

Background Data and Analysis (2020 update)

Introduction

The Transportation Element provides an assessment of the capability of the existing multimodal transportation system to serve current and future demand. As required by Florida Statue, 163.3177, the plan must provide for a safe, convenient multimodal transportation system, coordinated with the future land use map or a series of maps designed to support the comprehensive plan. Nassau County is part of the North Florida Transportation Planning Organization (TPO), the policies of the Transportation Element must be consistent with the TPO's Long Range Transportation Plan (LRTP).

The change to a Transportation Element is more than cosmetic; it represents a shift from sole consideration of the automobile speed, congestion and safety to providing additional transportation options in a more integrated transportation system that provides alternatives to single occupancy automobile travel. This is often referred to as multi-modal planning. It considers various modes of transportation (walking, cycling, car and truck, waterborne and airport) and connections among modes so that each can fill its optimal role in an overall system.

Land use and transportation systems are highly interdependent; changes in one often have a direct effect on the other. Improvement to the roadway network can serve as an impetus to intensification of the development of adjacent land uses, which in turn can cause the need for further improvements. The Transportation Element should plan for a transportation system that emphasizes the accessibility to goods and services and supports the Future Land Use Element. It should encourage the development of

- form based code,
- context sensitive solutions,
- pedestrian-oriented urban areas,
- mobility choices
- energy efficient development patterns, and
- reduced vehicle miles traveled and protected air quality.

Existing Conditions

Existing Planning and Regulatory Framework

Federal

The United States Department of Transportation (USDOT) administers the nation's transportation policy. The agencies within USDOT include the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA) and the Urban Mass Transit Administration (UMTA). The FHWA reviews and approves federally funded highway projects. These projects include primary, secondary, and urban system aid, the federal bridge replacement program and the maintenance and widening of federal facilities. Federal highway facilities are operated and maintained by the Florida Department of Transportation (FDOT) as part of the State Highway System. Federal Highway facilities in Nassau County include Interstate 95, U.S. Highway 17, and U.S. Highway 301. The NHTSA shares responsibility with the FHWA for highway safety programs including highway design, construction, and maintenance practices.

SAFETEA-LU requires that all components of transportation be planned as one system. In theory, local governments, through the TPO process, now have more influence on the projects to be federally and State funded and can shift funding from highway projects to other transportation modes, such as transit and bicycle/pedestrian facilities.

While the SAFETEA-LU legislation does not regulate development of local comprehensive plans directly, the LRTP is regulated by SAFETEA-LU. Consistency between the TPO LRTP and the local comprehensive plan is required by SAFETEA-LU.

In 2012 President Obama signed into law the Moving Ahead for Progress in the 21st Century Act (MAP 21) to fund the County's vital transportation infrastructure. Map 21 is a performance based multi-modal program to address improving safety, maintaining infrastructure conditions, reducing traffic congestion, improving efficiency, environmental protection, and reducing the delays in deliveries. Map 21 focuses on transportation options, specifically multi-modal transportation. It provides funding for:

- The National Highway System improvements and expansion to include new principle arterials
- Performance-based programs to invest funds more efficiently. States will invest resources in projects to meet targets that will collectively make progress towards national goals.
- Road, bridge, bicycle, and walking improvements, creating jobs and supporting economic growth.
- The TIFIA program by encouraging private development.
- Infrastructure safety projects, supporting the DOT's safety agenda.
- Federal Highway Transportation programs, streamlining them by consolidating the program structure into broader core programs.
- Accelerated project delivery and promotes innovation to ensure the timely delivery of transportation projects.

The transportation planning process must include performance goals, measures, and targets in identifying needed transportation improvements and project selection. Public involvement is paramount to the planning process. MAP 21 continues the requirements for long- and short-range transportation improvement plans (TIP). The long-range plan must include performance plans which describe the performance measures and targets used to achieve the identified performance targets. The TIP must also demonstrate it will meet performance targets and anticipated achievements. The selection of projects in

non-metropolitan areas must be made in cooperation with affected officials or any regional transportation planning organization.

State and Regional

The Florida Department of Transportation (FDOT) is responsible for the planning, construction, maintenance, and access to the state highway system, as well as the State Rail Plan and the Florida Aviation System Plan. The state highway system is established by Florida Statutes, and consists of all State and Federally designated roadways.

FDOT is decentralized in accordance with legislative mandates. Each of the districts is managed by a District Secretary. The districts vary in organizational structure, but in general each has major divisions for Administration, Planning, Production and Operations. District Two, in Northeast Florida, is home to more than 1.9 million residents. It consists of 18 counties, including Nassau County, covering nearly 12,000 square miles. Travelers on the state highway system logged 334.2 million daily vehicle miles traveled in 2018 (Fast Facts, FDOT). Two major transit authorities, assisted by the FDOT, operate in the district. The area is served by two deep-water ports, three major rail lines, and 144 public and private airports. The District headquarters is in Lake City (Columbia County) and the District also maintains the Jacksonville Urban Office.

FDOT has adopted The Florida Transportation Plan, which is part of the State Comprehensive Plan and guides major transportation planning for state facilities. Every year, the FDOT develops, with the cooperation of the County Commission, the Five-Year Work Program, which establishes priorities and funding for specific transportation improvement projects. Project priorities are established by the County Commission for all State roadways within the Nassau County boundaries.

FDOT establishes minimum Level of Service (LOS) targets and plans and funds for Strategic Intermodal System (SIS) facilities.

The North Florida Transportation Planning Organization (TPO) develops plans and programs to guide the region's transportation planning process including the Long-Range Transportation Plan (LRTP) and the Transportation Improvement Program (TIP). Chapter 163, Florida Statutes requires the schedule of capital improvements (SCI) and transportation elements of the local comprehensive plan to be consistent with the adopted LRTP.

The TPO also conducts studies and provides a regional forum for identifying and addressing transportation issues, including planning impacts and opportunities for automated, connected, electric, and shared-use vehicles. In addition to these planning and programming tasks, the TPO addresses immediate needs by overseeing the delivery of services to the transportation disadvantaged and providing direct services to commuters and employers.

Local

Nassau County is responsible for the maintenance of the County roadway system, which consists of minor and major collector roads and local roads. The County's Road and Bridge Department has primary responsibility for roadway maintenance and the Engineering Services Department for roadway design and development. The County is responsible for updating their schedule of Capital Improvement Projects on an annual basis; the identified projects should include priority projects listed in the Nassau County Mobility Plan. The County maintains and updates the County Mobility Plan and Mobility Fee based on

priority projects needed to maintain or improve levels of service. The County is responsible for preserving unopened rights-of-ways and acquiring new rights-of-ways to enhance the transportation network for both motorized and non-motorized users.

Transit in Nassau County

The Council on Aging (COA) in Nassau County operates the only County transit system, NassauTRANSIT. NassauTRANSIT provides scheduled public bus and registered paratransit services throughout the County, including convenient routes between Fernandina Beach, Hilliard, River City Market Place, and downtown Jacksonville. Through regional coordination, NassauTRANSIT has partnered with the Jacksonville Transit Authority (JTA) to provide a commuter express route from Yulee to downtown Jacksonville. There is also an Island Hopper Route which operates Thursday through Monday around the northern half of Amelia Island.

The paratransit program was established to provide transit services to the elderly, disabled, economically disadvantaged, children at risk, and individuals who have no other means of transportation. Registrants for this service can schedule door-to-door rides in advance. In addition to providing this service, NassauTRANSIT also has a Public Transportation Partners Program, which provides bus vouchers to clients of the Salvation Army Hope House, Barnabas Center, and Baptist Medical Center and Family Support Services of North Florida.

JTA is an independent state agency that is charged with providing regional transit services in Northeast Florida. Working closely with the Florida Department of Transportation and the City of Jacksonville, JTA develops and implements plans to improve mobility in the region.

JTA conducted a study to evaluate commuter rail through northeast Florida. Through this study, and additional local planning initiatives, like the William Burgess District, three potential rail stations have been identified, one in the William Burgess District and two within the East Nassau Community Planning Area Sector Plan.

Public Safety

Public safety touches everyone's life on a daily basis. Our sense of community is rooted in our quality of life and the feeling of safety and security we experience every day. Enhanced safety on an area's roadway network enhances the protection of life and property. Accident incidences are an indicator demonstrating the effectiveness of, and need for, safety-enhancing measures such as access management standards, intersection and interchange improvements, bike lanes, sidewalks, shared use paths, and signalization. Table 1 shows the number of vehicular crashes and the percent change for crashes on non-state facilities from the previous year for 2014 to 2018.

Table 1 – Crashes in Nassau County from 2014-2018

	2014	2015	2016	2017	2018
State Roads	866	1039	1104	1043	1246
All Other Roads	569	663	733	692	737
Total Crashes	1435	1702	1837	1735	1983
Percent Change per Year (non-State Roads)		17%	11%	-6%	7%
Percent Change (2014-2018)					30%

Source: Signal4 Crash Data

It is important to consider the safety of all roadway users when designing and redesigning roadways. People on bicycles and pedestrians must be taken into account when deciding on safety-enhancing measures. Table 2 shows the number of pedestrian and bicycle related crashes for 2014 to 2018.

Table 2 – Bicycle and Pedestrian Crashes

	2014		2015		2016		2017		2018	
	Ped.	Bike	Ped.	Bike	Ped.	Bike	Ped.	Bike	Ped.	Bike
State Roads	11	6	7	9	8	1	10	4	9	9
All Other Roads	15	12	11	2	5	3	14	4	6	6
Total Crashes	26	18	18	11	13	4	24	8	15	15

Source: Signal4 Crash Data

Historically, when designing streets, vehicular travel has been the primary concern; design which may be dangerous for other roadway users. While this philosophy has been changing due to the Complete Streets Coalition, it is still standard to have roadways that prioritize high speeds for cars over safety for all people.

Roadway Functional Classification

Functional classification is the process when roadways are grouped into classes based on the service they provide. There are five functional classification categories common to rural and urban roads.

Table 3 – Functional Categories

Urban	Rural
Principal Arterial	Principal Arterial
Minor Arterial	Minor Arterial
Major Collector	Major Collector
Minor Collector	Minor Collector
Local	Local

The relationship between functional characteristics and the three broad categories of functional classifications is listed in Table 4.

Table 4 – Relationship between Functional Classification and Travel Characteristics

Functional Classification	Distance Served (and length of route)	Access Points	Speed Limit	Distance between routes	Usage (AADT)	Significance	Number of travel lanes
Arterial	Longest	Fewest	Highest	Longest	Highest	Statewide	More
Collector	↓	↓	↓	↓	↓	↓	↓
Local	Shortest	Many	Lowest	Shortest	Lowest	Local	Fewer

A road located within an urban/urbanized area boundary is classified as urban. Those roads located outside urban areas are classified as rural. The classification of a road may change where there is a change in traffic conditions, property use and development, and other factors.

The arterial system serves the highest degree of through traffic movement and largest proportion of total travel. As used in the functional classification system the Interstate Highway System is considered an arterial network. Arterials generally have higher design standards than other roads.

Collectors typically are designed for travel at lower speeds and for shorter distances. Collectors are typically two-lane roads that collect and distribute traffic to/from the arterial system. Major collectors typically serve higher traffic volumes than minor collectors. Overall, in both urban and rural setting, the total mileage of Major Collectors should be lower than the total mileage of Minor Collectors.

Local roads represent the largest percentage of all roadways in terms of mileage. For rural and urban areas, all public road mileage below the collector system is considered local. Local roads provide basic access between residential and commercial properties, connecting with higher order highways. A route meeting this purpose would connect a home, work, or entertainment trip by connecting the final destination to the roads serving longer trips. Local roads generally do not carry bus routes, and, in many instances, they include various roadway treatments to discourage through traffic. In general, local roadways are often classified by “default”. In other words, once all arterial and collector roadways have been identified, all remaining roadways are classified as locals.

Table 5 – Characteristics of Functional Classifications

Classification	Urban	Rural
Principal Arterial System	Includes Interstate highways, other freeways and expressways, and other principal arterials. Serves the major centers of activity of a metropolitan area, has the highest traffic volume corridors, and the longest trip desires; and should carry a high portion of the total urban area travel on a minimum of mileage. Carries most trips entering and leaving urban areas, and it provides continuity for rural principal arterials that intercept urban boundaries.	Provides interstate and inter-county service so that all urban areas are within a reasonable distance of an arterial highway. Typically link nonadjacent urbanized areas. Provide an integrated network without stub connections except where needed because of unusual geographic or traffic conditions. The network is divided into three subsystems, Interstate highways, other freeways and expressways, and other principal arterials.
Minor Arterial System	Provides service for trips of moderate length and at a lower level of through traffic movement than principal arterials. They connect with urban principal arterial roads and rural collector routes.	Links cities and larger towns and serves an urban area if it penetrates or comes within 2 miles of the urban boundary. A road connecting the rural minor arterial highway to the urban area is not necessary.
Major Collector	Major collectors provide direct property access and traffic circulation in higher density residential neighborhoods and commercial and industrial areas. May penetrate residential neighborhoods for significant distances and channel traffic from local streets onto the arterial system.	Major collectors provide service to any county seat not on an arterial route. They also serve larger towns not accessed by higher order roads, and important industrial or agricultural centers that generate significant traffic and smaller communities not served by a higher-class facility.
Minor Collector	Minor collectors provide traffic access and traffic circulation in lower density residential and commercial/industrial areas. They may penetrate residential neighborhoods for only a short distance and channel traffic from local streets to/from the arterial system.	Minor collectors are spaced at intervals, consistent with population density, to collect traffic from local roads and to ensure that all developed areas are within a reasonable distance of a collector road.
Local	Provide direct property access to adjacent property. Provide access to higher systems. Carry no through traffic movement.	Serve primarily to provide direct property access to adjacent property. Provide service to travel over short distances Constitute the mileage not classified as part of the arterial and collectors' systems.

Source: Urban Boundary and Functional Classification Handbook, 2013 (FDOT)

The following pages show Table 6 – Nassau County Roadway segments and Classifications.

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
1	S.R.200/S.R.A1A/S. 8th St	Amelia Island Parkway to Sadler Road	4	Arterial	Minor	Trans/Urban
2	S. 8th Street	Sadler Road to Lime Street	4	Arterial	Minor	Trans/Urban
3	S. 8th Street	Lime Street to Atlantic Avenue	2	Arterial	Minor	Trans/Urban
4	Atlantic Avenue (S.R.A1A)	8th Street to 14th Street	2	Arterial	Minor	Trans/Urban
6	Atlantic Avenue (S.R.A1A)	14th Street to Fletcher Avenue	2	Arterial	Minor	Trans/Urban
8	Fletcher Avenue (S.R.A1A)	Atlantic Avenue to Sadler Road	2	Arterial	Minor	Trans/Urban
10	Fletcher Avenue (S.R.A1A)	Sadler Road to Simmons Road	2	Arterial	Minor	Trans/Urban
11	Fletcher Avenue (S.R.A1A)	Simmons Road to Amelia Island Parkway	2	Arterial	Minor	Trans/Urban
12	Fletcher Avenue (S.R.A1A)	Amelia Island Parkway to Buccaneer Trail (S.R.105A)	2	Arterial	Minor	Trans/Urban
14	14th Street	Pogy Place to Atlantic Avenue	2	Collector	Major	Trans/Urban
15	14th Street	Atlantic Avenue to Hickory Street	2	Collector	Major	Trans/Urban
16	14th Street	Hickory Street to Jasmine Street	2	Collector	Major	Trans/Urban
16A	14th Street	Jasmine Street to Lime Street	2	Collector	Major	Trans/Urban
17	14th Street	Lime Street to Sadler Road	4	Collector	Major	Trans/Urban
18	14th Street	Sadler Road to Amelia Island Parkway	2	Collector	Major	Trans/Urban
19	Amelia Island Parkway	S.R.200/S.R.A1A to 14th Street Extension	2	Collector	Major	Trans/Urban

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
20	Amelia Island Parkway	14th Street Extension to Buccaneer Trail (C-105A)	2	Collector	Major	Trans/Urban
21	Amelia Island Parkway	Buccaneer Trail (C-105A) to Fletcher Avenue	2	Collector	Major	Trans/Urban
22	Amelia Island Parkway	Fletcher Avenue to Scott Road	2	Collector	Major	Trans/Urban
22A	Amelia Island Parkway	Scott Road to S.R.A1A/Julia Street	2	Collector	Major	Trans/Urban
23	Buccaneer Trail (C-105A)	Gerbing Road/South Fletcher Avenue to Canopy Drive	2	Collector	Minor	Trans/Urban
23A	Buccaneer Trail (C-105A)	Canopy Drive to Amelia Island Parkway	2	Collector	Minor	Trans/Urban
24	Amelia Road	Amelia Island Parkway to S.R.200	2	Collector	Minor	Trans/Urban
26	First Coast Highway (S.R.A1A)	Gerbing RD./S. Fletcher AV. to Amelia Island Pkwy./Julia ST.	2	Arterial	Minor	Trans/Urban
27	First Coast Highway (S.R.A1A)	Amelia Island Parkway/Julia Street to Beach Lagoon Road	2	Arterial	Minor	Trans/Urban
28	First Coast Highway (S.R.A1A)	Beach Lagoon Road to Nassau Sound	2	Arterial	Minor	Trans/Urban
29	Sadler Road	8th Street to 14th Street	4	Collector	Major	Trans/Urban
30	Sadler Road	14th Street to Fletcher Avenue	4	Collector	Major	Trans/Urban
31	Lime Street	8th Street to 14th Street	2	Collector	Minor	Trans/Urban
32	Lime Street	14th Street to Citrona Drive	2	Collector	Minor	Trans/Urban
33	Citrona Drive	Atlantic Avenue to Jasmine Street	2	Collector	Minor	Trans/Urban

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
34	Citrona Drive	Jasmine Street to Sadler Road	2	Collector	Minor	Trans/Urban
35	Will Hardee Road	Sadler Road to Simmons Road	2	Collector	Minor	Trans/Urban
36	Simmons Road	Amelia Road to Will Hardee Road	2	Collector	Minor	Trans/Urban
37	Simmons Road	Will Hardee Road to Fletcher Avenue	2	Collector	Minor	Trans/Urban
38	Jasmine Street	14th Street to Citrona Drive	2	Collector	Minor	Trans/Urban
39	T. J. Courson Road	8th Street (S.R.200) to 14th Street	2	Collector	Minor	Trans/Urban
40	I-95	Duval County Line to S.R.200/S.R.A1A	6	Freeway		Trans/Urban
41	I-95	S.R.200/S.R.A1A to U.S.17	6	Freeway		Trans/Urban
42	I-95	U.S.17 to Georgia State Line	6	Freeway		Trans/Urban
43	S.R.200/S.R.A1A	Griffin Road to Edwards Road	4	Arterial	Principal	Trans/Urban
43A	S.R.200/S.R.A1A	Edwards Road to I-95	4	Arterial	Principal	Trans/Urban
44	S.R.200/S.R.A1A	I-95 eastbound off ramp to 35 MPH	4	Arterial	Minor	Trans/Urban
44A	S.R.200/S.R.A1A	35 MPH to US. 17	4	Arterial	Minor	Trans/Urban
45	S.R.200/S.R.A1A	U.S.17 to Miner Road	4	Arterial	Minor	Trans/Urban
45A	S.R.200/S.R.A1A	Miner Road to Chester Road	4	Arterial	Minor	Trans/Urban
46	S.R.200/S.R.A1A	Chester Road to Blackrock Road	4	Arterial	Minor	Trans/Urban
47	S.R.200/S.R.A1A	Blackrock Road to Old Nassauville Road	4	Arterial	Minor	Trans/Urban
48	S.R.200/S.R.A1A	Old Nassauville Road to Amelia Island Parkway	4	Arterial	Minor	Trans/Urban

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
50	C.R.107N. (Blackrock Road)	Chester Road to S.R.200/S.R.A1A	2	Collector	Minor	Trans/Urban
51	C.R.107S.	S.R.200/S.R.A1A to Amelia Concourse	2	Collector	Minor	Trans/Urban
51A	C.R.107S.	Amelia Concourse to Santa Juana Road	2	Collector	Minor	Rural
51B	Roses Bluff Road	Chester Road West	2	Collector	Minor	Trans/Urban
52	Chester Road	S.R.200/S.R.A1A to Pages Dairy Road (C.R.200A)	2	Collector	Minor	Trans/Urban
53	Chester Road	Pages Dairy Road to Blackrock Road	2	Collector	Minor	Trans/Urban
53A	Amelia Concourse	S.R.200/S.R.A1A to C.R.107S.	4	Collector	Major	Trans/Urban
54	Barnwell Road	S.R.200/S.R.A1A to Oyster Bay Drive	2	Collector	Minor	Trans/Urban
54A	Miner Road	Haddock Road to S.R.200/S.R.A1A	2	Collector	Minor	Trans/Urban
55	U.S.17 (S.R.5)	Duval County Line to Harts Road	2	Arterial	Principal	Trans/Urban
56	U.S.17 (S.R.5)	Harts Road to S.R.200/S.R.A1A	2	Arterial	Principal	Trans/Urban
57	U.S.17 (S.R.5)	S.R.200/S.R.A1A to Pages Dairy Road	4	Arterial	Principal	Trans/Urban
58	U.S.17 (S.R.5)	Pages Dairy Road to C.R.108	2	Arterial	Principal	Trans/Urban
59	U.S.17 (S.R.5)	C.R.108 to I-95	2	Arterial	Minor	Trans/Urban
60	U.S.17 (S.R.5)	I-95 to Georgia State Line	2	Arterial	Principal	Trans/Urban
60B	Harts Road	U.S.17 to Haddock Road	2	Collector	Minor	Trans/Urban
61	C.R.108	Middle Road (C.R.121A) to U.S.17 (S.R.5)	2	Collector	Major	Rural
62	William Burgess Boulevard	S.R.200/S.R.A1A to Harts Road	2	Collector	Minor	Trans/Urban

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
63	U.S.1/U.S.23/U.S.301(S.R.15)	Musselwhite Road to C.R.108	4	Arterial	Principal	Rural
64	U.S.1/U.S.23/U.S.301(S.R.15)	C.R.108 to C.R.121	4	Arterial	Principal	Rural
65	U.S.1/U.S.23/U.S.301(S.R.15)	C.R.121 to Georgia State Line	4	Arterial	Principal	Rural
66	C.R.121	C.R.108/C.R.121 Split to Bay Road (C.R.115)	2	Collector	Major	Rural
67	C.R.121	C.R.115 (Bay Road) to Andrews Road	2	Collector	Major	Rural
68	C.R.121	Andrews Road to U.S.1/U.S.301	2	Collector	Major	Rural
69	C.R.115 (Bay Road)	C.R.121 to C.R.108	2	Collector	Minor	Rural
70	Kings Ferry Rd. (C.R.115A)	C.R.108 to Kings Ferry Road	2	Collector	Minor	Rural
71	C.R.108	C.R.121 to C.R.115 (Bay Road)	2	Collector	Major	Rural
71A	C.R.108	Kings Ferry Road (C.R.115A) to Middle Road	2	Collector	Major	Rural
72	Middle Road (C.R.121A)	Kings Ferry Road (C.R.115A) to C.R.108	2	Collector	Minor	Rural
73	Middle Road (C.R.121A)	C.R.108 to Griffin Road	2	Collector	Minor	Rural
74	Lessie Road	C.R.108 to Middle Road (C.R.121A)	2	Collector	Minor	Rural
75	C.R.115 (Old Dixie Highway)	U.S.1/U.S.23/U.S.301 to Henry Smith Road	2	Collector	Minor	Rural
76	Andrews Road	C.R.121 to U.S.1/U.S.23/U.S.301	2	Collector	Minor	Trans/Urban
76A	Lake Hampton Road	U.S.1 to Murrhee Road	2	Collector	Minor	Rural
77	U.S.1/U.S.23/S.R.15	Duval County Line to Ratliff Road	4	Arterial	Principal	Trans/Urban

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
78	U.S.1/U.S.23/S.R.15	Ratliff Road to S.R.115 (Lem Turner Road)	4	Arterial	Principal	Trans/Urban
79	U.S.1/U.S.23/U.S.301/S.R.15	S.R.115 (Lem Turner Road) to Old Dixie Highway	4	Arterial	Principal	Trans/Urban
80	U.S.1/U.S.23/U.S.301/S.R.15	C.R.115 to Musselwhite Road	4	Arterial	Principal	Trans/Urban
81A	Griffin Road East	A1A to Bridge	2	Collector	Minor	Rural
81B	Griffin Road West	Bridge to Musselwhite Road	2	Collector	Minor	Rural
82	S.R.200/U.S.301	Duval County Line to C.R.119	2	Arterial	Principal	Trans/Urban
83	S.R.200/U.S.301	C.R.119 to Crawford Road	2	Arterial	Principal	Trans/Urban
84	S.R.200/U.S.301	Crawford Road to Kingbird Drive	2	Arterial	Principal	Trans/Urban
85	S.R.200/U.S.301	Kingbird Drive to U.S.1/U.S.23	4	Arterial	Principal	Trans/Urban
86	S.R.200/S.R.A1A	U.S.1/U.S.23 to Evelyn Street	4	Arterial	Principal	Trans/Urban
87	S.R.200/S.R.A1A	Evelyn Street to Griffin Road	2	Arterial	Principal	Trans/Urban
88	S.R.115 (Lem Turner Road)	Duval County Line to Church Road	2	Arterial	Minor	Trans/Urban
89	S.R.115 (Lem Turner Road)	Church Road to U.S.1/U.S.23	2	Arterial	Minor	Trans/Urban
90	C.R.121	Duval County Line to C.R.119	2	Collector	Major	Rural
91	C.R.121	C.R.119 to C.R.2 (Crawford Road)	2	Collector	Major	Rural
92	C.R.121	C.R.2 (Crawford Road) to C.R.108 (River Road)	2	Collector	Major	Rural
93	C.R.121	C.R.108 (River Road) to C.R.108/C.R.121 Split	2	Collector	Major	Rural

ID	Road Name	Segment	Lanes	Class	Maj/Min	Urban/Rural
94	C.R.119	U.S.301 to C.R.121	2	Collector	Minor	Rural
95	C.R.108 (River Road)	C.R.121 to U.S.1	2	Collector	Major	Rural
96	Ford Road	U.S.301 to Duval County Line	2	Collector	Minor	Trans/Urban
97	Ratliff Road	Thomas Creek Road to U.S.1	2	Collector	Minor	Trans/Urban
98	C.R.2	C.R.121 to Georgia State Line	2	Collector	Major	Rural
99	Crawford Road	U.S.301 to C.R.121	2	Collector	Major	Rural
100	8th Street	Alachua Street to Port	2	Arterial	Minor	Trans/Urban
101	8th Street	Atlantic to Alachua Street	2	Arterial	Minor	Trans/Urban
103	Centre Street	Front Street to 8th Street	2	Collector	Major	Trans/Urban
105	N. Fletcher	1st Street North	2	Collector	Minor	Trans/Urban
106	N. Fletcher	Atlantic Avenue to 1st Street	2	Collector	Minor	Trans/Urban
111	Jasmine Street	Citrona Drive to S. Fletcher Avenue	2	Collector	Minor	Trans/Urban
117	US 90	Baker County Line to Duval County Line	2	Collector	Minor	Trans/Urban
118	I-10	Baker County Line to Duval County Line	4	Freeway		Rural

SOURCE: FDOT, Nassau County Mobility Plan, 2020

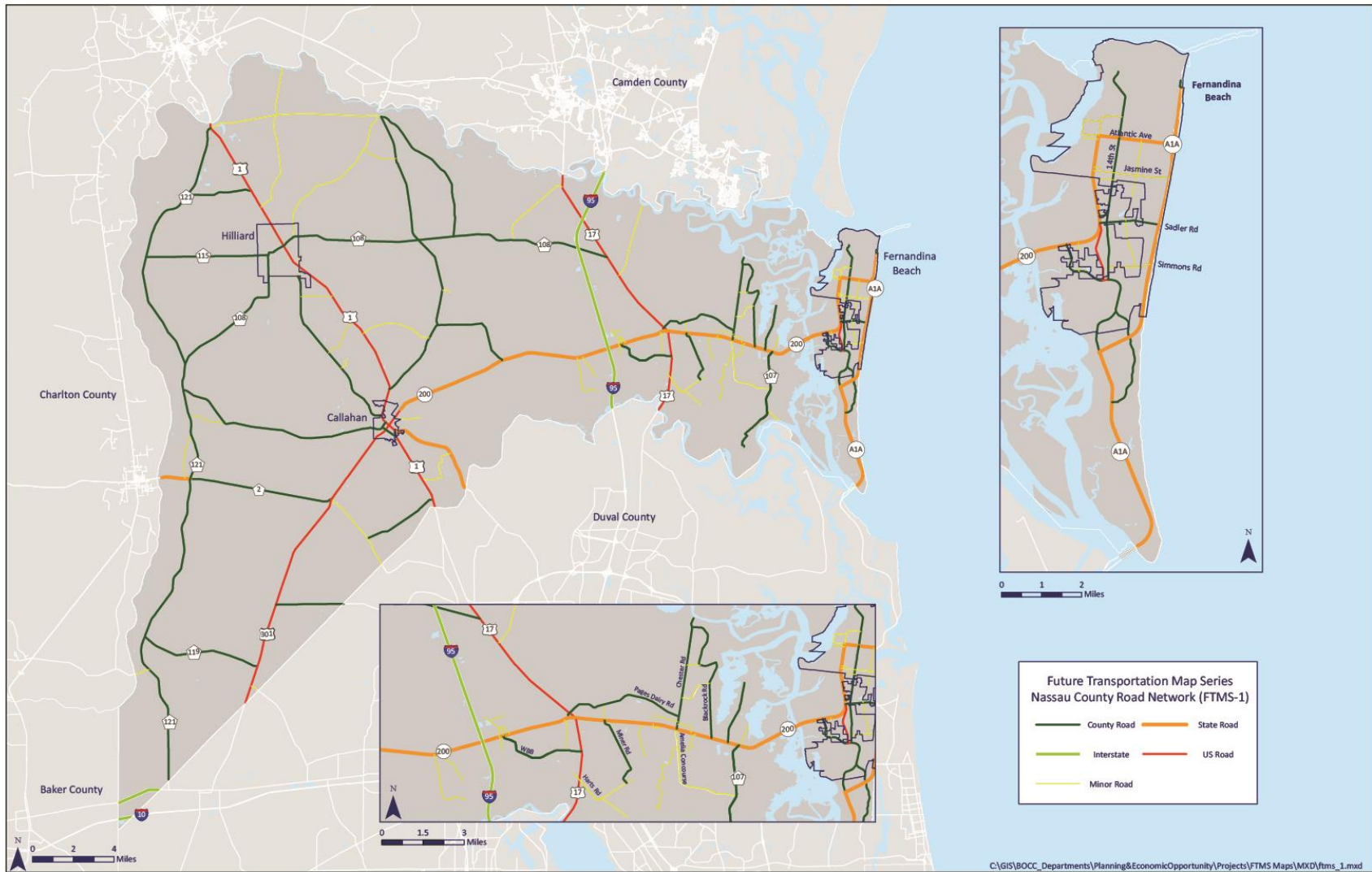


Figure 1 – FTMS Map 1 Nassau County Road Network

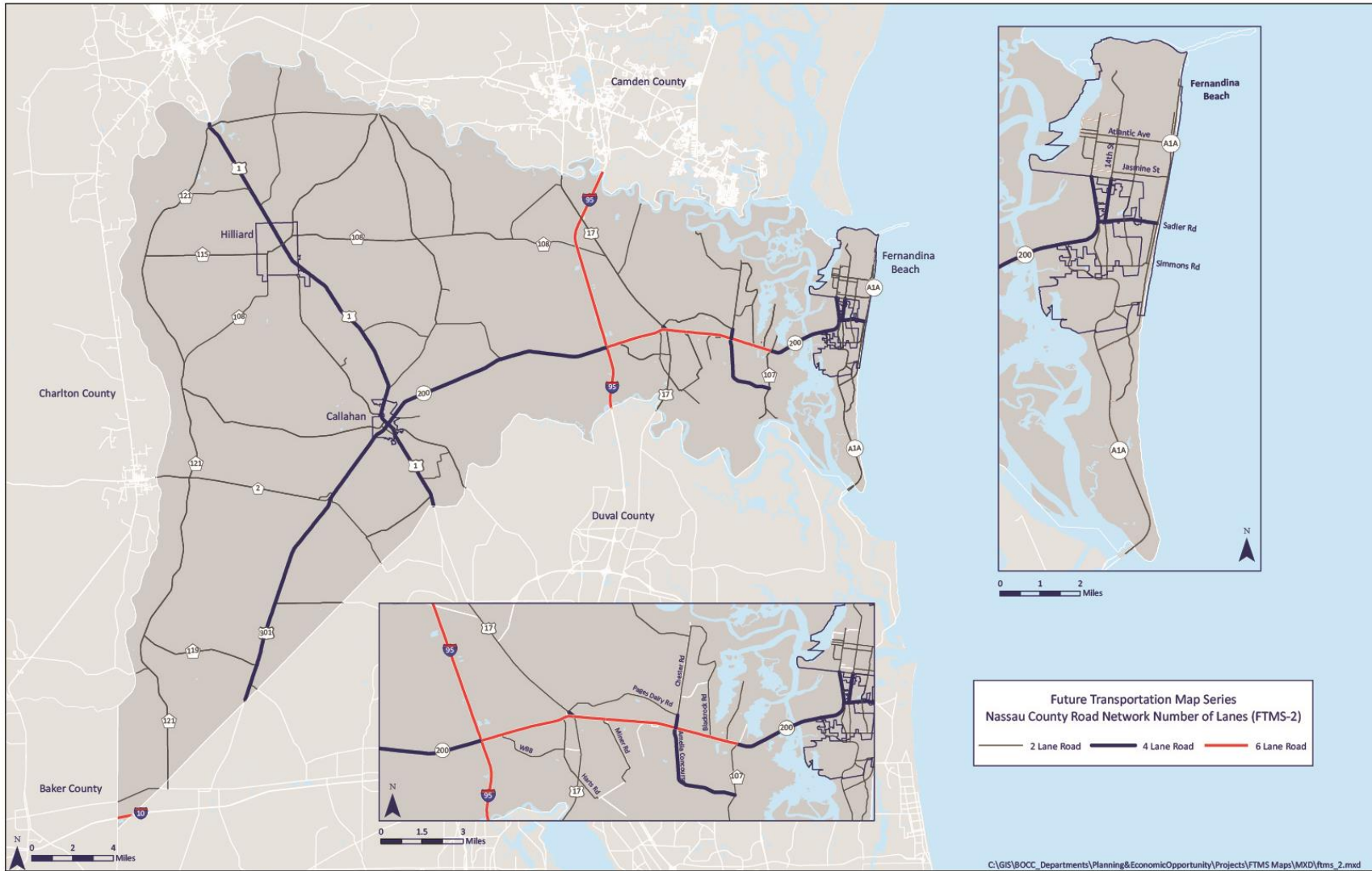


Figure 2 – FTMS Map 1 Nassau County Road Network Number of Lanes

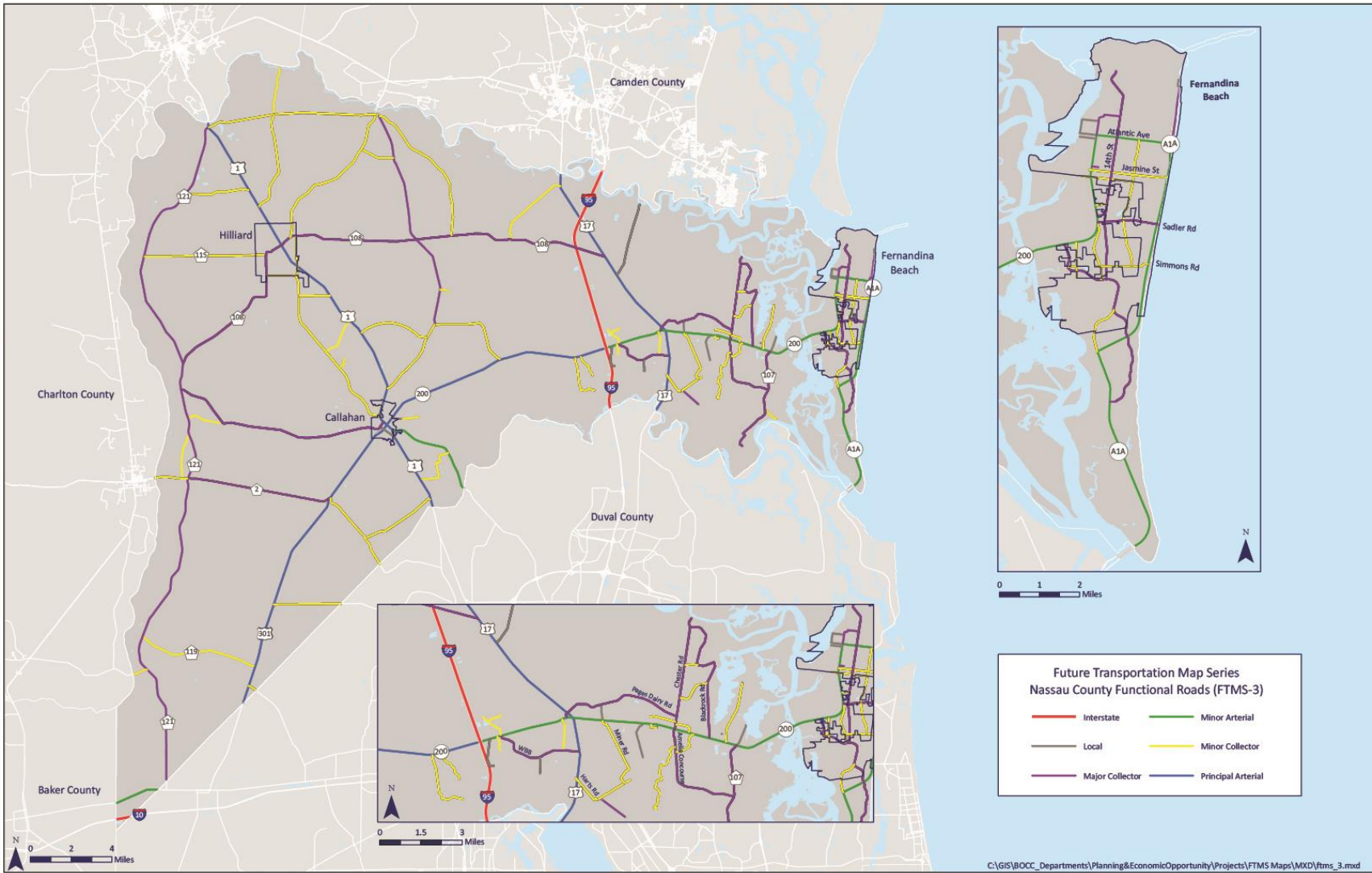


Figure 3 – FTMS Map 1 Nassau County Road Network Classification

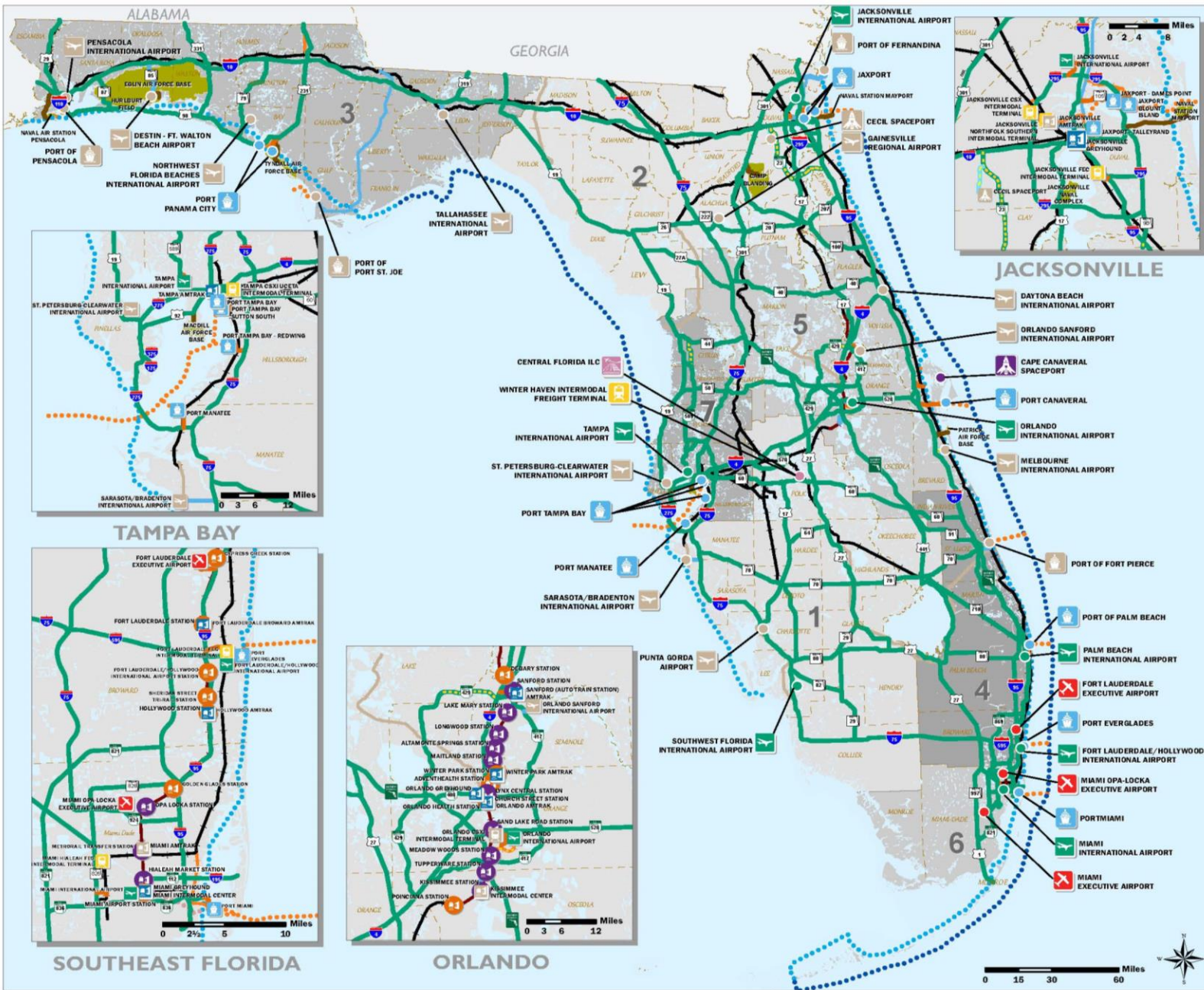
Strategic Intermodal System (SIS)

State legislation enacted in 2004 created a Strategic Intermodal System (SIS). The SIS is a statewide network of high-priority transportation facilities, including the State's largest and most significant commercial service airports, spaceport, deep-water seaports, freight rail terminals, passenger rail and intercity bus terminals, rail corridors, waterways and highways. These facilities are the workhorses of Florida's transportation system, carrying more than 99 percent of all commercial air passengers and cargo, virtually all waterborne freight and cruise passengers, almost all rail freight, 89 percent of all interregional rail and bus passengers and more than 70 percent of all truck traffic and 55 percent of total traffic on the State Highway System. Table 7 below shows the Nassau County key transportation and freight facilities. FDOT prepares an SIS Atlas, and updates it periodically to show new and updated SIS facilities in each District, this Atlas can be used as a reference when researching SIS Facilities.

Table 7 – Nassau County Key Transportation and Freight Facilities

SIS Category	SIS Facilities
Strategic Intermodal Systems (SIS) Facilities	I-95, I-10, US 301, US 1, SR-200/SR-A1A
SIS Railroads	CSX, Norfolk Southern, First Coast Railroad
Seaports	Port of Fernandina
Non-SIS State Facilities	US 17, SR 115
General Aviation Airports	Hilliard Airpark, Fernandina Beach Municipal Airport

Source: Nassau County Freight and Logistics Overview, FDOT (2013)



SIS Strategic Intermodal System System Map

Airports & Spaceports

- SIS Commercial Service Airport
- Strategic Growth Commercial Service Airport
- SIS General Aviation Reliever Airport
- SIS Spaceport
- Strategic Growth Spaceport

Seaports

- SIS Seaport
- Strategic Growth Seaport

Freight Rail Terminals

- SIS Freight Rail Terminal
- Strategic Growth Freight Rail Terminal

Intermodal Logistic Center

- Strategic Growth Intermodal Logistic Center

Interregional Passenger Terminals

- SIS Passenger Terminal
- Strategic Growth Passenger Terminal

Urban Fixed Guideway Transit Terminal

- SIS Urban Fixed Guideway Hub
- SIS Urban Fixed Guideway Station

Highway

- SIS Highway Corridor
- Future SIS Highway Corridor
- Strategic Growth Highway Corridor
- SIS Highway Connector
- Strategic Growth Highway Connector
- Future Strategic Growth Highway Connector
- SIS Military Access Facility

Rail & Urban Fixed Guideway

- SIS Railway Corridor
- Strategic Growth Railway Corridor
- SIS Railway Connector
- Strategic Growth Railway Connector
- SIS Urban Fixed Guideway

Waterways

- SIS Waterway
- Strategic Growth Waterway
- SIS Waterway Connector
- SIS Waterway Shipping Lane

Florida Department of Transportation
Strategic Intermodal System
October 2019
<http://www.fdot.gov/planning/systems> 850-414-4900

Figure 4 – Florida SIS System 2019 (Source: FDOT)

Quality/Level of Service (LOS)

The Quality/Level of Service Handbook was published by FDOT in 2020. This handbook aims to help review a roadway users' quality/level of service (Q/LOS) and capacity. Quality of service is a traveler-based perception of how a roadway operates. The roadway level of service (LOS) standard is a qualitative assessment of the quality of flow of traffic into six letter grades. The LOS standards are represented by letters A through F, with A representing the most favorable conditions and F representing the least favorable. The six levels of service as described by the Transportation Research Board's Highway Capacity Manual. They are:

LOS A – This represents a condition of free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Traffic volumes are low, and speeds are high, and drivers have complete freedom in selecting their speeds and may change lanes at will. The motorists experience a high level of driving comfort. Stopped delays at signalized intersections are minimal.

LOS B – With this level of service, operating speeds are beginning to be restricted somewhat by traffic conditions, although drivers still have reasonable freedom in choosing their speeds and travel lanes. Flow is stable and average operating speeds are only slightly lower. The general level of motorist comfort is still high.

LOS C – Traffic flow is still stable at this level of service, but most drivers are restricted in their choice of speeds and maneuverability. Traffic conditions are still tolerable for most drivers and operating speeds are not unsatisfactory. Traffic flows are such that small increases in flow will result in a substantial deterioration in service. Motorists will experience an increase in tension due to the increased attention needed for safe operation.

LOS D – This level of service represents high traffic volumes. Although speeds may still be maintained, delays may begin to occur frequently due to high traffic volumes. Drivers have little freedom to choose their own speeds or lanes of operation, and their comfort and convenience are low. Small increases in traffic flow will generally cause operational problems at this level.

LOS E – This level of service describes a roadway that is operating near or at capacity. Speeds are low and there are virtually no gaps in the traffic stream. There is little driver independence regarding speed choice and lane choice. Small increases in volume or minor disturbances within the traffic stream will cause a breakdown in traffic flow.

LOS F – This describes a forced flow situation. Vehicle density is beyond the optimum for maximum volume; therefore, traffic volume has dropped below that of level of service E. Frequent and prolonged stoppages may occur, and average travel speeds are very low, as is driver comfort. Vehicles may progress at reasonable speeds for several hundred feet or more, and then be required to stop in a cyclic fashion. It is to the point at which arrival flow exceeds discharge flow that causes a queue to form.

The Q/LOS Handbook looks at four major travel modes: automobile, bicycle, pedestrian, and transit. Each mode includes different characteristics to evaluate travelers' experiences using the facility; it is important to consider this when designing multimodal facilities.

Table 8 – Transportation Level of Service (LOS) Standards

Road Classification	Minimum LOS		
	Rural	Transitioning to Urban	Urbanized
Limited Access (Freeways)			
4-lane	D	D	D
6-lane	D	D	D
8-lane	D	D	D
Principle Arterials			
2-lane	D	D	D
4-lane	D	D	D
6-lane	D	D	D
Minor Arterials			
2-lane	D	D	D
4-lane	D	D	D
6-lane	D	D	D
Collectors			
Major	D	D	D
Minor	D	D	D
Local Roads			
All Local Roads	D	D	D

Source: FDOT, Nassau County Engineering Services Dept.

Vehicle Miles Traveled

Vehicle miles traveled (VMT) is a measure used extensively in transportation planning for a variety of purposes. It measures the amount of travel for all vehicles in a geographic region over a given period, typically a one-year period. It is calculated as the sum of the number of miles traveled by each vehicle. The Nassau County Mobility Plan Study focuses on vehicle travel and links to land use by type. Decreases in VMT per capita is an indicator that the County is successful in accommodating population and employment growth while encouraging and experiencing lesser increases in motorized traffic volumes. The most important factor in determining Vehicle Miles Traveled is population density. Nassau County has begun planning by ensuring that new transit, bicycling and walking infrastructure and services are implemented as the County encourages growth, providing options other than driving. Cities and counties around the state are in the process of transitioning from LOS to VMT in their policies and practices.

Constrained Roadways

A constrained facility is a roadway facility or project that cannot be expanded with additional through lanes because of physical, environmental, or policy constraints. In Nassau County, many of the constrained roadways are Canopy Roads. Facilities identified as constrained in Nassau County include the following:

- CR 105A (Buccaneer Trail) from Shannon Road to Gerbing Road
- State Road 105/A1A from Sadler Road to George Crady Bridge
- Amelia Island Parkway from Julia Street to CR105A (Buccaneer Trail)
- Scott Road from State Road 200/A1A to Amelia Island Parkway
- Any road designated as Scenic/Canopy Roads by the Board of County Commissioners, see Figure 6 Nassau County Canopy Roads.

Evacuation Routes

Evacuation routes, as defined by the Statewide Regional Evacuation Study Program (SRESP), includes roadways designated by county emergency management officials, in coordination with FDOT and NEFRC as official regional evacuation routes; roadways and roadway segments identified by the SRESP as routes used to interconnect county designated evacuations routes: or routes used to interconnect evacuation routes between study regions. This includes major highways that are part of the regional and statewide network including primary (interstates and turnpikes), secondary (major arterials), and certain local roadways (Minor arterials) which provide significant evacuation transportation capacity to move vulnerable populations to “points of safety”. Future Transportation Map Series (FTMS)⁴ shows the evacuation routes in Nassau County and the surrounding region.

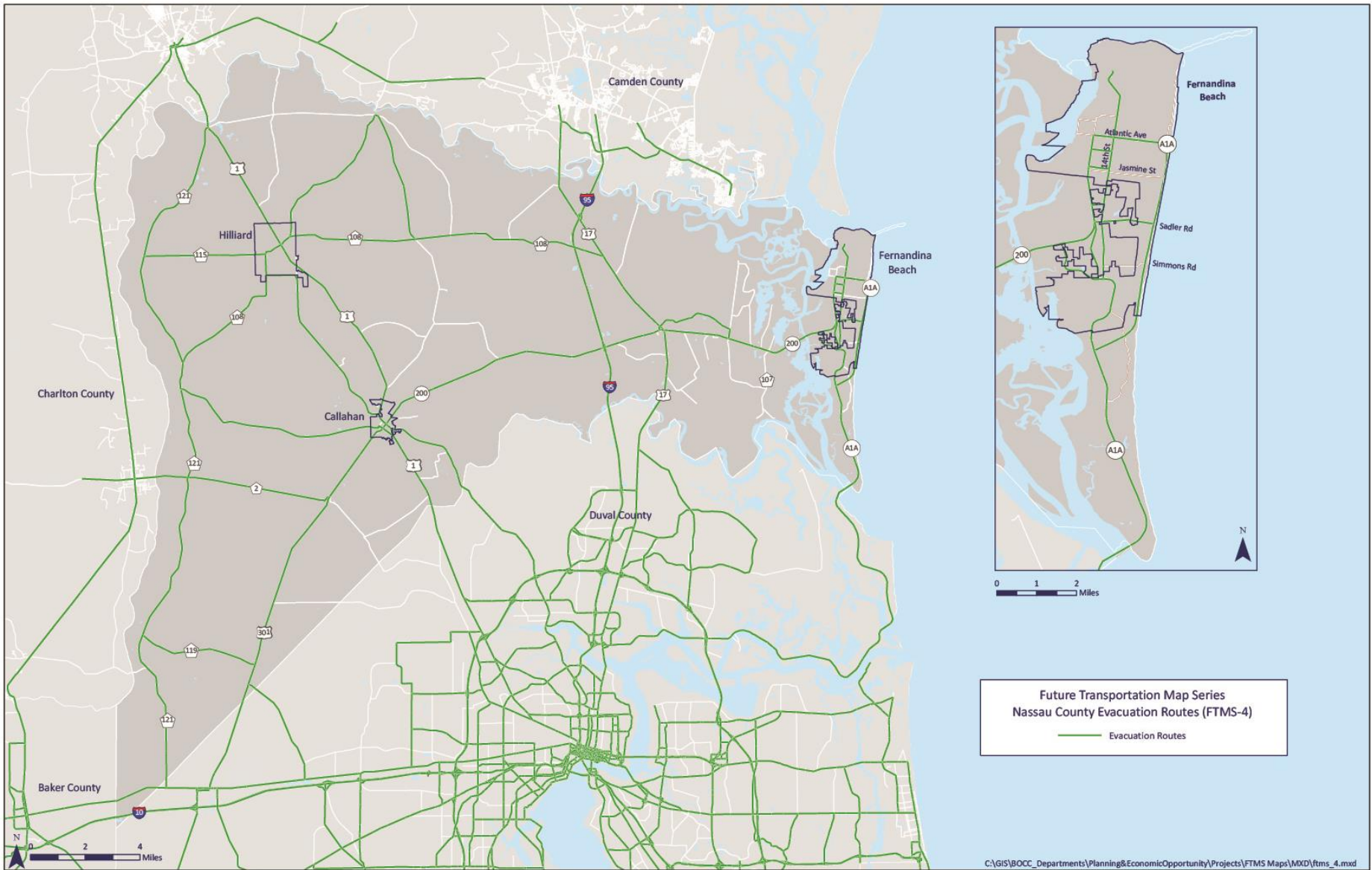
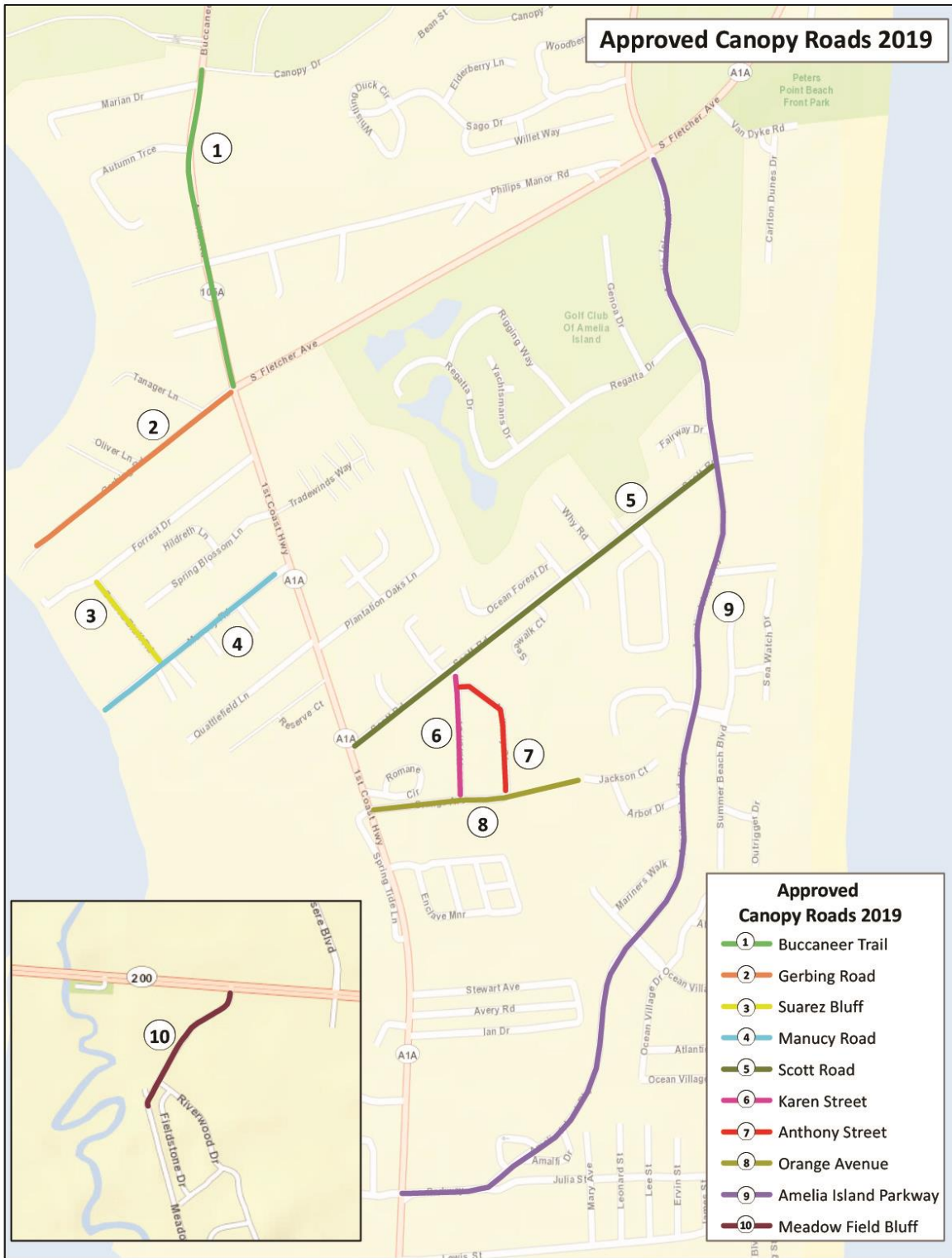


Figure 5 – FTMS-4 Nassau County Evacuation Routes



C:\GIS\BOCC_Departments\Planning&EconomicOpportunity\Projects\Canopy Roads\All Canopy roads_2019 rev.mxd

Figure 6 – Nassau County Canopy Roads (2019)

Nassau County Growth Trends

Nassau County’s population in 2019 was estimated to be 85,070 by Florida Bureau of Economic and Business Research (BEBR), and 80,578 by the US Census Bureau. According to the latest population estimates from the U.S. Census Bureau, Nassau County grew by 3.6% from 2017-2018, ranking as the twenty-fifth fastest growing county, by percent growth, in the United States. Over the coming decade, the Florida Bureau of Economic and Business Research (BEBR) predicts Nassau County will be the ninth fastest growing county in the State of Florida with a projected population expansion of 38% resulting in over 114,000 people calling Nassau County home by 2040. By 2045 Nassau County is expected to increase in population by between 40 and 74%, from around 85,070 in 2019 to between 118,900-148,000, due not only to migration into Florida, but also due to economic development both inside and surrounding Nassau County.

Table 9 – Bureau of Economic Business and Research Nassau County Population Projections

	Low	Medium	High
2020	81,600	86,900	92,100
2025	86,200	95,800	104,300
2030	89,400	103,100	116,100
2035	91,200	109,100	127,200
2040	92,100	114,300	137,500
2045	92,500	118,900	148,000

Source: Bureau of Economic Business and Research, 2019

In 2017, 89% of all new dwelling units were east of I-95, with 60% of those occurring in the Yulee area. New non-residential development has increased over the last four years, specifically along the SR200 corridor. Areas west of I-95 have also experienced steady growth, most notably west of I-95 near Edwards Road where previously dormant pre-recession housing developments are now being built-out. Construction plan approval for The Tributary (Three Rivers DRI), and apartment housing west of I-95 will bring more development activity west of I-95.

Current growth trends in Nassau County are expected to continue in an upward trajectory. The Nassau County Planning Department has helped to identify certain areas where growth is likely to occur in the future to help accommodate projected population growth in a manner that is consistent with the Vision 2032 Plan. These areas are the East Nassau Community Planning Area Sector Plan, The William Burgess District, The State Road 200 Corridor Plan, The Tributary, and The Western Nassau Vision Plan. Historic development patterns in Nassau County have led to suburban sprawl, non-sustainable development patterns which rely heavily on the single occupant vehicle. Current planning practices in the County shift away from these development patterns to encourage more mixed-use, compact development patterns which support the use of multi-modal transportation.

East Nassau Community Area (ENCPA) Sector Plan

The East Nassau Community Area (ENCPA) Sector Plan is a master planned development of 24,000 acres located in Eastern Nassau County, mainly between SR-200 and Chester Road. A Sector Plan allows for large-scale planning that recognizes the integral relationships between transportation, land use, and urban design. The ENCPA land use master plan promotes sustainable and efficient land use patterns by: protecting the conservation lands (conservation habitat network CHN) to protect natural habitats;

creating a connected network of civic spaces; providing for a variety of housing types near village centers; designing communities that support alternative modes of transportation with an emphasis on bicycle and pedestrian safety and the opportunity for bus rapid transit or rail; dedicating rights-of-ways to accommodate needed infrastructure; using innovative building construction and development practices; and accommodating a new interchange at I-95 to serve the ENCPA and facilitate implementation of the Long Range Transportation Plan.

Pursuant to Policy FL.13.05, multi-modal transportation design, Nassau County may designate the ENCPA Regional Center as a multi-modal transportation district (MMTD). The Regional Center shall incorporate: a complementary mix and range of land uses; interconnected networks of streets designed to encourage walking and bicycling; appropriate densities and intensities within walking distance of transit stops; daily activity within walking distance for residents; and public uses, streets, and squares that are safe, comfortable, and attractive for pedestrians with adjoining buildings open to the street and with parking not interfering with pedestrian, transit, automobile, and travel modes. In addition to the MMTD, there are two identified Transit Oriented Development (TOD) nodes within the ENCPA. These development areas require compact, mixed-use development that is friendly and attractive for pedestrians and people on bikes and have densities high enough to support transit. There will also be Village Centers which will contain a mixture of uses and densities and large-scale commercial, office or civic uses. They are intended to support the needs of more than one neighborhood. Development within the Village Center should be mixed use, with development standards to encourage and incorporate pedestrian facilities, plazas, and parks to serve the surrounding neighborhoods. The development shall be designed to accommodate bus/transit stops.

The overall allowed densities and intensities within the ENCPA are:

Table 10 – ENCPA Maximum Development Program

Maximum Development Program	
Residential	24,000 Dwelling Units
Non-Residential	11,000,000 Sq. ft.

The first development area, the Employment Center Detailed Specific Area Plan (DSAP) includes approximately 4,202 acres of land north and south of SR-200, and includes the first Preliminary Development Plan (PDP), the Market Street PDP, which accounts for approximately 560 acres directly north and south of SR-200. The two areas have the following development allowances:

Table 11 – East Nassau Employment Center DSAP Development Program

Planning Area	Acres	Residential Units	Non-Residential Square Footage
Northern	665	769	75,000
Central	2,938	3,269	6,236,495
Southern	599	0	788,505

Table 12 – Market Street PDP Development Program

Land Use	Development Program
----------	---------------------

Residential	917 Dwelling Units
Non-Residential	450,000 St. ft.

William Burgess District

The William Burgess District is an overlay district for approximately 5400 acres of land in Nassau County, located east of I-95, south of SR-200, generally west of US-17, and north of the Nassau River. This overlay district utilizes transect zones to encourage more sustainable and efficient development patterns in an area already experiencing growth pressures and anticipates being implemented through the 2045 planning horizon. The plan includes a comprehensive transportation network, a variety of land uses based on transect zones, and ensures civic facilities will be planned for and programmed with new development.

The overlay district is regulated by the William Burgess District Context and Connectivity Blueprint, or the Plan. The Plan includes provisions which not only regulate uses based on the transect, but also site plan design, transportation, and civic space requirements. The plan includes proposed cross-sections for all roadways, which include shared use paths along the roadways to accommodate multi-modal transportation. The Plan is centered around mobility and access and includes a comprehensive transportation network to help provide access into and out of the district, including a parallel corridor to SR-200 along William Burgess Boulevard. Trails through the conservation lands and through parks are also required to enhance recreational and active transportation opportunities throughout the district. All roadways and intersections will be designed with context-sensitive design solutions to promote safe non-vehicular transportation.

The Plan was designed to accommodate around 25% of the potential growth in Nassau County through a mixture of densities and intensities. The densities have been designed to be higher in the urban transect zones, so that they can support transit in the future. All residential development is required to meet minimum density standards as defined by their transect zone.

Table 13 – William Burgess District Transect Zones

Transect	Transect Name	Minimum Density	Maximum Density
T-1	Natural Zone		0du/ac.
T-1.5	Agriculture and Open Space Zone		1du/20ac.
T-2	Rural Zone		1du/5ac.
T-2.5	Rural Transitional Zone		1du/1ac.
T-3	Sub-urban Zone	2du/ac.	5du/ac.
T-3.5	Urban Transitional Zone	5du/ac.	10du/ac.
T-4	Urban Edge/Urban General Zone	8du/ac.	15du/ac.
T-4.5	Urban Corridor Zone	0du/ac.	18du/ac.
T-5	Urban Center Zone	10du/ac.	25du/ac.
T-7	Special District Zone	0du/ac.	25du/ac.

The WBD mobility network and Transect based mixed-use plan promotes parallel facilities, and a grid network of roads, and complete streets. Local facilities are proposed to run parallel to SR 200 from Semper Fi Drive to US 17, and parallel to US 17 from SR 200 to Harts Road. The parallel facilities, coupled with a mixed-use development pattern, will allow future road users to reduce their travel on SR 200 and US 17

within the limits identified by using the proposed local roads. These parallel roadways are planned to include bike lanes, sidewalks, and multi-use paths where possible to provide appropriate facilities for all users. According to FHWA these types of geographic areas are likely to assist in reducing drive alone trips, reducing vehicle miles driven by area residents and employees, increasing awareness and raising acceptability of all travel modes by increasing walking, biking, transit, carpooling and car sharing trips. Finally, the overlay text amendment promotes increasing neighborhood mobility and livability. A cursory assessment using the NCHRP trip estimator spreadsheet, indicates the transportation network provides the opportunity to reduce motor vehicle travel. The Plan includes access management standards and requires roadways to be designed with context sensitive solutions to increase safety for all roadway users. The roadways identified in the plan as public roads have been included as candidate projects to be funded in the Nassau County Mobility Plan update.

State Road 200 Corridor Plan

SR-200 services residential and non-residential development along the corridor. As the main east/west corridor in the County, and based on Euclidean zoning, it has facilitated the suburban sprawl development patterns seen in the Yulee area today. The current SR-200 overlay district includes access restrictions and has cross-connectivity requirements. The Planning Department has hired GAI Consultants to reevaluate the corridor’s overlay code to be in line with the shifting views in Nassau County. The proposal is to create an overlay district similar to the William Burgess District which will apply transects and form-based code for developments to encourage mixed-use, more compact development patterns. The proposed plan includes the installation of a trail along SR-200 to encourage alternative modes of transportation along the corridor as well as throughout the overlay district.

Table 14 – SR-200 Transect Zones

Transect	Transect Name	Minimum Density	Maximum Density
T-1	Natural Zone		0du/ac.
T-1.5	Agriculture and Open Space Zone		1du/20ac.
T-2	Rural Zone		1du/5ac.
T-2.5	Rural Transitional Zone		1du/1ac.
T-3	Sub-urban Zone	2du/ac.	5du/ac.
T-3.5	Urban Transitional Zone	5du/ac.	10du/ac.
T-4	Urban Edge/Urban General Zone	8du/ac.	15du/ac.
T-4.5	Urban Corridor Zone	0du/ac.	18du/ac.
T-5	Urban Center Zone	10du/ac.	25du/ac.
T-7	Special District Zone	0du/ac.	25du/ac.

The Tributary

Formally known as Three Rivers Development of Regional Impact (DRI), renamed by the developer to the Tributary, the development has begun construction of Phase 1A, a residential phase of the development including approximately 670 single family dwelling units. The DRI entitlements include 3,200 dwelling units and 500,000 square feet (s.f.) of retail, 250,000 s.f. of industrial, 300 dry storage boat slips, and 50,000 s.f. of office uses along SR-200 and in the mixed-use village center on the river. Public benefits of the project include a fire station, a public-school site, a public park, and a publicly accessible marina in the village center when constructed. The plan includes a River Village Center, which includes a public boat

ramp and a mixture of uses. The first approved Preliminary Development Plan (PDP) is for approximately 670 dwelling units at the northerly end of the property, and the public County park along Edwards Road. The plan also shows future development pods, phases, and the connectivity throughout the development for vehicular and non-vehicular transportation, which includes a comprehensive trail network. This kind of development pattern can allow better mobility throughout the community to the daily needs of the residents.

The Western Nassau Vision Book

In response to a Fall 2017 Urban Land Institute report on the impacts of growth on Western Nassau, the Nassau County Planning and Zoning Board (PZB) formed a subcommittee, the Western Nassau Heritage Preservation Committee (WNHPC). The committee was charged with discussing the future of Western Nassau, and to work with the Planning and Economic Opportunity Department to determine how they can best assist in planning. The Committee's logo "Our Heritage, Our Future" echoes the historic Hilliard Poultry Association signage as a nod to the County's past. Community outreach and engagement were the priorities of the committee. On March 26, 2019, after a year of community feedback to understand the wishes of the community, the WNHPC adopted the following mission statement:

The Western Nassau Heritage Preservation Committee exists because there is a genuine desire on the part of our citizenry to ensure what our name implies--Preservation! We enjoy a rich heritage in Western Nassau County. Through purposeful community engagement, we are driven to gain perspective and insight for inevitable growth. The underlying impetus of our goal is to maintain a high quality of life, preserve rural character, and ensure fiscally sustainable and appropriately controlled development.

The outcome of the WNHPC and community outreach is the Western Nassau Vision Book, which includes strategies to be implemented over the planning horizon of 2045. The Board of County Commissioners adopted the Vision Book as a policy tool for future planning and development in Western Nassau. Of greatest importance to the residents is the preservation of open space, conservation of wetlands and floodplain management, and community formation. The Vision Book includes goals, objectives, and strategies to encourage development patterns consistent with the community's vision. One policy proposed to preserve the prime agricultural lands and conserve wetlands, is to create an area plan, similar to the William Burgess District, around the Crawford Diamond to accommodate projected growth and provide for more efficient transportation means, including planning for transit to the Crawford Diamond employment center and trails to provide for a means of active transportation and recreation. The Vision Book also addresses the need to provide new and alternative corridors to State Road 200 and US-301.

Yulee Area Development Patterns

Nassau County, and Yulee in particular, has traditionally been a bedroom community for Jacksonville. The average number of cars per household in 2018, according to the US Census Bureau, is 1.92. Much of the Yulee area has developed as low density single-family detached dwelling units. The lands along Amelia Concourse are single family home pre-recession developments which are currently being built out. While there is little that can be done about the current development pattern, there are various larger vacant parcels that can be utilized differently. Future planning efforts in this area will focus on connectivity, both vehicular and non-vehicular, and civic facilities.

Nassau County Mobility Planning

Existing Network

The current Nassau County mobility network includes a majority of two-lane roads. West of I-95, these roads have little to no shoulder, and no sidewalk facilities. East of I-95, some of the roads include sidewalks and paved shoulders. Arterials in the County are 4-6 lanes. SR-200 is the only major east/west road east of I-95, there are few north/south roads east of I-95. A lack of interconnectivity in the transportation network coupled with insufficient parallel facilities has forced the arterial roadways, SR200 and US17, to function not only as arterial roadways but also as collector roads and local streets. The results are increased drive alone trips, increased vehicle miles driven by area residents and employees, decreased acceptability of other travel modes such as walking, biking, transit, carpooling, and car sharing trips.

There are few bike lanes, sidewalks, and shared use paths from Amelia Island, which discourages multi-modal transportation. On Amelia Island, there is insufficient right-of-way and other constraints which prohibit the widening and expansion of most roadways; alternative modes of transportation should be evaluated to increase capacity and facilitate transportation for all roadway users. Based on the lack of connectivity in the County, new roadways which serve as alternative routes to SR-200 and US-17 should be planned for.

The Mobility Plan

Pursuant to Article VIII, section 1(f), Florida Constitution, Sections 125.01 and 125.66, Florida Statutes, and other applicable provisions of the Law, the Nassau County Commission has the powers of local self-government to perform county functions, except where prohibited by law. These powers include creating funding mechanisms to support needed transportation improvements that increase capacity on the County's roadway network. The Mobility Plan was approved by Ordinance 2014-16 and identified projects that will be needed over the next 20 years as growth occurs. The Mobility Plan imposes a fee on new construction to contribute its fair share of the cost required to make vehicular and multi-modal improvements to the transportation network. The Mobility Plan imposes a fee on new residential units and non-residential uses based on the vehicle miles traveled (VMT) to determine the proportionate cost for each development. The County is currently updating the Mobility Plan to include new projects identified in FTMS 2045 LRTP (FTMS-5) and update the fees, as required by Ord. 2014-16.

The update to the plan modifies that timeframe for updating the plan from every three years to every five years. FTMS 2045 LRTP (FTMS-5) and the Mobility Plan identify 48 potential projects that are needed to maintain levels of service and add capacity through 2040. The projects include new roadway construction, roadway improvement projects, safety projects, and multi-modal projects to enhance the capacity of the roadway system for all users. The plan uses the North East Regional Planning Model – Activity Based for modeling the roadway network through 2040. The model indicates the following roadways will not meet the County LOS targets by 2040:

1. S. 8th St/A1A from Amelia Island Parkway to Sadler Road
2. S. 8th St/A1S from Lime Street to Atlantic Avenue
3. 14th Street from Hickory Street to Jasmine Street
4. 14th Street from Jasmine Street to Lime Street
5. Sadler Road from 8th Street to 14th Street
6. SR 200 from Still Quarters Road to US 17

7. SR 200/A1A from US 17 to Rubin Lane
8. SR 200/A1A from Rubin Lane to Chester Road
9. Pages Dairy Road from US 17 to Chester Road
10. Chester road from Pages Dairy Road to Blackrock Road
11. Amelia Concourse from SR 200 to Old Nassauville road
12. Miner Road from Haddock Road to SR 100
13. US 17 from the Duval County Line to Harts Road
14. US 17 from Pages Dairy Road to I-95
15. I-95 and I-10 from Duval County Line to US 17 and all of I-10

To alleviate the roadways that do not meet County LOS targets, the plan looks at the use of parallel/alternative corridors. The following parallel facilities have been considered:

Table 15 – Mobility Plan Identified Parallel Corridors

Non-Target Roadway	Parallel Route	Area
SR 200/A1A	William Burgess Boulevard	Yulee
Amelia Concourse	Hendricks Road	Yulee
SR A1A	Citrona Drive	Amelia Island
SR A1A	Amelia Island Parkway	Amelia Island
14 th Street	Citrona Drive	Amelia Island
Sadler Road	TJ Courson Road	Amelia Island

The Mobility Plan is broken into three zone, two zones are covered by this Mobility Plan, and the third is under the ENCPA Mobility Plan (see below). One zone is for the lands east of I-95, the second zone is for lands west of I-95, and the third Mobility Zone is for all lands in the ENCPA Sector Plan. The Mobility Fee is based on the project network cost in each zone, and the proportionate fair share for developments coming into the zone.

The 48 projects are prioritized into two categories: cost feasible/short range projects, projects needed in the next 1-10 years, and long-range projects, projects that will be needed in the next 11-20 years. These projects range from intersection improvements, roadway improvements, new roadway construction projects, and multi-modal projects such as the addition of sidewalks and trails. The projects should be evaluated on an annual basis and included in the schedule of capital improvements. By evaluating the projects on an annual basis, the Commission can remove projects which have alternative funding sources through the TPO or FDOT and add additional projects.

Alternative Corridors

SR-200 is the only east/west roadway located east of I-95, and despite it being widened to six (6) lanes, with the estimated population growth, it is necessary to plan for alternative corridors to provide for enhanced connectivity. The Mobility Plan and the ENCPA Mobility Plan (See below), both propose alternative corridors to SR-200. The Mobility Plan includes a proposed extension of William Burgess Boulevard to Semper Fi on the west, with an overpass over I-95, and Amelia Concourse to the east, with a bridge over Lofton Creek. It also proposes an alternative corridor west of I-95 and north of SR-200, connecting to a new interchange at the eastern end, and Griffin Road at the western end. The ENCPA Mobility Plan includes a new interchange and the CR-108 Extension.

Project Evaluation

The 48 candidate projects were evaluated, first from the planning aspect, and then from the technical aspect, to determine a weighted score for each project. Performance criteria was used to evaluate how each project fit in to the local and regional planning context. The performance criteria include planning, impacts to congestion/mobility, preservation or enhancement to the system, safety measures, multi-modal elements, promotion of economic development, and funding sources. Once projects were selected based on the performance criteria, Engineering Services assigned a weighted score for each candidate project based on its cost effectiveness, connectivity and mobility, health, policy support, and safety. While the candidate projects were ranked, it does not necessarily mean that the highest ranked project is the most needed to maintain levels of service, but rather, projects providing alternative routes may be considered instead of a widening project.

Project List

Project Number	Project Name	Project Description
1	Amelia Island trail	10' shared-use path from 8 th street to Bailey Road
2	William Burgess Boulevard Trail	10' shared-use path from SR-200 to US-17
3	Citrona/Will Hardee Path	10' shared-use path from Atlantic Avenue to Simmons Road
4	Baldwin Rail Path Northern Extension	10' shared-use path along CR-121 and CR-11
5	Baldwin Rail Path Northern Extension Duval to Baker County Lines	10' shared-use path extending west from Duval county Line to Baker County Line
6	William Burgess/Harts Road Roundabout	Roundabout at the intersection of William Burgess Boulevard and Harts Road
7	Pages Dairy/Chester Road Intersection	Signalized Intersection Improvements at Pages Dairy/Chester Road
8	14 th Street Improvements	Restripe and add medians for safety improvements, add shared-use path.
9	Amelia Island Parkway/Buccaneer Trail Roundabout	Roundabout at the intersection of Amelia Island Parkway and the Buccaneer Trail
10	Felmor Road Improvements	Addition of sidewalks and shoulders
11	Kings Ferry Road	Shoulder addition (excluding bridge)
12	William Burgess Boulevard Extension Phase 1	New 2-lane Road and shared-use path from US-17 to Miner Road
13	William Burgess Boulevard Redevelopment	Redevelop William Burgess Boulevard to 3-4 lanes with bike lanes and on-street parking
14	Chester Road Improvements	Widen road to 4 lanes, add pedestrian improvements and shoulder/bike lane
15	CR-107 (Old Nassauville Road)	Widen road to 4 lanes, add pedestrian improvements and shoulder/bike lane
16	William Burgess Boulevard Extension Phase 2	New 2-lane Road and shared-use path from Miner Road to Amelia Concourse
17	Sauls Road	Pave existing dirt road
18	Edwards Road Improvements	Widen, add pedestrians improvements

Project Number	Project Name	Project Description
19	Crawford Road/CR 121 Intersection Improvements	Signalized intersection improvements
20	Sundberg Road Improvements	Pave existing dirt road
21	New Road from Griffin Road to I-95 Interchange	New 2-lane road with shoulders, sidewalk and shared-use path with buffers
22	Edwards Road Extension	New 2-lane road with shoulders, sidewalk and shared-use path with buffers from Edwards Road to new interchange road
23	Semper Fi	Redevelop and realign Semper FI from I-95 bridge to Wildwood Road
24	CR-108 Improvements	Widen to add shoulders, sidewalk, and shared-use path
25	Griffin Road Improvements	Widen to add shoulders, sidewalk, and shared-use path
26	Musslewhite Road Improvements	Widen to add shoulders, sidewalk, and shared-use path
27	Ford Road Improvements	Widen to add shoulders and sidewalks
28	CR-119 (Otis road)	Widen lanes and add shoulders, exempt railroads
29	Ratliff Road Improvements	Widen lanes, add paved shoulders and sidewalks, exempt railroads
30	Thomas Creek Road Improvements	Widen lanes, add paved shoulders and sidewalks
31	New Bridge across I-95	New 2-lane bridge with 10' shoulders/breakdown lanes, shared-use path, and sidewalk
32	New 2-lane Road in WBD	New 2-lane road with bike lanes and shared-use path
33	Mentoria Road Improvements	Improve and extend existing road, add bike lanes and shared-use path
34	Harper Chapel road Improvements	Improve and extend existing road, add bike lanes, sidewalk, and shared-use path
35	Cardinal Road Improvements	Improve and extend existing road, add bike lanes, sidewalk, and shared-use path
36	Harvester Street Improvements	Improve existing road to paved 2-lane road, with bike lanes, shared-use path, and sidewalk
37	New WBB Road	New 2-lane road with bike lanes, shared-use path, and sidewalk
38	Pages Dairy Road Extension	New 2-lane road with bike lanes, shared-use path, and sidewalk
39	SR-200 Path	10' shared-use path from Blackrock Road to the Shave bridge
40	Pages Dairy Road Improvements	Widen to 4 lanes, add bike lanes, sidewalk, and shared-use path
41	Amelia Concourse Extension	New 2-lane road with bike lanes, sidewalk, and shared-use path
42	William Burgess District Trails	Shared-use paths in the William Burgess District
43	New road from Hendricks to Amelia Concourse	New 2-lane road with bike lanes, sidewalk, and shared-use path

Project Number	Project Name	Project Description
44	Hendricks Road Extension to CR-107	New 2-lane road with bike lanes, sidewalk, and shared-use path
45	Pages Dairy Road Extension 2	New 2-lane road with bike lanes, sidewalk, and shared-use path
46	Andrews Road	Widen existing lanes, add shoulders, and pedestrian improvements
47	Rowe Cutoff Road	Pave existing dirt road and add shoulders
48	Christian Way Extension	New 2-lane road with sidewalk

Nassau County Mobility Projects

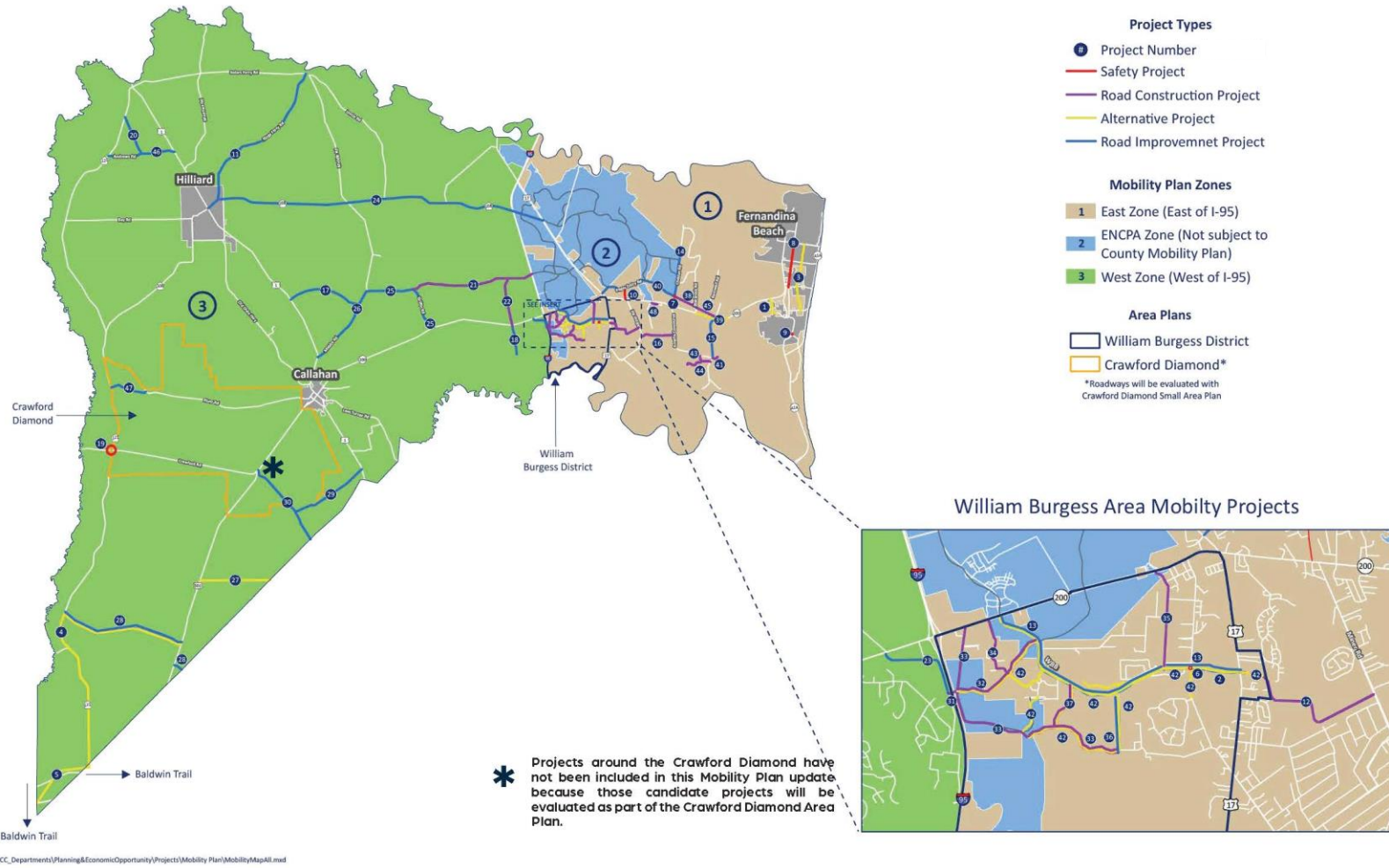


Figure 7 – Nassau County Mobility Plan Roadways

Capital Improvement Plan

The Comprehensive Plan requires Nassau County to maintain a minimum five (5)-year Schedule of Capital Improvements (SCI), including any publicly funded projects of federal, state, or local government, as well as privately funded projects necessary to ensure that all adopted level of service standards are achieved and maintained for the 5-year period. This schedule of improvements related to transportation should include the capital improvement plan (CIP) for roadway projects, the FDOT District 2 Five-Year Work Program, and any projects identified as part of a Proportionate Fair Share or Development Agreement. The SCI should be consistent with the Long-Range Transportation Plan outlined by the TPO. The CIP is updated on an annual basis during the budgeting process for the upcoming year.

ENCPA Mobility Plan

Concurrent with the Mobility Plan for Nassau County, the Board of County Commissioners approved a mobility plan to fund transportation improvements within the East Nassau Community Planning Area. This plan includes new roadway construction that provides for connectivity within the Sector Plan as well as to the surrounding properties. These connections include a new interchange, the CR-108 Extension, numerous roads, and intersections within the ENCPA, and trails to provide for off-road safe transportation. Unlike how the County's mobility plan is based on VMT, the ENCPA Mobility Plan is based on the network being built out by 2040, and the estimated uses paying for the improvements. The improvements defined in the Plan will be included on the FTMS-11.

Nothing limits the County's ability to request funding from federal, state, and local funding sources for the construction of the roadways. Some of the improvements have been included on the 2045 LRTP Needs Plan and would be eligible for funding in the future if they were added to the priority list. A coordinated review between the County and the property owner is conducted every five years.

Bicycle and Pedestrian Planning

Nassau County is actively planning to enhance the bicycle and pedestrian network throughout the County. It is important to provide the residents of the County a safe, alternative way to get to their daily needs, such as education, recreation, employment, and shopping. Benefits of off-road facilities include safety, mobility, and healthier communities.

- Sidewalk and trail fee in lieu systems help counties and municipalities fund and prioritize trail and sidewalk projects. This type of system allows developers to pay a fee-in-lieu of constructing a sidewalk due to certain circumstances, such as a planned improvement which will require the sidewalk to be torn up in the near future, or engineering challenges. A plan should include a sidewalk and trail inventory, and prioritization of how sidewalk and trail installation should occur. The plan should utilize utility corridors as possible trail corridors, provided they are approved by the utility companies.
- The East Coast Greenway is a national trail system lining the east coast of the United States from Maine to Florida, approximately 3,000 miles of off-road trails meant for riders of all ages and abilities. Nassau County has two designated routes. The first route runs down US-17 from Georgia, along the proposed CR-108 Extension, and over to Amelia Island to connect to the Amelia Island Parkway Trail. The second route connects St. Mary's to Fernandina by a ferry and connects from downtown City of Fernandina Beach to the Amelia Island Parkway Trail. These trails have been included in multiple plans to be eligible for funding in the future, including the Northeast Florida

Greenways and Trails Master Plan, the Florida Greenways and Trails Plan established by FDEP, and the Mobility Plan.

- Florida Greenways and Trails is a trail network established by the Department of Environmental Protection's Office of Greenways and Trails (OGT), that looks to establish, expand, and promote non-motorized trails that make up the Florida Greenways and Trails system pursuant to the Florida Greenways and Trails Act. This system of trails focuses on the conservation and recreational benefits of providing off-road non-motorized facilities which may include, walking, biking, hiking, canoeing, jogging, equestrian trails, and archeological interpretation. Nassau County works with the OGT to identify trails throughout the county to include on the trails map.
- The *Northeast Florida Regional Multi-Use Trail Master Plan* was a study funded by the NE Florida TPO in 2019 to assess the multi-use trails needs throughout the region, and to cohesively plan for a regionally-endorsed trail network consisting of over 570 miles of trails throughout the region. The purpose of this plan is not only to identify the network, but to create a tool which can be used to compete for funding and grant opportunities. Nassau County staff participated in the planning process for the regional trails and included a robust trail network in the County to connect to Baker and Duval counties. This plan is considered in the 2045 LRTP for multi-modal transportation funding.
- Nassau County applied for, and received, grants to construct the Amelia Island Parkway Trail, and the Bailey-Simmons Trail, now known as the Amelia River to Sea Trail. Portions of the Amelia Island Parkway Trail are under design now and will be constructed over the next 3-5 years. The Island has the most robust trail network in the County, including the private trails within the Plantation, and trails within the City of Fernandina Beach. Due to the built-out nature and constraints of the Island, the County should focus its resources on the island on roadway safety improvements, including the construction of shared-use paths on identified regional and local routes.
- Nassau County is actively creating a Recreation Master Plan for the County. This Plan will include off-road trails as recreational amenities and explores how to create safe access for pedestrians and people on bicycles to parks, whether in the urban or rural areas of the County. One aspect of this plan is to work with utility companies to create trails through utility easements to create a completely separated path.
- The Mobility Plan includes a variety of bicycle and pedestrian facilities, including sidewalks, multi-use paths, trails, and wide shoulders to double as bike lanes. All new roadway design in the County should consider alternate modes of transportation, rather than just the single occupant vehicle.

The following maps show the proposed and existing bike lanes and trails in Nassau County.

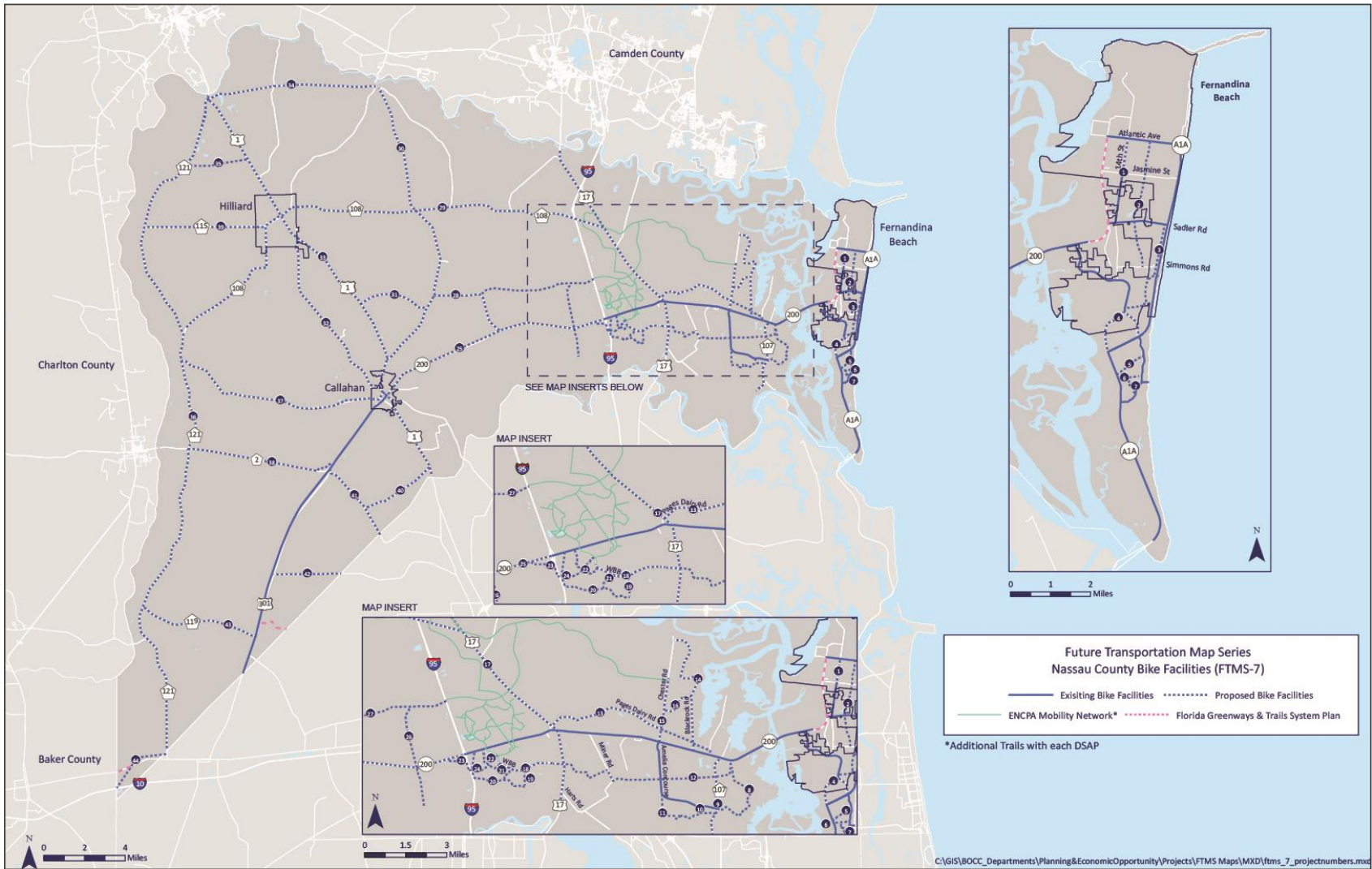


Figure 8 – FTMS -7 Nassau County Bike Facilities

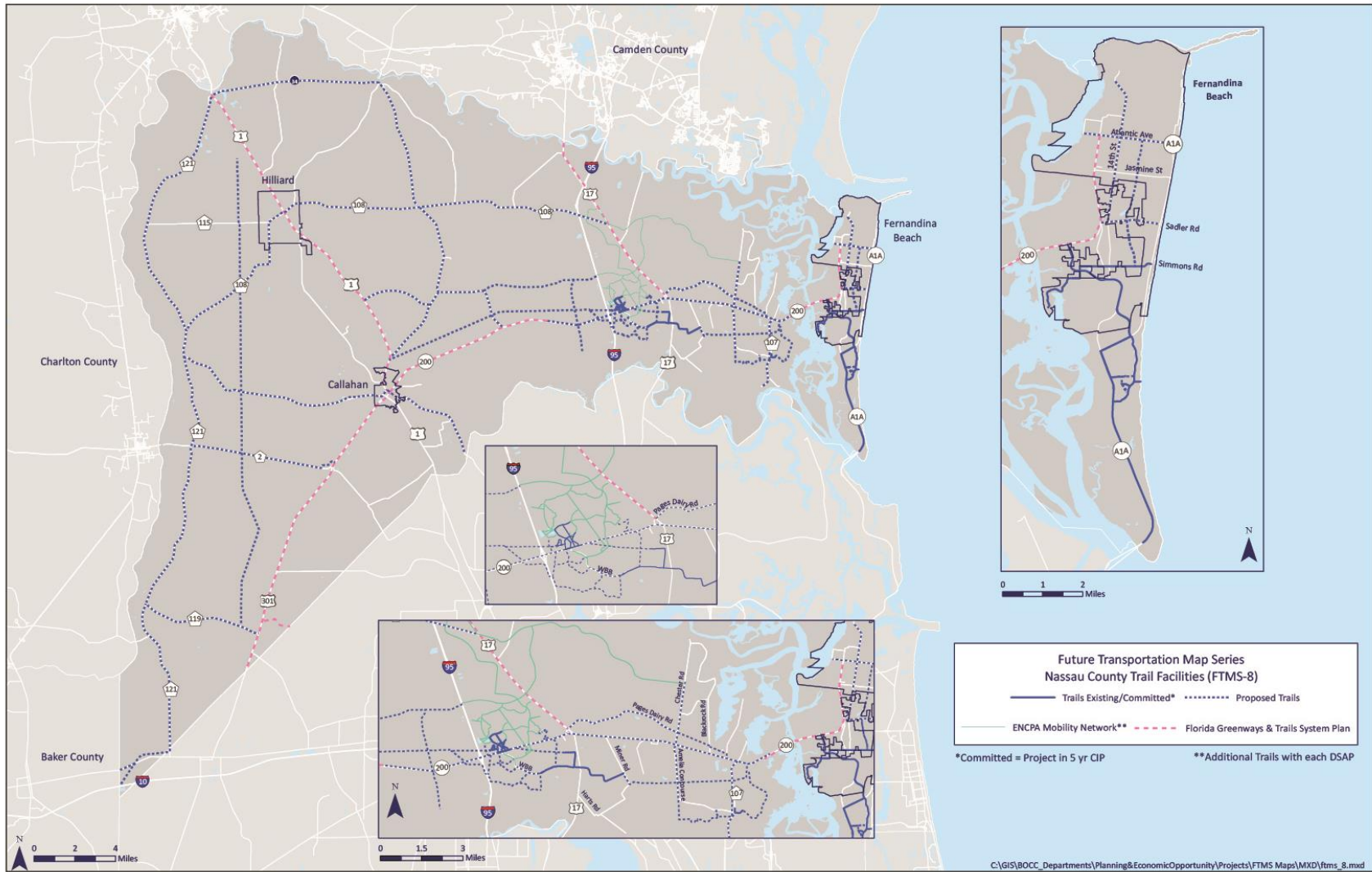


Figure 9 – FTMS-8 Nassau County Trail Facilities

Transit Planning

In 2015 Nassau County, through the TPO, had a transit study completed to determine the public transportation needs and opportunities, and recommend bus transit options. This study found that community feedback and stakeholder involvement indicated they support public transportation and understand its impact on the economy, need to reduce congestion, and importance to the environment. This is especially important to provide access to the beaches, where beach parking demand is not met during peak beach season. While NassauTRANSIT currently provides transit services throughout the county, the routes and services are not well known. The service is relatively limited in its service area around the County and does not have comprehensive maps or identified stops. The report recommended having more service coverage east of I-95, where there are higher densities and more connecting routes from Yulee to Callahan and Hilliard. The transit system can also be improved by adding new seasonal and weekend service to and from the beach. It also recommends securing a variety of funding sources, particularly dedicated local sources, to fund multi-modal and flexible transportation options within the County.

As previously discussed, Nassau County, through the TPO, studied the current transit system in Nassau County and came up with recommendations on how to improve and fund the service. Nassau County is active in working with regional partners through NassauTRANSIT, to provide better transit service through the County. Not only has it established a direct commuter service through JTA connecting Yulee to downtown Jacksonville, it is currently exploring adding another stop within the Market Street Preliminary Development Plan. In addition to planning for routes, Nassau County has identified three potential commuter rail spots along the CSX rail line, one within the Nassau Crossing Planned Unit Development within the William Burgess District (WBD), and two within the East Nassau Community Planning Area (ENCPA). The land for the site within the WBD has been reserved and can be used as a park-and-ride facility for bus rapid transit, or as a commuter rail site in the future.

Complete Streets

Complete Streets is a national movement to design streets to be safe, accessible, and healthy for all roadway users, regardless of means of transportation or level of ability. Complete Streets can help promote safety, quality of life, and economic development. There have been over 1,600 Complete Streets Policies passed in the United States. Complete Streets is one component of Smart Growth, an approach to development that encourages a mixture of building types and densities to provide a variety of transportation options to support the existing community. Complete streets approaches vary based on the context of the roadway and surrounding land uses, and may address elements such as sidewalks, bicycle lanes, multi-use paths, trails, crossing opportunities, median islands, curb extensions, bulb-outs, modified travel lanes, streetscape, and landscape treatments. By providing streets that meet the needs of all roadway users, people may feel safer using active modes of transportation and have more opportunities for recreation.

In 2014 FDOT passed its Complete Streets Policy, followed by its Implementation Plan in 2015. The policy was adopted after Florida was highlighted as one of the most dangerous states for pedestrians, in Smart Growth America's Dangerous by Design publication. The Implementation Plan outlined a five-part framework to include the following tasks: revise guidance standards, manual, policies, and other documents; update the decision making process; modify approaches for measuring performance; manage internal and external communication and collaboration during implementation; and provide ongoing

education and training. Following the Implementation Plan, FDOT adopted the Context Classification Guidebook in 2017 to describe measures to be used to determine the context classification of a roadway within the FDOT's jurisdiction. Complete streets are context sensitive; the transportation system design should consider land use patterns. State facilities should be designed so they are supportive of safe and comfortable travel for their anticipated users.

A network of Complete Streets cannot be solely dependent on State facilities, so local governments and metropolitan planning organizations should help to support a robust, connected network for the movement of all roadway users. Roadways should be designed with context sensitive solutions, which are intended to:

- Improve safety.
- Apply a process that integrates community context and the surrounding environment including the land uses.
- Protect and promote accessibility for all users.
- Balance the needs and comforts of all modes and users.
- Encourage consistent use of national industry best practice guidelines to select context sensitive design solutions.
- Improve energy efficiency in travel and mitigate vehicle emissions by providing non-motorized transportation options.
- Encourage opportunities for physical activity and recognize the health benefits of an active lifestyle.
- Recognize complete streets as a long-term investment that can save money over time; and,
- Incorporate trees and landscaping as integral components of roadway design.

Transportation System Management

Transportation Systems Management is transportation technology that increases mobility, safety, and efficiency. Technological approaches seek to identify operational improvements that will enhance the traffic flow, accessibility, and safety of the County transportation system. Some examples of TSM implementation include:

- Collection of automated and connected vehicles through the deployment of data sensors and transmitters to collect traffic data.
- Providing charging stations for electric vehicles.
- Improved roadway conditions such as signage, lighting, paving,
- Signal prioritization and timing to increase efficiency.
- Rail crossing alert systems.
- Connected signals.
- Special event traffic management solutions.
- Pedestrian sensors.
- Street flooding notification systems; and,
- Wayfinding information systems

Aviation, Rail, and Seaport Planning

Airport Facilities

The nearest airport to Nassau County which schedules commercial airline services is in Jacksonville International Airport. Two general aviation airports are active in Nassau County. The Fernandina Beach Municipal Airport is a city-owned public use airport located south of the central business district of Fernandina Beach. It is designated as a reliever airport for Jacksonville International Airport. Initially this airport was developed as a training facility during World War II; the airport was transferred to the City in 1946 and designated as general aviation reliever airport for Jacksonville International Airport. Covering approximately 602 acres, the airport has three paved runways. The Hilliard Airpark is a small public general aviation facility located in Hilliard with one turf runway.

Port Facilities

The Port of Fernandina is a natural deep-water port situated on the west side of Amelia Island about 2.2 miles from the mouth of the Amelia River. It provides terminal service to pulp and paper producers located throughout Florida and the Southeast; and supports several independent container lines serving Latin America and the Caribbean. The berth consists of one 1,200 linear foot marginal wharf. Draft alongside the berth is maintained at a depth of 36 feet mean low water (MLW). All berths can handle container or conventional cargo working vessels. The adjoining marshaling area can accommodate 3,200 TEU including 50 electrical hookups for refrigerated containers. A chassis depot is located near the port with parking for 500 chassis.

The Ocean Highway and Port Authority of Nassau County serves as the governing body for the Port of Fernandina., and are responsible for preparing the Port Facilities Element and a Port Master Plan for the City of Fernandina Beach Comprehensive Plan.

Rail Facilities

The railway network within Nassau County consist of railway lines, signals, and terminals. It includes tracks and associated facilities owned and operated by CSX, Norfolk Southern and short-line operator First Coast Railroad (FCRD), which provides rail service to the Port of Fernandina (see above). The FCRD interchanges with CSX lines in Yulee. The CSX railway and Norfolk Southern in Callahan provide access to the Crawford Diamond Industrial property, a currently vacant 1,814 acre industrially zoned property. FTMS Map 10 indicates the rail lines within the County.

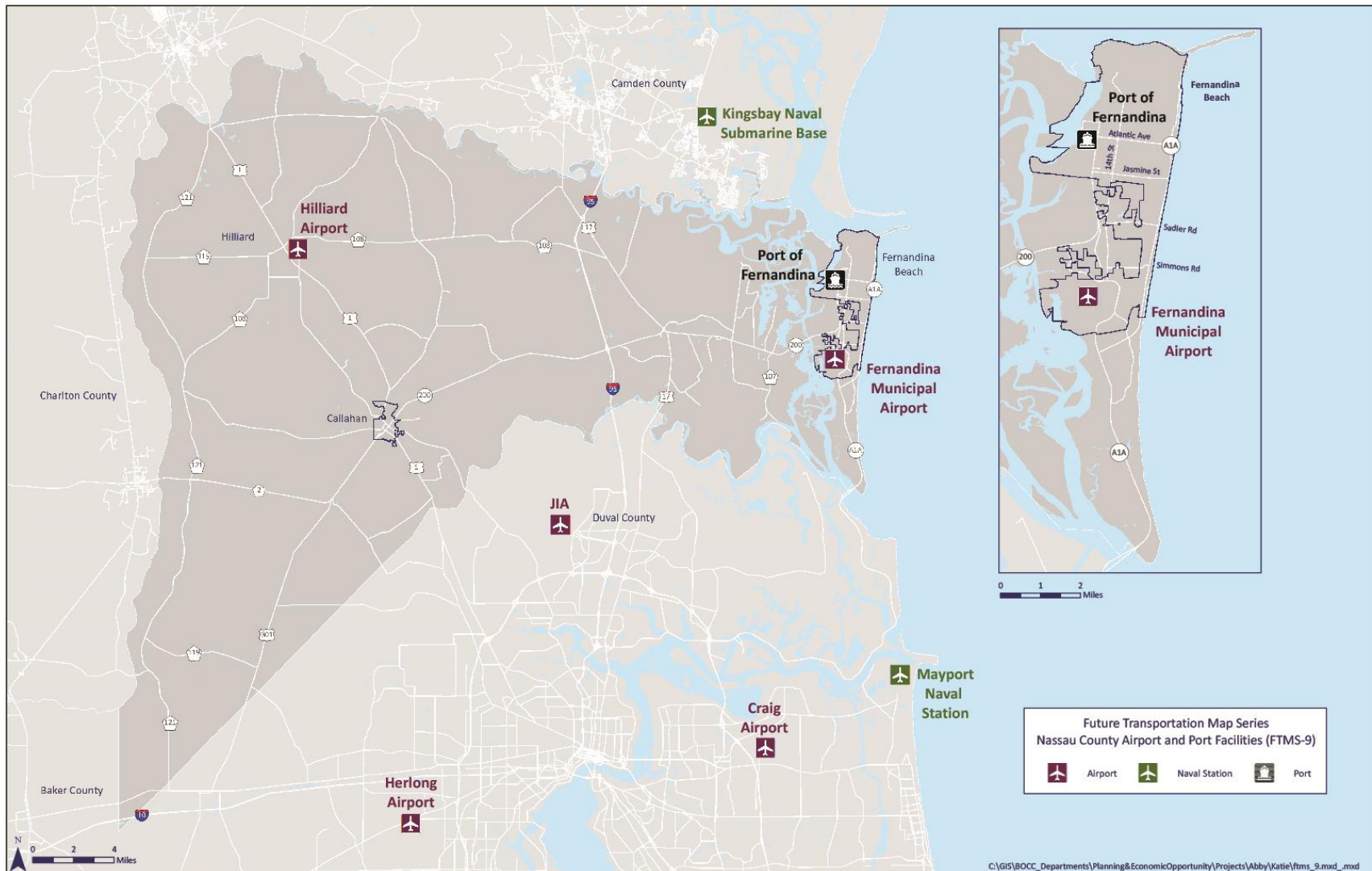


Figure 10 – FTMS-9 Nassau County Air and Port Facilities

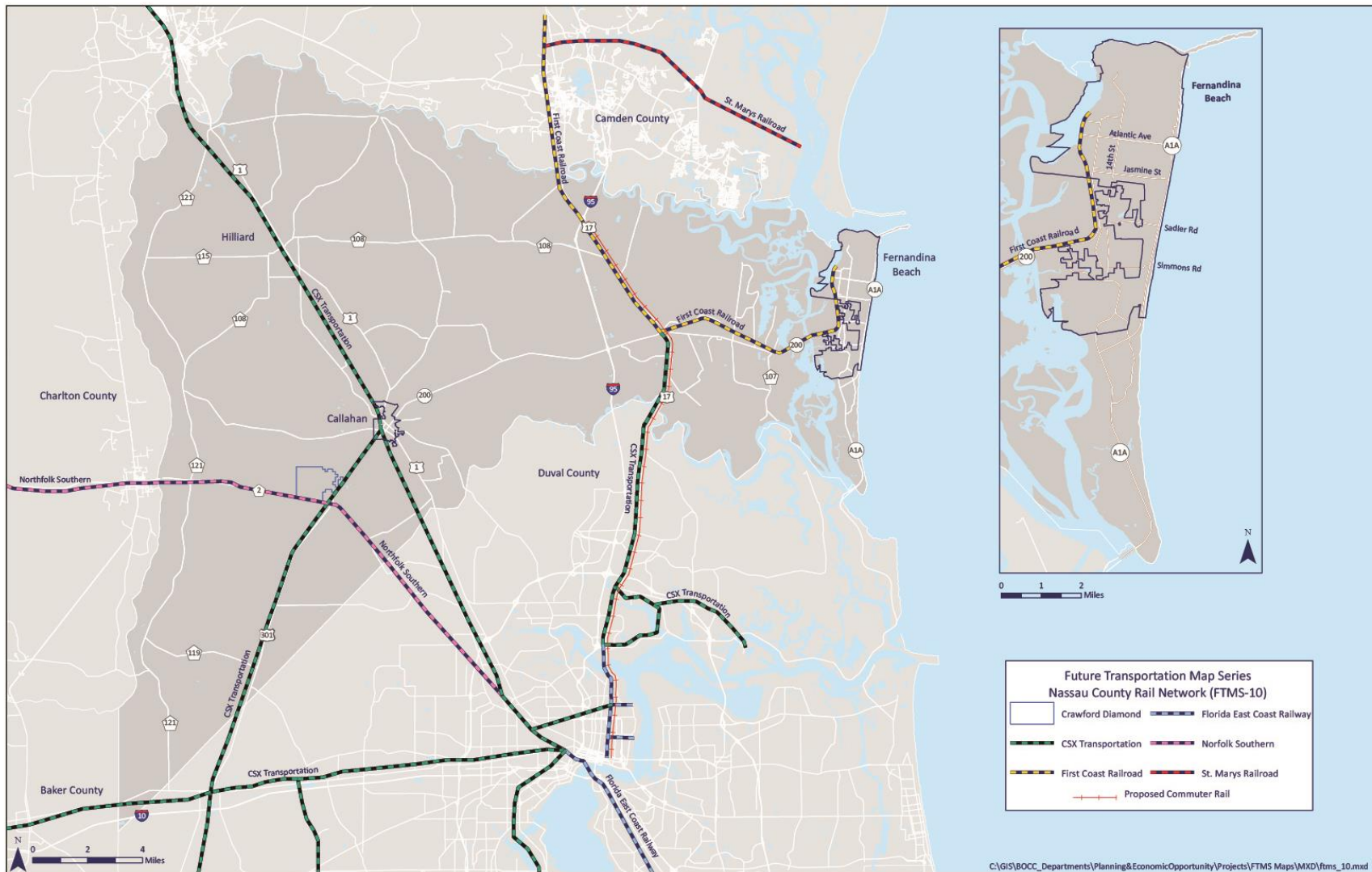


Figure 11 – FTMS-10 Nassau County Rail Facilities

Long Range Transportation Plan

The North Florida Transportation Planning Organization (North Florida TPO) updates the Long Range Transportation Plan (LRTP) every five (5) years to address road, transit, freight, bike, and pedestrian needs over the next 25 years, and identifies potential funding for projects that are cost feasible. The 2045 LRTP includes all of Clay, Duval, St. Johns, and Nassau Counties.

For transportation projects to be eligible for State funding, they should be included in the LRTP. The LRTP provides a blueprint from which the Transportation Improvement Plan (TIP) is developed. The TIP identifies the highway, transit, bike way, and pedestrian projects to be scheduled over a five-year frame and is updated on an annual basis. Sec. 163.3177 Florida Statutes requires the County's adopted Schedule of Capital Improvements (SCI) to include transportation improvements included in the adopted Transportation Improvement Program (TIP). The SCI must also be coordinated with the adopted LRTP.

The LRTP projects are broken down into two parts, the Needs Plan, and the Cost Feasible Plan. The needs plan includes all projects and programs needed to accommodate future transportation demands, regardless of funding. The Cost Feasible Plan prioritizes the needs plan and includes certain projects for future funding, based on how the projects meets the goals and policies identified in the LRTP. The current 2045 LRTP Cost Feasible Plan was adopted on November 14, 2019. The Plan includes goals and objectives to enhance economic competitiveness, liability, safety, mobility and accessibility, equity in decision making, system preservation, resilient multimodal infrastructure, and tourism transport management.

The five-year update for the LRTP began in 2018, around the same time the County began updating the County Mobility Plan. The mobility plan projects under consideration at the time were submitted to the TPO for consideration for the needs and cost feasible plans.

Regional Planning Model

The Long-Range Transportation Plan uses the Northeast Florida Regional Planning Model – Activity Based (NERPM-AB), to address the evolving transportation planning needs. The activity-based model more accurately represents how people plan their daily schedule and travel than traditional travel demand models. The NERPM-AB models the existing and proposed network and auxiliary demand for the North Florida region. It uses 2017 Household Travel Survey and 2016 transit on-board surveys collected by the NFTPO, as well as existing and future land uses, population projections, and micro zones to calibrate and validate the model. The NERPM-AB uses land uses (such as employment, shopping, civic uses, etc.) and travel choices of person and household decision makers to predict existing and future travel patterns.

Needs Plan

The 2045 Needs Plan represents all the mobility projects and programs that are needed to accommodate future transportation demands regardless of funding limitations. While the Plan is not constrained by funding, it does place special emphasis on local constraints including policy and environmental limitations. It includes all primary modes of transportation and begins to consider the needs of Mobility on Demand Services and Automated/Connected/Electric/Shared (ACES) vehicles. The Needs Plan allows the TPO's partners to develop a future transportation vision for the community that reflects social, environmental, and economic policy objectives and helps local government see the effects of land use decisions. The following projects are identified in the Needs Plan for Nassau County.

Table 16 – Nassau County Projects in the LRTP 2045 Needs Plan

ID	Corridor	From	To	Project Description
300	14th Street	Sadler Road	A1A/200/Atlantic Avenue	Reconstruct
301	Amelia Concourse (ex)	Frank Ward Road	Old Nassauville Road	New Road + Trail
302	Amelia Concourse Ex P2	SR 200	Frank Ward Road	New Road + Trail
303	Amelia Island Parkway	at Buccaneer Trail		Intersection Improvements
304	US 17	at Pages Dairy Road		Intersection Improvements
305	Chester Road	Pages Dairy Road	Green Pine Road	Widen
306	Clyde Higginbotham Road	Harvester Street	Harts Road	Reconstruct + Trail
307	CR-107	Amelia Concourse	SR 200	Widen
308	CR-108	US 1/SR 23/US 17	US 17	Reconstruct + Trail
309	CR-108 Extension	US 17	Chester Road	New Road + Trail
310	CR-119 (OTIS Rd)	CR 121	US 301	Reconstruct
311	Crawford Road	at CR 121		Intersection Improvements
312	Edwards Road	Easy Street	SR 200	Reconstruct + Trail
313	Edwards Road (ex)	SR 200	New Road X	New Road + Trail
314	Felmor Road	Pages Dairy Road	SR 200	Reconstruct
315	Felmor Road	School	SR 200	Reconstruct
316	Ford Road	US 301/SR 200	Duval County Line	Reconstruct
317	Griffin Road	Griffin Road (Bend)	SR 200	Reconstruct + Trail
318	Harper Chapel Road	SR 200	New Road X	Reconstruct and New
319	Harvester Street	William Burgess Boulevard	Harvester Street (Bend)	Reconstruct + Trail
320	Kings Ferry Road	CR 108	Kolars Ferry Road	Reconstruct
321	Lem Turner	US 1/SR 15	Duval County Line	Reconstruct
322	Mentoria Road	SR 200/Buccaneer Trail	Harvester Street	New Road + Trail

ID	Corridor	From	To	Project Description
323	Musslewhite Road	US 1/New Kings Road	Griffin Road	Reconstruct + Trail
324	New Road X	William Burgess Boulevard	Mentoria Road	New Road + Trail
325	New Road X	Middle Road/Griffin Road	I-95	New Road + Trail
326	New Road X	William Burgess Boulevard	New Road X	New Road + Trail
327	New Bridge X	Semper Fi Drive	Mentoria Road	New Bridge + Trail
328	Cardinal Road	SR 200	William Burgess Boulevard	New Road + Trail
329	New Interchange X	I-95	New Road X	New Interchange
330	New Interchange Road East	I-95	US 1	New Road + Trail
331	Old Baldwin Road	Old Baldwin Road	Sandy Ford Road	New Road
332	Pages Dairy Rd (ex)	Chester Road	Blackrock Road	New Road + Trail
333	Pages Dairy Road	US 17	Chester Road	Widen + Trail
334	Pages Dairy Road	at Chester Road		Intersection Improvements
335	Pratt Siding Road	Old Dixie Highway	US 1	New Road
336	Ratliff Road	Thomas Creek Road	US 1	Reconstruct
337	Sauls Road	US 1	Musselwhite Road	New Road
338	Semper Fi	Semper Fi Ext	Johnson Lake Road	Reconstruct + Trail
339	Semper Fi (ex)	SR 200	Semper Fi Drive	New Road + Trail
340	Sundberg Rd	CR 121	Andrews Road	New Road
341	Thomas Creek Road	US 301	Duval County Line	Reconstruct
342	US-17	CR 108	Duval County Line	Widen
343	Wildewood Connection to Edward Rd	Edwards Road Ext	SR 200	New Road + Trail
344	William Burgess Blvd (redev)	SR 200	US 17	Reconstruct
345	William Burgess	at Harts Road		Intersection Improvements

ID	Corridor	From	To	Project Description
346	William Burgess Blvd (ex ph 2)	Miner Road	Hampton Club Way	New Road + Trail
347	William Burgess Blvd (ex)	US 17	Miner Road	New Road + Trail
348	I-10	Baker County Line	Duval County Line	Add Express Lanes
349	I-95	Duval County Line	SR 200 (A1A)	Widen

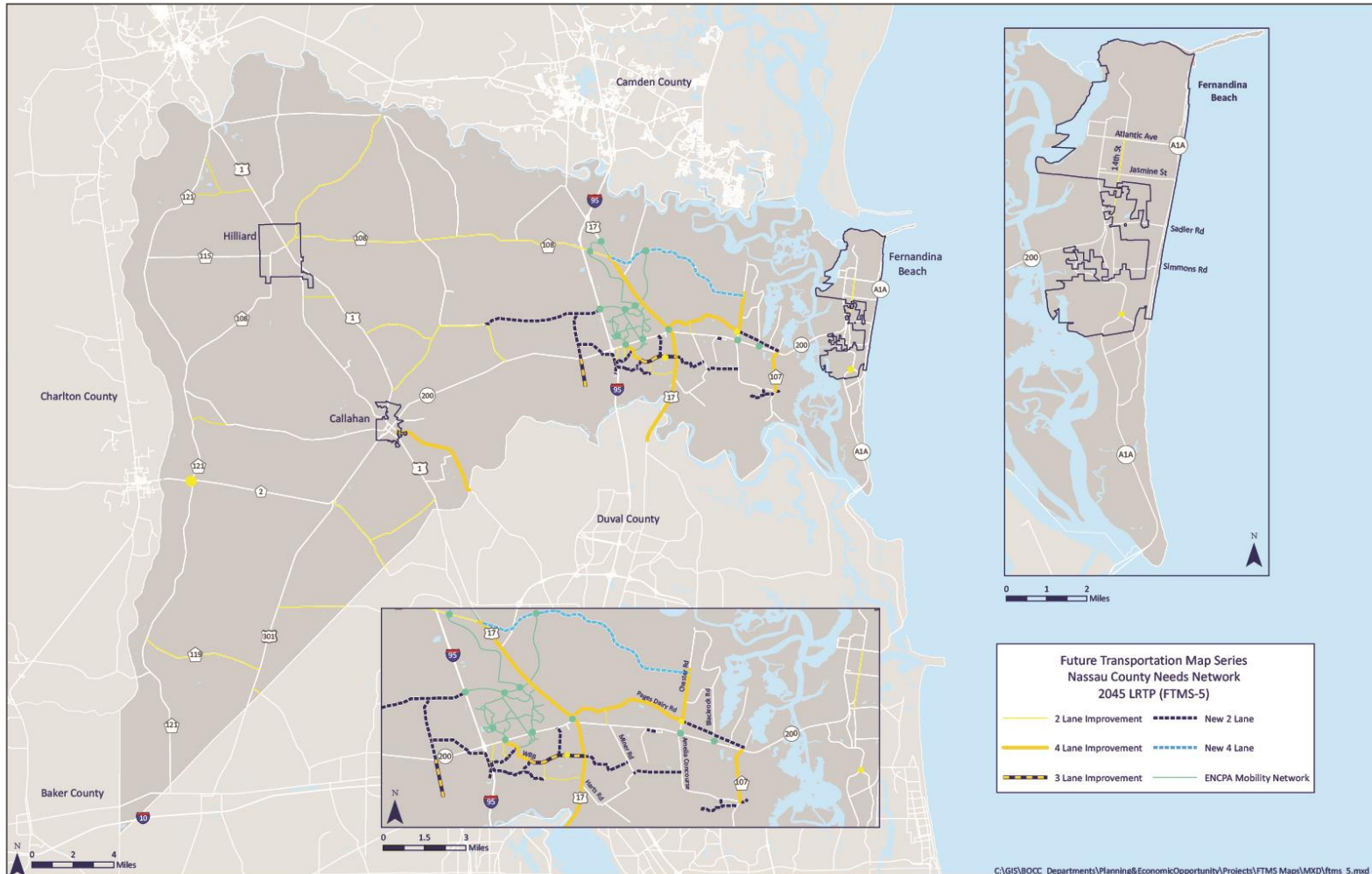


Figure 12 – FTMS-5 Nassau County Needs Network 2045 L RTP

Cost Feasible Plan

The cost to implement the needs plan outweighs the projected revenues to fund the improvements by 2045; as a result, the needs plan is prioritized with the goal of including the projects which are most needed to meet the long-rang objectives for each County in the Cost Feasible Plan. It establishes projects of various types and modes of travel to achieve community objectives such as quality of life, economic development, and protecting the environment.

Projects are broken into categories based on the funding source and who they service. Strategic Intermodal System (SIS) Projects are necessary for interregional, interstate, and international travel. The SIS is the state’s highest priority for capacity investments. Other Arterial Projects are State facilities that service residents and visitors of the region. These projects will include bike lanes and sidewalks to the maximum extent feasible. Transportation Management Area Projects are non-state facilities that service residents and visitors of the region that are needed to maximize mobility for all roadway users. Locally funded projects are projects that are funded at the local level, while not funded through the LRTP, it is important to include these projects in the LRTP. Improvements to the transportation network of Northeast Florida are important to improve resident’s quality-of-life and keeps the region competitive. Projects listed as transit in Nassau County are assumed to be funded by grants or other funds. In addition to the projects listed, the LRTP includes seven mobility programs, including bicycle and pedestrian mobility program, greenways and trails mobility program, ITS/TSM&O/Smart Cities Program, Safety Program, Context Sensitive Solutions (Complete Street) Program, Freight Enhancement Program, and Resiliency Program. While projects for each of these programs have not been included in the overall cost feasible plan, funding is anticipated for each of these programs.

Table 17 – 2045 LRTP Cost Feasible Plan Projects within Nassau County.

ID	Corridor	From	To	Project Description	Projected Timeframe
Strategic Intermodal System (SIS) Projects					
834	SR 200/US 301	At Crawford Road (Crawford Industrial Park)		Interchange/flyover	2019-2025 (PD&E, PE, ROW)
835	SR 200	US 17	CR 107	Add lanes and reconstruct	2019-2025 (PE)
Other Arterial Projects					
342	US 17	Duval County Line	CR 108	Widen to 4 lanes	2036-2045 (ROW, ENV, CST)
304	US 17	At Pages Dairy Road		Major Intersection Improvement	2036-2045 (ROW, ENV, CST)
	US 301	At Crawford Road		Major Intersection Improvement	2036-2045 (CST)
321	SR 115/Lem Turner Road	Duval County Line	US 1/SR 15	Widen to 4 lanes + trail	2031-2035 (ROW, ENV, CST)
Transportation Management Area (TMA) Projects					
346	William Burgess Extension	Miner Road	Hampton Club way	New 2 lane road + Trail	2036-2045 (CST)
324	New Road	William Burgess Blvd	Mentoria Road	New 2 lane road + trail	2026-2030 (CST)

ID	Corridor	From	To	Project Description	Projected Timeframe
327	New Bridge over I-95	Semper Fi Drive	Mentoria Road	New 2 lane road + trail	2026-2030 (CST)
338	Semper Fi	Semper Fi Extension	Johnson Lake Road	Reconstruct 2 lane road + trail	2026 – 2030 (CST)
339	Semper Fi Extension	SR 200 (A1A)	Semper Fi Drive	New 2 lane road + trail	2026-2030 (CST)
337	Sauls Road	US 1	Musselwhite Road	New 2 lane road + trail	2031-2035 (CST)
340	Sundberg Road	CR 121	Andrews Road	New 2 lane road	2031 – 2035 (CST)
Locally Funded Projects					
LP 300	Edwards Road	Police Lodge Road	SR 200	Reconstruct 2 lane road +Trail	2019 – 2025
LP 301	Pages dairy Road	Felmor Road	Chester Road	Reconstruct 2 lane road +Trail	2019 – 2025
LP 302	William Burgess Extension	US 17	Miner Road	Construct new roadway + trail	2019 – 2025
Transit Projects					
605	North Commuter Rail	Downtown Jacksonville	Yulee	Commuter Rail Service	2036-2045

PD&E = Project, Development and Environmental; PE = Project Engineering; ROW = Right of Way; ENV = Environmental Mitigation; CST = Construction

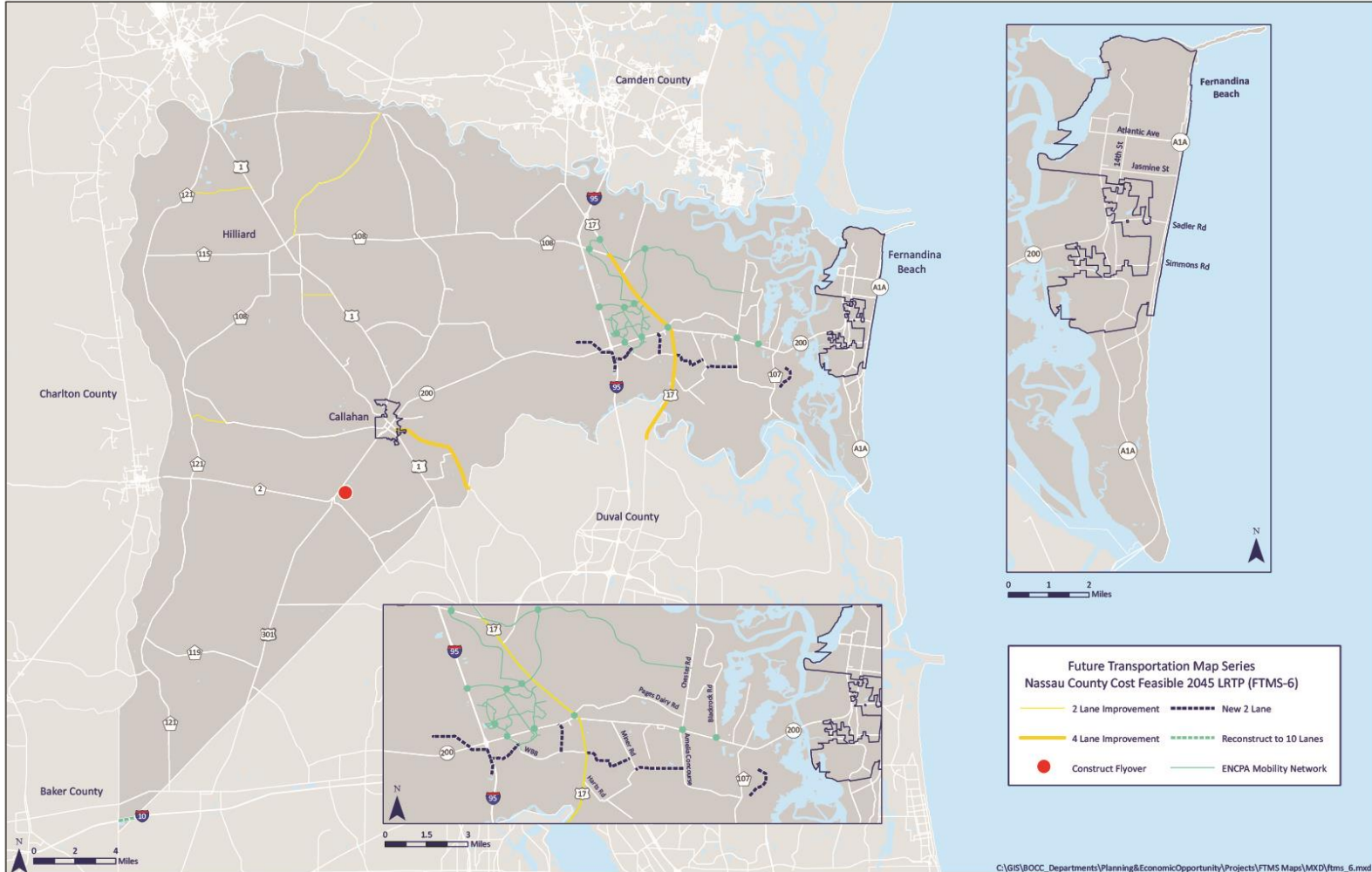


Figure 13 – FTMS-6 Nassau County Cost Feasible 2045 LTRP