

Transportation Infrastructure Update



PRESENTATION AGENDA

**Transportation
Overview**

**Transportation
Projects**

Current Road Capacity

Transportation Overview



Transportation Overview

Roadway

Functions

What are our primary roadway functions?

Level of

Service

Overview of roadway Level of Service and its implications on traffic.

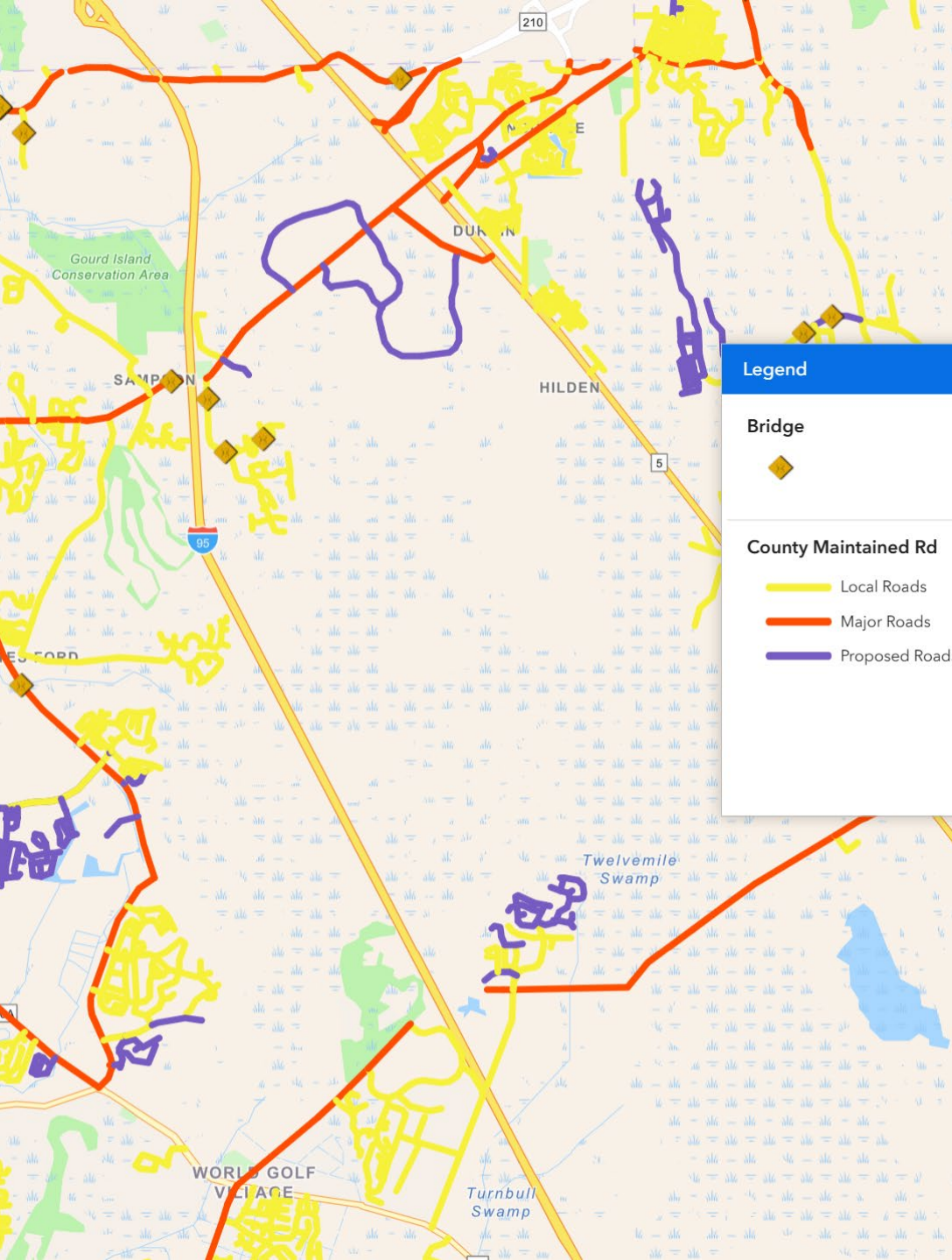
Fiscal

Responsibility

What goes into roadway projects?



Roadway Function



Roadways in St. Johns County fall under three functional classifications: Local, Minor Collector, and Major Collector.

Major Collectors are the backbone of the traffic network which are essential for transportation, enabling people to travel to work, school, and other destinations throughout the County.

Level of Service

Level of Service (LOS) is a quantitative stratification of the perceived comfort of a road. LOS is divided into letter categories (A-F). For a given road, this letter has a specific amount of traffic that meets the perception. LOS A will see fewer vehicles, while F will see more.

- A doesn't mean passing, cost more
- F doesn't mean failing, cost less
- Traffic is higher at peak by design



Variables

Based on roadway type (arterial, freeway, highway), land use (rural, urban, transitioning), signalization spacing, segment length, speed, roadway parameters (lane count, lane widths, medians, etc.). All these factors are used to determine peak hour capacity.

Why LOS D?

FDOT Policy 000-525-006 sets the State's highways at LOS D in urbanized areas and C outside of urbanized areas. St. Johns County has adopted a similar stance within the Comprehensive Plan. The LOS D anticipates traffic during the peak hours, striking a balance of cost, safety, and efficient transportation.

Perception

Driver perception is the comfort a driver feels on the road. This is influenced by the number of cars on the road at the time of travel. Perception includes factors such as delay, speed, congestion, etc.

Outcomes

Under LOS D, traffic moves at a safer speed, even during off peak hours. This also keeps capacity improvements at a lower cost by ensuring roads are built to an appropriate capacity for all hours of the day.





Fiscal Responsibility

By planning for roads with an expected level of traffic, the County is being fiscally sound with its funds. Road construction cost includes

- Land Acquisition
- Material and construction
- Utility conflicts/relocations
- Maintenance of Traffic
- CEI services
- Environmental concerns
- Permitting
- Non-direct cost

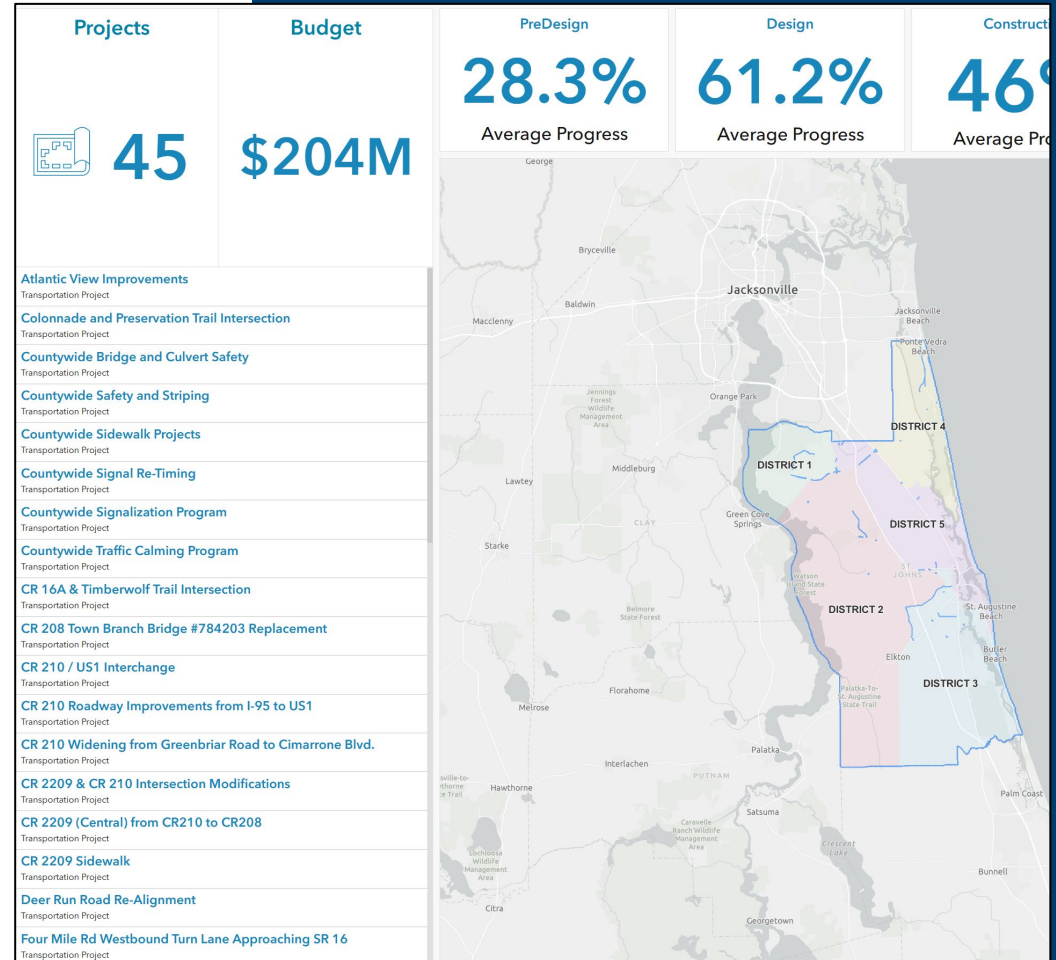
Based on current cost, widening from 2 to 4 lanes is \$11.2 million per mile.



Roadway Function

- Major Roads are for moving cars
- Level of Service dictates acceptable volume
- Perception changes as volume does
- Road building is costly

Transportation Projects



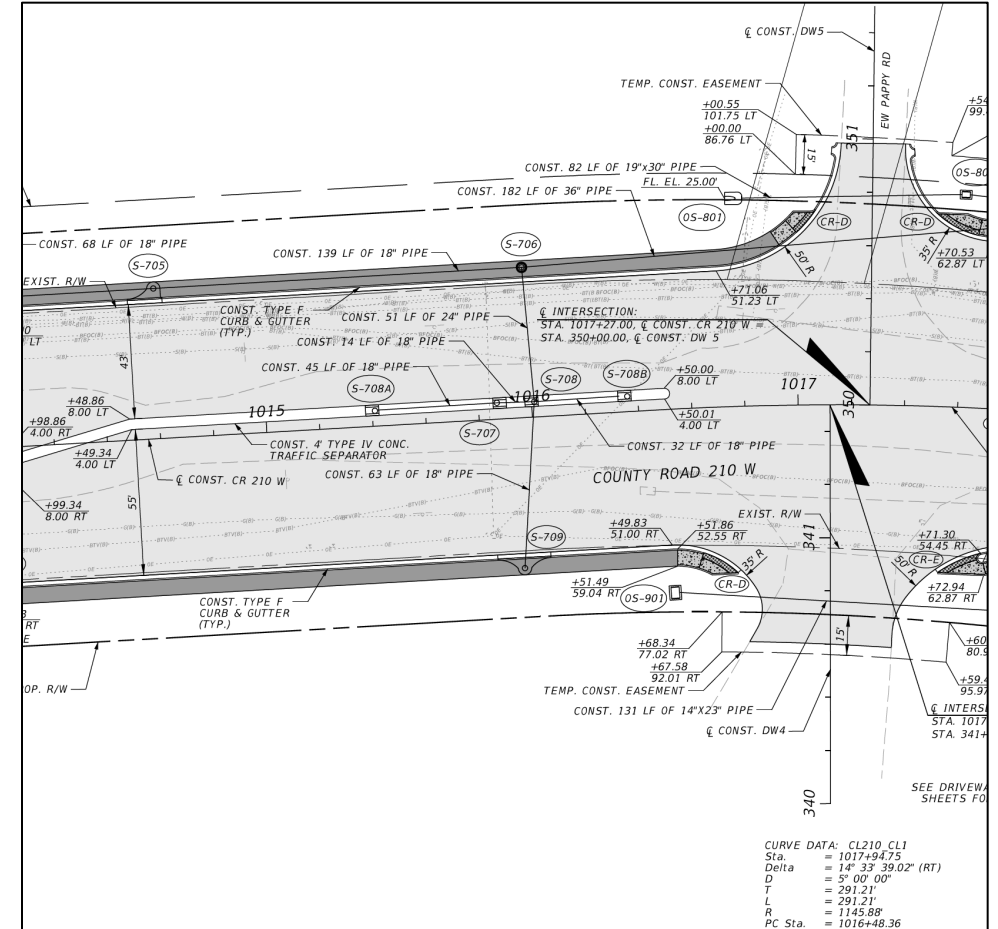
Active Construction

- CR 2209
- CR 210 West (Greenbriar to Cimarrone)
- CR 210 East
- Racetrack Road Widening
- SR 16 & IGP Improvements
- Pine Island & US 1 Signal
- SR 16 & South Francis Road Intersection Improvements
- SR 207 at Brinkhoff Intersection Improvements
- Holmes Blvd. - Four Mile Rd. & Kenton Morrison Improvements



In Design

- Greenbriar Road Widening
- CR210/US 1 Interchange
- CR2209/CR210 Intersection
- CR16A & Timberwolf Trail Intersection
- Kings Estate Road Corridor Improvements
- Regalo Road
- Stratton Blvd Signal
- Woodlawn Road
- Old Moultrie Road



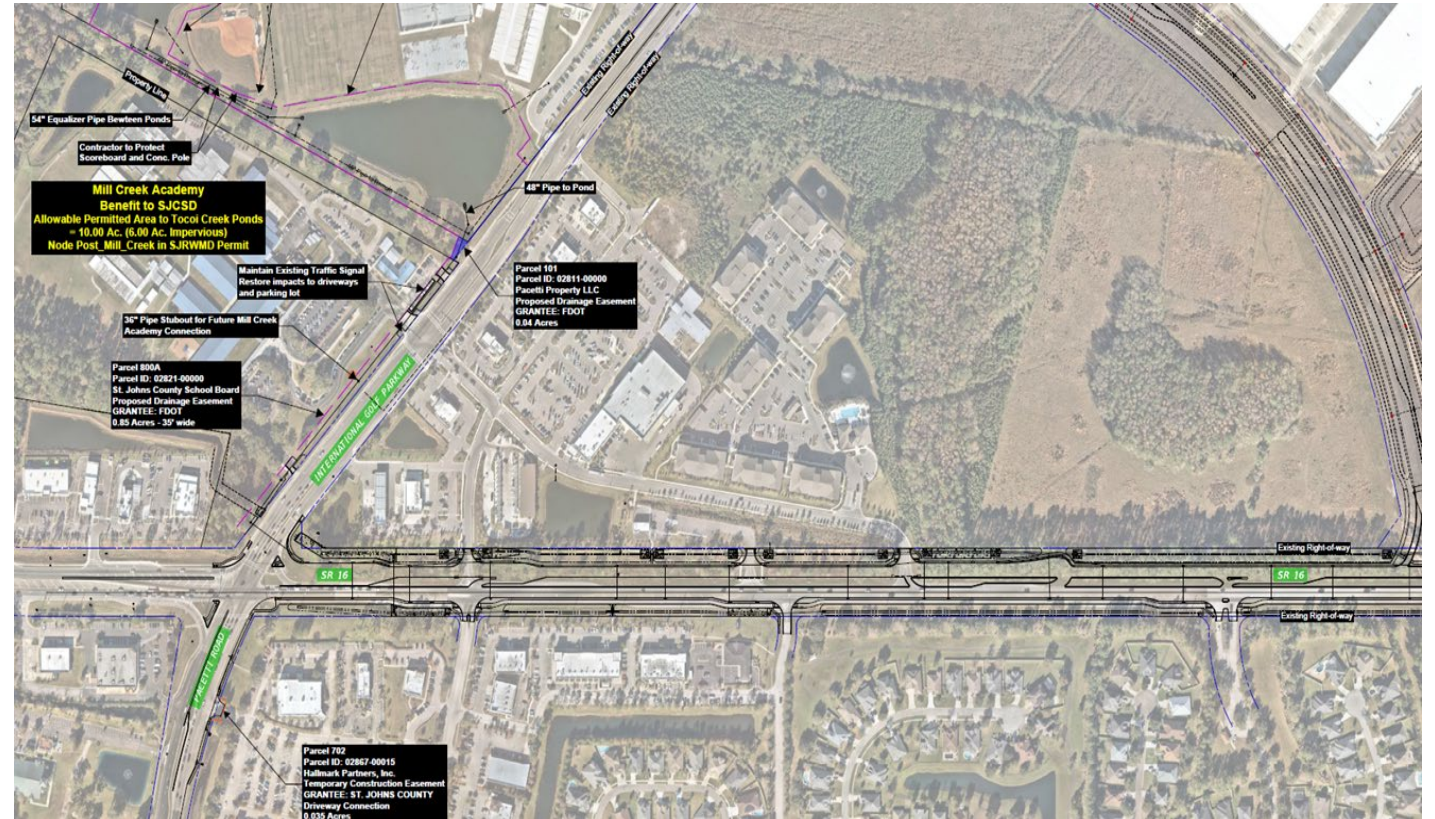
CR 2209 Extension

- Scope: 4-lane major collector from Silverleaf Drive to State Road 16. Includes multi-use path sidewalk and utility installation
- New North/South Corridor
- Capacity Improvement
- Budget: \$40 Million



SR 16 & IGP Intersection

- Scope: Improvements to the State Road 16 and International Golf Parkway intersection and 4-Laning of a section of SR-16
- Major Capacity Improvements
- Intersection Improvement/Reduction in Delays
- Budget: \$35 Million



A1A/Mickler Road Intersection

- Project Completion : March 2025
- Scope: additional lanes, sidewalks, and intersection efficiency improvements
- Budget: \$6 Million

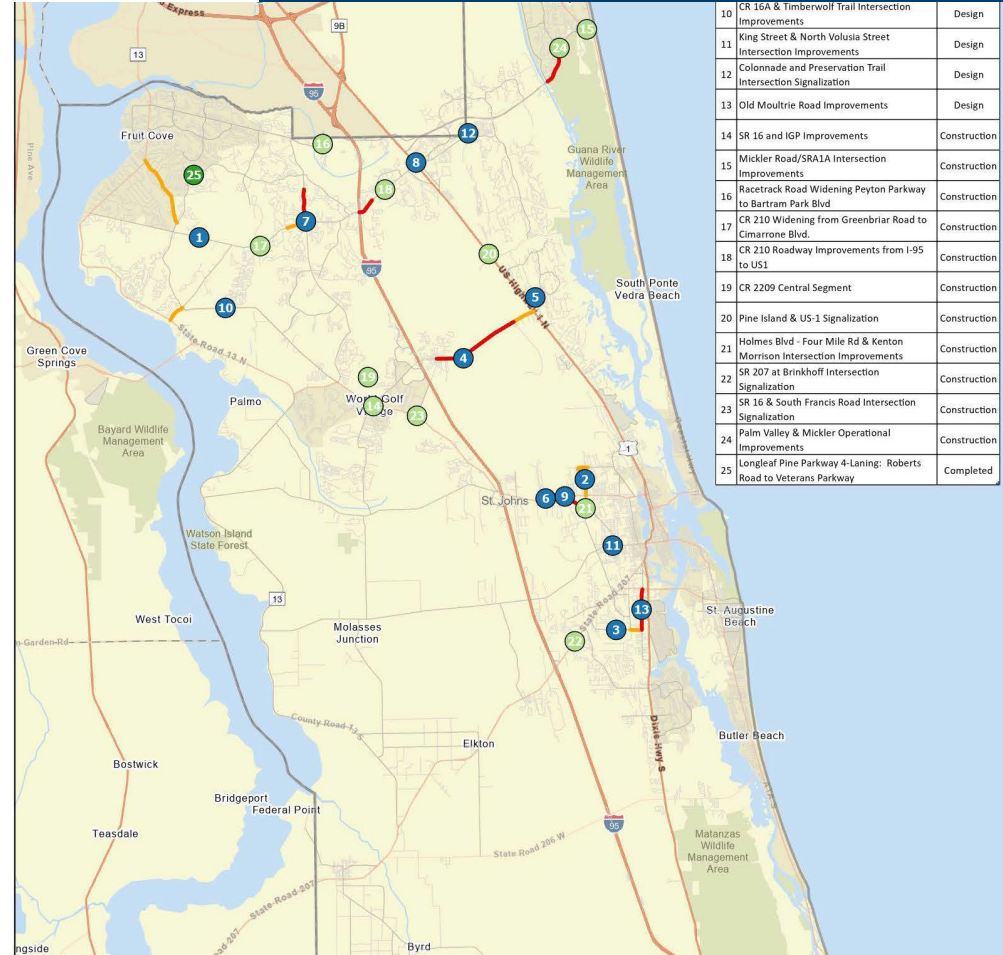


Longleaf Pine Parkway

- Projected Completed : Winter 2024
- Scope: This project widened a portion of Longleaf Pine Parkway from 2 lanes to 4 lanes. At the intersection of Veterans Parkway to the existing 4-lane section at the intersection of Roberts Road
- Budget: \$15.1 million



Current Road Capacity

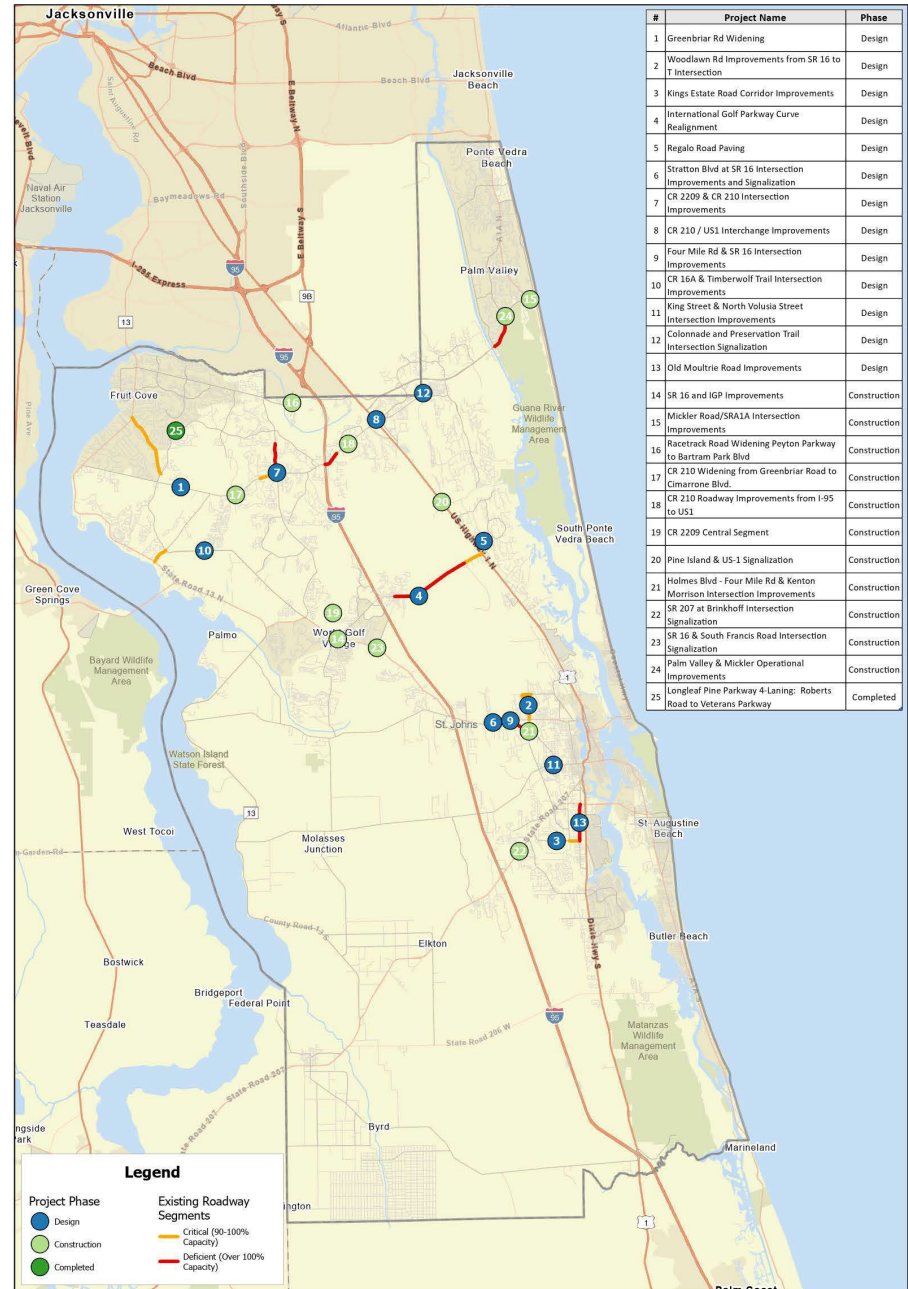


Current Road Capacity

County annually counts traffic on major road network. These counts are used by staff in the Concurrency Management System. Our system monitors both State and County facilities.

Based on existing traffic on the roads, 42 out of 211 roadway links are at least at 90% utilization. Of these, 14 are County Roads.





#	Project Name	Phase
1	Greenbriar Rd Widening	Design
2	Woodlawn Rd Improvements from SR 16 to T Intersection	Design
3	Kings Estate Road Corridor Improvements	Design
4	International Golf Parkway Curve Realignment	Design
5	Regalo Road Paving	Design
6	Stratton Blvd at SR 16 Intersection Improvements and Signalization	Design
7	CR 2209 & CR 210 Intersection Improvements	Design
8	CR 210 / US1 Interchange Improvements	Design
9	Four Mile Rd & SR 16 Intersection Improvements	Design
10	CR 16A & Timberwolf Trail Intersection Improvements	Design
11	King Street & North Volusia Street Intersection Improvements	Design
12	Colonnade and Preservation Trail Intersection Signalization	Design
13	Old Moultrie Road Improvements	Design
14	SR 16 and IGP Improvements	Construction
15	Mickler Road/SRA1A Intersection Improvements	Construction
16	Racetrack Road Widening Peyton Parkway to Bartram Park Blvd	Construction
17	CR 210 Widening from Greenbriar Road to Cimarrone Blvd.	Construction
18	CR 210 Roadway Improvements from I-95 to US1	Construction
19	CR 2209 Central Segment	Construction
20	Pine Island & US-1 Signalization	Construction
21	Holmes Blvd - Four Mile Rd & Kenton Morrison Intersection Improvements	Construction
22	SR 207 at Brinkhoff Intersection Signalization	Construction
23	SR 16 & South Francis Road Intersection Signalization	Construction
24	Palm Valley & Mickler Operational Improvements	Construction
25	Longleaf Pine Parkway 4-Laning; Roberts Road to Veterans Parkway	Completed

Legend

Project Phase

- Design (Blue circle)
- Construction (Green circle)
- Completed (Red circle)

Existing Roadway Segments

- Critical (90-100% Capacity) (Yellow line)
- Deficient (Over 100% Capacity) (Red line)



Level of Service Improvements

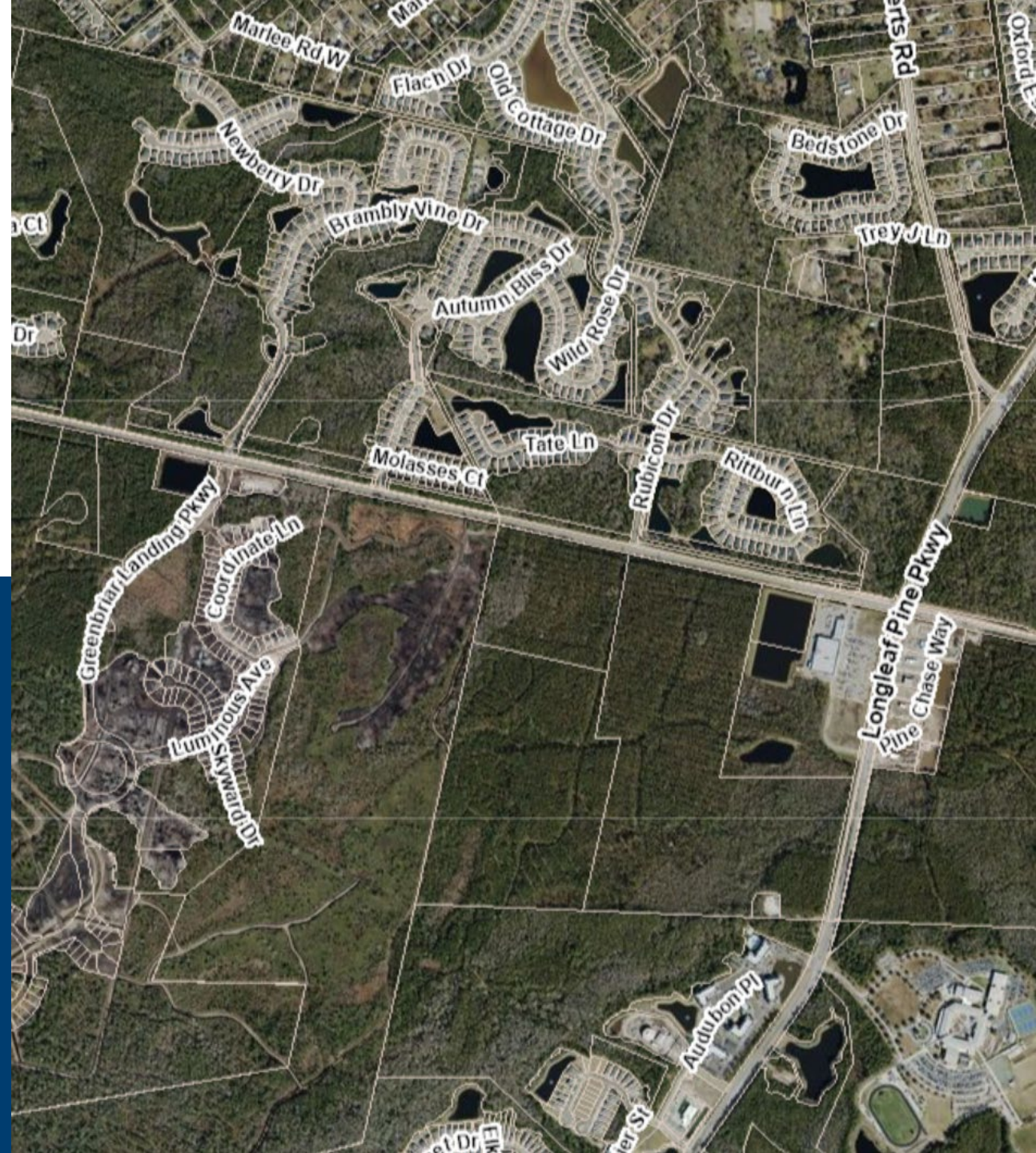
DISCLAIMER:
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Map Prepared: March 20, 2025



Greenbriar Road Example

In 2024, Greenbriar Road had 982 peak hour trips with a capacity of 1440 on a two lane Greenbriar.

The Landings at Greenbriar has funded a four lane Greenbriar which has a capacity of 3220.



Greenbriar Example

Below is a comparison of the existing conditions of Greenbriar versus the funded expansion (currently under construction). The vested trips are included to show that the additional trips, as contemplated by the Landings project, are properly mitigated.

	Existing Trips	LOS D Capacity	Utilization	Total Committed Trips	Committed Utilization
Greenbriar 2 lane	982	1,440	68.2%	1,962	136.3%
Greenbriar 4 lane	982	3,220	30.5%	1,962	57.6%



Current Road Capacity

The Transportation Planning Subcommittee is working to maintain the adopted Level of Service to ensure that the committed trips are properly mitigated, with a goal of a balance of cost-effective construction and driver experience.

