II.
TRANSPORTATION

GREEN COVE Springs

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II. TRANSPORTATION ELEMENT

A. INTRODUCTION

The City of Green Cove Springs is located on the west side of the St. Johns River, twenty-five miles south of Jacksonville in Clay County, Florida. The City is bounded by the river to the east, Harbor Road to the north, CR 315, Governors Creek, and part of US 17 to the west, and Bayard Conservation Area to the south. The City has served as the county seat for Clay County since 1871.

The City of Green Cove Springs is required under Chapter 163, Part II, Florida Statutes (F.S.), the "Community Planning Act," to produce a Transportation Element and the Data and Analysis supporting that element. The City is located within the North Florida Transportation Planning Organization (NFTPO) and is encouraged to coordinate the Transportation Element of its Comprehensive Plan with the Long-Range Transportation Plans of the NFTPO and the Florida Department of Transportation (FDOT).

The Transportation Element is the blueprint for the City to provide a safe, efficient and cost-effective multimodal transportation system that is accessible to all residents and visitors, preserves neighborhoods, protects natural resources, promotes economic development, while remaining compatible with the City's future land use plan.

B. INVENTORY AND ANALYSIS

1. Roadways

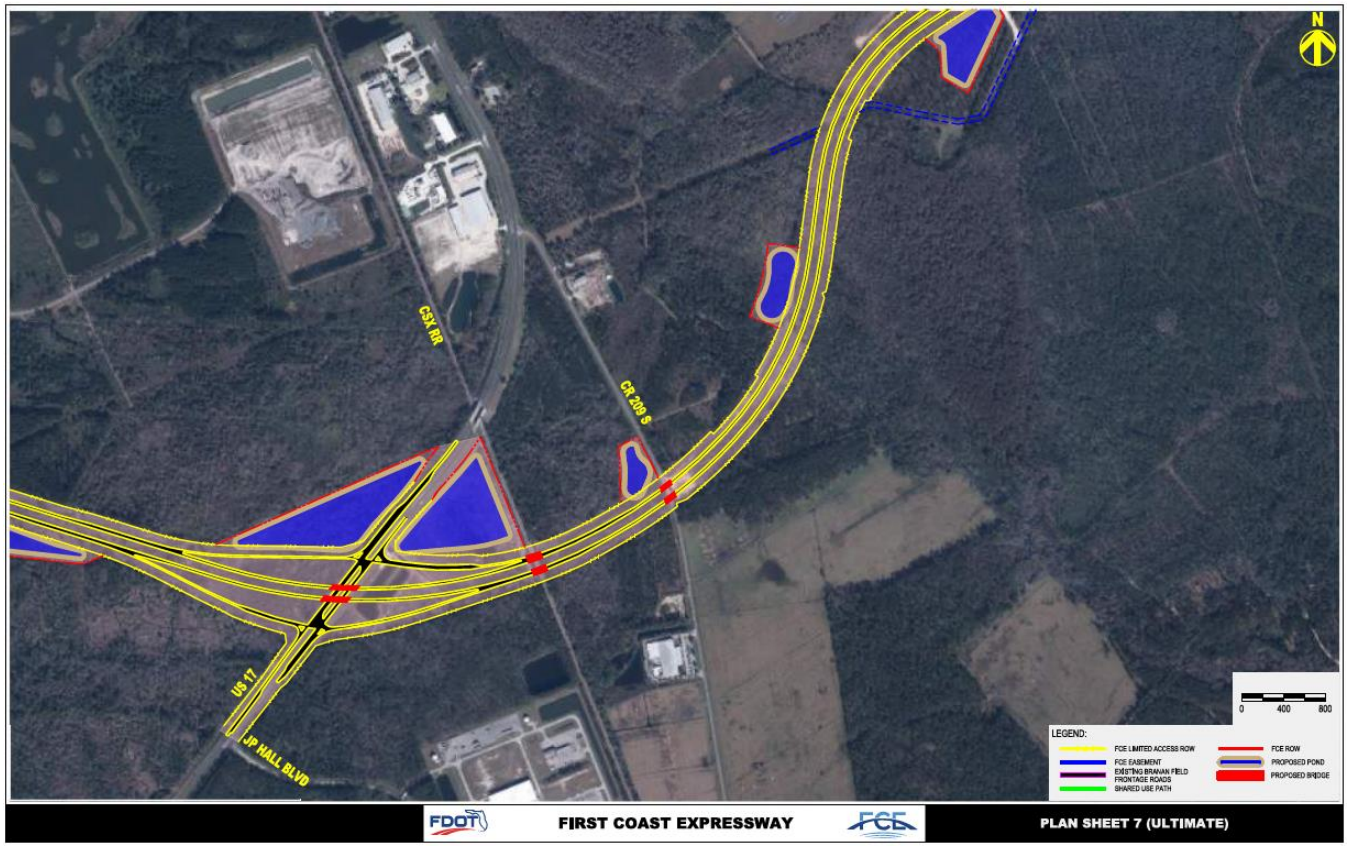
a. Inventory of Major Roadways

The Federal Functional Classification (FUNCLASS) process groups roadways into classes (freeways, arterials, collectors, etc.), or systems, based on the role they play in the overall roadway network and whether they are inside or outside a defined urban boundary. There are nineteen (19) functional classes. The regional roadways within the City of Green Cove Springs are shown in **Map II-1** and **Table II-1** and are generally described as follows:

- US Hwy 17 (SR 15) Orange Avenue – A main thoroughfare through Green Cove Springs with several river crossings, this regional roadway is on the Florida Strategic Intermodal System (SIS). US 17 runs north south along the west side of the St. Johns River with a major river crossing at SR 16 in Green Cove Springs.
- US 16 (Idlewild Avenue and Leonard C Taylor Parkway) – US 16 is a regional connector running east-west connecting Starke and the surrounding areas to US 17 to the east. At US 17, US 16 shares a half mile link with US 17 and heads across the St. Johns River. This connection across the river is reported to a future SIS roadway after the First Coast Expressway is completed.
- Green Cove Springs Avenue/Cooks Lane – Two lane collector that aligns with the US 16 river crossing. Serves as an alternate connection to US 17/US 16 from points west.
- CR 15A/Oakridge Avenue – Alternate connection from US 17 to the south.

While not within the City limits, a new First Coast Expressway interchange is being constructed at its intersection with US 17 (see **Figure II-1**). When finished, the First Coast Expressway will provide access from I-10 in Jacksonville to I-95 in St. Johns County.

Figure II - 1. Proposed First Coast Expressway Interchange at US 17



Source: FDOT, 2021

b. Roadway Maintenance and Responsibility

There are 3 agencies having jurisdictional responsibility for construction and maintenance of major roadways in the City: the Florida Department of Transportation (FDOT), Clay County, and the City of Green Cove Springs.

The State of Florida maintains most of the principal roadways within the City (see **Map II-2**). The most critical concern of the local roadway system is to provide for the appropriate maintenance to extend the effective life of the roads. This concern is addressed within the Transportation Element's goals, objectives and policies mainly by requiring that development activities make required operational or structural improvements to substandard roads and by maintaining a proactive approach to road maintenance. **Map II-3** shows the current number of lanes on the referenced roadway network. While there may be projects to add capacity in the future, no additional lanes are programed to be added to regional facilities by 2025. **Table II-1** shows the

current roadway characteristics including the functional classification, segment length, number of lanes, etc.

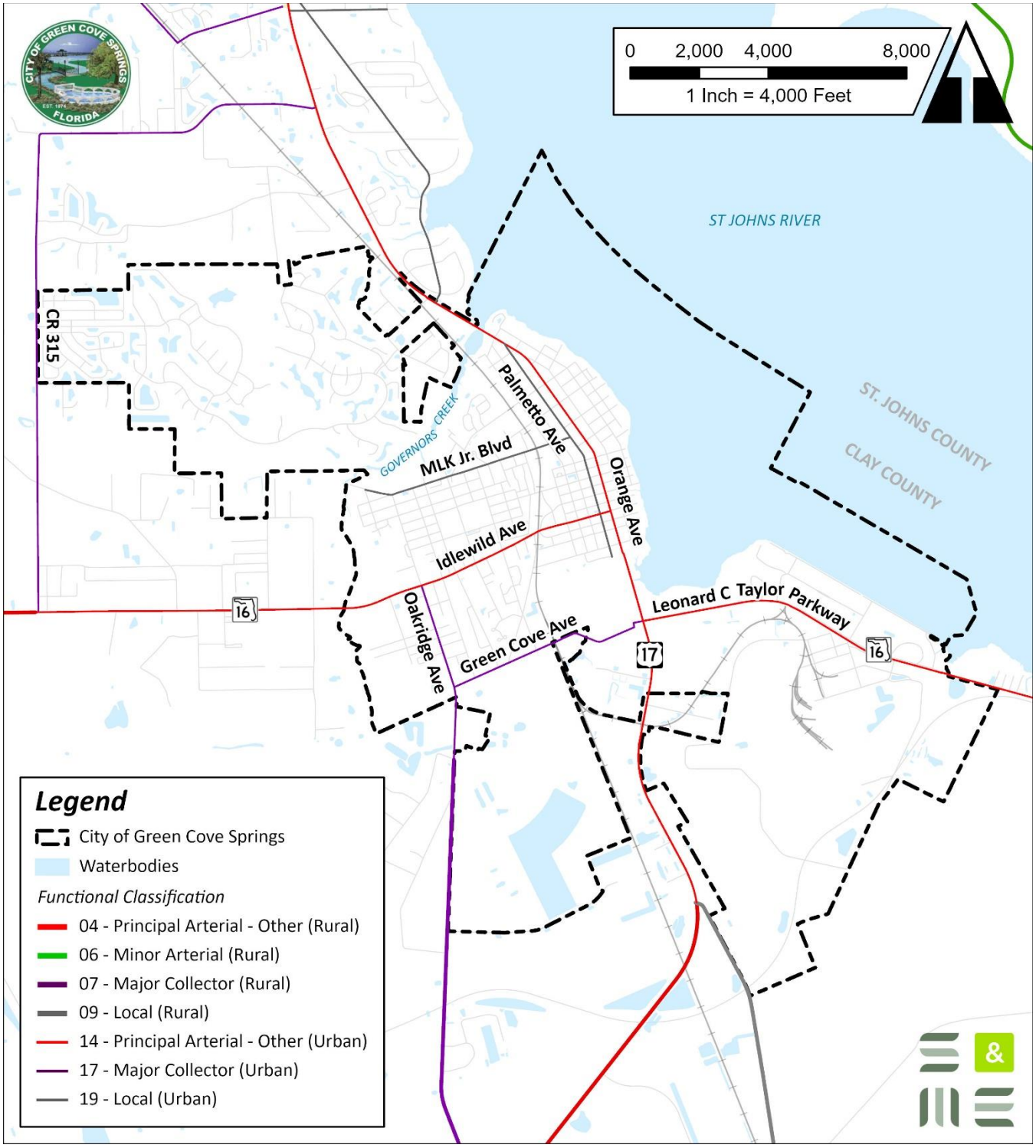
c. Local Roadway Network

There are several important roadways within the City that can be classified as Local Collectors. These roads, shown on **Map II-4**, are maintained by the City and connect Principal and Minor arterials. They provide much needed connectivity throughout the City, which will become a key characteristic of the network as US 17 and SR 16 become heavily used. **Table II-1** lists the Local Connectors, their terminus intersections, and their current number of lanes.

Table II - 1. Local Collectors

Roadway	From	To	Number of Lanes
Govenor Street	St. Johns Ave	Cypress Street	2
St Johns Avenue	Governor Street	Ferris Street	2
Magnolia Avenue	US 17	Oak Street	2
Pine Ave	Governor Street	Oak Street	2
Cypress Avenue	Governor Street	Oak Street	2
Houston Street	St. Johns Ave	MLK Blvd.	2
Walburg Street	St. Johns Ave	Mill Street	2
Mill Street	Houston Street	MLK Blvd.	2
Center Street	St. Johns Avenue	Roberts Street	2
Oak Street	Magnolia Avenue	Melrose Ave	2
Melrose Avenue	Idlewild Avenue	Green Cove Avenue	2
Roberts Road	MLK Boulevard	Green Cove Avenue	2
Vermont Avenue	MLK Boulevard	Green Cove Avenue	2
Highland Avenue	MLK Boulevard	Green Cove Avenue	2
S Oakridge Avenue	MLK Boulevard	Idlewild Avenue	2
Walnut Street	S Oakridge Avenue	Roberts Street	2
Forbes Street	S Oakridge Avenue	Roberts Street	2
Palmetto Avenue	Bay Street	Oak Street	2

Map II - 1. Functional Classification



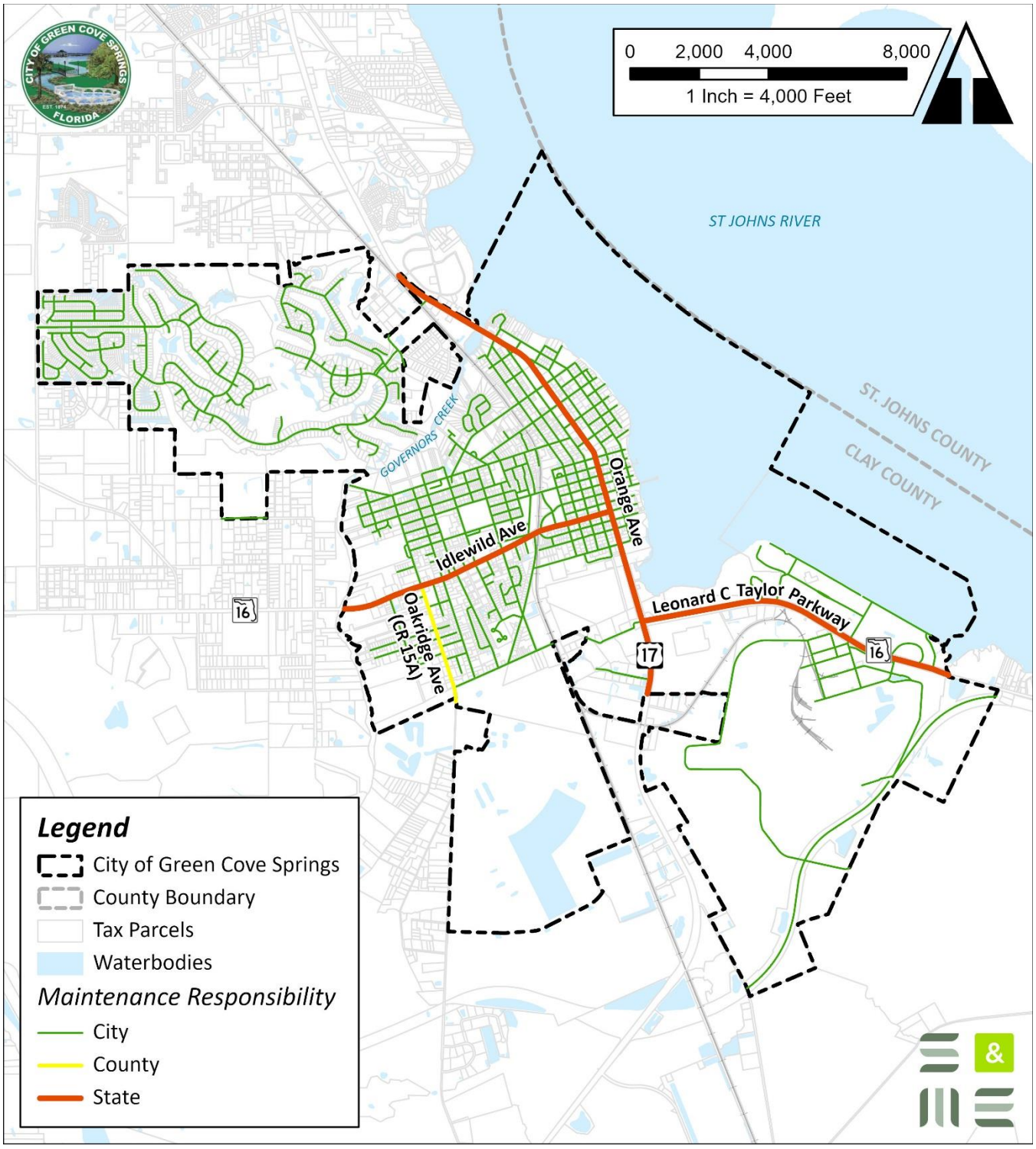
Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

Table II - 2. Roadway Segment Characteristics

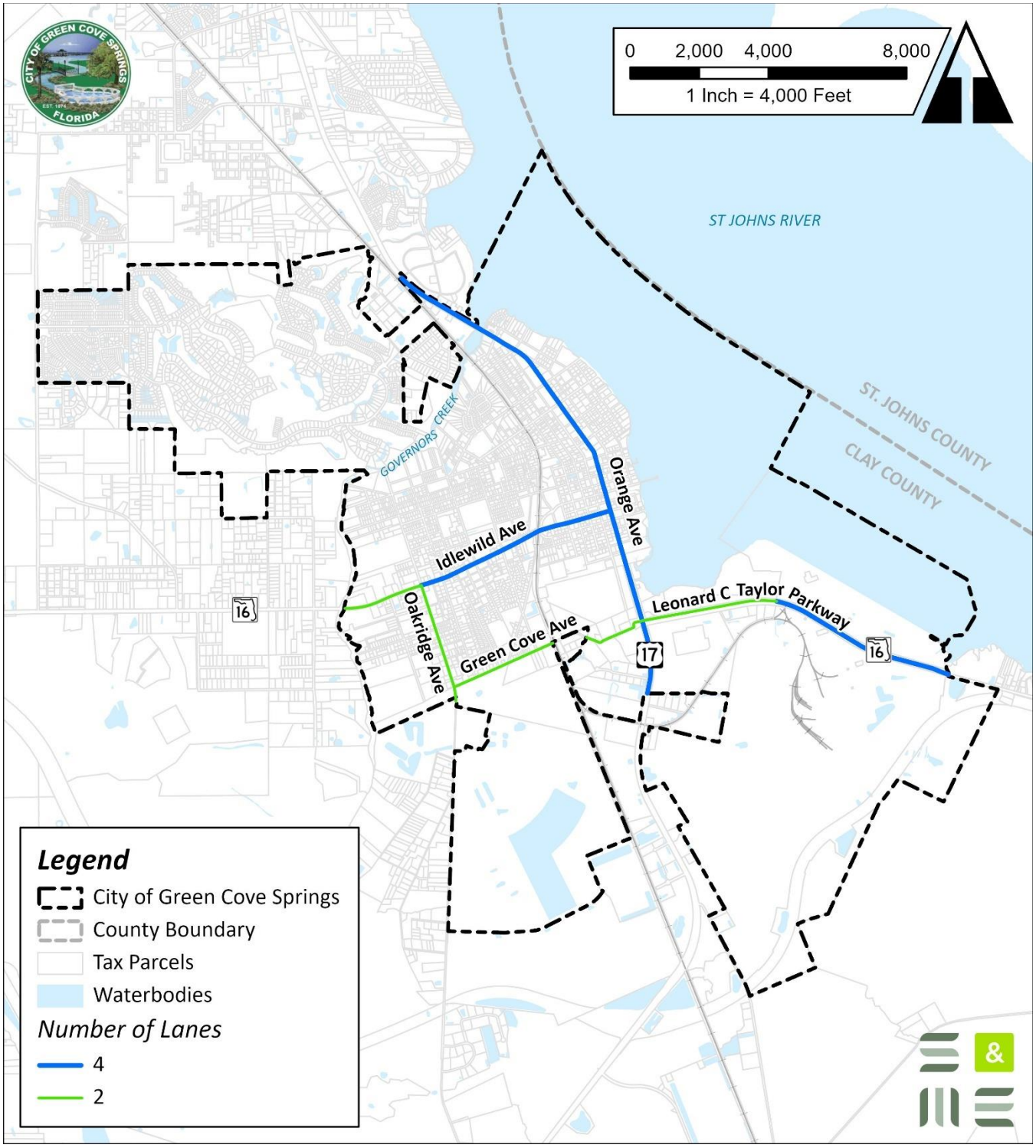
Roadway	From	To	Functional Classification	Length	Lanes	Divided/ Undivided	2020 Peak	2020 AADT
US HWY 17 (SR 15) Orange Av	North City Limits	Governors St	Principal Arterial - Other Urban	0.40	4	Divided	2,280	29,500
US HWY 17 (SR 15) Orange Av	Governors St	Center St	Principal Arterial - Other Urban	1.00	4	Divided	2,280	24,000
US HWY 17 (SR 15) Orange Av	Center St	Ferris St	Principal Arterial - Other Urban	0.20	4	Divided	2,280	22,500
US HWY 17 (SR 15) Orange Av	Ferris St	Oak St	Principal Arterial - Other Urban	0.10	4	Divided	2,170	21,060
US HWY 17 (SR 15) Orange Av	Oak St	SR 16	Principal Arterial - Other Urban	0.40	4	Divided	1,890	21,060
US HWY 17 (SR 15) Orange Av	SR 16	South City Limits	Principal Arterial - Other Urban	0.10	4	Divided	1,300	14,410
SR 16 West (Idlewild Av)	West City Limits	South Oakridge Av	Major Collector - Urban	1.12	2	Divided	1,270	14,080
SR 16 West (Farris St)	South Oakridge Av	US 17	Major Collector - Urban	1.12	4	Divided	1,070	11,910
SR 16 East (Leonard C Taylor Pkw)	US 17	Slow Tide Rd	Principal Arterial - Other Urban	0.75	2	Divided	1,720	18,010
SR 16 East (Leonard C Taylor Pkw)	Slow Tide Rd	Bulkhead Rd	Principal Arterial - Other Urban	0.93	4	Divided	1,620	18,010
SR 16 East (Leonard C Taylor Pkw)	Bulkhead Rd	South City Limits (Wildwood Rd)	Principal Arterial - Other Urban	0.36	2	Undivided	1,590	17,750
Green Cove Av/Cooks Ln	South Oakridge Av	US 17	Major Collector - Urban	0.13	2	Divided	160	1,600
CR 15 A/Oakridge Av	South City Limits	SR 16 W	Major Collector - Urban	0.50	4	Divided	220	2,200

Source: FDOT LOS, NERPM Model.

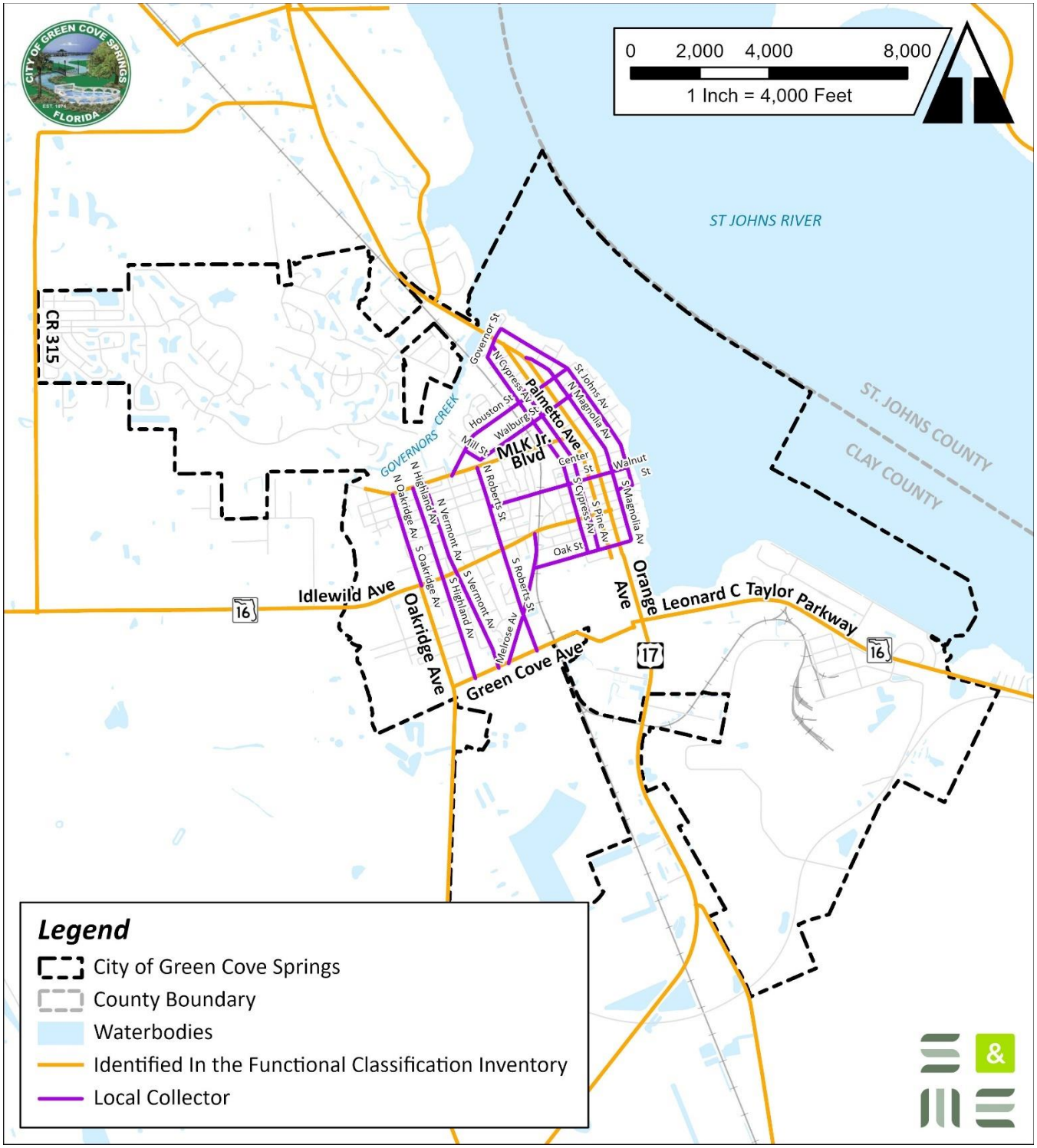
Map II - 2. Roadway Maintenance



Map II - 3. Current Number of Lanes



Map II - 4. Local Collectors



d. Context Classification

FDOT has recently developed a new system for classifying roadway corridors based on the context of the built environment they serve. **Figure II-2** depicts the eight classifications used, which range from C1-Natural to C6-Urban Core. The context classification system describes the general characteristics of the land use, development patterns, and roadway connectivity along a roadway, providing cues as to the types of uses and user groups that will likely utilize the roadway. The context classification and transportation characteristics of a roadway determine key design criteria for the roadway.

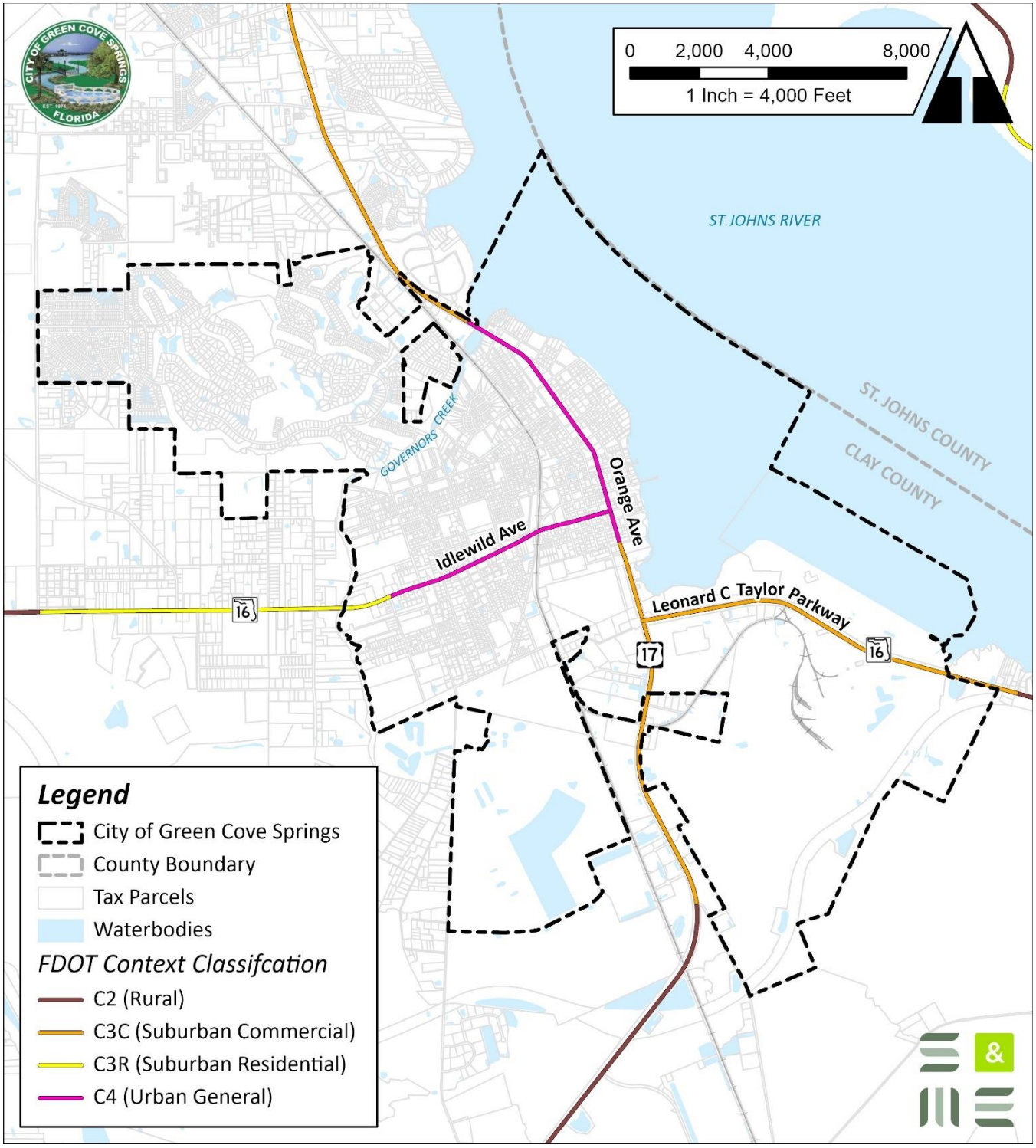
As **Map II-5** shows, US 17 is classified as C4 (Urban General) in the downtown area, C3C (Suburban Commercial) from Oak Street south. **Table II-3** shows the framework utilized by FDOT to determine the context classification for state roadways.

The FDOT Context Classification framework helps coordinate land use and transportation. While FDOT has determined the current context classification of the state roadways within the City, they may modify the classifications if the character of land uses changes over time. For instance, if the City adopts urban standards for a corridor that is currently designated C3C (Suburban Commercial), the City can coordinate with FDOT to change that designation so that the roadway design better matches the character of development.

Figure II - 2.FDOT Context Classification Transect

Source: FDOT Context Classification Guide

Map II - 5. FDOT Context Classification for Green Cove Springs



Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

Table II - 3. FDOT Context Classification Matrix

Context Classification	C2 – Rural	C3R – Suburban Residential	C3C – Suburban Commercial	C4 – Urban General
Distinguishing Characteristics	Sparsely settled lands; may include agricultural land, grassland, woodland, and wetlands.	Mostly residential uses within large blocks and a disconnected or sparse roadway network.	Mostly non-residential uses with large building footprints and large parking lots within large blocks and a disconnected or sparse roadway network.	Mix of uses set within small blocks with a well-connected roadway network. May extend long distances. The roadway network usually connects to residential neighborhoods immediately along the corridor or behind the uses fronting the roadway.
Primary Measures:				
Land Use	Agricultural or Single-Family Residential	Single-Family or Multi-Family Residential	Retail, Office, Multi-Family Residential, Institutional, or Industrial	Single-Family or Multi-Family Residential, Institutional, Neighborhood Scale Retail, or Office
Building Height	1 to 2	1 to 2, with some 3	1 (retail uses) and 1 to 4 (office uses)	1 to 3, with some taller buildings
Building Placement	Detached buildings with no consistent pattern of setbacks	Detached buildings with medium (20' to 75') front setbacks	Detached buildings with large (>75') setbacks on all sides	Both detached and attached buildings with no setbacks or up to medium (<75') front setbacks
Fronting Uses	No	No	No	Yes
Location of Off-street Parking	N/A	Mostly in front; occasionally in rear or side	Mostly in front; occasionally in rear or side	Mostly on side or rear; occasionally in front
Intersection Density	<20	<100	<100	>100
Block Perimeters	N/A	N/A	>3,000	<3,000
Block Length	N/A	N/A	>660	<500
Secondary Measures:				
Allowed Residential Density	<1	1 to 8	N/A	>4
Allowed Office/ Retail Density	N/A	N/A	<0.75	N/A
Population Density	<2	N/A	N/A	>5
Employment Density	N/A	N/A	N/A	>5

Source: FDOT Context Classification Guide

e. Existing Roadway Performance

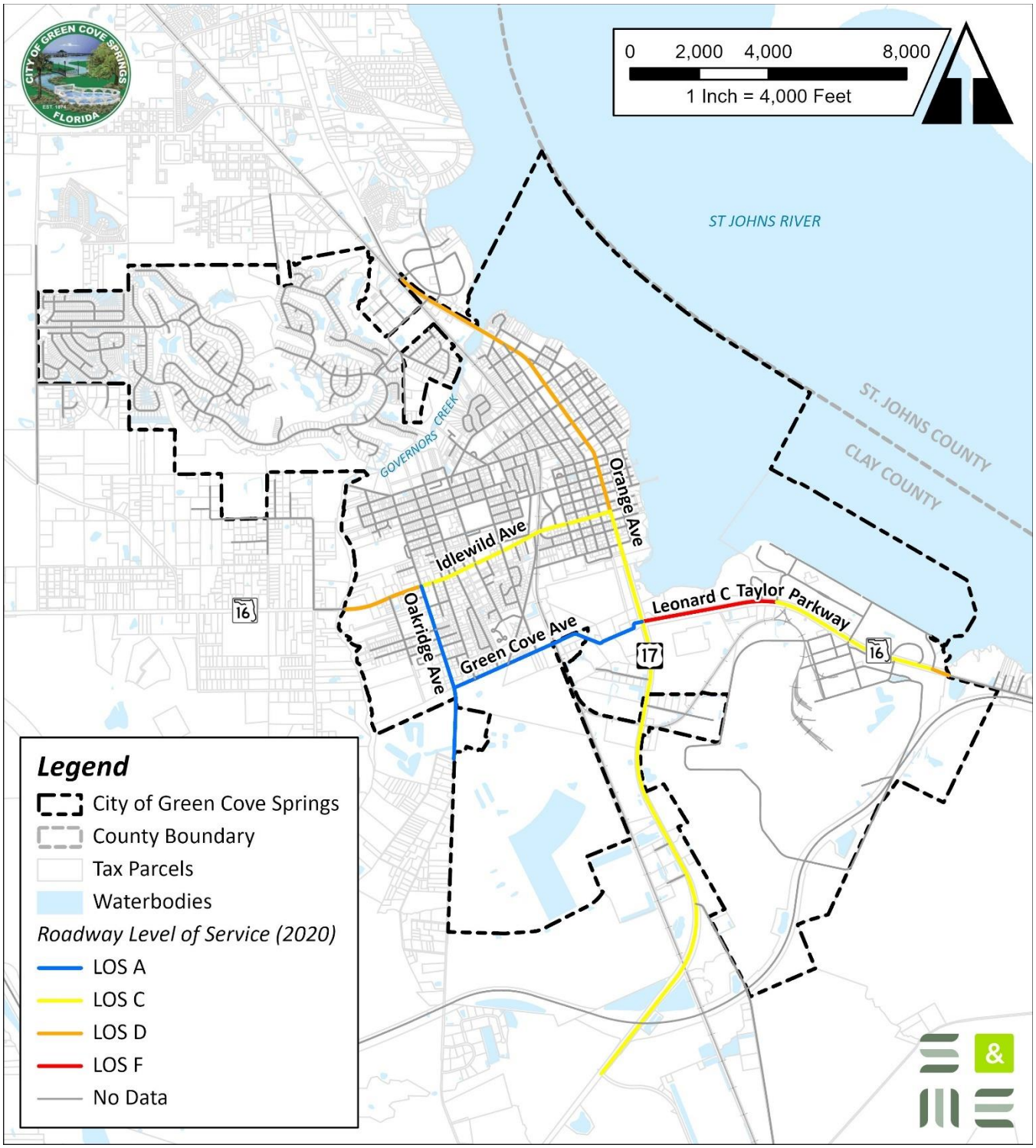
Existing performance for roadway infrastructure is based on traffic volumes from the FDOTs annual traffic count database, the available capacity based on an adopted Level of Service (LOS), and the assignment of a letter grade based on the available capacity.

Level of service is a standardized method of assessing available capacity on roadways based on daily or peak hour traffic counts. The LOS standard utilizes letters, A through F, to quantify a roadway segment's LOS, with LOS A as a free flow condition and LOS F as an over capacity or failing condition. **Table II-4** details the current Adopted LOS, the current Average Annual Daily Traffic (AADT) volume, the Peak Hour volume and the current LOS for each roadway link. The table shows that there is already a segment of SR 16 exceeding capacity. **Map II-6** shows the current 2020 LOS on the roadway segments listed in **Table II-4**.

Table II - 4. Adopted LOS and Current LOS 2020

Roadway	From	To	Adopted LOS	Daily Service Volume	2020 AADT	Peak Service Volume	2020 Peak	2020 LOS
US HWY 17 (SR 15) Orange Av	North City Limits	Governors St	D	33,200	29,500	2,920	2,280	D
US HWY 17 (SR 15) Orange Av	Governors St	Center St	D	33,200	24,000	2,920	2,280	D
US HWY 17 (SR 15) Orange Av	Center St	Ferris St	D	33,200	22,500	2,920	2,280	D
US HWY 17 (SR 15) Orange Av	Ferris St	Oak St	D	36,700	21,060	3,580	2,170	C
US HWY 17 (SR 15) Orange Av	Oak St	SR 16	D	36,700	21,060	3,580	1,890	C
US HWY 17 (SR 15) Orange Av	SR 16	South City Limits	D	36,700	14,410	3,580	1,300	C
SR 16 West (Idlewild Av)	West City Limits	South Oakridge Av	D	15,400	14,080	1,400	1,270	D
SR 16 West (Ferris St)	South Oakridge Av	US 17	D	15,400	11,910	2,770	1,070	C
SR 16 East (Leonard C Taylor PKW)	US 17	Slow Tide Rd	D	16,500	18,010	1,620	1,720	F
SR 16 East (Leonard C Taylor PKW)	Slow Tide Rd	Bulkhead Rd	D	36,700	18,010	3,580	1,620	C
SR 16 East (Leonard C Taylor PKW)	Bulkhead Rd	City Limits (Wildwood Rd)	D	16,500	17,750	1,600	1,590	D
Green Cove Av/Cooks Lane	South Oakridge Av	US 17	C	11,700	1,600	1,290	160	A
CR 15 A/Oakridge Av	South City Limits	SR 16 W	C	11,700	2,200	1,290	220	A

Map II - 6. Current Level of Service 2020



Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

f. Projected Trends

There are two projected forecasting scenarios, they are detailed as follows:

Scenario A – Forecasted trends without the First Coast Expressway completed. The current and future forecasted traffic for 2030 and 2045 are detailed in **Table II-5**. **Maps II-7 and II-8** show the projected 2030 and 2045 Levels of Service for Scenario A.

Scenario B – Forecasting based on the Northeast Regional Planning Model (NERPM) with the First Coast Expressway completed before 2030. **Table II-6** provides the forecasted information for Scenario B. **Maps II-9 and II-10** show the projected 2030 and 2045 Levels of Service for Scenario B.

As shown in **Figure II-3**, traffic is projected to increase with or without the completed expressway. Based on the trended traffic volumes (Scenario A), Green Cove Springs can expect to experience a 39.5 percent increase in overall traffic volumes by 2030 (or 3.9 percent average annual growth), and between 2030 and 2045 an overall increase of 34.2 percent (or 2.3 percent average annual growth). These estimates are based on historical trends and forecasts from the transportation model for the region.

Incorporating the First Coast Expressway into the model (Scenario B), the volumes appear to experience a smaller annual growth rate for the period between 2020 and 2030 (3.85% compared to 3.95% for Scenario A) but experience a higher growth rate between 2030 and 2045 (2.57% vs. 2.28%). The increase in traffic in Scenario B could be due to new development being attracted to the area by the new access provided by the First Coast Expressway. The model shows more traffic on SR 16 without the Expressway connection in place. This indicates that the finished expressway does provide traffic divertion from SR 16. The indications are that SR 16 will increase at a higher rate until the expressway is completed. Changes in volumes and growth rates over time could also be attributed to advancements in vehicle technology, changes in growth patterns, or other external influences that impact traffic movements.

Figure II - 3. Projected Average Annual Growth

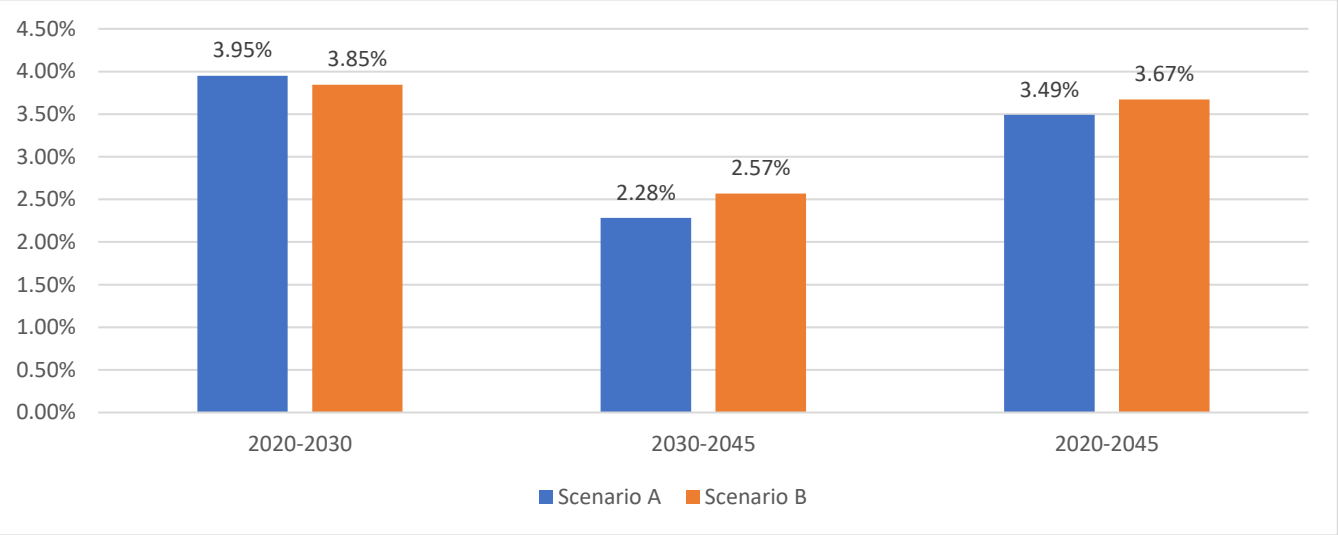
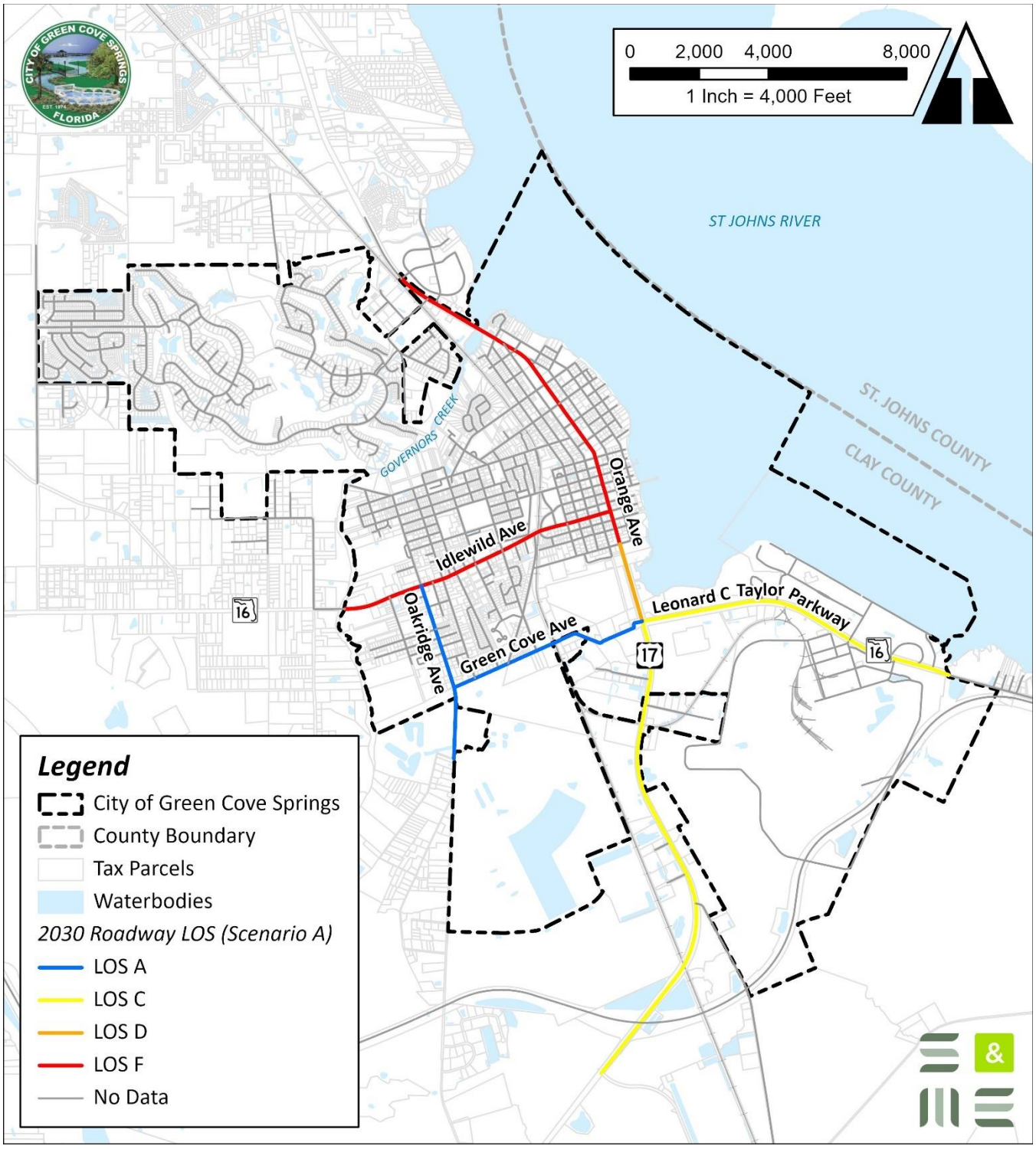


Table II - 5. Projected LOS for Scenario A (2030 and 2045)

Roadway	From	To	Adopted LOS	Daily Service Volume	2030 AADT	Projected 2030 Peak	2030 LOS	2045 AADT	Projected 2045 Peak	2045 LOS
US HWY 17 (SR 15) Orange Avenue	North City Limits	Governors Street	D	33,200	37,610	3,390	F	55,590	5,040	F
US HWY 17 (SR 15) Orange Avenue	Governors Street	Center Street	D	33,200	37,610	3,390	F	55,590	5,040	F
US HWY 17 (SR 15) Orange Avenue	Center Street	Ferris Street	D	33,200	37,610	3,390	F	55,590	5,040	F
US HWY 17 (SR 15) Orange Avenue	Ferris Street	Oak Street	D	36,700	37,610	3,390	F	40,200	3,580	F
US HWY 17 (SR 15) Orange Avenue	Oak Street	SR 16	D	36,700	29,200	2,620	D	40,200	3,580	F
US HWY 17 (SR 15) Orange Avenue	SR 16	South City Limits	D	36,700	17,500	1,580	C	22,130	1,990	C
SR 16 West (Idlewild Avenue)	West City Limits	South Oakridge Avenue	D	15,400	21,920	1,970	F	33,680	3,030	E *
SR 16 West (Farris Street)	South Oakridge Avenue	US 17	D	15,400	17,550	1,580	F	26,000	2,340	F
SR 16 East (Leonard C Taylor PKW)	US 17	Slow Tide Rd	D	16,500	20,100	1,810	C **	23,240	2,090	F
SR 16 East (Leonard C Taylor PKW)	Slow Tide Rd	Bulkhead Rd	D	36,700	20,100	1,810	C**	23,240	2,090	C
SR 16 East (Leonard C Taylor PKW)	Bulkhead Rd	South City Limits (Wildwood Rd)	D	16,500	19,740	1,780	C**	22,730	2,050	C
Green Cove Avenue/Cooks Lane	South Oakridge Avenue	US 17	C	11,700	1,920	190	A	2,496	248	A
CR 15 A/Oakridge Avenue	South City Limits	SR 16 W	C	11,700	2,640	260	A	3,432	339	A

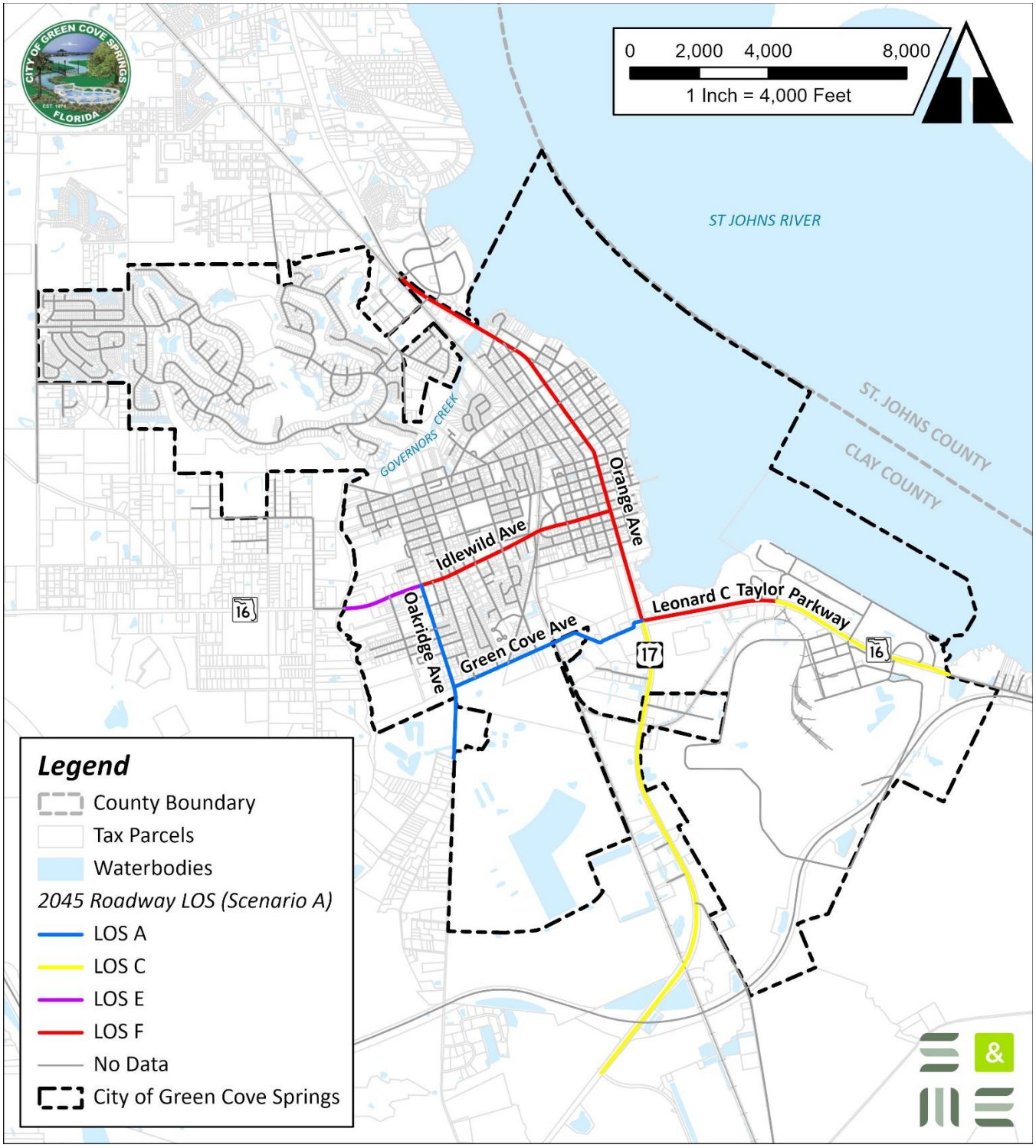
* - Capacity improvement to Peak Service Volume 3,070.
** - Capacity improvement to Peak Service Volume 3,580.

Map II - 7. Projected Level of Service Scenario A - 2030



Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

Map II - 8. Projected Level of Service Scenario A - 2045



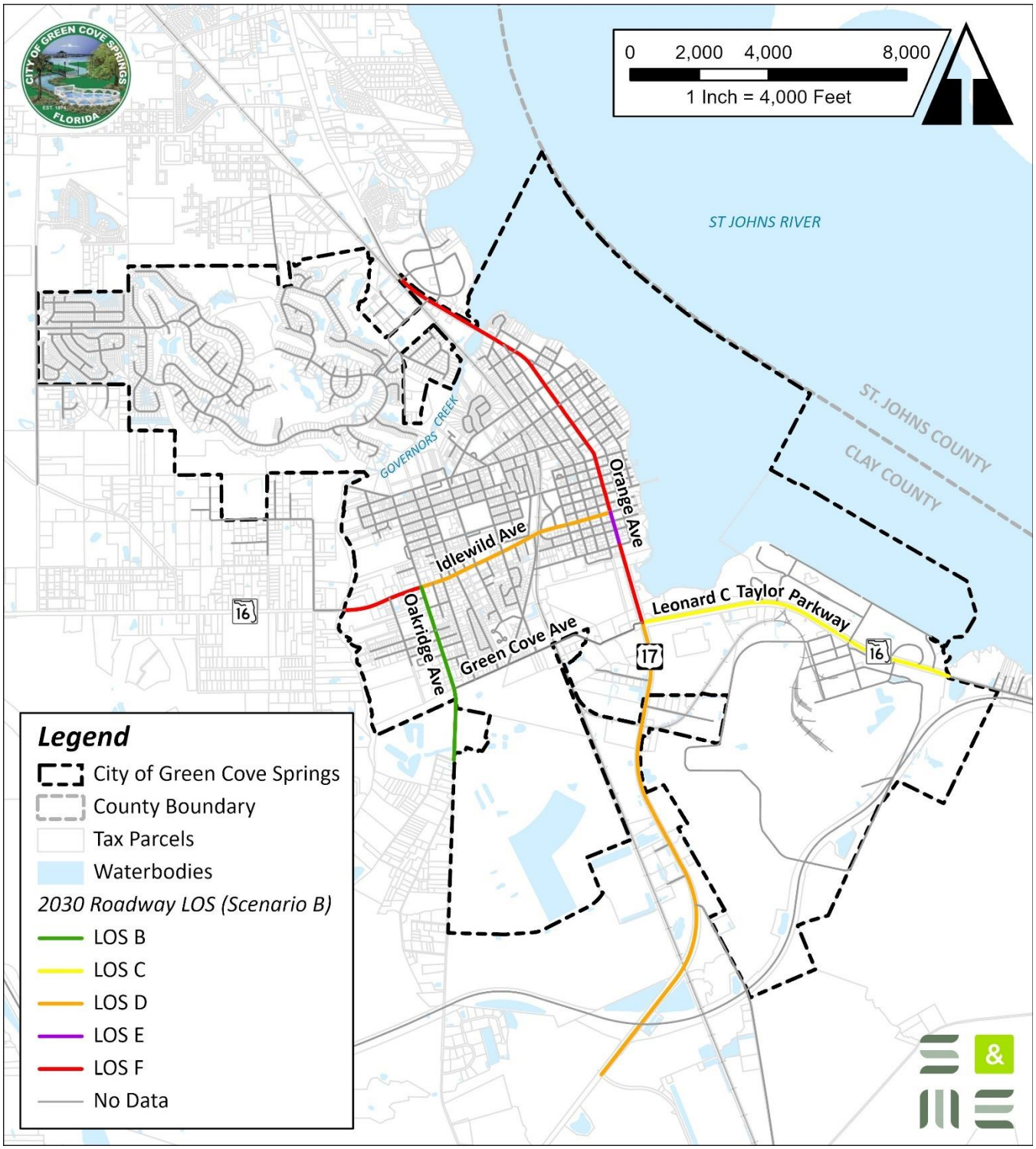
Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

Table II - 6. Projected LOS for Scenario B (2030 and 2045)

Roadway	From	To	Adopted LOS	Daily Service Volume	2030			2045		
					AADT	Peak	LOS	AADT	Peak	LOS
US HWY 17 (SR 15) Orange Avenue	North City Limits	Governors Street	D	33,200	46,710	4,671	F	61,530	6,153	F
US HWY 17 (SR 15) Orange Avenue	Governors Street	Center Street	D	33,200	29,610	2,961	F	42,240	4,224	F
US HWY 17 (SR 15) Orange Avenue	Center Street	Ferris Street	D	33,200	32,230	3,223	F	42,050	4,205	F
US HWY 17 (SR 15) Orange Avenue	Ferris Street	Oak Street	D	36,700	35,310	3,531	E	42,050	4,205	F
US HWY 17 (SR 15) Orange Avenue	Oak Street	SR 16	D	36,700	36,390	3,639	F	50,680	5,068	F
US HWY 17 (SR 15) Orange Avenue	SR 16	South City Limits	D	36,700	23,240	2,324	D	26,200	2,620	D
SR 16 West (Idlewild Avenue)	West City Limits	South Oakridge Avenue	D	15,400	21,970	2,197	F	34,270	3,427	F*
SR 16 West (Farris Street)	South Oakridge Avenue	US 17	D	15,400	21,710	2,171	D	31,980	3,198	D
SR 16 East (Leonard C Taylor PKW)	US 17	Slow Tide Rd	D	16,500	15,760	1,576	C**	25,530	2,553	E
SR 16 East (Leonard C Taylor PKW)	Slow Tide Rd	Bulkhead Rd	D	18,010	15,760	1,576	C**	25,430	2,553	D
SR 16 East (Leonard C Taylor PKW)	Bulkhead Rd	South City Limits (Wildwood Rd)	D	17,750	14,050	1,400	C**	24,010	2,553	D
Green Cove Avenue/Cooks Lane	South Oakridge Avenue	US 17	C	11,700	N/A	N/A	N/A	N/A	N/A	N/A
CR 15 A/Oakridge Avenue	South City Limits	SR 16 W	C	11,700	4,240	424	B	5,390	539	B

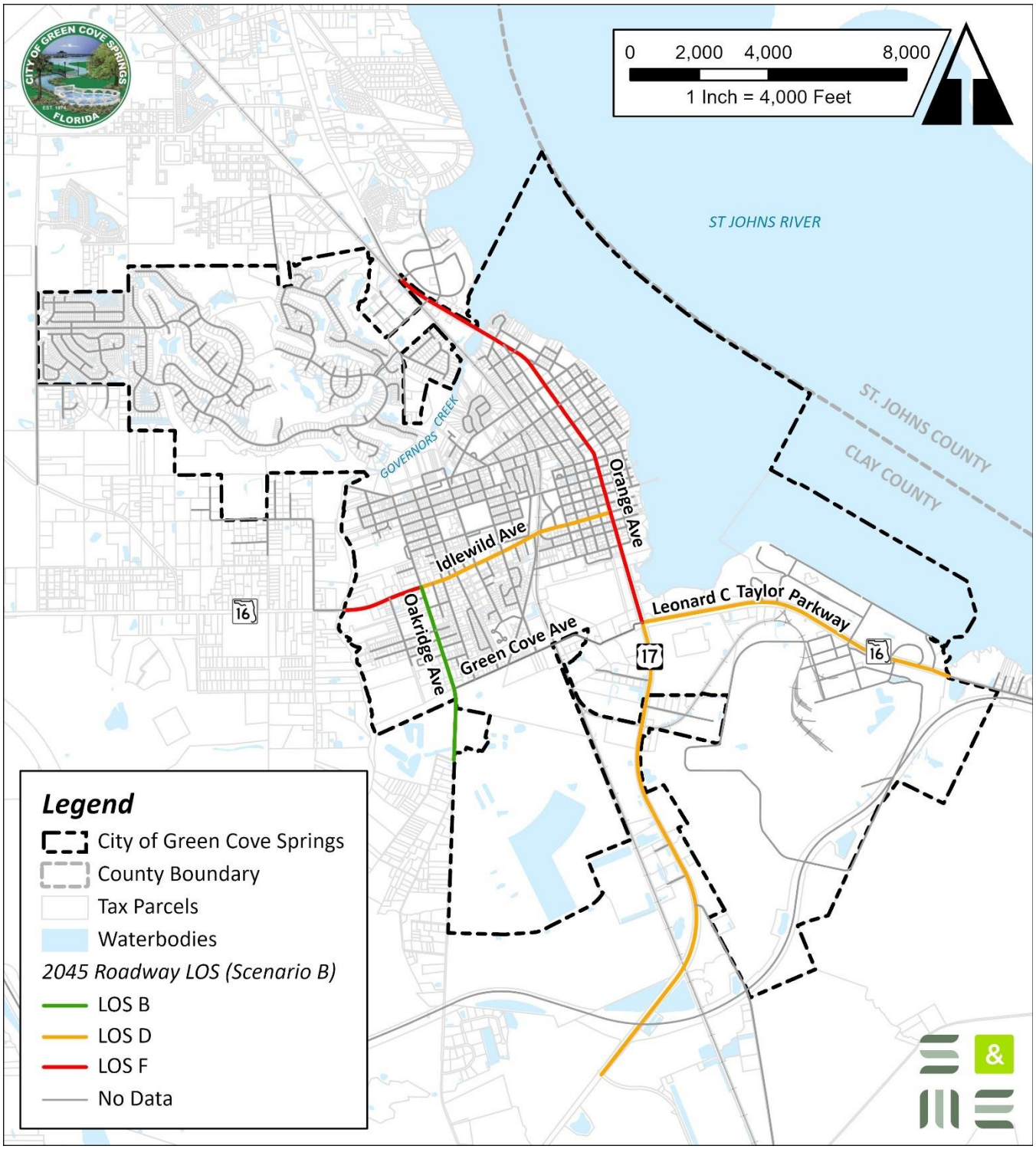
* - Capacity improvement to Peak Service Volume 3,070.
** - Capacity improvement to Peak Service Volume 3,580.

Map II - 9. Projected Level of Service Scenario B - 2030



Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

Map II - 10. Projected Level of Service Scenario B - 2045



Sources: Clay County, Clay County Property Appraiser, FDOT, S&ME, 2021.

g. Projected Roadway Performance

Based on the information provided from Scenario A and Scenario B, the LOS for the major roadway links serving Green Cover Springs is projected to degrade significantly by 2030. All but one roadway link on US 17 is forecasted to drop below the adopted LOS of D. This is forecasted to occur with or without the First Coast Expressway completed.

The Shands Bridge (S.R. 16) is the only direct connection between Clay County and St. Johns County and provides the only access in this area to I-95. The Buckman Bridge in Jacksonville, 20 miles north of Green Cove Springs, provides another river crossing. Both crossings are near capacity. The construction of the expressway will include a new bridge to replace the Shands bridge. However, there will be a few years between the completion of the interchange and the bridge when traffic will need to come off the Expressway onto US 17, head north and turn east on SR 16 to use the current Shands bridge to get across the St. Johns River. This traffic would put additional pressure on those two segments. However, it is unlikely that drivers would take the expressway (toll road) if they have to take a detour and use the Shands bridge.

While the First Coast Expressway will most likely take some of the truck traffic off from US 17, it is anticipated that development around the interchange will accelerate when the First Coast Expressway interchange is completed. To quantify the effect of growth and changing travel patterns, the City maintains a system to monitor the available capacity on each roadway segment, identifying different segments. Based on the monitoring system, The City produces an annual report that provides information on each roadway link and any available capacity.

Several strategies should be investigated by the City to assist in mitigating the rise in trips resulting from in-migration to the area. One strategy is to incorporate Intelligent Traffic Systems (ITS) into the transportation network in tandem with County and FDOT efforts. ITS helps maintain or improve traffic efficiency by minimizing traffic problems. Improvements such as coordinated signals, transit priority signals, and advanced messaging can help to reduce traffic frustrations. Intelligent ridesharing programs, ride-hailing applications, and parking location applications can reduce trips and trip length.

Another strategy involves encouraging mode shift from single user vehicles to a more multimodal way of travel. The City can promote mode shift by providing the facilities and connectivity for people to safely walk and bike. Micro-mobility, including E-scooters and golf carts should be thoughtfully and safely integrated as other mode choices.

Transit and on-demand buses are an important part of the mode shift strategy as they offer an alternative to a single use vehicle for longer trips and provide mobility for those who cannot drive. Transit connectivity is an essential for providing transit that people can utilize. Timely connections to hospitals, transportation hubs, and places of employment are crucial to a successful transit system. Transit should also connect to strategically placed park-and-ride lots to further encourage mode shift. Investment in innovation such as driverless electric people movers, reliable and fast internet for viable work-from-home opportunities, and modern fare box collection systems can help with trip reduction via single use vehicles.

2. Parking

Parking in Green Cove Springs is predominantly tied to the land use it supports; each business having its own dedicated parking area. US 17 is a main thoroughfare through downtown and does not include any on-street parking. Walnut Street from Pine Avenue to the river, is the only roadway with designated on-street parking. There are no public or visitor designated parking areas or garages in the City, but there are several government buildings with dedicated parking that may be available to the public on weekends or special events.

The City has conducted a vision plan that listed a parking plan be undertaken for the Central Business District (CBD). Under the goal of 'Promote the Redevelopment of the US 17 and SR 16 corridors the action item is to 'Develop and adopt a CBD parking plan'. However, to date, the plan has not yet been produced.

Parking in the CBD could provide several benefits, including visitor accommodation and pedestrian separation from traffic. The study should be undertaken, and an assessment of parking demand quantified.

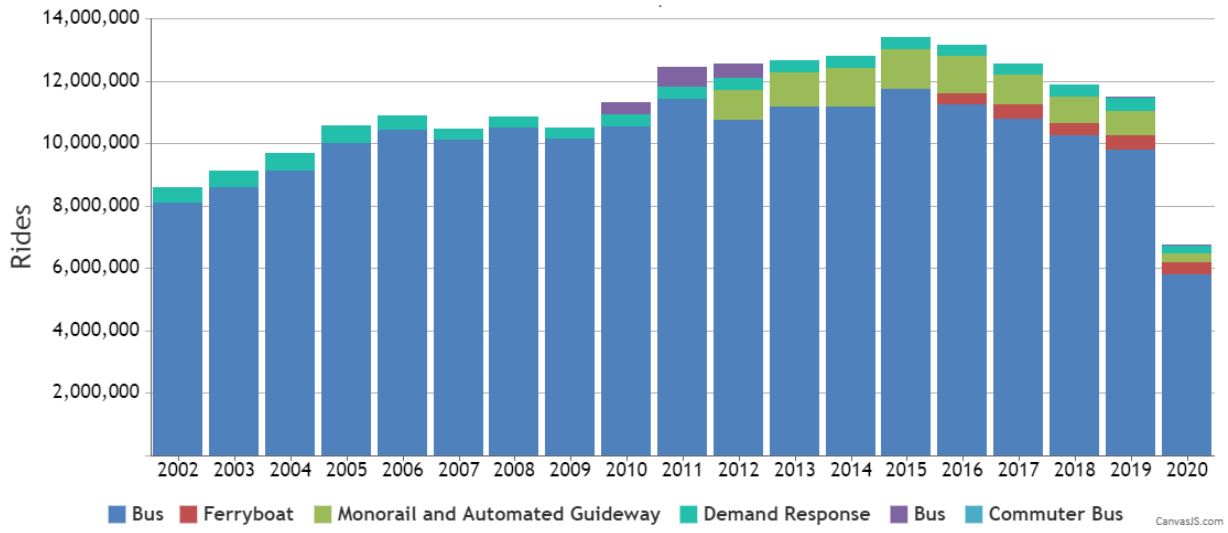
3. Public Transportation

Public transportation in Green Cove Springs is supported by the Clay Community Transportation (CCT) flex service shuttles, managed by the Jacksonville Transit Authority (JTA). The flex service is a fixed route system comprised of four dedicated routes but is also able to pick up from locations off the routes through a reservation system. The service runs 6 AM through 7 PM Monday through Friday only. JTA also operates the Clay Regional Express (Route 201) from the Black Creek Park-n-Ride located at 2511 County Road 220 and the Route 5 from the Orange Park Mall.

Two of the four CCT routes (Blue and Green Lines) serve the City of Green Cove Springs (see **Figures II-5 and II-6**). JTA recently inaugurated the CCT Green Line bus route from the Middleburg VA Clinic to Keystone Heights, through Green Cove Springs. A connection to Gainesville is available at Keystone Heights. Based on regional mobility needs in the area, a proposed Shands Bus Service has been envisioned to provide a fixed route connection between Clay County and St. Johns County.

Reported bus ridership in Clay county has experienced a decline between 2015 (54,362 trips) and 2017 (42,842 trips). As shown in **Figure II-4**, ridership for all modes has been declining since 2015. In 2019 the JTA reconfigured the bus service in Clay County and added more routes.

Figure II - 4. Ridership History (all modes)



Source: Jacksonville Transit Authority

The recent pandemic has contributed to decreasing transit share significantly. Based on transit ridership just recently picking up nationwide, and the recently added and reconfigured bus routes, good ridership numbers are unavailable and accurate projections are impossible at this time.

FDOT and JTA predict an increase in ridership based on the new route configurations, rising gas prices increasing auto ownership costs, and expanded job opportunities. The mode share of transit trip will rise in Green Cove Springs as the population increases based on the same trend seen in other rural to urban transitioning areas.

Figure II - 5. CCT Blue Line

Source: Jacksonville Transportation Authority, 2021

Figure II - 6. CCT Green Line

Source: Jacksonville Transportation Authority, 2021

4. Airports

Green Cove Springs includes Reynolds Airpark, a former Naval Air Station. Originally known as NAS Lee Field, this site was primarily used to train pilots for aircraft carrier landing operations during World War II. In 1943, the facility was renamed Naval Air Station Green Cove Springs. At the end of the war, the naval base was downgraded in status to a Naval Auxiliary Air Station (NAAS) and transferred to NAS Jacksonville for limited training purposes. Its proximity to the St. Johns River made the facility an excellent location to securely store the U.S. Naval Atlantic Reserve or "Mothball Fleet" of WWII U.S. Navy ships.[1]

The base was decommissioned in 1961 as part of a military reorganization plan. The City annexed the base and Reynolds Metal Company acquired the land. Reynolds Industrial Park was established in 1965. The airport is currently private. It was reported in 2020 that nine aircraft based at the

[1] AbandonedSoutheast.com

airfield. Plans to upgrade the airfield have been proposed in the past, with no movement forward to date.

5. Trails and Sidewalks

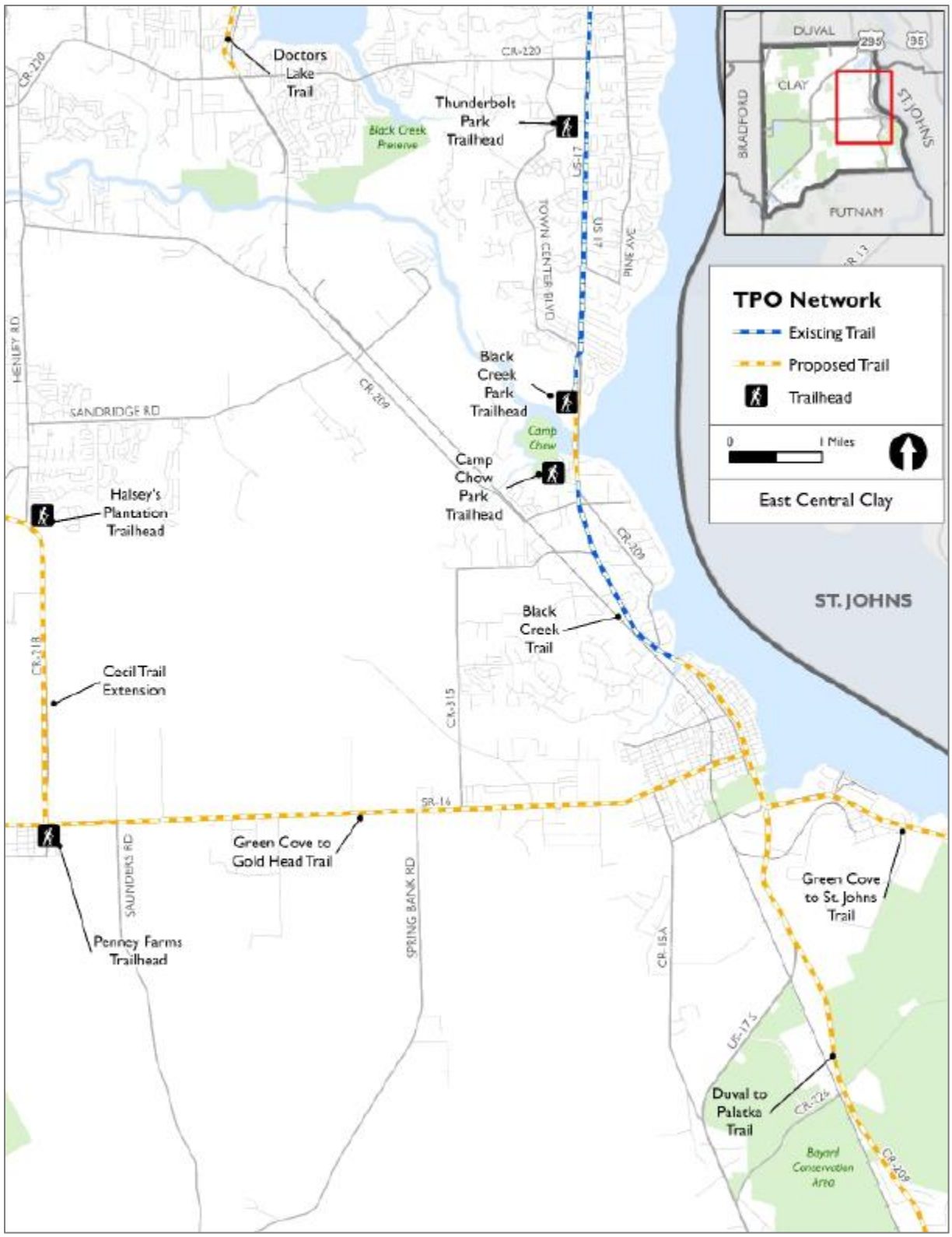
Adding pedestrian and bicycle accommodations is a priority within Green Cove Springs. Therefore, the City coordinates with the County and the FDOT to ensure that all roadway improvements are analyzed for inclusion of pedestrian and bicycle infrastructure. The City has codified the review of new development and requirements for the inclusion of connected pedestrian and bicycle networks.

Map II-11 shows the existing and proposed trails in the immediate area of Green Cove Springs. It shows the existing *Black Creek Trail*, which has its terminus at the northern boundary of the City and runs north, parallel to US 17, and the City of Green Cove Wildlife Corridor Trail, which is maintained by the City and is located off Oakridge Avenue and Green Cove Avenue. A new multi-use sidewalk/trail in currently under construction in Green Cove Springs. The trail runs along Palmetto Avenue from Martin Luther King Jr. Boulevard to the John P. Hall Nature Preserve in the Bayard Point Conservation Area.

The Northeast Florida Regional Multi-Use Trail Master Plan (2019) lists two proposed trail enhancements:

- Continuation of the Black Creek Trail through Green Cove Springs to Putnam County along US 17 and CR 209.
- Continuation of the Gold Head Trail through Green Cove Springs to St. Johns County along SR 16.

Map II - 11. Existing and Proposed Area Trails



Source: Northeast Florida Transportation Planning Organization, 2019.

C. FUTURE NEEDS

The future level of service deficiencies noted in this Element are not generated just by local traffic. US 17 and SR 16 carry substantial through traffic. Drivers traveling from Jacksonville, Orange Park and Fleming Island to Palatka, Eustis, Leesburg and Mount Dora rely on US 17; travel from Starke and surrounding areas to I-95 relies on SR 16 and the Shands bridge. The First Coast Expressway will relieve some of that traffic, particularly the truck traffic, but will not reduce traffic volumes within the City.

US 17 and SR 16 are in the hands of the Florida Department of Transportation and the City cannot expect (and would not want) the FDOT to continue widening these roadways. Bigger highways invite more trips. The wider these roads get, the faster the traffic will flow through the City and the more division they will create between the two sides of each road making them less safe for pedestrians and bicyclists to cross. There are, however, strategies that the City will need to start implementing to manage traffic in the future.

- **Transportation Connectivity**. Communities where self-contained subdivisions (not interconnected with the local grid) are allowed end up with heavily traveled roads surrounding the subdivisions and create unnecessary trips (e.g., having to go around a subdivision to go to the store, or having to use a major roadway for a local trip to the store). The City of Green Cove Springs is fortunate to still have a traditional grid in the central part of the City, and to have the potential to replicate that same system in the Reynolds Park site and future annexations. While the railroad tracks present a physical barrier to achieve full connectivity, it will be important to maintain/create roads that are parallel to the State Roads and serve as alternative routes for local trips.
- **Mobility Options.** When communities are designed to cater to the automobile only, residents are less likely to use other modes (walk or bike) because it is not safe or convenient to do so and are forced to use a car for even short trips. A strong system of sidewalks, bike lanes/trails, and public transit is necessary to provide a safe way to get around the City without the need for the automobile.
- **Land Use Strategies.** Land use and transportation are intrinsically connected. As explained earlier, FDOT predicates the design of roadways based on the character of the area they serve. Lower development densities/intensities and single use buildings contribute to sprawl, which in turn creates the need for more roadway capacity as residents are driven to live farther away from the city center. Compact, mixed-use communities can reduce the number of trips using internal capture and presenting a safe and walkable environment.
- **Mobility Plan.** Rather than continuing to rely on an outdated system of level of service for local roads (concurrency), the City will focus on developing a mobility plan and fee to replace the transportation concurrency management system. Strong coordination with FDOT will be necessary to address expected roadway deficiencies on State roads.
- **Complete Streets.** The design of a street determines the modes of transportation to be used on that street. All streets must be designed (built, restriped, modified) to accommodate all the relevant modes of transportation.

A paradigm shift is underway in the planning and design of transportation systems throughout the country. No more are we designing auto-centric roadways that bisect crucial core areas and put the burden on pedestrians and cyclists to move safely through an economic hub. The Complete Streets movement seeks to get back to the original design intent of a city's roadway network that promotes walkability with compelling and functional public spaces which will ultimately inform the development of a mobility framework of the city. Status Quo auto-dependency has undermined the character and livability of many of this nation's cities, particularly within their historic downtowns. Personal automobile trips by residents, visitors, students and workers strain the local street network and in downtown areas cause conflicts where pedestrian, wheelchair and bicycle modes are at risk of accidents created by the auto-centric transportation system.

Complete Streets is a context sensitive design concept that informs decisions for roadways that are more focused on the full functional value of a right-of-way rather than the sole focus being on automobile capacity. This is a mobility tool that has been adopted by the FDOT and TPO. FDOT District 2 has been a leader in complete streets and has allocated resources specifically for this cause.

The mobility needs of the City residents vary depending on the location within the City. In this case, the context does matter on how transportation facilities are addressed. Roadways in the downtown core area are much different than facilities near suburban or rural areas. That is one of the reasons the complete streets approach should be utilized in the future when preparing designs for new or expanding roadways. Some of the prime candidates for converting to complete streets include:

US 17 / Orange Avenue – This State highway transitions from a rural cross-section south of the City to an urban roadway bisecting the downtown. The City needs to work with FDOT and the TPO to incorporate improvements that will make pedestrian traffic safer (e.g., wider sidewalks, narrow travel lanes, interspersed medians, street trees, protected intersection crossings).

SR 16 /Idlewild Ave / Ferris St – This is also a major State roadway going through the City and providing access to a variety of uses including schools, the Clay County School Board offices, and health care facilities.

Ideally, all roadways should be designed as complete streets. While the City is not in the position to transform State and County roads, it will be important to coordinate with those agencies to prioritize safety and comfort for all modes of transportation. Incremental improvements are possible in conjunction with 3R (resurfacing, restoration and rehabilitation) projects conducted by FDOT. **Figure II-7** illustrates an example of the transformation of an auto-centric street into a complete street.

Figure II - 7. Complete Street Transformation

D. FUTURE IMPROVEMENTS

The following are planned improvements for the major roads in the City.

1. Near Term

The near term is defined as within the next five years to 2025. The FDOT Transportation Improvement Plan (TIP) for Fiscal years 2020/21 - 2024/25, includes one project within Green Cove Springs:

- SR 23 (First Coast Expressway) from East of SR 16A (Spur) to East of CR 209 (4229387). Fiscal Years 2022/23 through 2024/25.

Clay County has several bonded projects that are outside the City limits but will have an impact on local transportation:

- First Coast Connector from FCE to CR 315 – new 2-lane construction. Spring 2022 to Winter 2024.
- First Coast Connector from CR 315 to US 17 – increase from 2 to 4 lanes. Winter 2022 to Fall 2024.
- Sandridge Road, from Henley Road to CR 209 – increase from 2 to 3 lanes. Spring 2022 to Spring 2024.
- County Road 209 from Sandridge Road to CR 315B – increase from 2 to 3 lanes. Spring 2023 to Winter 2024.
- County Road 209 from CR 315B to US 17 – increase from 2 to 4 lanes. Summer 2022 to Spring 2024.

2. Long Term

The long term is defined as more than five years, from 2026 – 2045. The FDOT SIS long range plan does not list any SIS improvements by 2045.

The NFTPO Long Range Transportation Plan 2045 (February 2020) does include three capacity improvement projects:

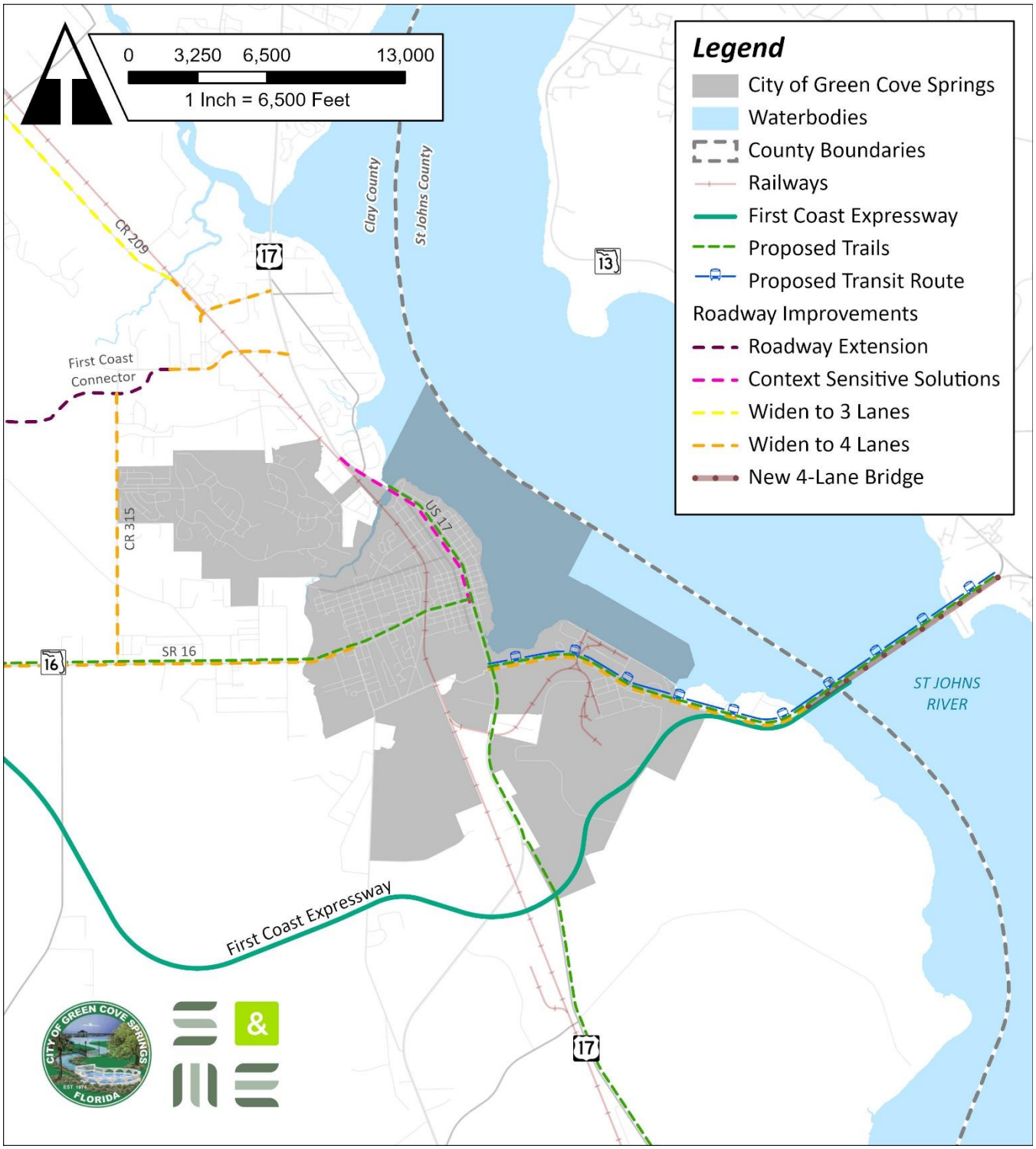
- CR 315 widen to 4 lanes, from SR 16 to CR 315B.
- SR 16 widen to 4 lanes, from the First Coast Expressway to SR 15A/Oakridge Avenue.
- SR 16 widen to 4 lanes, from US 17 to the Shands Bridge.
- US 17 implementation of context sensitive solutions, from Orion Road to SR 16.
- Governors Park Road, new roadway, from US 17 to SR 16.

The construction of the new four-lane bridge over the St. Johns River is expected to begin in 2022 and be completed in 2029 (see **Figure II-8**). The vertical clearance of the new bridge will be 65 feet from the water line (currently 45 feet). The old bridge will be partially removed and the segment from SR 16 extending in the river will be made available for recreation (fishing pier).

Figure II - 8. FDOT Photo Simulation of the New Bridge and Fishing Pier

Source: FDOT, 2021

Map II - 12. Future Transportation Improvements



Source: Northeast Florida Transportation Planning Organization, 2019.