Multiple layers of designations--popular, informal, and official--often served to confuse some motorists. In Jacksonville, West Beaver Street carried the triple designation of State Road No. 1, U.S. 90, and Old Spanish Trail with a ninety-degree turn south onto Main Street carrying the latter designation south along with the formal designations of State Road No. 4 and U.S.

Highway 1 to St. Augustine, which to the consternation of some was also part of the Dixie Highway. In Tallahassee, Tennessee Street carried the triple designations of State Road No. 1, U.S. Highway 90, and Old Spanish Trail, but to the east of the city along that road was added the informal designation of Dixie Highway. In Pensacola, Old Spanish Trail coincided with State Road No. 1, U.S. Highway 90, and Mobile Highway west of the city. To the east of the city, the Mobile Highway designation was dropped and replaced by the Pensacola-Milton Road. Despite the actions by various states, cities, and counties, the Florida Legislature did not designate the highway as Old Spanish Trail until 1966 (*Los Angeles Times,* 24 November 1926, 4 March 1928; *New York Times,* 30 April 1933; *Pensacola Journal,* 29 July 1977; Hill 1921:444-473; Sanborn 1951).

The Black Bear Trail was another such continental enterprise, but much less successful than the Old Spanish Trail. The brainchild of Central Florida promoters, it played upon the theme of America's roads and highways extending through picturesque black bear country. In early-1926, in the wake of the collapsed Florida Land Boom, Martin Sample, president of the Haines City chamber of commerce, and Earl W. Brown, mayor of DeLand, met with officials from Green Cove Springs, Orlando, Palatka, Sanford, and Winter Park to discuss re-naming the primary north-south route through their respective cities as the Black Bear Trail. The road then was designated as State Road 3 and would soon be federalized as U.S. Highway 17. Their enthusiasm ignited a larger international Black Bear Tail Association, which sought to unite the nation's Northeast and Quebec, Canada with Central Florida, in part, to maintain the Sunshine State's sagging real estate market and tourist economy. The association's members arranged an international conference in Winchester, Virginia, the midpoint of the trail. Central Florida's motorcade originated in Haines City, stopping to add motorists in Kissimmee, Orlando, Winter Park, Sanford, DeLand, Palatka, and Green Cove Springs. They stopped overnight in Jacksonville, where they added more automobiles, and then traveled to overnight stops in Augusta, Georgia and Bristol, Tennessee before arriving in Winchester, Virginia. Some aggressive insurance agents took advantage of the fears associated with long-distance automobile travel in the 1920s. C. H. Baguley of DeLand offered ten-dollar premiums for death and injury related accidents, reminding Black Bear Trail enthusiasts that "...this is a hazardous trip and for a few dollars you can buy protection. With over 46,000 killed last year and 558,000 injured by automobiles it's a good buy." In early-June 1926, 100 delegates from eighty cities and all the states through which the proposed trail extended and from Quebec. Delegates were treated to Valencia oranges shipped by Central Florida growers and apples by Virginia farmers. They discussed measures to obtain official recognition of the proposed route in the various states, and advertising the benefits of automobile travel through the Shenandoah Valley, North Carolina's mountains, and Central Florida's citrus groves. But, a unified route following U.S. 17 in Florida yielded to a meandering course farther north that included changing onto U.S. Highway 25 at Brunswick, Georgia and traveling northwest to Asheville, North Carolina, veering onto U.S. Highway 19 south of Bristol, Tennessee, and then returning to U.S. Highway 17 near the Virginia line, following the federal highway to its northern terminus at Winchester. Farther north, the route changes became even more numerous, dooming the association's effort. Organized at the close of the Florida Land Boom, the Black Bear Trail Association lost its impetus as thousands of investors abandoned Florida, their enthusiasm and interest swept away by hurricanes in September 1926. Some boosters clung to the name, however, and later that year promoters based in New York and New England encouraged travel to Gettysburg by the Lincoln Highway from the east and west and the Black Bear Trail from the north and south. A project conceived on the magnitude of the Lincoln Highway and Dixie Highway, the Black Bear Trail never moved beyond the planning stage, was

not officially authorized or designated, and appears to be the last of the large popularized informal regional highway systems affecting or based in Florida (*Washington Post,* 2 June, 17 August 1926; *DeLand Daily News,* 27, 29 May, 2 June 1926).

During the Martin administration, the state adopted a system of standardized road markers and signs as adopted by the United States Bureau of Roads and approved by the American Association of State Highway Officials at Detroit, Michigan in November 1925. Familiar standard roadside shapes in the early twenty-first century, those signs included the octagonal stop sign, the diamond shape for caution or directional information, rectangles for speed limits, shields noting the number of the federal highway, crossed bars for railroad crossings, and round shapes for railroad warning. Most signs were attached to four-inch-by-four-inch wooden posts standing seven feet high. Near the top of the posts the Florida Department of State attached State Road numbers of nine-inch-by-nine-inch metal signs executed in white letters on a blue background. In the top quadrant appeared the abbreviation "Fla." and the road number in the lower quadrant. In 1927, the Florida Legislature updated its statewide state road numbering system, a response, in part, to the multiple layers of informal designations, such as Dixie Highway, Lee-Jackson Highway, and Old Spanish Trail. By then, the Florida Legislature had designated 141 Florida state roads. These early designations included completed roads, such as State Road No. 1 between Jacksonville and Pensacola, but also routes still in the early planning stages. For instance, in 1927 State Road No. 59 extended between Zolfo City in Hardee County to Crewsville in DeSoto County and Fort Bassenger, where it crossed a steel bridge spanning the Kissimmee River. But, from there State Road No. 59 was to run to Okeechobee City by "...the most advisable or acceptable route." Several roads carried alphabetical suffixes. State Road 47-A ran from Palatka to Ocala, connected to the latter city by State Road No. 47 from Duval County. Those state roads were numbered as they were approved or designated by the Florida Legislature without regard to location in the state or the direction of the route. Again, the legislature stipulated that State Road Nos. 1, 2, 3, 4, 5, and 8 were to be completed before any new state contracts were signed for road construction. Roads being constructed with federal aid funds then consisted of State Road No. 6 from the Alabama State Line to Mariana, Stae Road StaTalllne (Kendrick 1964:93-94, 100, 245-251; Florida Legislature Laws of Florida 1927).

Caught up in the 1920s fever of popular names for roads, the Florida Legislature instructed the State Road Department attach scenic and politically-motivated names to some of its designations. Consequently, State Road No. 50 running from Jasper, Live Oak, Branford, and Old Town was also designated as "Suwannee River Scenic Highway." Moody Boulevard, named for road-builder and town founder I.I. Moody, ran between Bunnell and Flagler Beach, carrying the formal designation of State Road No. 72. To recognize the recently-deceased president S. Davies Warfield of the Seaboard Air Line Railway, the department designated State Road No. 85 between Stuart, Indiantown, and Okeechobee as "Warfield Highway." Designated as the "DeSoto Trail," State Road No. 86 ran from Punta Gorda to Arcadia. Extending from Starke to the Florida State Prison, State Road No. 102 was predictably also named "State Farm Highway." State Road 111, running between Stuart through Palm City to Okeechobee was also designated as "Martin Highway." A tribute to the popular Florida governor, Martin's name had been appropriated just two years earlier for the name of Martin County of which Stuart was the seat of government. Running east of Madison to the Alapaha River and Jasper, State Road No. 116 was also designated as "Blue Springs Highway." Most of these alternative designations applied to state

roads no longer than twenty miles. The State Road Department, however, took no action to designate, recognize, or even affirm by name longer multi-county or regional roads, such as the Bellamy Road, Dixie Highway, King's Road, Lee-Jackson Highway, or Old Spanish Trail. The department referenced Ocean Shore Boulevard as the terminus for State Road No. 72, but did not designate Ocean Shore Boulevard as a state road itself. Only Monroe County had no state roads. In four years, the Martin administration awarded $37,412,081 in road construction contracts. Hurricanes in 1926 and 1928 undermined and even washed away some isolated stretches of roads. Martin's millions spent on road construction would not be equaled until the late-1930s (Florida Legislature 1927; Kendrick 1964:93-94, 100, 245-251).

The air began to seep out of Florida's speculative land bubble in late 1925. Bank deposits reached $875 million in 1925, but then began to decline. In August, the FEC announced an embargo on freight shipments to south Florida, where ports and rail terminals became clogged with unused building supplies. Bankers and businessmen throughout the nation complained about transfers of money to Florida. As the collapse unfolded and construction slowed, it became clear that many subdivisions would remain undeveloped and become bankrupt. Banks collapsed, were reorganized, and then failed again. Many investors lost faith in the state's economic future. As construction tapered off, devastating hurricanes in 1926 and 1928 flooded communities, swept buildings off foundations, and killed thousands of people, providing a sad closing chapter to the land speculation fever gone bust. Both storms entered the peninsula in South Florida, but the aftermath of the storms were felt throughout the state, and temporarily altered Florida's east coast vacationland image to that of a wasteland of wind-swept beaches (Tebeau 1971:385-387; Frazer and Guthrie 1995:115-166; Stuart News, July 24, 1926, March 18, June 1, November 30, 1927).

The collapse of the land boom did little to dampen the enthusiasm of Florida's legislators to improve roads in their respective districts. During April and May of 1929, fifty bills were drafted and composed by sixty-eight legislators, who sought to build, construct, create, declare, designate, establish, extend, maintain, fix status, provide preferential federal and/or state assistance to, repair, re-designate, re-establish, and validate Florida's public roads. Notwithstanding the persistent attempts by legislators to bring roads to their respective districts, Florida's road construction slowed considerably during the Great Depression. In 1930, State Road Board chairman Robert W. Bentley reported that the road department maintained approximately 5,000 miles of paved roads, many of those miles paved by counties but maintained now by the state. Governor Martin had averaged $15,000,000 annually for road construction, but under Governor Doyle Carlton (1929-1933) annual appropriations amounted to approximately $6,000,000. Facing $500,000,000 of bonded indebtedness, Carlton struggled to keep the state government solvent. He ended Florida's *ad valorem* tax on automobiles and instituted a license tax and then a gasoline tax, but was compelled to use many of those resources to fund, improve, reform, and restructure Florida's school system. For its part, the legislature built on its system of state roads named for places and political personalities. In 1931, the legislature designated State Road No. 167 as Bob Bentley Highway and State Road No. 286 as the Gainesville Short Route, which extended about ten miles from Jacksonville's Lackawanna neighborhood to the Town of Maxville in Southwest Duval County. Between 1929 and 1931, Robert W. Bentley, owner of the *Bradenton Herald,* served as chairman of the State Road Board, honored with the road designated in his name. At the following session, the legislature designated the part of State Road No. 2 between Lady Lake and Mount Dora as the Richey-Simpson Memorial Highway. To honor

recently deceased state senator John J. Swearingen the legislature designated the state road between Lake Wales and Tampa as the Swearingen Highway. In Dade County, State Highway No. 140 was designated as the John H. Levi Highway. Making some of its state roads concurrent with named roads in Georgia, the Florida Legislature designated the state road between River Junction, Bristol, Sumatra, and Apalachicola as the Georgia-Florida Military Highway. In 1935, the legislature recognized one of its previous members, Volusia County judge, and State Road Board member James W. Perkins. A former state senator, Perkins served on the board between 1935 and 1940, was appointed as chairman in the latter year by Governor Fred P. Cone, but was replaced by Governor Spessard Holland in 1941. Extending between Bunnell and DeLand, Perkins Highway was designated as State Road No. 134. The same year, the legislature designated Magnolia Drive in Leon County as State Road 10A, a connector between State Road No. 10 and State Road No. 19. The designation of the Withlacoochee Scenic Highway came in 1937, extending between Istachatta and Dunnellon running along the Withlachoochee River (Journal of the House of Representatives of the State of Florida 1929; Florida Legislature 1931:851, 1144; Florida Legislature 1933:756-757, 767, 769; Florida Legislature 1935:1211, 1214, 1226; Florida Legislature 1937:1010; Kendrick 1964:124-125, 140, 264-265).

Perhaps the most notable chairman of the State Road Department during the Great Depression was Chester B. Treadway. A native of Kentucky, Treadway earned a law degree from the University of Kentucky after which he moved to Sebring in 1910 and worked for the Federal Bureau of Investigation (FBI) in Washington, D.C. during World War I. In 1920, after leaving federal service, Treadway moved to Tavares in Lake County, where he became a prominent realtor and citrus grower. Entering politics, Treadway served on the board of county commissioners until 1930. In 1933, Governor David Sholtz of Daytona Beach appointed Treadway as chairman of the State Road Board, a post he held until 1937. Sholtz also appointed Treadway as chairman of the Florida Advisory and Planning Board. Moving to Jacksonville, Treadway made the leadership transition from the top administrator of the Civil Works Administration (CWA) in Florida to the Federal Emergency Relief Administration (FERA) and then the Works Progress Administration (WPA). Treadway organized Florida's WPA program, serving as its administrator between mid-1935 and September 1937. In the late-1930s, after his departure from the federal and state posts, Treadway returned to his Tavares law practice, but also worked in Washington, D.C., where he lobbied for public relations projects, including garnering federal funds for state roads (Dovell 1952 4:841; Cash 1938 3:27-28; Kendrick 1964:268-269).

Under Treadway's leadership, the Florida State Road Department built and paved several hundred miles of roads and implemented a statewide road survey. Treadway used his contacts and planning directives from Governor Sholtz to provide some long-range planning for the state's road system. In association with the department and Federal Bureau of Public Roads, the survey estimated that if all of the roads designated by the Florida Legislature as state roads were completed and paved in a single year it would cost $400,000,000. Instead, the board developed a long-range ten-year plan for state roads estimated to cost $250,000,000. Treadway asserted that long-range planning to build a system rather than using politics to build roads would annually save the state ten of thousands of dollars. In 1936, Florida's gasoline tax amounted to eight cents with seven cents to the state government and one cent to the federal government. But, from the seven cent tax, the Florida State Road Department received only three cents, or approximately $7,000,000 annually between 1932 and 1936. Maintenance alone in 1936 amounted to $3,600,000, supplemented by $1,500,000 from the federal

government. By then, the Florida Legislature had designated 12,700 miles of state roads, but the Florida State Road Department had been able to construct and maintain only 6,700 miles of those state roads with the available revenues. At that, for most of Florida's Depression-era state roads, the rights-of-way were obtained by the various boards of county commissioners. In January 1936, the State Road Department received $50,000,000 in formal requests for new road construction with a budget of $7,000,000 for all phases of operations. Paving projects in 1936 and 1937 included State Road No. 10 between Fort Walton Beach and Navarre, State Road 16A from Inglis to the Marion County line, State Road No. 35 from Perry to State Road No. 19, State Road No. 48 between Starke and Raiford, State Road No. 52 from Lynn Haven to Southport, and State Road No. 152 between Point Washington and the Gulf of Mexico. In one of his closing statements to his fellow board members, Treadway encouraged them to improve safety on Florida's roads by eliminating curves and widening roads. One of the prominent safety accomplishments completed by the department late in the Great Depression was northwest of Bunnell in Flagler County, where the alignment of State Road No. 28 was reorganized with an overpass of U. S. Highway 1 and the FEC tracks, which maintained close parallel alignments (Treadway March 1936:1, 33; Treadway April 1936:1, 50-51).

Despite Treadway's attempts at reforms and planning, the State Road Department remained largely a pawn of the board members appointed by Florida's governors. A leading critic of the political framework associated with the early decades of the Florida State Road Department, William M. Traer of Winter Park published the *Winter Park Herald, Florida Engineer and Contractor,* and later *Florida Public Works.* A native of Iowa, Traer worked in the publishing field in his native state until moving to Melbourne in 1910. After publishing the *Melbourne Herald* and then the *Florida Farmer* in Jacksonville, Traer moved to Winter Park in 1926, assuming management of the *Winter Park Herald* and the journal of the Florida Engineering Society. Politically active and an astute businessman, Traer transformed the *Florida Engineer and Contractor* into a broader format that became an official journal of the Florida State Road Department: *Florida Public Works.* Widely regarded and independent, Traer characterized the state roads in 1941 as "Florida's Highway System: For the Politician, by the Politician, and of the Politician." He asserted that "Never has there been a real plan followed in locating and building Florida highways. One State Road Department after another has been obliged to bow to the pernicious influence of politicians and squander the gas tax revenue in many cases on little stretches of good road here and there." Traer observed that packed state roads in North Florida and Central Florida during the winter months became bottle-necked by competing traveling interests consisting of winter tourists in their automobiles and trucks moving between fields and groves to packing houses. Traer believed that most of Florida's wealth came from citrus groves and winter vegetable fields in the peninsula, which contained "...a badly bungled road system." In West Florida, Traer found fairly good roads, but few tourists or farm trucks. He cited State Highway No. 140 between St. Augustine and Daytona Beach, later designated as State Road A1A, as one of the worst roads in the state, which "...should have had attention long ago" (Blackman 1927:34; Traer 1941:3-5).

A keen observer of how politics corrupted Florida's road system, Traer recounted how State Road No. 21, or U. S. Highway 92, between Daytona Beach and DeLand was in deplorable condition in 1941. The twenty-four mile road contained potholes and washed out sections. Plans for its improvement had been put into place during the closing term of board chairman James W. Perkins of DeLand. Appointed to the board by Governor Sholtz and sustained in that position by Governor Fred P. Cone, the Volusia County judge had served on the board

between 1935 and 1940 and was appointed chairman by Governor Cone in the latter year. Perkins helped arrange the improvement of the state road between Daytona Beach and DeLand, but after Governor Spessard Holland replaced him in 1941 the contract was cancelled. For his part, Traer advocated the construction of Florida's road in those counties and regions that supported the heaviest traffic and produced the greatest proportion of gas tax revenues. He characterized many of Florida's past State Road Board chairmen as "political henchmen" appointed by the governor as a reward for rendering "...valuable assistance to the chief executive in his election campaign, but may be entirely incompetent to properly manage" the state's road system (Blackman 1927:34; Traer 1941:3-5).

Notwithstanding cutbacks, politics, and road naming, Florida's largest road construction project of the Great Depression was the Overseas Highway (NR 1979). The route was built on an older railroad viaduct and track system constructed by the Florida East Coast Railway between 1909 and 1912. Paralleling some of that viaduct-and-railroad track system, Monroe County had built its own road, bridge, and ferry system for automobiles between 1922 and 1928. Built at the cost of $4,000,000, the road-bridge-and-ferry system consisted of sixty miles of lime rock paved road-and-bridges from Florida City on the mainland to Lower Matecumbe Key, followed by forty miles of ferriage, and forty miles of road-and-bridges from No Name Key to Key West. One engineer estimated a cost of $16,000,000 to replace the ferry with a forty-mile wooden bridge. But, light-weight timber bridges were found to weaken by punishing ocean currents and the lime rock roads easily washed out in storms. On 2 September 1935, a Labor Day hurricane washed out several miles of Monroe County's roads and bridges, and even swept a Florida East Coast Railway train off the tracks at Islamorada. The storm also stripped rails from several bridges, destroyed miles of roadbed, and ended train service into Key West. The railroad company transferred ownership of the roadbed to the Overseas Highway District, which was organized by the Florida Legislature. The 1928 road-and-bridge system was abandoned. The state government turned to the federal government for assistance in the form of the Public Works Administration (PWA), which supplied millions of dollars to assist in the rehabilitation of the former railroad tracks into the Overseas Highway. Financed by a $3,600,000 loan from the PWA, work began in November 1936 to convert the former railroad bed and bridges into a vehicular highway. The new construction consisted of a twenty-foot reinforced concrete roadway and precast concrete guardrails supported by reinforced concrete arch spans and steel girder spans. Draw bridges consisted of bascule and swing types. Designated as State Road 4A and later as U. S. Highway 1, the first section opened on 1 November 1938 and the entire road system was placed into service six months later. In showcasing the road, the PWA claimed the Overseas Highway as "one of the most spectacular highways in existence" and that a seven-mile bridge in the system was the longest bridge in the world (WPA 1939:200, 324; Tebeau 1971:405; Short and Stanley-Brown 1939:558-559; *Miami Herald,* 3 January 1936, 3 January 1937; Kendrick 1964:139, 145).

Near the close of the Great Depression, Carita Doggett Corse, the state director of the Federal Writers' Project, compiled *Florida: A Guide to the Southernmost State.* Working with a team of writers and editors, Corse divided Florida into twenty-two tours using the states' primary roads. Each tour was prefaced with a brief description of roads associated with those tours. Most carried the description "Hard-surfaced road throughout, mainly concrete- and asphalt-paved." Most travelers found the term "hard-surfaced" meant bituminous, clay, or shell, rather than asphalt, brick, or concrete. References to short brick-paved stretches of roads sprinkled the

text, but none of the tours outlined in the publication was completely paved with either brick or concrete, or a combination of the materials. Nearly all the descriptions carried the admonition "watch for cattle along the highway." Florida would not enact a fence law until 1949, making Florida's roads some of the most dangerous in the nation. Prior to Florida's fence law, if you ran into a cow on a highway, killed it and was killed in the process, your estate could be made to pay for the animal (WPA 1939; Kendrick 1964:174).

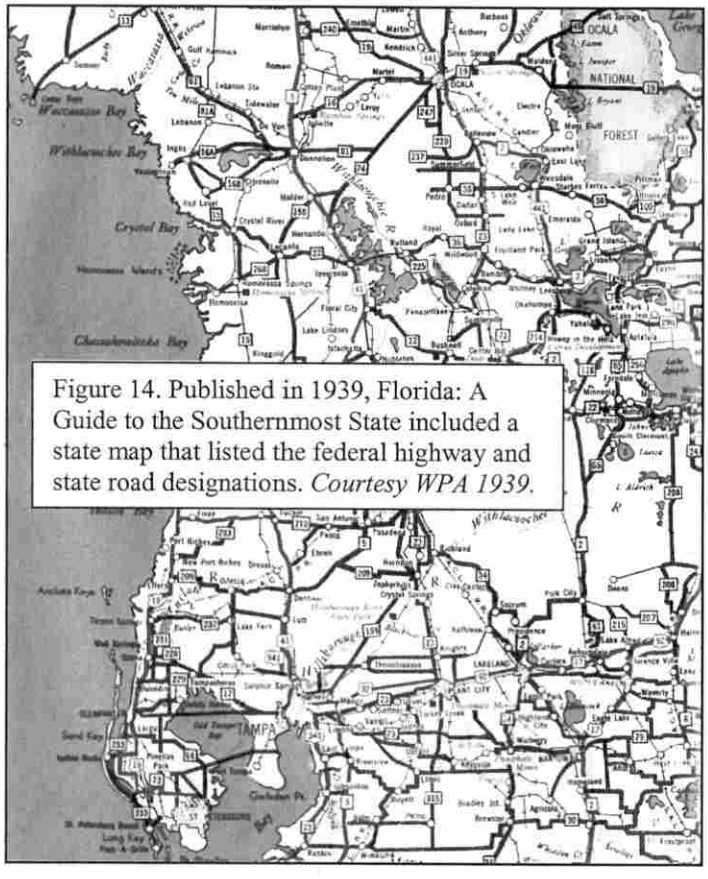


Figure 14. Published in 1939, Florida: A Guide to the Southernmost State included a state map that listed the federal highway and state road designations. *Courtesy WPA 1939.*

In 1939, the Florida Legislature created the State Department of Public Safety divided into two divisions: the Florida Highway Patrol and the Division of State Motor Vehicle Drivers Licenses. Previous efforts to develop an enforcement wing of the Florida State Road Department had begun in 1931, when the administration of Governor Doyle E. Carlton and Attorney-General Cary D. Landis, at the request of Robert W. Bentley then the chairman of the State Road Department, ruled that the State Road Department enforce the laws enacted to preserve its physical structure. As a result, the road department hired twelve weight inspectors who were placed under the supervision of division engineers. In 1934, under the administration of Governor Sholtz, the Division of Traffic Enforcement was created as a result of an Attorney-General Landis' opinion indicating the division could enforce motor vehicles laws. In 1936, Chairman Treadway appointed H. Neil Kirkman as chief of the State Road Department's Traffic Division because of his experience in the United States Army associated with traffic control and his engineering background. In 1937, Governor Cone, as an economic move, abolished the traffic enforcement division of the State Road Department. In 1939, State Road Board chairman Arthur B. Hale, a Tampa mechanical engineer, authorized Richard Ervin, then the department's attorney, to prepare legislation to create a Department of Public Safety with a highway patrol division and a driver license division, and lobby its passage in the 1939 session of the legislature. Richard Ervin was the author of the legislation creating the Department of Public Safety and the Florida Sheriff's Bureau which paved the way for the creation of the Florida Department of Law Enforcement. Ervin contacted H. M. Fearnside, a state representative from Palatka. Fearnside agreed to introduce the legislation and successfully lobbied for its passage in 1939. In 1940, the State of Florida registered 492,431 cars and trucks, a six-fold increase of the 1920s registration of 73,900 vehicles (Kendrick 1964:138, 206, 211; Cash 1938 4:724; FSRD 1941:viii).

In 1941, the Florida Legislature enacted a series of reforms associated with Florida's state roads. The legislation, in part, provided a depression-era measure to establish municipal links between cities and state roads where

none existed. It also brought the state's much-needed resources to several counties in need of assistance in the development of new roads, and with maintenance projects. As part of the measure, the legislature began re-numbering the state's roads, providing a system not unlike the federal system with odd numbers associated with north-south alignments and even numbers for east-west roads. Some of the re-numbering affected relatively large highways, such as U.S. Highway 1, which was re-numbered from State Road No. 4 to State Road No. 5, and even combined some older state road segments with different numbers into a single reference. The re-numbering process would continue during the following decade (Florida Legislature 1935; Florida Legislature 1941; Florida Legislature 1945).

VIII

World War II and Post-War Roads and Trails, 1941-1959

During World War II, the state government built 1,500 miles of roads at a cost of $44,000,000. Under the leadership of Governor Spessard Holland, the state by 1944 maintained 8,389 miles of state roads, up from 898 in 1923. War-related projects, many of those roads radiated around military installations. Primary among those were primary roads and access adjacent to MacDill Air Field near Tampa, Naval Air Station Jacksonville, and Naval Air Station Pensacola. In 1940, Bay Shore Boulevard in Tampa was considered "Florida's most magnificent six-lane thoroughfare" supported by a concrete curb-and-gutter median with a white way. Just months before the United States entered the war in December 1941, the Florida State Road Department completed the four-lane concrete divided U.S. Highway 17 adjacent to NAS Jacksonville. The new highway provided twenty-two foot wide traffic lanes. Farther south, the department also provided a divided road for U.S. Highway 41 between Brooksville and Tampa, which was initially designated as State Road No. 5 but re-designated as State Road No. 45. Characterized as a "dream road," the new road included a six-foot wide grass center median dividing travel lanes twelve feet wide. The improvements were part of a pre-World War initiative to raise Florida's low national ranking in road systems. By 1940, the state had built approximately fifteen miles of concrete divided roads, a mileage that placed Florida ahead of Arizona, Arkansas, and Iowa, and Mississippi, but well behind Massachusetts with forty-eight miles, Illinois with sixty-eight miles, and New Jersey with 115 miles of divided concrete state roads (Kendrick 1964:153, 154, 160; *Brooksville Journal,* 3 July 1941).

Elected in 1944, Governor Millard Caldwell appointed F. Elgin Bayless of Sebring as chairman of the State Road Board. Attorney, banker, cattleman, and naval stores operator, Bayless directed the road board between 1945 and 1948. The state government completed the Holland Building, the headquarters for the State Road Department, during Bayless' final year as part of its Capitol Complex construction program. Under Bayless' direction, the State Road Department spent approximately $116,000,000 on maintenance and road-and-bridge projects, but provided little future planning. Bayless helped layout the route and secured federal designation of U.S. Highway 27. A part of the highway, Bayless directed the development of a welcome station north of Havana, Florida, the genesis of the state-line feature that was expanded in the 1950s. During Bayless' chairmanship, the State Road Department also instituted the Wayside Park Program along the state's major roads. Turnouts off state roads provided travelers with access into a wayside park, generally developed under live oak trees or stands of pine trees with picnic tables, pavilions, sidewalks, landscaping, and cooking pits. Initiated about 1948, Florida's wayside parks reached 260 by the early-1960s, located astride state roads

adjacent to beaches, citrus groves, crossroads, forests, and welcome stations. Wayside parks complemented most welcome stations, which the state government initiated about 1953. Distributing information and free orange juice to travelers, the welcome stations of the 1950s and 1960s were simple masonry buildings with banks of awning windows, parking lots, and restrooms on federal highways and most major state roads at the Alabama State Line and Georgia State Line. Bayless also oversaw the re-numbering of Florida's state roads in June 1945. The re-numbering used a grid system with east-west state roads carrying even numbers with the smallest number running across the north end of the state. Similarly, north-south state roads designated odds numbers with the smallest number extending along the east coast. Under the new designation, State Road No. 2, extended between Bascom and Sweet Gum Head within four miles of the Georgia border. Divided into two segments, the seventy-six mile long state road combined pre-1945 state road numbers 6, 90, 123, 150, and 165. At the south tip of the state, Tamiami Trail was designated State Road No. 90. Along the east coast, State Road A1A extended from Callahan to Miami Beach, much of it along the oceanfront, but merging into other state roads to skirt inlets and other obstacles. Near the Alabama State Line, State Road 97 ran from U. S. Highway 29 near Molino to the state line, where it became Alabama State Highway 21 (Dovell 1952 4:860; Kendrick 1964:164-165, 171; http://en.wikipedia.org/wiki/1945_Florida_State_Road_renumbering; http:// www.dot.state.fl.us/PublicInformationOffice/more DOT/secretaries.shtm)).

Figure 15. Wayside Parks and Welcome Stations emerged along Florida's federal highways and state roads during the 1940s and 1950s. *Courtesy Florida Photographic Archives.*

In the late-1940s and 1950s, the state experienced unprecedented population growth and expanded its road system. Some of the expansion resulted in wider roads; other expansion was in the form of new roads. In 1949, the Florida Legislature increased road construction revenues and provided for a fairer system of building Florida's state roads. The legislation enacted a seventh-cent gasoline tax allocated on a county-by-county basis predicated on collected taxes. That year, Governor Fuller Warren appointed Brooksville banker Alfred A. McKethan as chairman of the State Road Board. McKethan added significantly to the state road system in Citrus, Hernando, Pasco and Sumter counties, a region that earlier State Road Boards had neglected. In Hernando County alone, residents enjoyed $664,800 worth of road construction projects between 1950 and 1952. By 1953, McKethan directed the expenditure of $200,000,000 in road construction projects that covered all sixty-seven counties, perhaps the first four-year interval in which all

regions of the state enjoyed road construction projects. In 1949, the Florida Legislature enacted a cattle-fencing law, requiring ranchers to keep their livestock off the state's roads. In the previous three years, 1,502 accidents in Florida had involved motorists and cattle. Getting cows off of Florida's roads had been a perennial legislative issue pitting chambers of commerce and women's clubs against cattle ranchers since the 1920s (Kendrick 1964:169-170, 174; Stanaback 1976:111, 147-148; Dovell 1953 3:110-111).

Expressways provided better access within urban centers, and many federal highways were expanded from two lanes to divided four-lane highways. Initiated in April 1950, the Jacksonville Expressway led the state in limited access urban highways. It extended between the downtown and the Arlington neighborhood, connected by the John E. Matthews Bridge over the St. Johns River. One expressway spawned more and by the mid-1960s five bridges crossed the St. Johns River in Jacksonville, supporting expressways and interstates. Opened in 1954, the Sunshine Skyway Bridge supported U. S. Highway 19 between Manatee and Pinellas counties. In 1960, the Howard Frankland Bridge supported expanded roads in St. Petersburg and Tampa. The same year, the New River Tunnel in Fort Lauderdale closed a bitter bridge-versus-tunnel dispute in Broward County (Mormino 2005:242; Kendrick 1964:171-173).

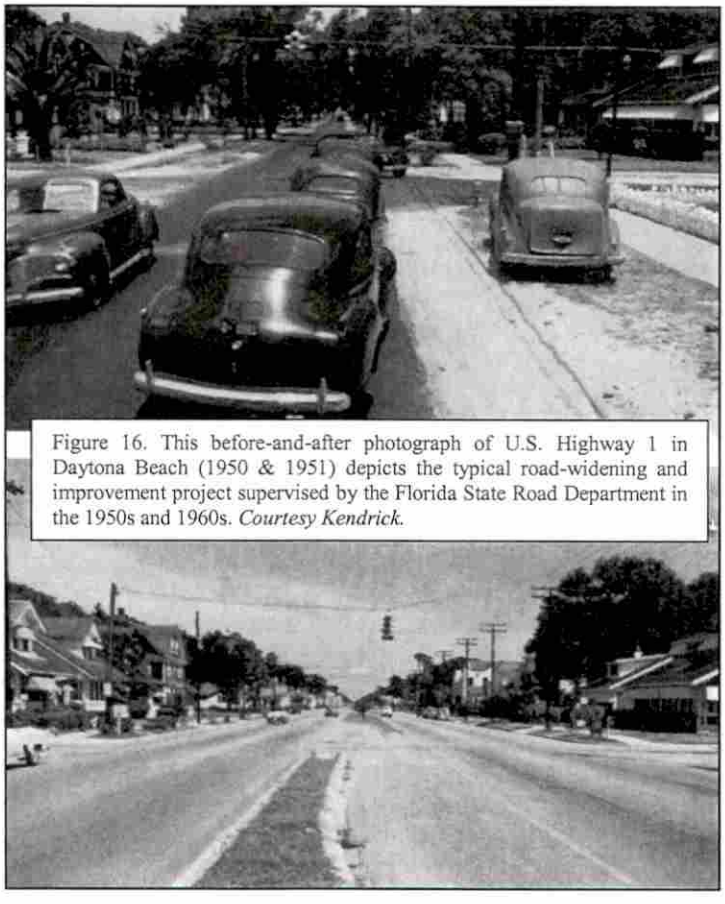


Figure 16. This before-and-after photograph of U.S. Highway 1 in Daytona Beach (1950 & 1951) depicts the typical road-widening and improvement project supervised by the Florida State Road Department in the 1950s and 1960s. *Courtesy Kendrick.*

A prominent supporter of Governor Warren, McKethan held the chairman position until 1953, when he was replaced by Richard Simpson of Monticello by Governor Daniel McCarty. A native of Jefferson County, Simpson was educated at Purdue University and the University of Florida. He was elected to the Florida House in 1939, serving consecutive terms through 1951. In 1943, members elected Simpson speaker of the house, a position that McCarty had held in 1941 and McCarty rewarded his political ally with the State Road Board chairmanship in 1953. In July 1953, McCarty signed into law the Florida Turnpike Act. After McCarty's untimely death later that year, Lieutenant-Governor Charley Johns, a member of the Florida Legislature from Starke since 1935, became acting-governor. In 1954, Johns replaced Simpson with Cecil M. Webb, president of the Dixie Lily Milling Company of Tampa and an officer of the Florida State Chamber of Commerce. Webb had organized the milling company in 1939 and by 1954 maintained mills at Chipley, Miami, Tampa, and Williston. His hominy grits appeared on grocery shelves in nearly every urban market and country store in Florida. Politically well-connected, Webb had served as chairman of the Florida Game and Fresh-Water Fish Commission, appointed to the position by Governor

Warren in 1950. Webb became a proponent of the National Defense Interstate Highway Systems Act. The effect of having governors from Central Florida and North Florida with State Road Commissioners from those regions had the effect of better roads in those regions than elsewhere in the state during the late-1940s and the opening years of the 1950s. Large portions of U. S. Highway 1 were four-laned (Stanaback 1976:111, 147-148; Dovell 1953 3:110-111).

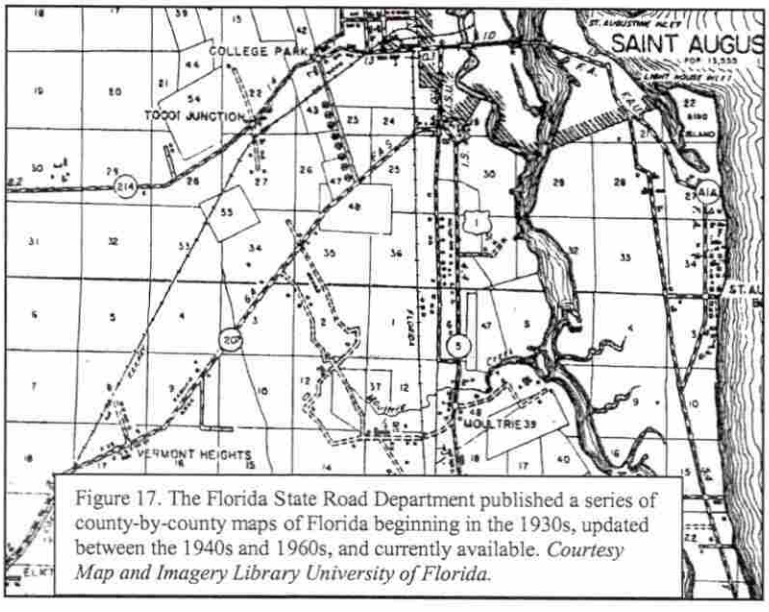


Figure 17. The Florida State Road Department published a series of county-by-county maps of Florida beginning in the 1930s, updated between the 1940s and 1960s, and currently available. *Courtesy Map and Imagery Library University of Florida.*

In 1955, Governor LeRoy Collins replaced Webb with Wilbur E. Jones. A native of Miami, Jones was educated at the Wharton School of Finance at the University of Pennsylvania. Jones returned to Miami, where he established a business. Often regarded as Florida's greatest governor, Collins served a six-year term (1955-1961), elected in 1954 to fill the unexpired term of Daniel McCarty and then was re-elected in 1956. During Collins' six years and under Jones' oversight, the State Road Department expended $536,000,000 in maintenance and road-and-bridge construction, an amount that totaled more than the previous four decades of the department's existence. Perhaps the most progressive of any State Road Board chairman, Jones suggested a reorganization of the board. Governor Collins and the Florida Legislature agreed, in 1955 supplementing the powerful appointed chairman with the position of executive director of the Florida State Road Department. The executive director served under the chairman, but provided continuity between appointments and the various division engineers reported to the director. The post was filled by Ralph Davis, an administrative assistant to United States Senator Spessard Holland (Mormino 2005:46; Kendrick 1964:283).

In 1956, the Congress enacted the National Defense Interstate Highway Systems Act within the larger Federal Highway Act of 1956. The legislation authorized $24,800,000,000 in federal spending over thirteen years for a 44,764-mile network of limited access interstate highways. The most ambitious public-works project in American history, the interstate system was envisioned by the administration of President Dwight D. Eisenhower to address concerns that the president had perceived and experienced with America's deplorable roads as an Army officer during World War I. During World War II, Eisenhower saw the benefits of good roads and highways as he traveled along the German Autobahn. The United States' interstate system provided 1,475 miles of expressway in Florida, one of sixteen states allocated more than 1,000 miles in the enabling legislation. Three major interstates connected the state with other regions of the nation: I-10, I-75, and I-95. Each roughly paralleled existing federal highways, but provided the limited access and higher speeds for automobile sought by planners and military officials alike. The shorter Interstate 4 (142 miles) connected Florida's Atlantic and Gulf coasts. Roughly paralleling U. S. Highway 92, Interstate 4 linked the urban centers of Daytona Beach, Orlando, and Tampa. Designed in the 1950s, interstate construction began slowly in the late-1950s and

accelerated in the 1960s. Between 1959 and 1960, fifty miles of interstate were built in the Sunshine State; an additional 127 miles followed in 1961 and 1962. In Florida, Interstate 10 remained incomplete until the 1970s and I-95 until the 1980s (Mormino 2005:241-245; Kendrick 1964:231).

Signed into law by Governor McCarty in 1953, Chapter 340 of the 1953 Laws of Florida, popularly known as the Florida Turnpike Act, created a turnpike authority and the genesis for the Sunshine State Parkway. The initial legislation called for a peninsular toll road between Dade County and Duval County. In June 1955, following planning and engineering, the Florida Legislature authorized a $70,000,000 bond issue and construction on the turnpike began a month later. In 1956, the turnpike authority shelved some of those plans when the state-long Interstate 95 was planned to connect Jacksonville with Miami. A scaled back version of the turnpike created a toll road from Miami to Fort Pierce with forty-two miles of the turnpike south of Stuart to be part of Interstate 95. In January 1959, Governor Collins directed that the toll road be extended from Fort Pierce to Wildwood, and in 1960 approved the sale of $55,000,000 in bonds to finance the extension. In January 1966, the State Road Department authorized traffic counts to justify the construction of a separate Interstate 95 from the Turnpike. On the west coast, the turnpike authority investigated a toll road between Tampa and Miami, but Congressman William C. Cramer of St. Petersburg thwarted the authority's plans. Instead, Cramer helped steer an federal interstate loop through Pinellas County, connecting to the Sunshine Skyway Bridge and extending Interstate 75 south to Naples and then across the peninsula on Everglades Parkway, or Alligator Alley, to Fort Lauderdale. The Florida Turnpike, later re-named Ronald Reagan Turnpike, connected Orlando with Miami, taking into its systems rural outposts of Wildwood in Sumter County and Yeehaw Junction in Osceola County (Mormino 2005:243-245).

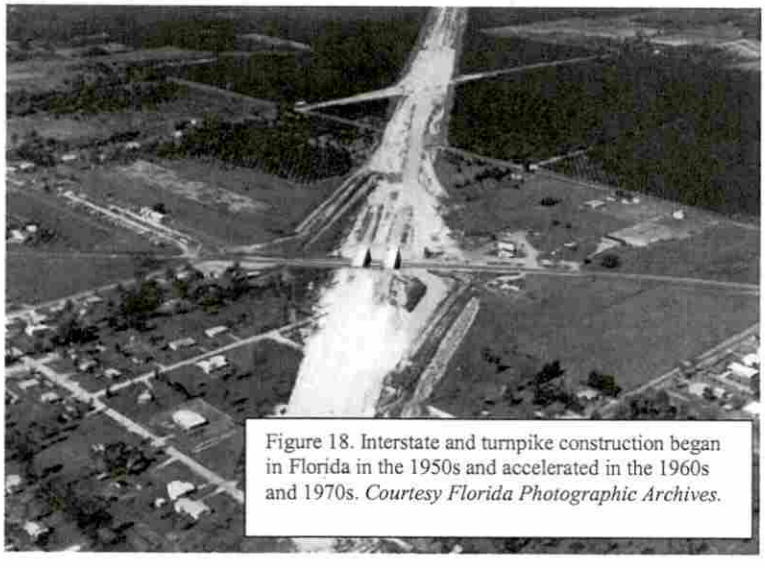


Figure 18. Interstate and turnpike construction began in Florida in the 1950s and accelerated in the 1960s and 1970s. *Courtesy Florida Photographic Archives.*

Whereas earlier state roads and federal highways had been designated and built along age-old corridors and established roads and trails, Florida's interstates and turnpike often punched through existing commercial and residential districts. Interstate 4 and Interstate 95 skirted developed areas of Daytona Beach, and the latter avoided built-up regions of Fort Pierce, Melbourne, and Vero Beach. But, Interstate 95 extended through established residential neighborhoods in most South Florida cities. In Tampa, Interstate 4 and Interstate 75 tore into the Latin quarters of West Tampa and Ybor City. Their intersection became known as "malfunction junction." In Jacksonville and Miami, planners, politicians, and businessmen targeted racial and ethnic neighborhoods for urban interstate alignments. In Miami, interstate building cleared eighty-seven acres of Overtown. The destruction displaced hundreds of residents and generated new ghettoes adjacent to those neighborhoods-turned-to-interstates. In Orlando, Interstate 4 and the East-West Expressway divided Parramore,

a historic African-American neighborhood. In Jacksonville, Interstate 95 was built with some of the tightest radius interstate curves in the nation to avoid the downtown and Riverside and San Marco neighborhoods, but divided Brooklyn and several other decades-old African-American neighborhoods. Interstate highways in Hillsborough County alone destroyed 3,300 residences and many businesses and stores. Encouraging speed and efficiency, interstates became expressways through cities rather than to cities. Suburbs emerged along them and in many places downtowns became irrelevant (Mormino 2005:242-247, 250; Gannon 1996:431).

Historian Gary Mormino characterized the Federal Interstate Highway System as a triumph of technology and engineering, embodying the best and worst of American society. Interstate highways encouraged high-speed long-distance travel, but undermined downtowns and spurred suburban development. Large number of trucks eroded the nation's railroad system, but brought foods and goods to rural isolated areas, and prosperity to businessmen and jobs to workers. The automobile became a grim reaper with 3,000 persons dieing in traffic crashes on Florida's highways and roads in 2000. The growth of expressways and roads, especially in urban areas, were perceived by some as barriers to inter-city movement, rather than improving access. In the interest of decreasing travel times, the widening of some highways and roads resulted in destruction of scenic corridors. Locally designated as Colonial Drive, State Road 50 through Orlando was widened at the cost of decades-old live oak trees, filling in parts of two lakes, and transforming the canopied drive north of the downtown into a barren commercial strip of concrete and asphalt (Mormino 2005:251-252).

Even as 1960s road widening projects in Florida eroded downtowns and destroyed picturesque streets, preservation forces began to document and recognize roads and trails. Nationally, the historic preservation community focused primarily on individual buildings and historic districts, predicated primarily on architecture. Early recognition of historic roads and trails began with supporting and ancillary features, such as Casselman's Bridge on the National Road (NR 1966) near Grantsville, Maryland; the Old National Pike Milestones (NR 1975) near Bellgrove, Maryland; Inns on the National Road (NR 1976) in Cumberland, Maryland; and Overseas Highway and Railway Bridges (1979, boundary increased 2004) in the Florida Keys. A few road segments appeared in the National Register in the 1970s associated with well-established roads and trails, such as the Barlow Road Segment of Oregon Trail near Wemme, Oregon (NR1974) and the Wells Springs Segment of the Oregon Trail (NR 1975) near Boardman, Oregon. Those humble beginnings belied the extensive amount of change occurring to the nation's highways, roads, and trails as they were paved, re-paved, widened, and improved during the 1970s and 1980s. A broader renewed interest in highways, roads, and trails began in the early twentieth century with the Arkansas Highway History and Architecture Multiple Property Submission (NR 2001) and the Lincoln Highway Heritage Corridor Historic Resources (NR 2003) in Pennsylvania. In the process, preservationists began to understand that roads and trails no longer simply led to places; they were places, some of which were historic places.

In 1966, the Florida Legislature officially designated a surviving portion of old Florida State Road No. 1 as Old Spanish Trail, appropriating the informal designation from the 1920s association. In the 1970s, the *Pensacola News-Journal* launched an ambitious project to preserve a portion of the brick-paved State Road No. 1. Federal recognition of Florida's early roads and trails emerged through the significance associated with the state's bridge engineering and trails in archaeological sites. Those early National Register Nominations included the Overseas

Highway and Railway Bridges (NR 1979); the First American Road in Florida Archaeological Properties of the Naval Live Oaks Reservation (NR 1994) in Santa Rosa County; and the half-mile long Anhinga Trail in the Archaeological Resources of Everglades National Park MPS (NR 1996). Florida State Road No. 1 (NR 1994), a six-mile-long nine-foot-wide brick-paved road, achieved distinction as the first early-twentieth road listed in the National Register in Florida. It derives significance under Criteria A and C in the areas of engineering and transportation. The Jungle Trail (NR 2003) in Indian River County recognized a 1920s unpaved dirt trail under Criterion A for its transportation and entertainment/recreation significance near Vero Beach. A ten-mile long nine-foot-wide brick-paved segment of the Dixie Highway (NR 2005) extending between north Flagler County and south St. Johns County was recognized for its engineering and transportation significance.

In 1969, the Florida State Road Department was merged into the newly-created Florida Department of Transportation (FDOT). The FDOT was created by the reorganization of eight state agencies into a single Department to manage Florida's transportation systems. The Department was created to oversee, license, and/or inspect airports, bridges, highways, public transit systems, and rail lines. The Department was also charged with conducting research and developing policies for a state comprehensive transportation plan; coordinating the transportation services of government agencies and private sectors; and directing the design, construction, and maintenance of the state highway system (Ch 69-106 Laws of Florida).

In the 1970s, the Florida Legislature continued to memorialize its members and persons of local significance by naming highways and roads for them. It also responded to pressures from the historic preservation community to designate historic roads, resulting in the states' historic highway program. Criteria for designation was largely political, similar to memorializing highways, but included documentation of the general history of a road without subjecting it to the assessment and evaluation of integrity and significance for listing in the *National Register of Historic Places*. The program provided, among other measures, protection and oversight by the Florida Department of State for any proposed alterations to the road, signage, vegetation, adjacent historic structures, or other features. In 1973, the Florida Legislature designated U.S. Highway 1 between Florida City and Key West as the Harry S. Truman Overseas Highway, a memorial designation rather than a historic designation. Two years earlier, President Truman had died, prompting Florida's politicians and historians to capitalize on Truman's "vacation White House" in Key West and appropriate his name to memorialize the highway leading to the nation's southernmost city. Five years later, the *National Register* recognized the engineering significance of the highway and bridges associated with the Truman Overseas Highway.

Many of Florida's early historic highway and road designations came from Miami and South Florida. In 1974, the Florida Legislature designated Old Cutler Road between Coconut Grove and Cutler in Dade County as a historic highway, one of the earliest such designations in Florida. In 1980, the legislature recognized Bird Road Highway for its transportation heritage as an early road linking Biscayne Bay with Coral Gables and its associations with landscape architect Frank Button. Sunset Drive in Dade County was designated a historic highway in 1983. In 1986, the Florida Legislature designation Interstate 95 between the Georgia State Line and Miami as the Dwight David Eisenhower Veterans Memorial Highway and Calle Ocho, part of Miami's "Little Havana," a historic road. In 1986, Crandon Boulevard on Key Biscayne received the state designation of historic highway. In addition to several other historical events and associations, the Florida Legislature

recognized Crandon Boulevard for its significant Tequesta Indian artifacts within the median. In 1989, the legislature designated Red Road between S.W. 8th Street and S.W. 72nd Street in Miami as a state historic highway. In 1989, the legislature recognized the efforts of William V. Chappell, Jr. by designating a 2.2-mile segment of U.S. Highway 301/441 between Silver Springs Boulevard and the Old Gainesville Road in Marion County as the William V. Chappell, Jr. Memorial Highway. While a historic-period road, the Chappell Memorial Highway simply recognized the achievements of a prominent politician, but not the road as a historic place. Two years later, the Old Apopka Road Historic Roadway was designated between Eatonville and Maitland in Orange County. In 1992, the legislature took action to re-designate Rainbow Springs Boulevard, which had been designated in 1971, as Wallace E. Sturgis Memorial Highway. Between Sarasota and West Palm Beach, the Florida Legislature designated State Road 70, State Road 72, and State Road 710 as Coast-to-Coast Highway. Florida's Historic Roads and Trails MPS builds upon previous research and *National Register* Nominations to facilitate the inventorying, documentation, evaluation, and registration of Florida's remaining historic highways, roads, and trails.

National Register of Historic Places Continuation Sheet

PROPERTY TYPE: F.1

1. Name of Property Type: Florida's Historic Roads and Trails

2. Description: Florida's historic roads and trails represent a small but meaningful collection of historic resources developed over a broad span of time, extending between the colonial period and the early twentieth century. Prior to the late-1990s, linear resources were not typically recorded during cultural resources assessment surveys with the exception of some older roads and trails, such as the King's Road, which were recorded and treated as archaeological sites. By 2005, approximately 200 roads and trails were recorded in the Florida Master Site File. As of 2008, parts and segments of approximately 240 roads and trails have been inventoried in the Florida Master Site File. Documented trails with Native-American associations include the Ekanachattee Trail in Bay, Walton, and Washington counties, Grayton Trail in Walton County, and the Chocachatti Trail in Pasco County. Other trails consist of segments of the Hernandez-Capron Trail in Brevard County, Indian River, and St. Lucie counties, the Eustis Trail in Palm Beach County, the Fort Mellon Road in Polk County, Twigg's Trail in Okeechobee County, and the Aqua Vista Trail in Dade County all of Second Seminole War vintage. Military roads associated with Fort Basinger and Fort Fanning of the Second Seminole War have been documented. Various segments of the eighteenth-century 150-mile long King's Road have been documented in Nassau, Duval, St. Johns, Flagler, and Volusia counties. By contrast, only one segment of the 460-mile Bellamy Road has been documented in Columbia County. Perhaps no Florida road has been documented more heavily than the Dixie Highway, which had east and west branches through the Sunshine State bringing its total mileage in Florida along to approximately 600 miles. Built in some counties with brick, in others with concrete, and still others initially with shell, the eastern branch of the Dixie Highway has been documented in Broward, Brevard, Dade, Flagler, Indian River, Nassau, Palm Beach, St. Johns, and St. Lucie counties. In rural areas of North Florida and Central Florida, forest roads in national forests contrast with turpentine camp roads.

Historic road types include aesthetic routes, cultural routes, and engineered routes. Designed for scenic enjoyment, leisure, recreation, or commemoration, aesthetic routes often follow the natural topography of a region, winding through river valleys, ridge tops, or slopes. Seldom intended as the most direct route between places, aesthetic routes may influence a larger landscape. The most common type of historic road, the engineered route is designed for efficient movement of people, goods, and services. Cultural routes are historic roads that evolved through necessity or tradition. These may be roads that evolved from Native American or animal trails, footpaths between farms or villages, or following river courses. They often do not have will not have the design and construction legacy of aesthetic and engineered routes. Most of Florida's historic roads and trails are engineered routes, but some, such as State Road A1A and Tamiami Trail also have segments considered aesthetic routes. Historic roads and trails in Florida determined eligible for the National Register include the Dixie Highway in Broward County (BD4227), Old Dixie Highway in Brevard County (BR1924), Fellsmere Grade (IR1085) in Indian River County, Hulett Colonial Road (FL239) in Flagler County, King's Road near Durbin in St. Johns County (SJ13980), and Old King's Road South (SJ4893) in St. Johns County. Florida's historic roads and trails individually listed in the National Register

consist of First American Road in Florida (SR66) in Santa Rosa County, Florida State Road No. 1 (SR1313) in Santa Rosa County, Jungle Trail (IR121) in Indian River County, Old Dixie Highway (SJ4843) in Flagler County and St. Johns County.

Descriptions and definition for roads and their engineering in this Multiple Property Submission (MPS) are derived from a variety of primary and secondary sources, including various biennial reports and publications issued by the Florida Department of Transportation and its predecessor organizations; congressional documents on road construction, conditions, and mileages in the United States; Peirce and Moorefield's *Vitrified Brick as a Paving Material for Country Roads* (1913); articles from *Engineering Magazine* (1867-1930); *Paving and Municipal Engineering* (1890-1896); and *Municipal Engineering* (1896-1918); Kendrick's Florida Trails to Turnpikes (1964); articles from *American Historical Review* and *Florida Historical Quarterly*; and the United States Department of Agriculture *Yearbooks*.

3. Significance: In general, Florida's historic roads may possess significance in the areas engineering, military, and transportation, among others, at the local level under NRHP criteria A, B, C, or D, ~~or combinations thereof.~~ National Register guidelines define significance as "...the length of time when a property was associated with important events, activities or persons, or attained the characteristics which qualify it for National Register listing. Period of significance usually begins with the date when significant activities or events began giving the property its historic significance; that is often a date of construction" (National Register Bulletin 16, 1997). The significance embodied by Florida's historic roads and trails is often associated with their engineering, but also with the human activities associated with them through their uses as transportation systems and within concepts of community planning and development. Some roads possess significance as examples of national or regional trends in engineering; others are examples of specific creative regional responses associated with the location, site, and period in which they were constructed, or simply cleared and developed over time by use. An antebellum road built by military personnel, in part, to provide for the defense of a region may possess significance in the areas of military and transportation, but not engineering because in many cases the road construction involved little more than the felling of trees and clearing of stumps. Native American trails often developed over time, often beginning as paths created by animals to locate water holes. Some roads and trails developed through informal processes rather than through any specific engineering system applied to the soil. For instance, a road may possess local significance in the areas of engineering and transportation associated with its design and construction to improve movement of people and commerce within its jurisdictional limits. In other cases, a road may possess statewide significance as part of a state transportation system. The movement of troops and later settlers created the tangible road, which often contributed to a subsequent larger regional road system. Similarly, a public road built by a government entity may have been subsequently used for the movement of military troops in time of war and possess significance in the areas of engineering, military, and transportation. No single significance may be associated with these roads; instead, individual roads may possess a shared significance of time and place.

4. Registration Requirements: For Florida's historic roads to be eligible for nomination under the F.1 property type they must possess both significance and historic physical integrity, serve a historic transportation function; have been constructed during the period outlined in Section E; and lie within the State of Florida. Eligibility for individual

roads and trails is restricted to well-preserved examples that retain sufficient historic physical features to convey the historic identity, significance, and associated historic period of a road or trail.

Linear historic resources are often interrelated with a surrounding landscape and should be viewed as linear historic districts. Historic districts may be formed around historic roads and trails using identification and documentation methods that discuss the linear corridor, engineers and builders associated with the corridor, associated platting techniques and buildings for historic resources adjacent to the corridor, landscape features, significant local events associated with the road and associated historic district, and/or the activities of persons significant in local history. The ending boundaries of linear historic districts should be related to historic places, that is, a prominent intersection or a historic corner, a city, town, or village, or an existing historic country store that can be clearly demonstrated historically as a terminus along a historic road or trail. Beyond the linear resource itself, those historic resources should also retain their historic physical integrity to a high degree.

A historic road may be defined at one or even both ends by new or modern termini, for instance, when a 1950s, 1960s, or 1970s replacement highway provided a nearby new corridor to improve safety, destroying part of the historic road while leaving a segment of the historic road. The introduction of an interstate or turnpike complete with overpasses and interchanges may also represent a new terminus, predicated on the transportation significance of the older road as a corridor providing access from a historic place to the new limited access highway. In those cases, the date of the corridor change should be evaluated using the National Register's 50-year cut-off date to attach significance to the design and construction of the new highway.

In other cases, historic linear corridors may contain non-contributing segments. A non-contributing property is defined as not being present during the period of significance, or due to alterations, disturbances, additions, or other changes, it no longer possesses historic integrity reflecting its character at that time or is incapable of yielding important information about the period, or it does not independently meet National Register criteria. Non-contributing road segments may result from the process of widening a historic road, paving over the original material with incompatible materials, or even introducing new culverts under a historic road that may have destroyed the original roadbed. The establishment of a new road or bridge that intersects with or overpasses the historic road where none existed in the historic period may result in a non-contributing segment. Although the original materials and corridor system may remain intact for the historic linear corridor, the visual impact of the new highway or bridge may result in a larger non- contributing segment than the disruption of the original road fabric by the new highway or the vertical space above the bridge, say 300 feet on both sides of the modern intrusion. In any case, the mileage of non-contributing segments should be assessed, evaluated, and counted in the overall mileage of the linear corridor and clearly shown on maps of the linear corridor or historic district. Non-contributing segments of a historic linear corridor should not amount to more than 40 percent of the corridor being assessed and evaluated for eligibility.

Roads and trails must retain their historic physical integrity to a high degree whether they are nominated individually to the *National Register* or contribute to a historic district. The Secretary of the Interior's *Guidelines for Rehabilitating Historic Buildings* shall serve as a guide for gauging eligibility. Alterations to a road are to be treated sensitively and evaluated as part of the development of the road during the historic period. Materials remain a key

feature in the assessment and evaluation of roads and trails. Alterations to the original design and appearance of a road outside the historic period may not preclude it from eligibility, but sufficient historic physical features must remain to convey its historic physical integrity. Alterations made during the historic period discussed in Section E are to be treated sensitively and evaluated as part of the historic development of the road. For instance, the widening of a 1910s or 1920s nine-foot brick road by paving over the original shoulders with asphalt in the 1930s, 1940s, or 1950s does not preclude a structure from eligibility. The complete re-paving of a brick road with asphalt during the period of significance may not preclude it from eligibility, but may eliminate engineering as an area of significance. A dirt, lime rock, or shell road or trail paved with asphalt or concrete outside the historic-period or period of significance is generally ineligible for the *National Register.* A brick road re-paved with asphalt or concrete surfaces applied outside the period of significance is also generally ineligible, even if the original nine-foot width and historic setting remain. If asphalt pavement was applied during the period of significance, the road should be considered eligible for the *National Register* even though the original materials lie dormant under the replacement surface.

If a historic-period dirt path or trail is dormant under decades of overgrowth, has mature trees growing within the original alignment, and/or it is no longer visibly discernible, then the historic-period dirt path or trail generally will not be not eligible for the *National Register.* If, however, a narrow historic path or trail exists within a corridor defined by a canopy of trees or tall undergrowth but is not clearly discernable at grade, then the dirt path or trail may be eligible for the *National Register.* Its eligibility should be predicated on the path or trail being supported by historic termini. A historic-period road, trail, or path without at least one historic terminus, or reference point, is generally ineligible for the *National Register.* A clearly defined terminus is an important component of historic roads and trails. Termini may take the form of historic-period camp sites or villages documented by archaeological investigations, historic-period crossroads, historic-period way stations or stage stops, historic-period plantations or farms, river or creek crossings, or major wetlands that historically interrupted the path or trail. In general, a road and trail segment of without a historic place name or terminus as discussed above is generally not eligible for the National Register. Road segments without a historic reference point should be considered insufficient for assessment and evaluation. A road or trail segment in association with a historic-period farm, plantation, or village should be assessed within the larger framework of the historic rural landscape.

The assessment and evaluation of road segments should be predicated largely upon the history of the particular road. If a road historically was 400 miles long, but presently only 150 miles of the road retains sufficient historic physical integrity, the entire route should not be considered as a historic district. Instead, the miles retaining their historical physical integrity should be associated with historic places names or important features significant in the history of the roads. Short segments, even those several miles in length, should not be considered eligible even if they retain their historic physical integrity unless they can be associated with historic termini, For instance, if a historic rural road built to a length of seventy miles has only ten miles that retain their historic physical integrity, then those ten miles should be tied to a historic place name, that is, a country store, town, village, creek, or river. The historic road should be tied to a central historic place name or feature, in part, to meet integrity sufficiency with regard to its transportation significance and integrity of setting. A historic road segment radiating out from a central historic place or feature should be able to convey the association of transportation, travel, or movement. In general, the length of a historic road is less important than its historic physical integrity of location as it is related to the connecting of

distant points. Generally, road segments dissociated from their associated historic places, that is, the places to which the road extended and the primary reason behind the construction of the road, cannot convey transportation significance and integrity of location, association, and feeling.

Alterations in the form of modern roads, large overhead power lines with clear cut rights-of-way, reforestation projects, and plowed fields may result in non-contributing path or trail segments. If evidence of engineering significance remains apparent for a dirt road, such as a raised roadbed, even with mature trees growing within the original alignment, it may be considered eligible under Criterion D for its potential to yield important information regarding engineering concepts associated with its period of significance. Cross-trenching and soil profiling in archaeological investigations of historic roads may be insufficient for assessing and evaluating significance. Some dirt roads of the eighteenth and nineteenth century were built by little more than the clearing of trees and stumps. Consequently, because no material culture, engineering concepts, or design features were involved in the construction of the road or trial, beyond surveying the route, felling trees, and building it to the correct width, then other facets of integrity should be assessed and evaluated, such as association, location, setting, and feeling.

In general, the Secretary of the Interior's *Standards for Rehabilitation,* codified in 36 CFR 67, and NRHP Bulletin 15, *How to Apply the National Register Criteria for Evaluation,* shall serve as guides for gauging eligibility. Historic-period roads and trails must retain their historic physical integrity to a high degree. Integrity is defined as the ability of a property to convey its significance. In general, properties eligible for listing under this MPS cover must retain their historic physical integrity to the extent that they convey their historic significance. It should be recognized that although general guidelines may be useful, the integrity of individual roads and trails must be evaluated on a case-by-case basis. There are seven aspects or qualities of integrity: location, design, setting, materials, workmanship, feeling, and association. The importance of these aspects under this MPS cover is as follows:

Location. Location is the place where a historic road was constructed or the place where the historic event occurred on a road. It is the most important aspect of integrity. To possess integrity of location, a road must be in the same location in which it was built during its period of significance. The specific location of a road is important in the interpretation of historical events and the specific engineering and construction systems used to build it at that location. Furthermore, the particular location of a historic road reflects important general information about the locations of cities, farms, towns, and villages from which, by which, to which, and/or through which a historic road extended. The locations of historic roads should be documented using historic-period aerials, legal and rights-of-way descriptions, and maps. Location bears upon alignments and corridors associated with historic roads and trails. A realignment of the original location of a historic road within the declared right-of-way generally will not preclude a road from eligibility. Realignments that soften a curve or slightly reduce an incline also generally will not preclude a road from eligibility. The relocation of a historic road outside the historic-period right-of-way disrupts the historic physical integrity of location, compromising the understanding about the course of travel over the original route. Historic roads require verification through legal sources that the land nominated is the actual location of the road, and that the actual road right-of-way corresponds with the historic road right-of-way. The location of historic road segments may be interrupted by modern buildings, fields, or simply destruction of materials or setting, but the

historic segments in their original locations can be nominated under this cover. While some transportation structures, such as bridges, can often possess integrity after being relocated to a new site, roads and linear alignments cannot. Consequently, all roads associated with this property type should occupy their original locations to possess significance under either Criterion A, B, or C. The integrity of location for historic roads must be evaluated on a case-by-case basis. D?

Design: Design is the combination of physical elements planned, developed, and constructed to create the historic alignment, corridor, expression, form, plan, and space of a road. For roads, the design relates to the engineering system used to create and build the road, solutions for culverts, curbs, and foundations, as well as the roadbed itself. The design for a single road may not be uniform because of regional irregularities associated with creeks, soils, and wetlands along its alignment. In addition, some roads were built in segments, for instance, between river systems, river-to-town, from city limit-to-county-line or county-line-to-county-line. In some cases, historic roads were built from a city or town limit to a point a certain number of miles outside the municipality where financial resources were exhausted. Those road segments should be documented, assessed, and evaluated based on their historic physical integrity and the extent of their construction during the period of significance. Because of irregularities that may have occurred associated with various builders, different construction time frames, and the introduction of new technologies, the design of a historic road may not be uniform. The design also relates to the alignment, causeways, culverts, curbs-and-gutters, embankments, ditches, grading, guardrails, roadbed thickness, roadbed width, and related structures. Roads should retain their original design to a high degree. The alteration, change, or removal of original design features may exclude a road from eligibility. The integrity of design for individual roads must be evaluated on a case-by-case basis. as a whole, or pieces?

Setting: Setting of a historic road consists of its physical environment, that is, the road itself and the properties adjacent to the right-of-way. A historic road may run through sparsely populated rural scenic areas, along a shoreline or river, or through densely developed commercial, residential, or urban areas. To retain integrity of setting, the general land uses adjacent to a historic road must be similar to historic land uses. Adjacent historic properties help to convey the transportation function of a historic road and should retain sufficient historic appearance to convey their functions during the period of significance. The current physical surrounding environment, whether rural forests, pastures, farmlands, agricultural fields, beach sand dunes, canals, lakes, ponds, rivers, or suburban tracts, should resemble its historic character and setting. Some roads may have lost their historic physical integrity of setting as the result of new suburbs altering historic agricultural, rural, or wetlands landscapes. The destruction of prairies and savannahs, clear cutting of forests, or new developments and towns, such as Palm Bay, Sandestin, Seaside, and Viera, generally will disrupt the setting of a historic road. In other cases, suburbs of the 1940s and 1950s associated with roads built during those periods of significance have yielded to new commercial centers, thereby creating a loss of historic physical integrity of setting for historic roads. The setting of a road considered for nomination requires verification that the land being nominated corresponds with the historic setting. In general, the setting should reflect the character of the historic period with minimal intrusive elements. The integrity of setting for a historic road must be evaluated on a case-by-case basis.

POS

being evaluated for eligibility

Materials: Materials are the key physical elements that provide a road with integrity. Surface materials are often treated as mundane, but instead are the defining feature of a historic road. To possess historic physical integrity, a road must display the materials that were engineered, assembled, and combined during a historic period in a particular pattern or configuration to form a road. A road must retain those key materials dating from its period of significance to be eligible. Historic materials should accurately reflect the time in which a road was constructed, resurfaced, and repaired during the historic period. Those historic materials may consist of but not be limited to asphalt, bricks, concrete, lime rock, logs, macadam, packed earth, and planks. The engineering developed to put these materials together should be clearly evident.

The following constitute common materials used to pave roads in Florida during the historic period. **Asphalt** is a brown-to-black solid or semisolid bituminous substance found in natural beds or as a by-product in refining petroleum. It consists chiefly of hydrocarbons and varies in form from hard and brittle to plastic. It is insoluble in water but is soluble in gasoline. For road paving, asphalt historically was heated and mixed with crushed stone or sand. **Brick** used to pave Florida's historic roads were called vitrified brick. Hard-fired clay bricks, they were glazed in kilns at temperatures sufficiently high to fuse grains and close the surface pores. The firing process made bricks impervious to water and highly resistant to chemical corrosion. Some vitrified brick-paved roads latter re-paved with asphalt and dug up decades later were found to retain their original character with little or no penetration by the asphalt into the brick finish. The curing process after the kiln firing required seven to ten days with the resulting brick possessing a crushing strength of eight to ten thousand pounds per square inch.

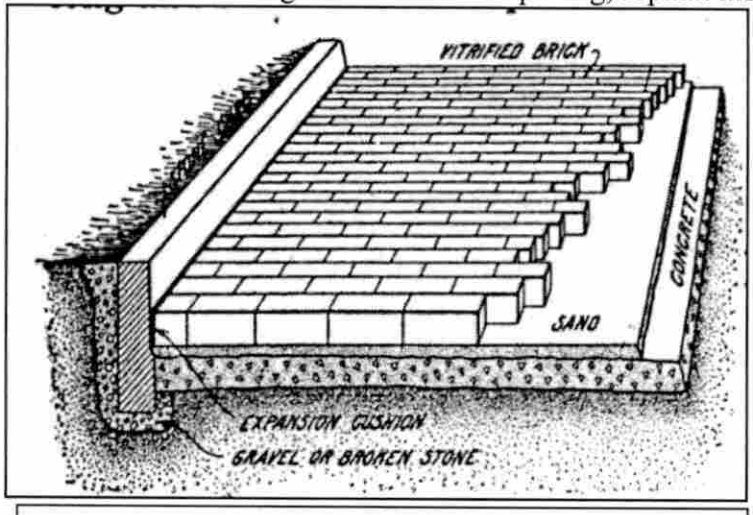


Figure 19. Many early twentieth century brick-paved roads used the above paving profile. In contrast, most of Florida's brick paved roads were set directly on rolled dirt or a shell roadbed rather than concrete. *Courtesy American Association of State Highway Officials.*

Concrete used to pave Florida's roads and highways historically was a proportioned combination of aggregate stone, fly ash, lime, Portland cement, sand, and other admixtures with water to form a solid mass. **Lime rock** to pave Florida's historic road was harvested from quarries in various regions of the state, but especially Dade County and Hernando County. In Dade County, the Ojus rock was a popular material, comprised of oolitic lime rock, a sedimentary calcium carbonate rock, mined in Northeast Dade County. In Hernando County, lime rock was often found in association with natural phosphate deposits. In Hernando County, lime rock quarries were developed by the Brooksville Prepared Stone Company, Consolidated Rock Products Company, Florida Portland Cement Company, Florida Rock Products Company, and the William P. McDonald Corporation. Most of Florida's lime rock paved roads were formed from unconsolidated or partially consolidated lime rock forms containing shells or shell fragments graded, packed, and rolled with grass shoulders.

Macadam is a type of road construction pioneered by Scotsman John McAdam about 1820. It consisted of creating three layers of stones laid on a crowned subgrade with ditches for drainage. The first two layers consisted of angular aggregate with a maximum size of three inches to a depth of approximately eight inches. The third and top layer measured approximately two inches thick with aggregate no larger than one inch in diameter. Each layer was compacted with a heavy roller causing the angular stones to lock together. Roads constructed in this manner were described as macadamized. With the introduction of automobiles dust and grit became a serious problem on macadam roads. The vacuum created under moving vehicles sucked dust from the shoulders onto the road, creating an abrasive reaction with the stones and gradually raveling, or pulling apart, the road material. This problem was rectified by spraying tar on the surface to create tar-bound macadam, or tarmac. While most macadam roads have been resurfaced in the United States, some preserved stretches remain, such as on the National Road.

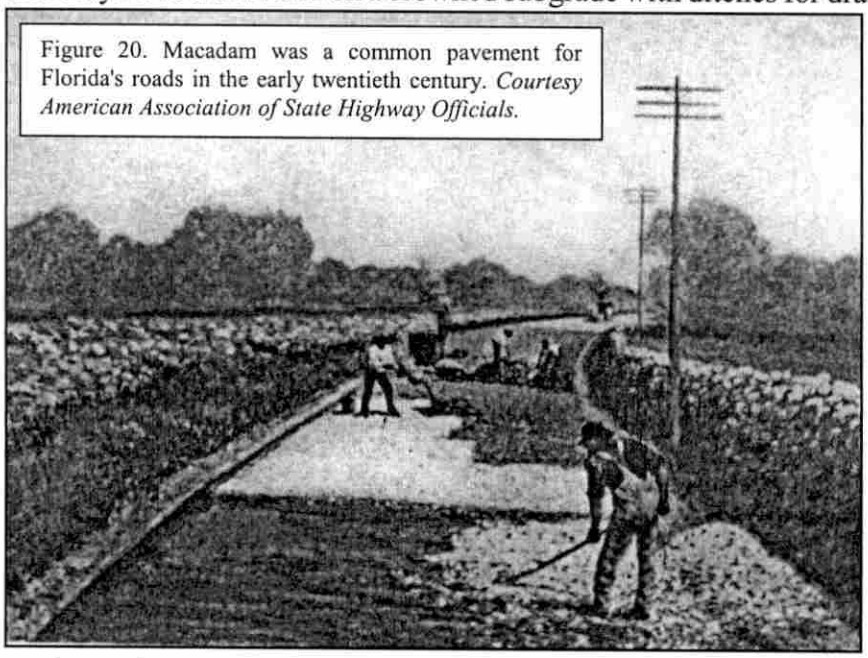


Figure 20. Macadam was a common pavement for Florida's roads in the early twentieth century. *Courtesy American Association of State Highway Officials.*

Historic POS

Original road materials should not be altered or obscured. A historic dirt road or trail paved with asphalt or concrete outside the historic period generally will not be eligible for the National Register. Subtle changes in the color of asphalt, the size of aggregate, and the height of the pavement can also affect historic physical integrity. Surface patching of historic vitrified brick or concrete roads with asphalt may have an adverse affect on the historic material cultural and historic physical integrity of a road. If a historic-period brick or concrete road is covered by modern asphalt, then it cannot be assumed the original material is dormant under the still there, precluding it from eligibility under Criterion D. Even if the original brick or concrete is confirmed to be dormant under the modern surfacing, it cannot be assumed that the historic materials have integrity. In the same way that a modern material cannot obscure the original façade of a historic-period building being assessed for *National Register* eligibility, a historic-period road built with brick cannot be obscured by modern materials. For instance, the resurfacing of a historic brick road with asphalt or concrete outside the historic POS period is analogous to the alteration of a historic building by altering its historic roof materials, wall materials, fenestration materials--it represents a complete change of materials. In the event that an original brick road was subsequently resurfaced with asphalt during the historic period, the road materials still have significance dating from the time of the resurfacing.

Bold or corduroy

For historic plank roads, a system of logs, planks, and earth should be evident. If an original plank road was subsequently rebuilt or repaved with brick and then with concrete, the integrity of material relates to the most recent surfacing; the most modern material should guide the evaluation, assessment, and date of significance for the road.

were the planks removed? Could be D if still there

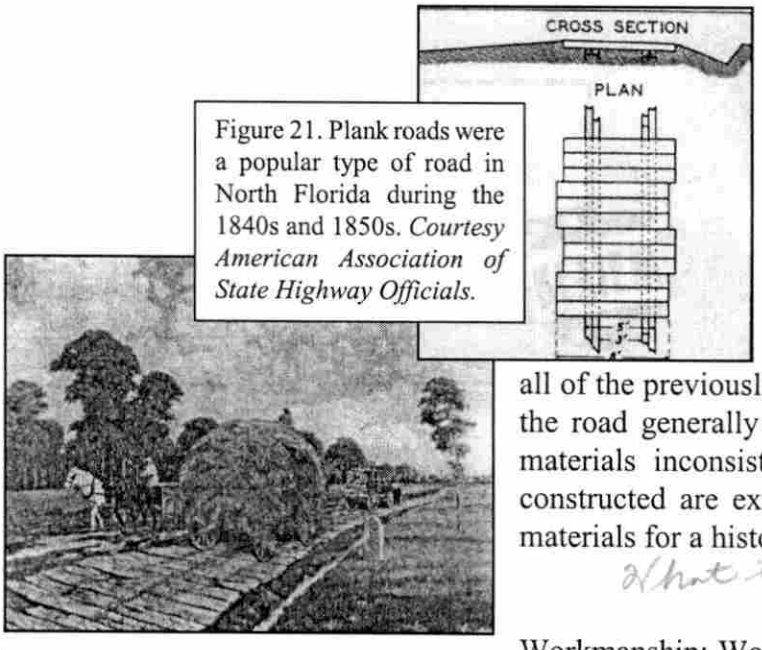


Figure 21. Plank roads were a popular type of road in North Florida during the 1840s and 1850s. *Courtesy American Association of State Highway Officials.*

The repair of historic roads should be conducted with compatible if not the exact materials associated with the original surfacing. Replacement of original materials with incompatible materials compromises the integrity of a road and the interpretation of historic events associated with the road. Materials extend beyond paved surfacing to include curbing, guardrails, sidewalks and pathways, fences, and walls, each of which should be assessed for historic physical integrity. Yet, if a historic-period road has all of the previously-referenced features but lacks its brick paving, then the road generally will not be eligible. In general, roads that display materials inconsistent with the historic period in which they were constructed are excluded from individual eligibility. The integrity of materials for a historic road must be evaluated on a case-by-case basis.

Workmanship: Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history. Workmanship on some early roads will not be a factor in evaluating integrity, largely because those structures were developed by the simple act of felling and removing trees and stumps, and the subsequent passing of horses, wagons, and travelers over the established route rather than by intentional workmanship. The integrity of workmanship in other cases will be important, for instance, for brick roads the historic fabric including the paved roadbed, curbs, and shoulders should display their original workmanship. The integrity of workmanship for a historic road must be evaluated on a case-by-case basis.

Feeling: Feeling is a property's visual expression of the aesthetic or historic sense of a particular period of time. Integrity of feeling may be associated with the concept of retaining a sense of place. To that end, the setting and feeling of a historic road or trail are inextricably linked. In general, a road that retains its original design, materials, workmanship, and setting will relate the feeling of a historic road. Historic roads contribute feeling, or a sense of place. Those roads that have been altered in terms of design and materials, especially, will lack historic feeling, or a sense of place. They simply will not feel historic. A historic-period dirt road or trail, however, may be more difficult to assess and evaluate than a historic-period paved road. Because no design or materials may have been employed in the development of a paved road, then the integrity of feeling will become more significant and measured with association and location. The integrity of feeling associated with a historic road must be evaluated on a case-by-case basis.

Association: Association is the direct link between a historic road and the significant transportation it provided, an important historic event, and/or a significant person. Association relates pertinent National Register themes, generally engineering and transportation, to a historic road. Integrity through association can play a key role in assessing eligibility. While some historic events associated with the development of a road may have occurred at a

state government office building, engineer's office, or road building company, the most tangible manifestations of these activities may be other properties, such as the roads themselves. A historic road retains its association if it retains its historic physical integrity of design, location, and materials. The association between a historic road and vehicular traffic on it, especially with regard to Florida's tourist industry and the transportation of citrus from grove to packing houses, is an important aspect of associative integrity. The integrity of association for a historic road must be evaluated on a case-by-case basis.

how about association with termini — is it still the main means of access?

SELECT CASE STUDIES

- use to devise generic examples, as in Bulletin 15

The following case studies illustrate some of the central issues associated with the assessment and evaluation of historic roads and trails for the *National Register*.

Pinetree Drive, Miami Beach, Dade County

In 2001, a Cultural Resource Assessment Survey (CRAS) of SR 112/41st Street/Arthur Godfrey Road and Pinetree Drive was conducted. In anticipation of the Florida Department of Transportation's (FDOT) proposed improvements to the roadway, the City of Miami Beach prepared a local designation of the Pinetree Drive Historic Roadway, which was approved by the City Commission in June 2001. This local designation did not explicitly address *NRHP* criteria for evaluation and historic physical integrity to the extent needed for the Section 106 process. Background research was conducted to document the historic appearance of Pinetree Drive and determine the importance of the Australian pines that border the road.

Historic research confirmed that Pinetree Drive was historically significant at a local level and *NRHP* eligible. It maintained historical importance under *NRHP* Criterion A based on its associations with the early history of Miami Beach, because the road was directly associated with the plantation and agricultural endeavors of John Collins, considered one of the founding fathers of the City. According to the 1912 plat map, which depicted the "plantation road," an early iteration of today's Pinetree Drive, the roadway may be one of the oldest structures in Miami Beach. Additionally, Pinetree Drive contributed to the area's residential development that occurred to a great extent during the 1920s. For the adjacent neighborhoods that quickly grew during the Land Boom era, the street with its tree-lined medians was an important feature as well as a main thoroughfare for vehicular and pedestrian traffic. Further, the Australian pines bordering the street were planted by Collins.

In addition to maintaining historical significance, Pinetree Drive also retained historic integrity of location, design, setting, feeling, and association. After evaluating research materials, such as historic maps and photographs, Pinetree Drive appeared to have experienced few major modifications between the 1920s and the present day. Although Pinetree Drive no longer conveyed its appearance from the time it was a "plantation road" comprised of sand, the street layout and shape and size of the medians with Australian pine trees remained, for the most part, unchanged since the 1920s, which was considered to be part of the resource's period of significance.

Based on its historical significance and integrity, Pinetree Drive was considered potentially eligible for listing in the NRHP under Criteria A and C in the areas of Community Planning and Development and Transportation. Because Pinetree Drive was treated as a linear historic district, the roadway, and related historic objects including the statue "The Great Spirit" and the Fountain in Liebman Square were considered to be part of a potentially *NRHP*-eligible historic district. SHPO did not render a formal opinion regarding the eligibility of the road.

Biscayne Boulevard, Miami, Dade County

In 1997, a Cultural Resource Assessment Survey (CRAS) of Biscayne Boulevard was conducted by the Florida Department of Transportation (FDOT). The project improvements consisted of full roadway reconstruction for drainage improvements with no increase in number of lanes. It also included the installation of curbed median areas (for access management), new sidewalks, curbs, and gutters. The exception to these improvements was in the Bay Point area (around NE 44th Street to NE 47th Street) where wide, landscaped medians were maintained as well as existing landscaping in these medians, with only new curbs and gutters added. As part of the initial CRAS, the historic Biscayne Boulevard was not recorded. Several years later, when the project was in the design phase, the City of Miami noted that several historic medians in front of the Bay Point neighborhood may be affected by the proposed improvements. Consequently, a Determination of Eligibility (DOE) report was prepared for Biscayne Boulevard, from NE 13th Street to NE 55th Street extending approximately 2.75 miles.

The Determination of Eligibility (DOE) report produced in 2001 included a description of the roadway as it appeared historically and currently as well as an evaluation of the roadway's significance and integrity. Previously the City of Miami prepared a document with the roadway's history, which provided limited background information. Additional research was conducted at the Miami-Dade County Library Florida Room, Historical Museum of Southern Florida, and Miami-Dade County. Historic aerials and photographs and Hopkins Maps were instrumental in determining the changes that occurred to the roadway over time.

Determining the significance of Biscayne Boulevard was straightforward, as the roadway maintained notable historical associations with the planning, development, and transportation of the City of Miami. Construction of Biscayne Boulevard began in 1925 and was completed by 1927. The construction of Biscayne Boulevard from NE 13th Street to NE 55th Street was mostly privately funded as one of the largest and most important infrastructure projects in Miami during the 1920s. Workers and machines cut through some of Miami's oldest residential areas and the Charles Deering Estate to create the road. Once fully developed, the boulevard was a beautiful palm-lined thoroughfare with architecturally exceptional shops, restaurants, and homes flanking it. After its completion, Biscayne Boulevard was the primary traffic route from the downtown to the developments located north of the City's core. Biscayne Boulevard currently remains among the City's most widely used north-south transportation routes.

The primary issue encountered when preparing the DOE primarily centered on evaluating the historic physical integrity of the roadway. The lack of comparative research and contexts related to linear resources made it difficult to assess the integrity of the materials used to construct the road and its contributing elements. It was also difficult to

obtain historic information regarding the road. Research indicated that Biscayne Boulevard's current width and length continued to convey the original width and length of the roadway. It also remains a widely used and continuous road. However, the setting had been extensively modified, as most historic buildings sited along Biscayne Boulevard, particularly in the former Biscayne Boulevard Shopping Center area, were no longer extant. The setting had been further compromised by the addition of modern light poles and traffic signals. Additionally, the majority of the design elements historically associated with the boulevard, such as light standards, medians, and traffic lights, had been removed. Consequently, it was determined Biscayne Boulevard did not retain sufficient historic integrity to convey its significance. Biscayne Boulevard's historic character was no longer evident and it did not physically represent the roadway designed and built in the 1920s. Therefore, it was considered ineligible for inclusion in the NRHP. In a letter dated September 24, 2001, the SHPO concurred with the findings in the DOE document.

Jungle Trail (IR121), Orchid, Indian River County NR

In 2003, Jungle Trail (IR121) was listed in the *NRHP* at the local level under Criterion A in the areas of Transportation as a route to deliver citrus to market and Entertainment/Recreation for its role in mid-twentieth century tourism in Vero Beach with a period significance of 1920-1953. Known locally as Jungle Trail, the trail also carries the other designations of State Road 252, Island Road, Old State Road A1A, and Peninsular Road. Located on a barrier island east of Vero Beach's mainland, the narrow unpaved public road was measured as approximately 7.5 miles long. The trail originally measured 14 miles long from the Vero Beach Bridge to the Brevard County line, linking homesteads settled in the 1880s. Abandonment and development in the 1970s and 1980s destroyed the southern 6.5 miles of the trail south of Old Winter Beach Road. The current width of the roadbed varied between 15 and 27 feet, averaging 20 feet. Research from township maps of the 1840s and 1850s indicated that the region largely consisted of cabbage hammocks and hammocks. The name, Jungle Trail, was derived, in part, from the numerous plants, trees, and vegetation flanking the alignment, including American holly, coontie, coral bean, false mastic, ferns, gumbo limbo, lancewood, magnolia, marl berry, paradise tree, poisonwood, red cedar, saw palmetto, sea grape, strangler fir, wild coffee, and wild olive.

The development of Jungle Trail was sparked after a bridge was constructed between the mainland at Vero Beach to the barrier island in 1919. Designated as a county road in 1920, the trail was designed to speed the movement of citrus to mainland packinghouses. The right-of-way was established as thirty feet. The alignment of the trail incorporated older grove roads, existing and newly-created road segments, and older trails. Consequently, the course of Jungle Trail was built in a series of jogs, skirting wetlands, but largely followed the course of banks of Spratt Creek and the Indian River Narrows lagoon. In 1931, Chapter 15648 Laws of Florida designated the portion of the trail south of Wabasso Beach Road as State Road 252. In 1935, the state road designation was extended to include the trail north of Wabasso Beach Road. In 1941, Chapter 20276 *Laws of Florida* renamed State Road 252 as Peninsular Road. In 1946, Jungle Trail was designated as State Road A1A, but within a decade a new State Road A1A was built closer to the ocean. Periodic grading to eliminate washboard and the addition of new soil to achieve a level surface did not compromise the historic physical integrity associated with the width and roadbed of the trail. In

1989, developers of the Orchid Island Golf and Beach Club successfully lobbied the Indian River County Board of County Commissioners to realign a ½ mile-segment of the trail to permit the development of a golf course, which was built on top of a segment of the original trail. The action prompted concerned citizens and preservationists to designate Jungle Trail as a local scenic and historic road. The realigned ½ mile-segment represented 7 percent of the overall trail and was included in the National Register boundary of the trail as a non-contributing segment. The portion of the original Jungle Trail destroyed by the golf course was not included in the boundary of the trail. A modern 30-foot preservation buffer exists on either side of the road.

Florida State Road No. 1 (SR1313), Milton, Santa Rosa County NR

In 1994, Florida State Road No. 1 (SR1313) was listed in the NRHP at the local level under Criterion A in the area of Transportation as the first modern highway constructed in the Florida panhandle and under Criterion C in the area of Engineering as one of the longest and best preserved examples of the use of early brick highway construction techniques in the State of Florida with a period of significance of 1921-1944. The six-mile brick-and-concrete road carries other historic and contemporary designations: U. S. Highway 90, Old Spanish Trail, Old Brick Road, and Red Brick Road. The six-mile road was financed and built with county and state funds by the Southern Clay Manufacturing Company of Chattanooga, Tennessee. The company laid out, cleared, and graded the alignment, rolling the grade with a ten-ton roller after which a brick roadbed 9 feet in width was laid directly on the grade and secured with concrete curbs 4 inches wide and clay shoulders 3 feet 2 inches wide, bringing the total width of the road to 16 feet. A cement grout finished the brick roadbed, which the company completed in 1921.

The road started near the east bank of Marquis Bayou, .3 miles east of Blackwater River. It extended east along the north side of Marquis Basin, north of and parallel to railroad tracks. Three-tenths of a mile from its western terminus, the road crossed the railroad tracks, but no bricks were laid in the railroad roadbed. The brick road continued east adjacent to the south side of the tracks for a distance of six miles. In 1927, 4.5 foot wide concrete strips were paved onto the shoulders abutting the 1921 concrete curbs, giving the road a new paved width of eighteen feet eight inches. Any additional shoulder work or expansion of the right-of-way in 1927 was not referenced in the Nomination. In 1936, the west end of the road was bypassed when a new highway overpass extended above the railroad tracks. At that time, 500 feet of concrete was paved over the brick-and-concrete roadbed west of the overpass. In 1955, a new segment of U. S. Highway 90 was completed south of the original alignment and the 1921 road was abandoned. The road was left in its original condition, although some areas were later repaired with thin patches of asphalt and concrete. In 1977, Governor Askew authorized the removal of .45 miles of bricks from the east end of the brick road for transshipment to Pensacola. Several thousand bricks were removed, leaving only the 1921 concrete curbing and 1927 concrete strips. The bricks re-laid in News-Journal Plaza in downtown Pensacola to create a sidewalk dedicated as "Old Spanish Trail Memorial."

Assessment of the entire six-mile alignment by SHPO staff resulted in resulted in 5.37 miles of the roadbed evaluated as contributing in two segments. The two contributing road segments were divided by a .18-mile non-contributing road segment at the modern overpass. The extent of the non-contributing road segment was determined,

in part, by the absence of bricks where the original road crossed the railroad tracks, heavy overgrown foliage over the original road at the overpass, and intersecting streets approximately 150 feet from either side of the overpass. The 500 feet, or .1 mile, of road re-paved with concrete in 1936 was evaluated as contributing because it demonstrated advancements in construction technology and the changing use of materials in the 1930s. The .45-mile road segment at the east end of the road was assessed as non-contributing because it no longer possessed the original brick roadbed. Instead, a center depressed dirt grade was flanked by 1921 curbs and 1927 concrete shoulder strips. Those remaining features were evaluated as insufficient to convey the road's engineering significance. Located at the east end of the original road, the .45-mile non-contributing road segment was left inside the boundary. The boundary included the entire extent of the original 6-mile road. Altered during the historic period (1921-1944), the contributing segments retained their historic physical integrity to a high degree. The Nomination made no consideration for buildings, structures, sites, or the surrounding landscape adjacent to the historic road.

Old Dixie Highway (FL155/SJ4843), Flagler County & St. Johns County NR

The Old Dixie Highway (FL155/SJ4843) was listed in the NRHP in 2005 at the state level under Criterion A in the area of Transportation for its contribution to Florida's modern highway system and the larger regional Dixie Highway and Criterion C in the area of Engineering for its standard construction techniques used to assemble rural brick highways in the early twentieth century with a period of significance of 1916-1954. The National Register Nomination was part of a larger investigation sponsored by the Board of County Commissioners of Flagler County, the Florida Department of Transportation, and the Flagler County Historical Society located in Bunnell, Florida. The investigation resulted in the Nomination and *A Cultural Resource Plan for Old Dixie Highway, Flagler County, Florida* (2004). The ten-mile brick-paved road carried other historic and contemporary designations: Old Brick Road; Dixie Highway; Hastings, Espanola & Bunnell Road; State Road No. 4; State Road No. 13; State Road No. 189; and County Road 13.

In August 1912, after meeting several legal requirements, the St. Johns County Board of County Commissioners declared the alignment a public road. The board established the right-of-way as 60 feet and used the initial name of Hastings, Espanola & Bunnell Road. It became part of a larger county-line-to-county-line road that measured 66 miles between the Duval County line and the Volusia County line. South of St. Augustine, the road followed a circuitous alignment, extending first to the southwest through the farm communities of Vermont, Elkton, Spuds, and Hastings, then to the east through Byrd and to Kersey's Corner, and then south to Espanola and Bunnell. In 1914, the county shell-paved the 66-mile road, but subsequently passed a bond issue to brick-pave the road. The county hired the J. B. McCrary Engineering Company of Atlanta to survey the alignment and the James Y. Wilson Company of Jacksonville to build the road. During its construction, the Dixie Highway Association named the county-line-to-county-line alignment as part of the Dixie Highway, and it became part of the eastern branch of the regional highway that extended between Ste. Sault Marie, Michigan and Miami Beach, Florida. The Wilson company cleared, scraped, graded, and rolled the alignment after which a brick roadbed 9 feet in width was laid directly on the grade and secured with interlocking concrete curbs 4 inches wide and shell shoulders 3 feet wide, bringing the total width of the road to 15 feet 8 inches. The company also built below the grade rectangular brick culverts in several low-lying

areas to improve drainage. Completing the county road in 1916, the company used vitrified bricks from the Southern Clay Manufacturing Company of Chattanooga, Tennessee and Graves Brick Company of Birmingham, Alabama.

As completed in 1916, the Dixie Highway in St. Johns County originally extended between the Duval County line near the village of Durbin and the Volusia County line near the village of Korona in Flagler County, which until 1917 was part of Volusia County. Soon after Flagler County was carved out of St. Johns County and Volusia County a lime stone or coquina marker was installed at the Flagler-St. Johns County line, but the marker was found to be removed or destroyed. A roadside arch spanned the Dixie Highway at Flagler City, a 1920s boom-time village located four miles south of the county line. All vestiges of the road arch and village were later destroyed or removed. A logging or naval stores was also located adjacent to the alignment in the late-1910s and 1920s, but all of those buildings were later either destroyed or removed. A re-aligned Dixie Highway, or new Dixie Highway, was completed in 1927 through St. Johns County, Flagler County, and Volusia County. Paved with asphalt, it measured twenty feet in width and extended between 1 mile and 5 miles east of the original road. Because the original Dixie Highway had veered to the southwest from St. Augustine toward Elkton and Hastings, only about 1½ miles of the original road immediately south of St. Augustine were incorporated into the new Dixie Highway. The original road segment between Hastings and Kersey's Corner was extended farther east to connect with the new Dixie Highway and that segment of the original nine-foot brick-paved road was eventually paved with asphalt and widened to twenty-four feet. Established in the 1910s, Kersey's Corner was a prominent 90-degree bend in the Old Dixie Highway, where a general store and filling station provided motorists with a few amenities and services. The road segment south of Espanola was also widened and paved with asphalt, connecting with the new Dixie Highway north of Bunnell. Consequently, with the exception of a short stretch of original brick road southeast of Bunnell, the ten-mile road segment between Espanola and Kersey's Corner was the longest and best preserved remnant of the original brick-paved road.

The two historic place-names, Espanola and Kersey's Corner, coincided with the end points of the historic brick-paved road, providing sufficient justification for establishing the north and south boundaries at those locations. Since the 1990s, the County of Flagler and the County of St. Johns had applied sand over the historic brick road, in part, to preserve it from logging trucks using it to deliver products to pulp and saw mills, and, in part, to prevent theft of the bricks along the isolated rural road. Only one building was located along the road, a historic-period dwelling built at the time the road was constructed. It was deteriorated to the extent that had lost its historic physical integrity and was not included as a resource in the Nomination. The Flagler City site underwent archaeological investigation. An insufficient collection of historic-period artifacts and no tangible evidence of the town plan in the form of buildings, road arch, sidewalks, and street lamps provided sufficient justification for excluding the site as a resource in the Nomination. Beyond those cultural landscape considerations, it was documented through aerials and deeds that logging operations had occurred in forests adjacent to the roadbed in the 1940s and 1950s, part of the present-use pattern of the cultural landscape. Although much of the present alignment was lined with trees, occasional breaks indicated logging operations, part of the historic use pattern. Sand trails or woods roads intersected with the brick road, but no modern paved roads interrupted the alignment; neither asphalt nor concrete had been added to the roadbed. Six modern culverts replaced original brick structures that had collapsed. At those locations, approximately six feet of brick pavement and curbs had been removed, new culverts installed, and a dirt grade replaced the brick

pavement. Those six areas were noted in the Nomination and included in the boundary, which contained only the historic right-of-way of the brick road drawn 30 feet from each side of its center line, rather than the historic road-and-shoulder system itself. The boundary did not include the sites of Flagler City or the naval stores and logging camps that occupied sites along the alignment.

State Road A1A in St. Lucie County

State Road A1A in St. Lucie County travels in a north-south direction from the Indian River County line on the north and the Martin County line on the south. The road's length within S. Lucie County is approximately 20.4 miles. The north end of the road exists in a small residential area. Heading south along the road, there are areas of natural overgrown vegetation along both sides of the roadway. The roadway is two lanes wide along this section with bike paths on both sides. In the Bonito Isle area, the road remains residential in nature, the residences being numerous condominiums stretched along the west side of the road for approximately 2.5 miles. At this point, there is an intermittent left turn lane in the center of the roadway, and numerous right and left turn lanes on the northbound and southbound sides of the road. Sidewalks exist along some portions of this 2.5-mile section.

South of the condominiums, vegetation and recreational areas surround the roadway. These areas include Jack Island State Preserve, Pepper Beach Park, and a Navy Seal Museum. Occasional right and left turn lanes exist along this portion of the road. South of this area, the road again becomes residential in nature, with private residences along the west side of the road and condominiums along the east side. Numerous right and left turn lanes for northbound and southbound traffic exist here, as well as intermittent sidewalks along each side of the road.

The roadway then makes a turn west towards the North Bridge Causeway. This portion of the road is commercial and recreational in nature. The sidewalk still exists here, as well as varying sections of turn lanes. The road is still two lanes wide and passes over the Indian River at this point. It terminates at U.S. Highway 1, and the area is commercial in nature.

A separation exists in State Road A1A due to the existence of the Fort Pierce Inlet. The road begins approximately one mile south of the termination point at U.S. Highway 1. The road here is State Road A1A/Seaway Drive. This section of the road is two lanes wide and paved with asphalt. The area is commercial in nature. As the road goes over the Indian River at the South Bridge Causeway heading east, it widens into a four-lane road with two lanes heading each direction. East of the bridge, it returns to a two-lane road.

The area east of the bridge and south past the southern curve in the road at the Atlantic Ocean is primarily residential in nature, with some commercial buildings, including hotels, restaurants, and some stores. Sidewalks and right and left turn lanes exist along this portion of the road. South of Blue Heron Boulevard, there is little development. Vegetation exists along the road, with mangroves to the west and Australian pine trees to the east. From the Florida Power and Light Nuclear Power Plant heading south, the area becomes increasingly residential and commercial with condominiums along the east and private residences along the west. Sidewalks exist intermittently on both side of

the road in this area, and right and left turn lanes exist in the northbound and southbound lanes. The area remains residential and commercial in nature to the southern county line.

Historical evidence used to document the road included St. Lucie County plats, 1952 aerials, nineteenth-century township plats, and 1924 township plats. The earliest evidence of a road or trail along a portion of the current route of State Road A1A is from a plat on file with St. Lucie County, entitled "Plat of Avalon Park," dating to September 1891. Although only the area of present-day Avalon Beach State Park is covered by this plat, it is likely that a road or trail along the full north-south route of present-day A1A existed at the time. The original road is reported to have been a dirt or dirt grade road, probably paved with oyster shell, marl, and lime rock along certain sections.

The first name for what is now State Road A1A seems to have been Park Boulevard. This label is given to the road on the 1912 plat for Surfside. Surfside, located about a mile south of the current South Bridge Causeway, was the first major development along what is now State road A1A. It is still the only commercial and residential area of development along the northern portion of South Al A.

After the permanent opening of the Fort Pierce Inlet in 1922, the portion of South State Road A1A, known as Seaway Drive, was constructed by the City of Fort Pierce and St. Lucie County. The construction work was conducted in 1926 and 1927 and served to link the mainland with the barrier island. Shortly afterwards, as illustrated on a 1929 map on file with the St. Lucie County Historical Museum, the entire length of South State Road A1A was depicted as a graded highway labeled Jensen Beach Road. In 1940 and 1941, the State of Florida laid down a rock base surface treated with tar for present-day South State Road A1A that was 24 feet wide. North State Road A1A seems to have originally been known as Atlantic Beach Boulevard. The plat of Unit #1 of North Beach Subdivision in 1941 shows the road labeled in this way.

During the renumbering of Florida's state roads in the 1940s, the State Road Department briefly designated both North and South State Road A1A as State Road No. 1. By 1947, the road was renumbered A1A in order to avoid confusion with nearby U.S. Highway 1. North State Road A1A was paved with gravel in 1951. By the end of 1969, both North and South State Road AlA were 24 feet wide and paved with asphalt. The highway currently varies from 24 to 60 feet in width, with a one-foot bed. The last major resurfacing of the road was in 1997.

Areas along State Road A1A that were platted but never developed include the section of road north of the Fort Pierce inlet. A plat from the 1940s shows the proposed development of North Beach Subdivision. After World War II, there was an increase in the amount of planned development in the county, including development along portions of State Road A1A. The development of Bonita Isle on North State Road A1A was planned in June 1947. The residential district of Fort Pierce Shores along the southern portion of North State Road A1A was first planned along the roadway in 1949, and construction in this area continued into the early 1950s.

State Road A1A played an important role in the development and transportation system of St. Lucie County, as it was a major north-south thoroughfare. Although portions of State Road A1A retain some of its original historic character and appearance, development throughout the twentieth century has significantly altered large portions of

the road. Improvements that have affected the historic physical integrity of the road include widening, asphalt paving, modern traffic lights, condominiums, and increased commercial areas. Given the lack of historic physical integrity and/or engineering distinction, State Road A1A in St. Lucie County is considered ineligible for listing in the *NRHP*.

U. S. Highway 1 in St. Lucie County

U. S. Highway 1 travels in a north-south direction from the Indian River County line on the north and the Martin County line on the south. The road's length within the county is approximately 22.5 miles. The road is four lanes wide at the northernmost point, with two lanes in each direction, and is paved with modern asphalt. There is a wide grassy median that separates the road and is, at times, broken by a U-turn lane running through the center. There are small asphalt shoulders on both sides. Occasional right and left turn lanes exist on both sides of the road at varying intersections; this occurs along the entire length of the road within the county. The portion of U.S. Highway 1 north of the North Bridge Causeway is generally commercial in nature, but is not highly developed. There are numerous open lots on the east and west sides of the road. The entire length of U.S. Highway 1 in St. Lucie County is primarily commercial in nature.

South of the North Bridge Causeway, the area becomes more developed and the number of empty lots decreases. South of Taylor Creek, sidewalks appear intermittently along the roadway on varying sides from Taylor Creek to the Martin County line. Also at this point, the grassy median dissipates and a continuous center left turn lane continues intermittently. The Florida East Coast (FEC) Railway tracks border the road to the east in this area.

South of Seaway Drive, the road is heavily trafficked and highly commercial in nature. At this point, the FEC Railway ceases to border the road on the east. The eastern portion of the road becomes industrial in nature and includes citrus packing plants and other warehouse industries. Municipal buildings for the City of Fort Pierce exist along the roadway between Avenue C and Orange Avenue. South of Citrus Avenue, there are paved, and painted bike lanes exist on the northbound and southbound sides of U.S. Highway 1.

South of Ulrich Road in White City, the area surrounding the roadway becomes slightly less developed, and there is an increase in the amount of undeveloped lots. In this area, a grassy median separates the northbound and southbound travel lanes. South of Rio Mar Drive, the road becomes six lanes wide, with three lanes in each direction. An intermittent sidewalk exists on both sides of the road in this area. At times, drainage ditches appear on varying sides of the road. Just north of St. Lucie Boulevard, the roadway changes to eight lanes wide, with four lanes in each direction. There are several documented historic resources that exist along the roadway. These resources range in date from 1915 to 1952 and are concentrated around and north of Midway Road.

As evidenced by its name, U.S. Highway 1 was one of the first federal roads planned by the U.S. Department of Agriculture's Bureau of Public Roads (BPR). The BPR, working in conjunction with the American Association of State Highway Officials, began preliminary planning for the national highway system in 1924. Like the earlier auto

trails, the United States highways were laid out along existing intercity roads. State governments paid for road construction and upkeep along the designated route. The federal government provided a unified numbering and signage system, but the newly designated United States highways did not receive preferential funding from the federal government. A list of proposed routes was ready in late 1925. This list included U.S. Highway 1 and the final list was approved on November 11, 1926.

U.S. Highway 1, extending from Fort Kent, Maine, on the New Brunswick border, to Florida City, Florida, south of Miami, became the primary north-south tourist route on the Eastern Seaboard. The new highway generally followed the route of the earlier Dixie Highway in North Florida, but south of Daytona Beach, U.S. Highway 1 often took a path closer to the coast. This was the case in St. Lucie County, where U.S. Highway 1 replaced the former Dixie Highway route that consisted of present-day Old Dixie Highway and Indian River Drive.

The earliest plat map on file at the St. Lucie County Courthouse to depict U.S. Highway 1 is the plat of Maravilla Gardens from July 20, 1927. The plat depicts U.S. Highway 1 in the vicinity of White City. However, the road is labeled as Dixie Highway/State Road 4. A December 1930 plat illustrates the section of U.S. Highway 1 north of Fort Pierce in its present location to the west of present-day Old Dixie Highway. Again, U.S. Highway 1 is labeled as State Road 4 on this plat. Thus, by 1930, U.S. Highway 1, although sometimes referred to as State Road 4 or Dixie Highway, was present in its current route and length throughout St. Lucie County.

On March 15, 1927, Fort Pierce celebrated Dixie Highway Day. The festivity was held on account of the widening and paving of Dixie Highway, which was a brand new, two-lane concrete paved road that connected Vero Beach and Stuart. According to a speech given that day at the celebration by Dr. Fons A. Hathaway, chairman of the State Road Department, there were only two existing portions of Dixie Highway that needed to be completed to form a straight paved highway link between Georgia and Miami.

However, by this point, it is possible that the Dixie Highway in northern St. Lucie County had already been shifted west to what is currently known as U.S. Highway 1. Thus, it is possible that the 1927 Dixie Highway Day was a celebration of the road in St. Lucie County that is currently known as U.S. Highway 1. To this day, U.S. Highway 1 is sometimes referred to as Dixie Highway, whereas the former route in northern St. Lucie County was referred to as Old Dixie Highway.

In 1945, as a result of the renumbering of Florida's state roads, State Road 4 was re-designated as State Road 5, and since then it has been known by this state road number, as well as U.S. Highway 1. In 1946 and 1947, U.S. Highway 1 was widened to at least 24 feet throughout St. Lucie County. During the 1952-1953 administration of Governor Daniel McCarty, a Fort Pierce attorney who championed major state construction projects, U.S. Highway 1 was again widened. It became an asphalt-paved, four-lane highway. In 1953, Governor McCarty died in office from complications due to a heart attack. Through an act of the legislature, the section of the roadway from Fort Pierce to Vero Beach was designated the Dan McCarty Highway. The last major resurfacing in Fort Pierce took place in 1995. The stretch from Rio Mar Drive to Port St. Lucie Boulevard was expanded to six lanes with landscaped medians

between the fall of 1997 and the spring of 2000. Modern-day U.S. Highway 1 is almost completely commercially oriented and has been widened and improved many times since the 1950s.

U.S. Highway 1 played an important role in the development and transportation system of St. Lucie County as a major north-south thoroughfare. Although portions of U.S. Highway 1 retain some of its original historic character and appearance, development throughout the twentieth century has significantly altered large portions of the roadway. Improvements that have affected the historic physical integrity of the road include widening, asphalt paving, modern traffic lights, and modern commercial areas. Because of the lack of historic physical integrity especially associated with the setting but also with the original engineering and width of the road, A1A is considered ineligible for listing in the *NRHP*.

Okeechobee Road

Okeechobee Road, designated as State Road 70, travels in a northeast-southwest direction for 22.1 miles between Fort Pierce and the Okeechobee County line in St. Lucie County. The northeastern end is located near the intersection of Delaware Avenue and South 17th Street in Fort Pierce, where the surrounding landscape is primarily commercial. The road is paved with asphalt three lanes wide in each direction. Modern traffic lights are suspended above the road at various intersections and left-right turn lanes support many intersections. A grassy median divides the road, supported by concrete curbs. Modern streetlights are suspended over the state road to the east and west of Interstate 95 (Exit 129) and Florida's Turnpike (Exit 152). Concrete overpasses extend over Okeechobee Road at both the interstate and turnpike. West of Interstate 95, the surrounding landscape consists of modern commercial buildings with intersections supported by modern traffic lights. In this commercial area, the road passes an outlet shopping center and an office park. West of the turnpike, the state road turns into a two-lane asphalt highway and the surrounding area becomes mostly residential, agricultural, and many tracts of undeveloped land. Between the turnpike and the western county line, there are numerous small modern concrete bridges that cross canals. There is a grassy median that divides the two-lane road until McCarty Road (State Road 712A), beyond which the median does not exist. Drainage ditches support both sides of the road and there are no modern traffic lights. There are occasional left and right turn lanes on the road in this area.

West of McCarty Road, the roadway turns into a two-lane highway, with one lane in each direction. The area here is primarily agricultural, although some industrial buildings stand along the road, related to agriculture. No right or left turn lanes exist on this portion of the road. West of Midway Road, there are few residences. Guardrails appear on varying sides of the roadway west of Summerlin Road, and the land becomes less agricultural and more undeveloped and pastoral. In the area around and west of Bluefield Road, the land is mostly undeveloped and features thick vegetation. At the western St. Lucie County line, the area is rural and residential with a cluster of small homes. Documented historic resources exist along the roadway and are concentrated east of Header Canal Road. These structures range in date from 1913 to 1947.

Okeechobee Road is one of the oldest and most widely used roads west of Fort Pierce and in western St. Lucie County. The construction of modern-day Okeechobee Road dates to the 1890s. It is one of the earliest roads appearing on St. Lucie County plat maps. A plat depicting the road was prepared by J. O. Fries, a prominent Orange County surveyor, to the county in December 1899. Initially, the road was graded dirt leading west to Lake Okeechobee out of the city. It is probable that sections of the road, especially close to town, were paved with crushed oyster shell, marl, or lime rock. In rainy weather, the journey west out of Fort Pierce could be dangerous, whether by car, oxen, or horse drawn wagon, as the road became muddy and slippery. In the early-twentieth century, the road was graded for approximately twelve miles southwest of Fort Pierce. A trip to the Town of Okeechobee required all day when traveling by horse-and carriage or ox-and-wagon.

Okeechobee Road has been designated numerous names during its existence. Various historic plat maps depict the road as Ft. Drum Road, public road, Highland Avenue, Tampa-Fort Pierce Highway, and State Road No. 8. The reference to Fort Drum Road is associated with a Second Seminole War fort farther west and the Army road or trail used by Colonel Taylor to march from Fort Pierce to the interior fortification. Colonel Taylor's route extended west from Fort Pierce to Fort Basinger and then north to Fort Drum. Colonel Taylor's route closely followed present-day Okeechobee Road.

The road was improved in the mid-1920s, when it was paved as a two-lane highway traversing the width of the county. The completion of the improved road was celebrated at the opening of the asphalt highway. This was one of the few roads for travelers to travel across the state. A motorcade from Okeechobee City traveled east to Fort Pierce, where the town celebrated with a fish fry and fireworks. At Okeechobee City, the Okeechobee Road connected to the Conner's Highway, which extended around the east shore of Lake Okeechobee. The initial pavement of Okeechobee Road consisted of a thin layer of blacktop asphalt, presumably two inches thick, over compacted earth that was prone to potholes, especially after heavy rains.

Okeechobee Road played an important role in the development and transportation system of St. Lucie County. Development throughout the twentieth century has significantly altered the segment of Okeechobee Road east of Florida's Turnpike. The segment of Okeechobee Road to the west of the turnpike retains much of its historic physical integrity. But, the western segment does not extend between historic places associated with its overall alignment. The historic alignment has been altered by large modern intrusions and no longer conveys a sense of traveling between historic places. The traverse of the road through an undeveloped region for approximately fourteen miles may make it a scenic highway. But, its loss of a key physical feature at the east end of the road, that is, the association of entering the City of Fort Pierce, results in a loss of historic physical integrity. Paved and re-paved with asphalt during the modern period, the road has lost its original engineering significance. Because the historic eastern four miles of the road have been altered and the key eastern terminus of Okeechobee Road has lost its historic physical integrity, the road is ineligible for inclusion in the *NRHP*. Subsequent documentation of the date of construction of overpasses by Florida's Turnpike and Interstate 95 in the 1960s may permit Okeechobee Road west of Florida's Turnpike to be assessed and evaluated as historic, predicated on investigation of its significance as a connector with interchanges to the nation's interstate and the state's turnpike systems.

King's Road

Few roads and trails have been researched, assessed, and evaluated as much in Florida as the King's Road, an eighteenth century road that extended between the St. Marys River and New Smyrna Beach. Completed by the British Crown between St. Augustine and New Smyrna Beach in 1774 and to the St. Marys River the following year, the King's Road was built to the width of sixteen feet by the clearing of trees and stumps along the alignment. No paving materials or even a raised roadbed was used in the physical construction of the road. Bridges and causeways built of wood supported the route. Amounting to approximately 150 miles in length, the King's Road of the 1770s was a dirt road sixteen feet wide with neither crushed shell finish nor ditches.

An exhaustive study by Adams, Schafer, Steinbach, and Weaver in 1997 documented the physical route between St. Augustine and New Smyrna Beach, primarily using surveyor's notes and township plats produced between the 1830s and 1850s. No corresponding field notes or map with surveyor's measurements from the 1770s was located. A few plantations south of St. Augustine stood astride the King's Road during the British period, such as those maintained by John Moultrie near Moultrie Creek and at Tomoka. Notwithstanding those few plantations, Cow Ford, New Smyrna, St. Augustine, and various crossings by the St. Johns River, Spruce Creek, and Tomoka River, among others, were the prominent termini during the British period.

During the Second Spanish Period, a number of plantations were developed along the King's Road. Some of those were river-to-road plantations along the Halifax River; others were in close proximity to New Smyrna Beach and St. Augustine. During the antebellum period, segments of the King's Road were re-cleared and re-opened, financed by the Congress and especially during the Second Seminole War. After the conflict, the road became the responsibility of various county governments between Nassau County at the St. Marys River and Volusia County at New Smyrna Beach. In 1872, Volusia County briefly abandoned the King's Road, but several years later re-declared it as a public road. In the early-twentieth century, the King's Road was incorporated into several subdivisions and paved with asphalt, especially between the 1920s and 1950s in Callahan, Daytona Beach, Holly Hill, Jacksonville, New Smyrna Beach, Ormond Beach, and Port Orange. Later, additional modern subdivisions were opened in most of those cities and south of St. Augustine in the Moultrie Creek region and south of Pellicer Creek in the Palm Coast community.

Consequently, the King's Road is presently a series of road segments between the St. Marys River and New Smyrna Beach. Some non-contributing segments have been completely obliterated by subdivisions. Other segments have been widened and paved with asphalt. Still other segments have returned to nature under private ownership, or remain rights-of-way maintained by various county governments. North of Ormond Beach, in northeast Volusia County, and southeast Flagler County, much of the alignment has been vacated, abandoned, and platted into subdivisions with the former road under homes and swimming pools. At the intersection of King's Road and Old Dixie Highway at the Flagler-Volusia County line, the King's Road to the south of the intersection retains its historic physical integrity, but to the north of the intersection the King's Road has been widened to thirty-three feet and paved with asphalt. As a corollary, Old Dixie Highway at that intersection has been widened to twenty-four feet from its original nine feet and the original brick pavement either removed or paved over with asphalt. In Holly Hill,

segments of King's Road are asphalt-paved residential streets. Between Callahan and Hilliard in Nassau County, King's Road is paved with asphalt and designated State Road 115. In Jacksonville, King's Road lies under a maze of paved streets, and in northern Duval County has been named Old King's Road to distinguish it from New King's Road, which is designated U.S. Highway 1/23.

In northern St. Johns County, several segments of King's Road have been documented. Near Durbin, a stretch of King's Road 10,836 feet was recorded as Dixie Highway/Old King's Highway (SJ3476) as part of a larger Development of Regional Impact (DRI) study. The segment was documented as a dirt road with the bricks removed from the 1916 paving of the Dixie Highway. The segment was supported by Durbin Creek, providing it with an important natural feature. The removal of the bricks made the Dixie Highway ineligible for the *National Register*. An archaeological investigation proceeded including the excavation of a trench across the alignment. Oriented east-west across the road, the trench was 50 centimeters wide by 5 meters long. The trench revealed what was believed to be the original King's Highway roadbed underlying gray sand and gravel. Although grading had obscured and disturbed the original roadbed, a possible wheel rut was discerned. No artifacts were recovered from the excavation. Consultation with SHPO regarding segments of the King's Road/Dixie Highway led to a determination that intact portions of the road were eligible for listing in the *National Register*. Consequently, trenching served as a means of documentation and one measure of mitigating adverse effects. No assessment was made with regard to the historic physical integrity of setting, workmanship, feeling, and association.

In south St. Johns County north of Pellicer's Creek, Old King's Road South (SJ4893) was found to be largely obliterated by logging operations in the 1970s. Investigated as part of a larger Development of Regional Impact (DRI) study, the alignment was documented using historic period maps. Only a small section in the southeastern part of a larger project tract was determined to be part of the original King's Road. Efforts to clearly delineate construction episodes and manner of construction of the King's Road through archaeological investigation and excavation were unsuccessful. Cultural stratigraphy which characterized a segment of King's Road in northern St. Johns County (SJ3476) was not found. Subsurface deposits characterizing the construction of causeways and roadbed attributed elsewhere to the King's Road were evidenced by disturbed top soil and dense fill episodes ranging up to two meters deep. The soils demonstrated clear evidence of mixing and appeared as light brownish-gray sand in profile across the road. The King's Road segment consisted of fifty feet of an existing dirt road, 75 feet of a ridge cut road, and a causeway running 275 feet to Pellicer Creek. Four hundred feet north of Pellicer Creek no evidence of the historic road existed, obliterated by silviculture. Mature trees provided a canopy over the road, which displayed modern rutted tracks. Based on historic physical integrity of location from historic map research, SHPO concurred with the archaeologist that the road segment was potentially eligible for the *National Register*. The assessment and evaluation relied largely on the historic physical integrity of location and setting, rather than design and materials. It appears the assessment and evaluation was based largely on historical research and could have been made without the benefit of an archaeological investigation.

In Volusia County, a segment of King's Road (VO255) was documented as part of the Plantation Oaks Development of Regional Impact (DRI). Located in northeastern Volusia County near National Gardens, the alignment was documented using historic period maps. In the south portion of the project track, the road segment followed a sand

ridge as a single-lane sand track extending through palmettos and scrub. In the north portion of the project track, the road segment was seldom discernible. Archaeologists worked with a backhoe operator to cut three trenches across the road segments in an effort to obtain information on its construction and usage. Profiles of the trenches were recorded with scaled drawings and photographs. No evidence of oyster or brick surfacing was observed in the trenches. The trenches were sandy throughout. No archaeological materials or evidence of road construction could be associated with the historic corridor. Based on historic physical integrity of location using historic map research, SHPO concurred with the archaeologist that the road was potentially eligible for the *National Register*. The assessment and evaluation relied largely on the historic physical integrity of location, rather than design and materials. It appears the assessment and evaluation was based largely on historical research and could have been made without the benefit of an archaeological investigation. The assessment did not address historic physical integrity of setting, association, or feeling.

In Flagler County, a 4.4 mile segment of King's Road (FL186) was investigated as part of a road widening project. The segment, designated as Old King's Road by Flagler County, was documented as the only public-road section of the King's Road in this region. A dirt road, the segment extended between U.S. Highway 1 and Forest Grove Drive supported by an overpass at Interstate 95. The archaeologist found that no evidence remained of King's Road north of its terminus of U.S. Highway 1 or south of its terminus at Forest Grove Drive. Using research from historic maps, it was determined that most of Flagler County's Old King's Road likely followed the general route of the original King's Road. Test units along the right-of-way showed disturbance from logging and reforestation activities. It was found that extensive logging, reforestation, road maintenance, and grading activities had largely obliterated the original King's Road. Based on a dearth of artifacts, no sections of the existing Old King's Road could be conclusively attributed to the original King's Road. But, it was concluded that the original King's Road was located within the greater alignment of the county road designated as Old King's Road from archival research and maps. The investigation did not compare the width of the original King's Road provided in archival sources with the width of the present Old King's Road maintained by Flagler County. Still, based on this spatial occupation, the archaeologist concluded that the road segment was potentially eligible for the *National Register*. The evaluation did not include assessment of the historic physical integrity of setting, association, or feeling. SHPO did not concur with the assessment and found that the segment of Old King's Road did not appear eligible for the *National Register*. For its assessment, the agency referenced that the current road and surroundings no longer conveyed integrity of setting and feeling, and that no evidence of historic road reconstruction between 1818 and 1831 could be determined from the archaeological investigation.

In St. Johns County south of St. Augustine, a segment of King's Road (SJ3482) approximately three-quarters of a mile in length was documented as part of a Development of Regional Impact (DRI) study. Archival research documented its location and alignment. Abandoned by St. Johns County, the road was in private land holdings approximately one-half mile south of Moultrie Creek. During an archaeological investigation, no artifacts were recovered from the road, but the north-south alignment of the historic road was quite evident within the project tract. The Chief Osceola Capture Site of 27 October 1837 was documented adjacent to the road. The archaeologist recommended a trench across the historic road and additional documentary research, a finding supported by SHPO. In addition, the developer agreed not to build over this segment of the historic road, incorporate it into the

development plan with the name Old King's Road, and was amenable to some sort of marker. No assessment was conducted for historic physical integrity of association, feeling, and setting.

Farther north along the headwaters of Moultrie Creek, another Development of Regional Impact (DRI) study documented a bridge remnant and road segment associated with the King's Road. The archaeologist determined that Old Plantation Drive was an asphalt paved road running over the original King's Road and that a new wooden bridge spanned Moultrie Creek at the location of the original King's Road. Most of the King's Road through the project tract was under asphalt paving associated with Old Plantation Drive, which has a meandering course through the project tract. Archival research documented that the King's Road through the project tract had a straight alignment, which was different than the present alignment of Old Plantation Drive. Disused bridge pilings (SJ5267) and a corduroy road segment (SJ3482) under the present bridge were documented as part of the original King's Road, and assessed and evaluated as potentially eligible for the *National Register*. The alignment of the adjacent King's Road (SJ3482) was documented using archival research. Comprised of shovel tests, an archaeological investigation revealed no evidence of the historic road. In addition, no evidence of tree canopy, bricks, or ditches was observed in the investigation, assessment, and evaluation of the historic road. Short segments beyond the paved roadbed of Old Plantation Drive lacked historic physical integrity of setting, association, and feeling. The archaeologist and SHPO concurred that those sections of the King's Road (SJ3482) paved over with asphalt and those short segments beyond the asphalt, which lacked historic physical integrity, were not eligible for the *National Register*.

Hulett Colonial Road (FL239)

Assessed as part of a Development of Regional Impact (DRI) study, a road segment of 375 feet (FL239) was recorded in northern Flagler County. Extending along a high sandy bluff, the segment had been well-preserved. Farther east, the road had been destroyed by extensive logging operations, leaving the short segment intact. The direction to which and from which the road originally ran was no longer discernible. The western terminus of the road was located on high terrace uplands in a sandy pine woods habitat. The eastern terminus was determined to be Hulett's Branch. No elements of a bridge or ford were established, but it was theorized that the road may have been an early crossing of Hulett's Branch and even predated construction of the King's Road. Archival research suggested an origin for the road associated with Andrew Burgevin's 16,000-acre grant of Second Spanish Period, but no map was found to confirm the location of the road. A reference in the text to Volume 1 of Spanish *Land Grants in Florida* indicated that the grant was not confirmed by the United States Board of Land Commissioners in the 1820s, and may not have been settled by Burgevin in the Colonial period. An archaeological investigation located four artifacts along the road: two 18th century musket balls or different calibers, one 18th century dog-eared iron spike, and a 19th century narrow gauge railroad spike. The road segment fell within close proximity of Hewlitts Mill Site Complex (FL14) and Hewlitts Mill House (FL238). Defined by a branch at one end and supported by a house and mill sites, the historic road was found potentially eligible for the *National Register*.

Tamiami Canal, Miami-Dade County

In 2005, a CRAS of the Tamiami Canal Swing Bridge on N.W. South River Drive/Delaware Parkway from N.W. 19th Street to N.W. 32nd Avenue in Miami-Dade County was conducted in District 6. The CRAS was conducted as part of an evaluation of the need to improve the existing bridge crossing over the Tamiami Canal, in order to address deficiencies. As part of this CRAS, the bridge was considered potentially eligible for inclusion for the *NRHP* and a Determination of Eligibility (DOE) was prepared. If the historic bridge is replaced, improvements to the Tamiami Canal may also be needed. A DOE report is currently (2008) being prepared for the Tamiami Canal to clarify its eligibility.

Because the Tamiami Canal is an extremely large linear historic resource, both in its length and width, the resource had been previously encountered and documented. The Tamiami Canal from Krome Avenue (SR 997), on the western edge of Miami, westward was previously determined potentially eligible for listing in the *NRHP* as part of a CRAS for the Tamiami Trail Project Area in Miami-Dade County. However, in 2004, a small portion of the Tamiami Canal was determined ineligible for the *NRHP* where the Palmetto Expressway (SR 826) and Tamiami Trail (SR 90) intersect due to non-historic modifications to its design and setting. During this later eligibility assessment, a ten-mile stretch of the Tamiami Trail and Canal from the Palmetto Expressway westward to Krome Avenue was driven to assess its integrity. The archaeologist noted that the Tamiami Canal's historic character did not reappear until just west of SR 997/Krome Avenue. The SHPO concurred with these findings.

Due to the increased awareness of linear historic resources and the recognition of problems encountered during documentation, a joint decision was made to prepare a DOE of the canal from its juncture at the Miami River to Krome Avenue to the west. It was understood that by documenting a lengthy portion of the canal, rather than a small segment that would be potentially impacted by the project, a more accurate view and contextual understanding of the canal would be possible. The DOE focused on the Tamiami Canal from Krome Avenue eastward into the communities of West Miami, Sweetwater, and the City of Miami to where it opens into the Miami River and Canal. The length of this segment was approximately 14.25 miles from Krome Avenue to the Miami River, and 45 to 120 feet in width.

As with many of the other major linear historic resources encountered in District 6, the historical significance of the Tamiami Canal was readily evident and relatively easy to research. The construction of the Tamiami Trail was a massive undertaking. With the importance of the automobile on the rise at the time, there was a need to create an overland route across the formidable Everglades to link the west coast of Florida to the east. Without the construction of the Tamiami Canal then the Tamiami Trail could never have been built. The histories of these two structures are linked and their significance extends to each county in which they traverse; not just Miami-Dade County. The creation of this highway, with its accompanying canal, brought about an important transportation and communication corridor that brought economic growth to many communities on both South Florida coasts. The Tamiami Canal continues to be used as an important waterway in a vast water management district that encompasses

most of southeast Florida. In addition to providing valuable drainage to the surrounding areas, the canal has to a lesser extent provided recreational entertainment to many local inhabitants and tourists in the form of fishing, bird-watching, and sightseeing. Based on these reasons, the canal is considered significant under Criterion A.

In addition, the Tamiami Canal is significant under Criterion C due to its significance as an important engineering structure that helped create the Tamiami Trail, as well as providing excellent drainage to the surrounding land for development. The problems facing the engineers and laborers were numerous and the construction methods used at the time included huge dredges and explosives. The construction of the Tamiami Canal provided the fill necessary to build the Tamiami Trail itself. The Tamiami Trail eventually became an important piece in the local Miami-Dade water management district linking up with other important canals and water systems, including the Miami Canal, the Comfort Canal, the Coral Gables Canal, and Dade Broward Levee.

The major challenge associated with the evaluation of the Tamiami Canal was determining the existing historic physical integrity in order to compare it to the historic appearance. The entire canal within the proposed limits was driven and visually surveyed, which entailed taking numerous photographs and copious notes of the existing conditions, canal crossings, setting, etc. Historic aerial photographs were obtained from Miami-Dade County and existing ones were provided by the Florida Department of Transportation (FDOT). The South Florida Water Management District (SFWMD) was contacted, as they maintain the canal, in order to gather information regarding changes made to the canal through the years and routine maintenance activities. However, information on the history of the canals has not been readily available.

Important aspects of its integrity were addressed. The Tamiami Canal has maintained its original historic location since its final completion in 1928, with only a slight deviation from its original route at the West Flagler Street/Milam Dairy Road Intersection. The canal has been gradually widened, manipulated, and crossed with bridges over the years, with many of these alterations historic themselves. The Tamiami Canal's historic design is still evident as it still conveys its original historic purpose as a drainage canal and source of material for the Tamiami Trail, as well as an important water management and drainage project for the surrounding Everglades. The creators of the Tamiami Trail believed that the construction of the canal would bring about future residential, agricultural, and commercial development at the eastern end of the historic highway that crossed the Everglades. While there are many crossings across the canal, some historic and others not, most of these crossings affect only small portions of the overall historic design of the canal.

The setting of the Tamiami Canal has changed greatly from the final days of its completion in 1928 from one of rural swamplands to bustling residential and urban metropolises. This was a foreseen event, and the Tamiami Canal helped bring about this evolutionary change. The western portion of the Tamiami Canal still conveys the most historic setting at the time of the canal's completion, with much of the Everglades evident to the north and relatively little development to the south. The remainder of the canal's setting eastward to the Miami Canal has been almost completely built up into residential and urban environments. The Tamiami Canal's integrity, in regards to materials, seems to be better expressed in the western portion of the canal, but throughout the canal's length there is evidence of constructed berms and exposed limestone. Only at major crossings and intersections, such as the Florida Turnpike

and Palmetto Expressway, have the original materials in the canal's construction been significantly altered. The Tamiami Canal's integrity of feeling seems diminished by the changes to its setting; however, as previously discussed, this change in setting is a direct result of the success of the canal draining the surrounding swampland. The canal's integrity of association with its surroundings has continued to be conveyed as an important piece of engineering history associated with the Tamiami Trail and the development of the surrounding area of South Florida through its continual usage over the years as a water management system. Based on its significance and retention of historic physical integrity the Tamiami Canal from the Miami River to Krome Avenue is considered potentially eligible for inclusion in the *NRHP*.

Stub Canal, West Palm Beach

A proposed Interstate-95 expansion project in West Palm Beach crossed the Stub Canal turning basin. Incident to this project, in 1996, the local preservation community prepared a Nomination Proposal of the Stub Canal to the *NRHP*. The nomination received support from the SHPO and was approved by Florida's National Register Review Board. The Florida Department of Transportation (FDOT) understood that the canal played an important role in the economic development of Palm Beach County, but noted that segments of the canal had been filled in and were no longer in use. Based on this, the Federal Highway Administration (FHWY) and FDOT concluded that the integrity of the canal has been compromised. The FHWA and Department, therefore, objected to the determination of eligibility, prepared their own documentation, and requested a determination from the Keeper of the National Register. The Keeper concurred with FHWA and FDOT that the integrity of Stub Canal had been compromised and did not meet the eligibility criteria.

Primary Identification Methods Put in Section H - Methods?

A systematic approach to the identification of Florida's unrecorded historic roads and trails during project surveys and other planning, survey, registration, and compliance actions should involve thorough documentary research. The evidence of Florida's earliest roads and trails can be generally identified through maps, but most of those only provide general routes and reference points for road and trail alignments. Maps prepared between the 1500s and early-1800s are generally too small in scale and imprecise to specifically locate and confirm the alignment of a road or trail. Referential confirmation of a road or trail may be possible through the use of some of these earliest maps. Some maps prepared as part of Spanish land grants between the 1790s and 1810 provide evidence of roads and trails. Those maps can be accessed at http://www.floridamemory.com/Collections/SpanishLandGrants/.

One of the most accurate sources of road and trail locations is from township plats and surveyor notes maintained by the Department of Environmental Protection (DEP) in Tallahassee. They can be consulted online at http://www.dep.state.fl.us/lands/title/default.htm. Most deputy-surveyors hired by Florida's surveyors-general between the 1820s and 1850 noted the presence of Indian trails, military roads and trails, post roads, and other named and unnamed roads in their field notes and on township plats. However, both notes and plats should be

consulted to insure a comprehensive archival review. Past searches have found that a surveyor's notes about roads or trails were not always translated onto plats. In addition, surveyor's notes provide specific references for especially difficult-to-find early roads using a system of chain-and-link measurements called out from section corners. These measurements have been found to be very accurate. Furthermore, some township plats do not depict entire road and trail alignments across a map, information often only available in surveyors' field notes.

Beginning in the 1930s, the Florida State Road Department published a statewide system of twentieth-century General Highway and Transportation Maps, which are held in various archives around the state. Published as early as 1936, these maps depict the primary federal, state, and county roads on a county-by-county basis, supported by township, range, and section designations. The maps depict the types of pavements and supporting buildings, structures, and sites astride the highways and roads. Updated during the 1940s, 1950s, and 1960s, those maps depict change over time to the public roads of each county. The most readily available collection of these maps is online at the University of Florida Map and Imagery Library at http://www.uflib.ufl.edu/maps/MAPNEWDIR.HTML. Hard-copy versions of those maps are also available at the Map and Imagery Library.

Biennial reports of the Florida State Road Department provide important information on a county-by-county basis of road construction projects. These invaluable reports discuss contracting companies, types of pavement, sources of funding, and illustrations of roads under construction and completed. The *Laws of Florida* provide the legislative foundation of the creation of Florida roads and their formal routes and designations. Those road laws are generally grouped in single chapters in biennial laws, designating formal numbers and their associated routes on a town-by-town basis. In some cases, memorial names, such as Blue Springs Highway, Perkins Highway, or Suwannee River Scenic Highway, are designated by legislatures. The descriptive names, such as Blue Springs Highway, generally were not named by legislatures before 1915. Published in 1939, *Florida: A Guide to the Southernmost State* provides a state map of primary roads and a route-by-route narrative physical description of twenty-two tours using the state's primary paved roads. Within the narrative, the guide describes the pavement type, routes by federal and state designations, and cities, towns, and cultural and natural features along those tours. Various journals provide important information about the development of Florida's highways and roads. They include *Florida Engineering & Contractor, Florida Engineering & Construction,* and *Florida Public Works* each of which include photographs of recently-completed roads, articles by the chairman of the State Road Department, and editorials about the State's road system by editor William Traer. The bibliography in Section I of this MPS document provides additional reference materials to consult regarding Florida's historic roads and trails.

To date, archaeological investigation of Florida's historic roads and trails has resulted in the collection of few artifacts and revealed little of the nature of road building. Shovels tests have revealed few artifacts associated with historic roads or trails. Similarly, the cross-trenching of roads has revealed little more than underlying gray sand and gravel, vitrified bricks, and a possible wheel rut. Historic engineering associations have not been documented through the archaeological investigations. Generally, heavy grading of roads and silviculture has resulted in significance disturbance of abandoned roads and trails, and others have been paved over the asphalt or concrete. Perhaps the most productive archaeological harvests have occurred when roads extend close the plantations of the colonial period and nineteenth century. Typically, archival research and geo-rectification of historic maps and plats

onto modern topographic maps has confirmed the locations of historic roads and trails. These primary sources of information provide a research framework to identify Florida's unrecorded historic roads as part of project surveys and other development compliance actions.

Geographical Data

The geographical limits are the Florida State Line and the coastal limits of the State of Florida.

Summary of Identification and Evaluation Methods

In 2007, the Oviedo Preservation Project (TOPP) was awarded a grant from the Florida Department of State through the Division of Historical Resources, Bureau of Historic Preservation for a Multiple Property Submission (MPS) on Florida's Historic Roads and Trails. The tireless and diligent efforts of TOPP members Joan Brown-Bachmeier, Todd Luxton, Lisa McCoy, Jennifer Nash, and Zell Sladek provided leadership to ensure the success of the project. Special appreciation is extended to TOPP's president, Stephen Schenck, who spent countless hours reviewing the details of the grant award and contract agreements, and spearheaded the TOPP grant from its inception. Gracious thanks are also extended to Fred Gaske, Florida's State Historic Preservation Officer (SHPO) for his leadership and extremely capable staff. Sherry Anderson, Bob Jones, Laura Kammerer, Barbara Mattick, and Brian Yates of the Bureau of Historic Preservation each provided crucial expertise in shaping the scope of the project. Grateful appreciation is also extended to Sharyn Heiland, the Bureau's grants administrator who furnished critical administrative assistance.

The methodology to prepare the MPS consisted largely of a literature search and field samplings. Compiling research to develop historic contexts and property types for evaluating Florida's Historic Roads and Trails constituted the primary parts of the project. Research was compiled from various repositories, including the Florida State Library and Archives in Tallahassee, Jacksonville Public Library, John C. Pace Library at the University of West Florida, the Research Center at the Historical Museum of Southern Florida in Miami, the Special Collections Department at the University of South Florida Library, the Special Collections Department of Robert Manning Strozier Library at the Florida State University, the P. K. Yonge Library of Florida History at the University of Florida, the St. Augustine Historical Society Archives and Library, and the Special Collections Division in the Otto J. Ritcher Library at the University of Miami. Cultural resource assessment surveys and National Register Nominations held by the Bureau of Historic Preservation provided extremely helpful research. In addition, the Florida Master Site File furnished database information on Florida's historic roads and trails.

The research afforded sufficient information to the types of roads and trails built in Florida between the contract period and the twentieth century, engineers and builders, road paving companies, important events, and significant themes associated with the development of Florida's historic roads and trails. Sources consulted included federal and state government documents and publications, county commission minutes, engineering, historical, and transportation journals, monographs and published histories, newspapers, and documents compiled by Sherry Anderson and Brian Yates. Enumerated in the bibliography, those sources yielded important site specific and contextual information pertaining to the development of Florida's historic roads and trails. In addition, *NRHP* Bulletins and Nominations provided useful information.

Following the collection of research, Florida's historic roads and trails were analyzed and evaluated for themes and historic contexts. Various treatises on the subject and *NRHP* Nominations suggested contextual frameworks and methodologies for organizing the document. The methodology included identifying specific types of properties and assessing their architectural and historical significance. One property type was selected to cover the state's historic roads and trails. A period of significance was selected to reflect the pattern of historical events associated with the construction of Florida's historic roads and trails. Following the analysis and evaluation, a MPS Nomination was prepared using the necessary forms with supporting narratives.

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