Performance and Production Review of the Florida Department of Transportation

Prepared and presented by the

Florida Transportation Commission



November 10, 2021

Performance and Production Review

- History behind the performance monitoring measures
- Summary of FDOT's Performance and Production
- Measurement of FDOT's Delivery Outcomes
- Department and District/FTE Presentations

## FTC Performance Monitoring

### **History of the Performance Measures**

- 1990 Legislation
- Development Process
- Guiding Principles
- 2020 Revisions

## Monitoring FDOT's FY 20/21 Production

FY ending June 30, 2021

#### **383** Construction contracts valued at \$2.1 B

- 109.9 lane miles of capacity on the State Highway System
- 1,966.5 lane miles of resurfacing on the SHS
- 90 bridge repair contracts
- 16 bridge replacement contracts

1,301 Consultant contracts valued at \$1.1 B

**Closed out 331 contracts at \$2.5 B** 

## Performance Measures Scorecard

	Performance Measure	Objective	FY 202
afe	ty of the Current State System		
L	Reduction of the number of fatalities all public roads in Florida year over year.	3,191	3,266
	Production		6
ons	adiant Contracts		
2	The consultant contract dollars let as a percentage of the original estimated amount.	95% to 105%	91.4%
3	Consultant contracts let compared to the number of consultant	95% 10 105%	97.2%
	contracts planned for the year. struction Contracts		
.0119			11
4	Contract time: For all construction contracts completed during the year, the percentage of those contracts that were completed within 120% of the original contract time.	80%	84.0%
5	<b>Contract cost:</b> For all construction contracts completed during the year, the percentage of those contracts that were completed at a cost, within 110% above the original contract amount.	90%i	93.7%
6	The construction contract dollars let as a percentage of the original estimated amount.	95% to 105%	90.0%
7	Construction contracts let as compared to the number planned.	95%	97.1%
	Preservation of the state highway syste		
3	The percentage of lane miles on the State Highway System Faving a pavement condition rating of excellent or good.	80%	83.5%
9	Achieve a maintenance rating of at least 80 percent on the State Highwey System.	80	83
10	The percentage of bridge structures on the State Highway System having a condition rating of excellent or good.	90%	94.5%
	Capacity/Mobility		
11	Time it takes to clear incidents.	60 minutes	43.1
-	Financial Management		1
12	Adopt a balanced work program and eash management within the statutory requirements.	Yes/No	Yes
		Operating Budget Reversions: 10%	7.3%
		Roll Forward: 10% to 12%	16.3%
	Disadvantaged Business Enterprise and Minority Business	Enterprise Programs	4
13	The MBE utilization rate expressed as a percentage of all executed state and federal construction and consultant contracts.	7.29%	8.44%
14	The dollar volume of DBE participation as a percentage of all executed federal and state construction and constitiant contracts.	10.65%	14.79%
	Business Development Initiative	39 Å	8
15		10% of construction, maintenance, and other contractual services	14,9%
		15% of professional services contracts	15.3%

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## Performance Measures Not Met

Reduction in the number of fatalities on all public roads in Florida year to year.





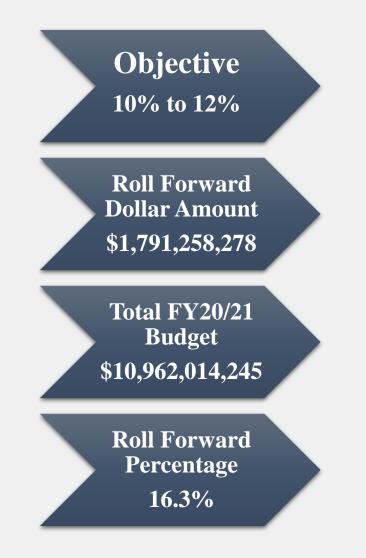
Consultant contract dollars let as a percentage of the estimated amount.



Construction contract dollars let as a percentage of the estimated amount.



## Financial Management: Roll Forward Budget



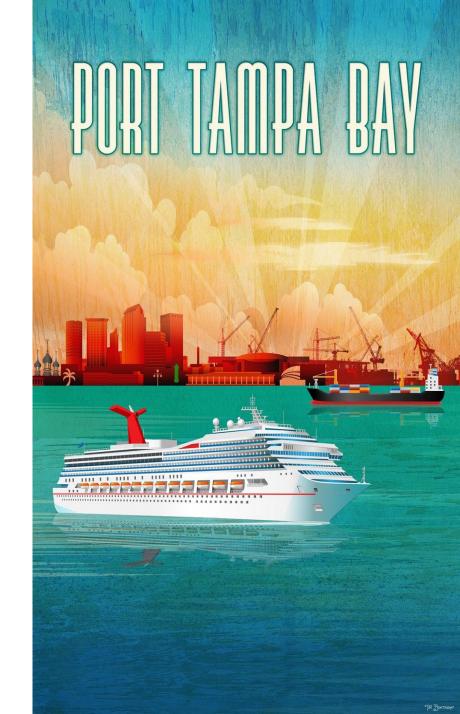
## Questions?



## Response from Florida Department of Transportation

Secretary Kevin J. Thibault, P.E. November 10, 2021







## Performance and Production Review

- Safety of the Current State System: Reduction of the number of fatalities; all public in Florida year over year. (Objective: 3,191/ Actual: 3,266)
- **Production/Consultant Contracts:** The consultant contract dollars let as a percentage of the original estimated amount. (Objective: 95% 105%/ Actual: 91.4%)
- Production/Construction Contracts: The construction contract dollars let as a percentage of the original estimated amount. (Objective: 95% - 105%/ Actual: 90.0%)
- Financial Management: Adopt a balanced work program and cash management within the statutory requirements. Roll Forward (Objective: 10% to 12%/Actual: 16.3%)

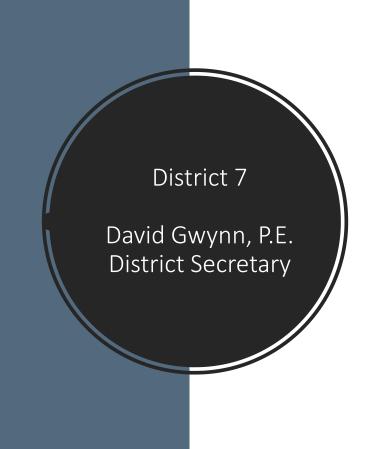




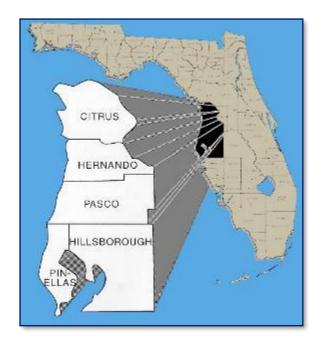
## **Agency Report**

- Personnel Update
- Florida's Supply Chain
- AASHTO Annual Meeting
- Federal Update









# Challenges

- Default of DAB Constructors Inc. and DBi Services
- Staffing retention and retirements
- Safety

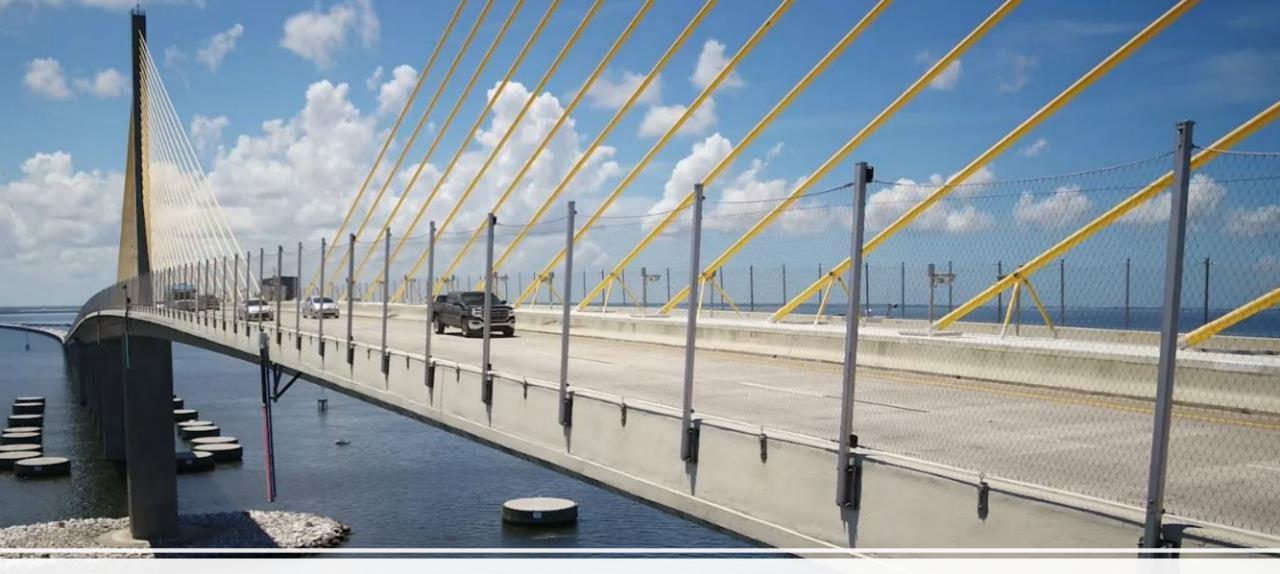
## Opportunities

- New Safety Department in District 7
- Tampa Bay Next Project Funding



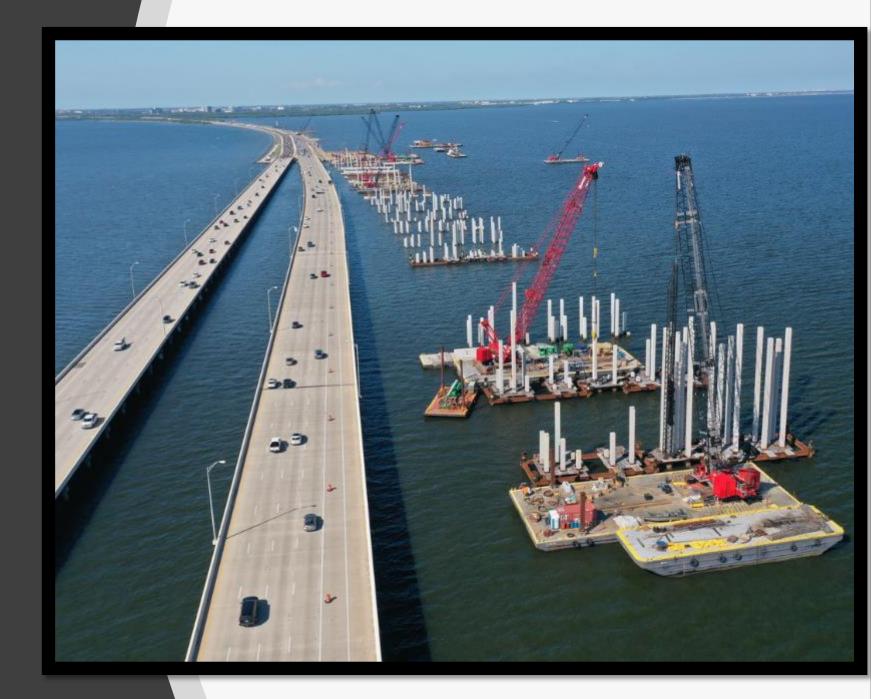
# Gateway Expressway





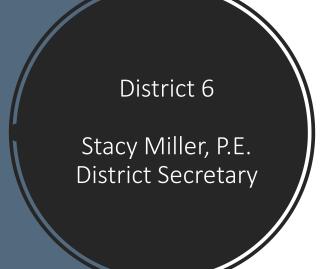
## Sunshine Skyway Vertical Net

Howard Frankland Bridge

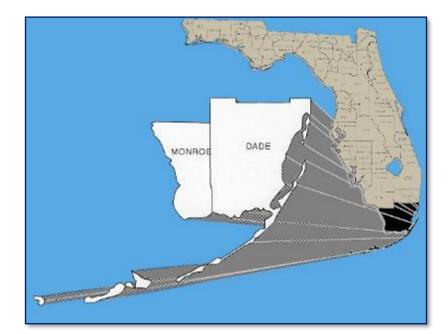


# Pinellas Bayway Structure E









# Challenges and Opportunities

## **Opportunities**

- Okeechobee Road Improvements
- Monroe County Projects
  - Resiliency Initiatives
  - US-1 Keys COAST
- Golden Glades Interchange Enhancement

# Challenges and Opportunities

### Challenges

- SMART Plan/Transit Funding
- Seven Mile Bridge Replacement
- Long Key Bridge Replacement

## Recent Successes

### Successes

- GGI Multimodal Facility
- I-395 Signature Bridge
- Tamiami Trail Phase II
- Cow Key Channel Bridge Rehabilitation

# I-395/SR 836/I 95 Design Build Project

# I-395 Construction





## GGI Multimodal Facility

Completion Date: December 2021



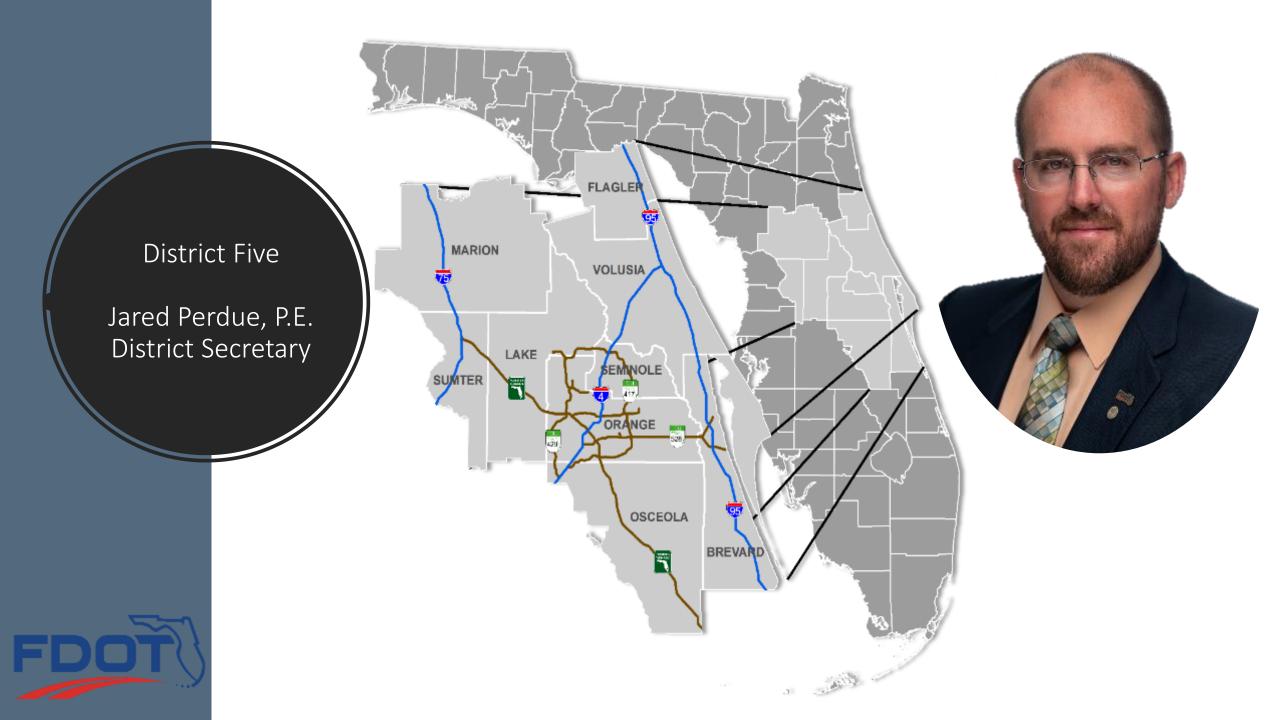
#### COW KEY CHANNEL BRIDGE REHABILIATION

-4800

#### OKEECHOBEE ROAD FUTURE IMPROVEMENTS







### Challenge/Opportunity











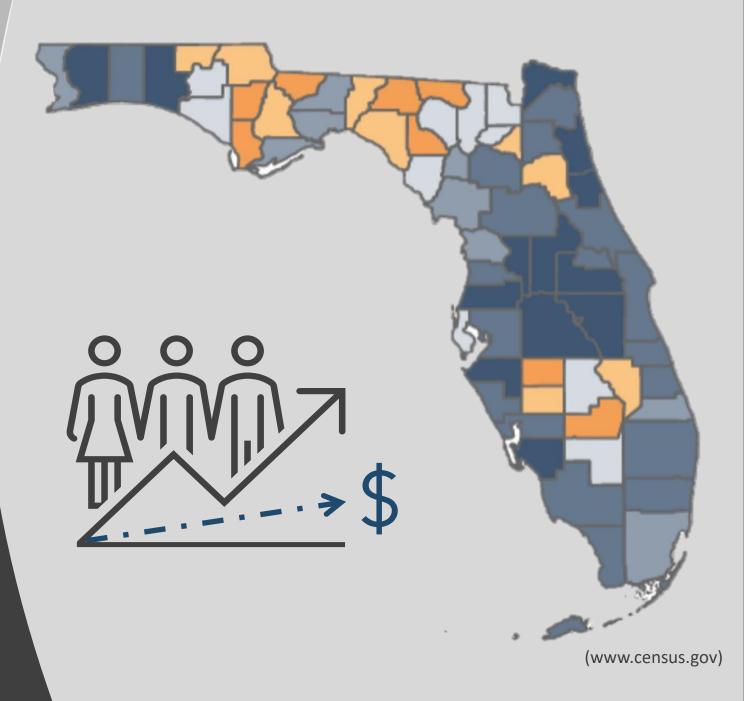
### Challenge

#### POPULATION INCREASE (2010 VS. 2020)

Florida	District Five Counties		
Total Population (2020): 21,538,187	Osceola Sumter Lake	44.7 % 38.9 % 29.3 %	
Numeric Change in Population (2010–2020): 2,736,877	Orange Flagler Marion Volusia Brevard Seminole	24.8 % 20.6 % 13.5 %	
Percent Change in Population (2010–2020): 14.6%		11.9 % 11.6 % 11.4 %	

### DISTRICT FIVE ADOPTED WORK PROGRAM:

**\$ 5.38 Billion** (FY 18-22 to FY 22-26 average) **5%** (FY 20-24 vs. FY 22-26)



### Opportunity

### DISTRICT FIVE OFFICE OF SAFETY

EST. JUNE 1, 2021

In 2020, **697** people did not go home to their families due to being killed on the roads in our 9 counties. 20% of them were our most vulnerable users, people walking/biking.



## Opportunity



#### • Smart Signals





VITAL FEW

 Regional Integrated Corridor Management Software



### **Success: In Construction**

### 440424-1 NASA CAUSEWAY BRIDGE





#### Success: 423446-1 Central Florida Commuter Rail System Phase II North



# Progress: Wekiva Parkway

## Progress: 14 Ultimate

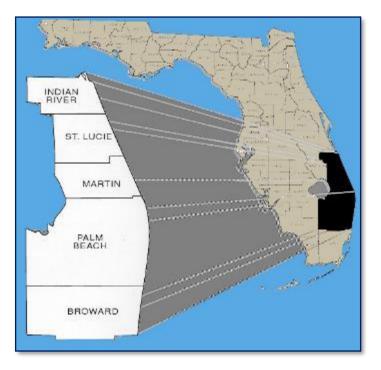
## September 2021

Paul A. Lampley, P.E.

District 4

Director of Transportation Operations





## Fostering Talent

- Staff retention
- Hiring qualified/quality staff
- Current vacancy rate 17%
- 121 vacancies of 726 positions
- All position types: engineers, procurement staff, contract managers, maintenance workers, etc.

## Recent Successes

Hired Safety Administrator – for a comprehensive focus on safety across all areas, phases, and functions

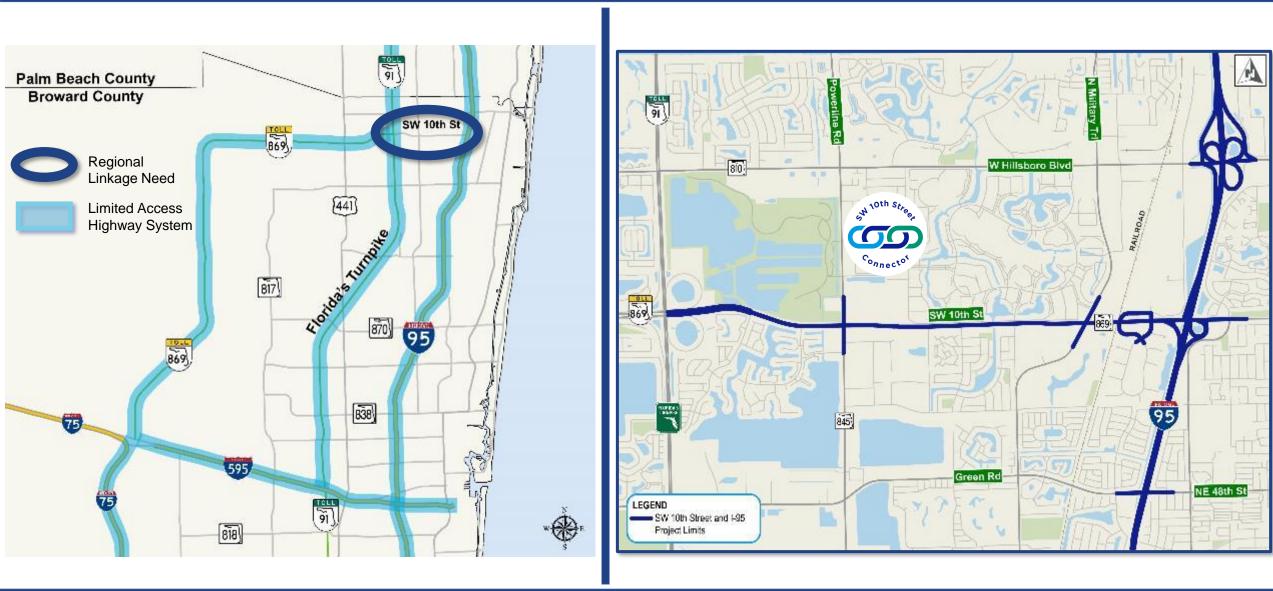
- Building a culture of safety from Planning to Maintenance
- Incorporating a focus on safety into all processes
- Promoting ownership of safety
- Coordinating between offices to implement safety features in all projects
- Coordinating with local partners for both on and off-system safety improvements
- Promoting more proactive outreach and education

## Delivering SW 10<sup>th</sup> Street – Broward County



- 3 projects totaling \$800M
- FY23 Safe Work Zone Traffic Management
- FY24 SW 10<sup>th</sup> Street and I-95 Interchange
- FY25 SW 10<sup>th</sup> Street Connector

### Missing Link in Regional Network



**FDOT** Florida Department of Transportation

## **Broward Commuter Rail**

- Broward Commuter Rail FDOT working closely with Broward County
- Limits from Aventura to Deerfield Beach
  - FDOT managing the PD&E Study
  - Broward County responsible for local outreach and financial plan
  - Anticipate Locally Preferred Alternative (LPA) in 2022
  - Anticipate Location Design Concept Approval (LDCA) in 2023

## **Broward Commuter Rail**

#### • FDOT

- $\,\circ\,$  Managing the PD&E Study
- $\,\circ\,$  Environmental analysis of Commuter Rail on FEC Railroad
- $\,\circ\,$  Operational analysis of Commuter Rail on FEC Railroad
- $\,\circ\,$  Technical Recommendations for Station Locations
- Continued evaluation of the crossing at the New River (3 bridge alternatives and tunnel alternative under evaluation)
- $\,\circ\,$  Public engagement & stakeholder coordination

#### Broward County

- $\,\circ\,$  Stakeholder outreach and station locations
- $\,\circ\,$  Track access, design/construction and O&M agreements
- $\,\circ\,$  Identify local share of capital costs and annual O&M funds
- $\,\circ\,$  Draft financial plan



## Indian River County Grade Crossing Safety Improvement Project

- Pilot project to implement best practices for high-speed rail
- Agreement with Brightline and Indian River County is in place
- Partial funding for improvements via legislature and Brightline
- Application for Federal Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

## **RAISE Grant**

- Partnership/Applicants:
  - Indian River County (IRC)
  - FDOT
  - Brightline
- Construction of supplemental safety measures at 31 highway-railroad grade crossings
- Safety elements will benefit drivers, pedestrians, bicyclists, passengers, and rail operations

Funding Sources as outlined in RAISE Application		
Brightline	\$5,393,761	17%
FDOT	\$4,228,347	13%
Federal – RAISE	\$16,281,747	51%
State Appropriation	\$4,945,710	16%
Indian River County	\$905,000	3%

\$31,754,565 100%

## Recent Successes

## Gatlin Park and Ride Lot



East of Gatlin Blvd/I-95 Interchange | City of Port St. Lucie, St. Lucie County, FL

- Now known as "The Jobs Express Terminal", it features 162 parking spaces accommodating carpool, vanpool, and ride sharing, electric vehicle charging as well as a local transit stop, and a stop for regional bus services.
- The construction of this new regional transportation facility was made possible through the partnership of FDOT, St. Lucie County Transportation Planning Organization, City of Port St. Lucie, Florida Power and Light, St. Lucie County, and Area Regional Transit.



## Recent Successes

## Miramar Park and Ride Lot



Miramar Boulevard and Hiatus Road | City of Miramar, Broward County, FL

- In response to the success of the 95 Express Bus service, the FDOT, Broward County (Transit) and the City of Miramar partnered to build a Park and Ride facility in Miramar.
- The 95 Express Bus service provides connections between Miami-Dade and Broward County on weekdays during the morning and afternoon peak travel hours.
- The Miramar Park and Ride lot will have 488 parking spaces, electric vehicle charging as well as bus shelters, community bus parking, lighting, landscaping, sidewalks, and bicycle racks. Completion is expected in the Summer of 2022.

## Recent Successes: I-95 Express

#### 95 Express Phase Three



- 95 Express Phase 3 in Broward and Palm Beach counties will extend the existing Phase 1 & 2 managed lanes system.
- One lane is being added to I-95 and the High Occupancy Vehicle (HOV) lane is being converted to create two managed lanes.
- Phase 3 is split into five Design/Build construction contracts totaling over \$1 Billion.
- Phase 3 from Hollywood Boulevard in Broward County to Linton Boulevard in Palm Beach County is anticipated to be fully operational by 2024.

## Recent Successes: I-95 Express

#### 95 Express Phase Three



Twitter post 5/23/2021 - While You Were Sleeping: Last night, crews successfully removed the entire westbound SR 84 bridge over I-95 and re-opened all lanes of traffic 7.5 hours ahead of schedule.

## I-95 Express – Phase Three

Two of five new segments set to open



## Recent Successes

#### FDOT to Activate I-95 Managed Lanes from Cypress Creek Road to Glades Road

#### MANAGED LANES BENEFITS

**Travel Time** 



Drivers with

Travel

Choices

Offer a More Deliver Long-Predictable Term Solution

to Manage

Congestion





Reduce

Fuel

Consumption



Decrease

Air

Pollution



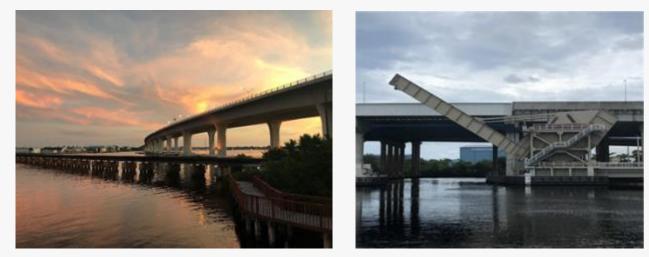
Support Transit Usage

For more information, visit www.95express.com.



## Recent Successes

Implementation of Construction Management/General Contractor (CM/GC) Procurement for three Projects



- Roosevelt bridge repair
- Roosevelt bridge acoustic monitoring
- New River Rail Bascule Bridge Repair

# Safety Message



#### Life Jackets... They float, You don't



## Recent Successes

## American Rescue Plan Act of 2021 (ARPA)

#### **Funding Accomplishments - Bay County**

✓ SR 30A (US 98) Panama City Beach Parkway From Mandy Lane To East of Nautilus Street

✓ SR 30A (US 98) Panama City Beach Parkway From East of Nautilus Street To East of R Jackson Blvd

✓ SR 30A (US 98) Panama City Beach Parkway From East of R Jackson Blvd To Hathaway Bridge





## Panama City Beach Parkway

## Safety & Key Partnerships

## Pedestrian Safety Improvements Walton County

✓ SR 30 (US 98) @ CR 30A East Inlet Beach Pedestrian Crossing





CR 30A East Inlet Beach Pedestrian Crossing

## Major Bridge Replacement Okaloosa County

✓ SR 30 (US 98) Brooks Bridge No. 570034





## Brooks Bridge Replacement

## Major Bridge Replacement Bay County

✓ SR 30 (US 98) Over St. Andrews Bay Intercoastal Waterway Bridge No. 460019





Camera 2: Tyndall Air Force Base - Looking North



DuPont Bridge Replacement

## New Interchange Okaloosa County

✓ SR 8 (I-10) Interchange West of Crestview





## New Interchange @ I-10 at Antioch Road





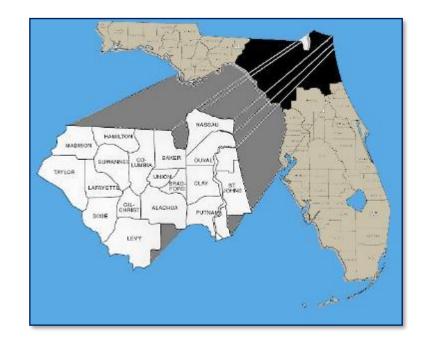






## District 2 Greg Evans, P.E. District Secretary





<u>Regional ITS Connectivity:</u> Interstate Connectivity Complete Data Accessibility (Cameras, Traffic, etc.) Focused View on Arterial Expansion

## FY '23 Lettings, \$1.5B

#### FIRST COAST EXPRESSWAY

SR23(First Coast Expressway) from East of CR16A Spur to East of CR209 New Road Construction (Shands Bridge) CST, \$392.0M

SR23(First Coast Expressway) from I-95 to East of CR16A Spur New Road Construction CST, \$346.4M

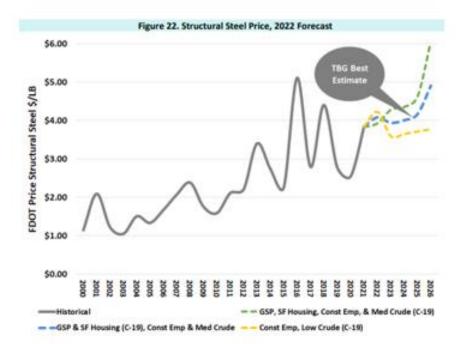
#### **I-95 CAPACITY**

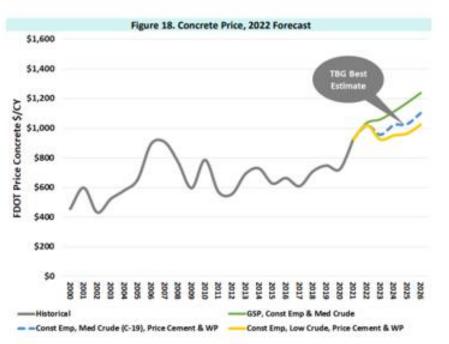
I-95 from South of International Golf Parkway to South of SR23 Interchange Add Lanes & Reconstruct CST, \$109.0M

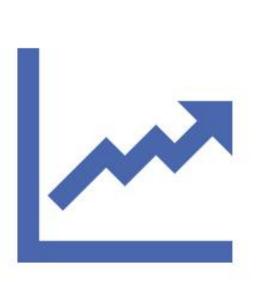
I-95 from Baymeadows Road to S. of SR 202 (JTB) Add Lanes & Reconstruct CST, \$39.1M, FY2023 Let

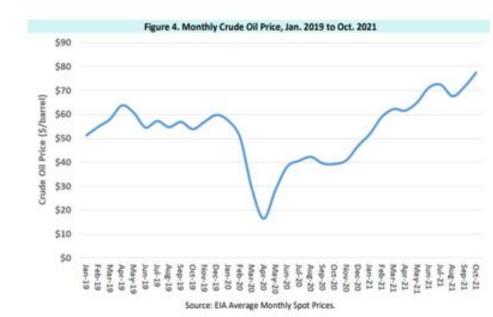
I-95 from South of SR202(JTB) to Atlantic Blvd Add Lanes & Reconstruct CST, \$284.4M, FY2023 Let











Industry Pricing Trends



#### **Bradford County**

• 240 lane miles

#### I-75/I-10 Interstate West

Counties: Alachua, Baker, Columbia, Hamilton, Madison and Suwannee (I-75 from the Marion County line to the Georgia State line; I-10 from the Nassau County line to the Jefferson County line)

- 203 miles of interstate (105 miles of I-10, 98 miles of I-75)
- 1218 lane miles
- 158 Bridges
- 313 High Mast Light Poles
- 60 Overhead Sign Structures
- 957 Conventional Light Poles

#### Rest Areas/Welcome Centers/Weigh-In-Motion Stations 15 Rest Areas (total of 17, 2 under construction)

- 17 Rest Areas
- 2 Welcome Centers
- 7 Weigh-In-Motion Stations
- 6 Comfort Stations

### High Employee Turnover

(Based on last 5 years of separation data)

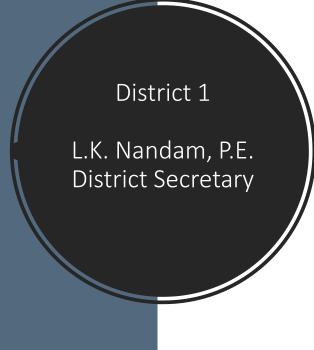
	СО	D1	D2	D3	D4	D5	D6	D7	ТР	Grand Total	AVG Pay	Avg Hourly Pay
EQUIPMENT OPERATOR		23	29	12	15	17	14	32		142	\$ 31,070.54	\$ 14.94
HIGHWAY MAINTENANCE TECHNICIAN II			17	10	17	16	8	46		114	\$ 28,679.77	\$ 13.79
SENIOR EQUIPMENT OPERATOR		14	15	12	5	24	5	19		94	\$ 36,361.52	\$ 17.48
SENIOR CLERK	13	8	8	3	14	24	3	10	1	84	\$ 32,942.50	\$ 15.84
WEIGHT INSPECTOR I	78									78	\$ 27,734.32	\$ 13.33
HIGHWAY MAINTENANCE TECH COORDINATOR		11	11	6	6	4	9	4		51	\$ 36,496.35	\$ 17.55
FIELD OPERATIONS SUPERVISOR II		6	11	1	11	4	3	6		42	\$ 45,710.65	\$ 21.98
INSPECTOR III		10	15	2	3	4	4	4		42	\$ 39,848.65	\$ 19.16
ADMINISTRATIVE ASSISTANT II	9	11	3	4		4	2	3	3	39	\$ 47,368.18	\$ 22.77
AUTOMOTIVE EQUIPMENT MECHANIC II		11	2	5	5	4	1	3		31	\$ 38,284.55	\$ 18.41

### **CDL** Licensing

TER

Beginning February 2022, the training/testing for a CDL is approximately 10 weeks at a cost of \$3500

# SLOW DOWN!







## Challenges

### Challenges

- Construction Projects
- Material shortages and supply chain disruptions
- Cost increases on steel, pvc & resins
- Contractor staffing shortages due to the pandemic
- Resource availability for maintenance due to lack of DC Crews
- The State of Safety

### Opportunities

### **Opportunities**

- Keeping up with infrastructure needs due to very high growth rate in District One
- Partnership opportunities impact fees
- Safety Initiatives
- Speed Management

### Recent Successes

- Year of Failure Analysis
- Multi-Modalism

#### • Innovation – Mobility in Construction

- Developing a new lane closure tool that balances mobility with contractor work operations
- Developed CEI Mobility Dashboard for Interstate Projects
- Renewed emphasis on plan reviews with focus on solutions that do not affect mobility during construction

### Recent Successes

#### I-75 at SR 951 Interchange – Project Advancement

- Interchange reconstruction to enhance mobility and improve safety for all roadway users
- Continued coordination and partnerships with local stakeholders made advancement possible
- Environmental re-evaluation complete
- Right-of-Way cleared
- Permits applications have been submitted
- Advanced major utility relocation complete

#### I-275 Sunshine Skyway Rest Areas and Seawall Repairs

This project was awarded the 2021 Design Build Project of the Year Award in the Small Projects Category from the Design Build Institute of America (DBIA)!





#### SR 80 from Dalton Lane to CR 833 in Hendry

#### **County**

#### **Recent Awards**

- 2021 FTBA Best in Construction Award in the Special Significance Category
- #7 Project on the Roads & Bridges' 2020 Top 10 Roads Award







#### SR 542 in Polk County

#### **Recent Awards**

• 2021 ACEC-FL Outstanding Award for Best Roadway Project





#### American Legion Drive over Peace River in Desoto County

#### **Recent Awards**

• 2021 America's Transportation Award in the Quality of Life/Community Development Category from AASHTO







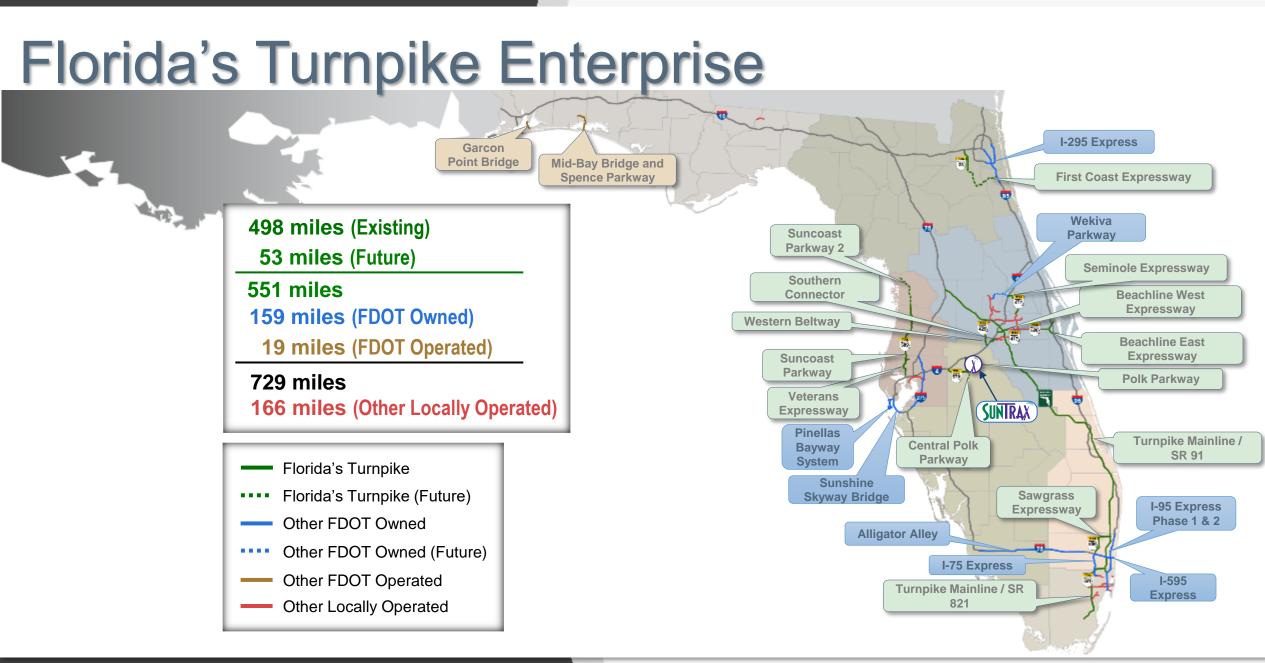
# Florida's Turnpike Enterprise

Performance and Production Review





Nicola Liquori, CPA Executive Director and CEO

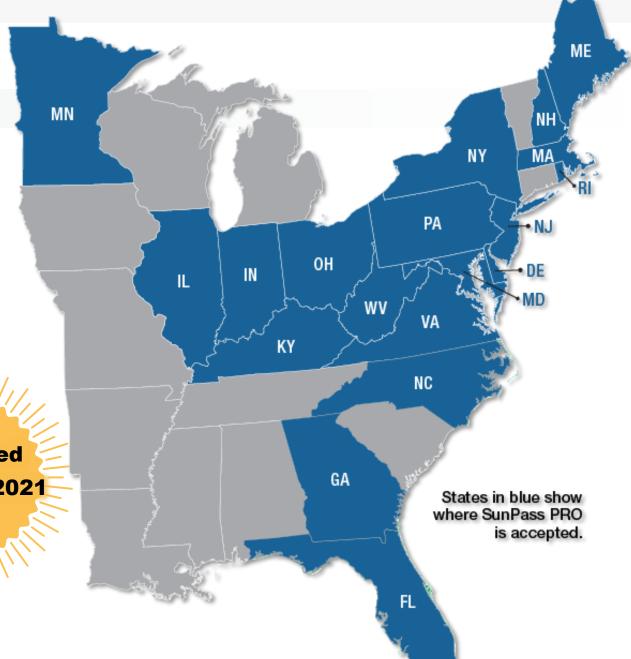


### Challenges and Opportunities SunPass Interoperability



- Technology Tested at SunTrax Facility
- Transponder Works in 19 States
- Driving a Customer Friendly Experience
- >50M Customers can use their Transponder in Florida

Launched May 28<sup>th</sup> 2021



### Challenges and Opportunities Recent SUN Testing

- Toll Integrators
  - System testing as part of toll integrator procurement
- E-ZPass Interoperability
  - Three different toll integrator systems
  - Tri-protocol reader (SeGo, E-ZPass TDM, 6C)
  - Lane system multi-tag reads
- Connected vehicle
  - CV Toll system interference testing
  - Wrong way alert
  - Speed limit warning
  - Stopped vehicle alert





### **Challenges and Opportunities**

**Reinvesting in the Turnpike System** 

#### Florida's Turnpike System

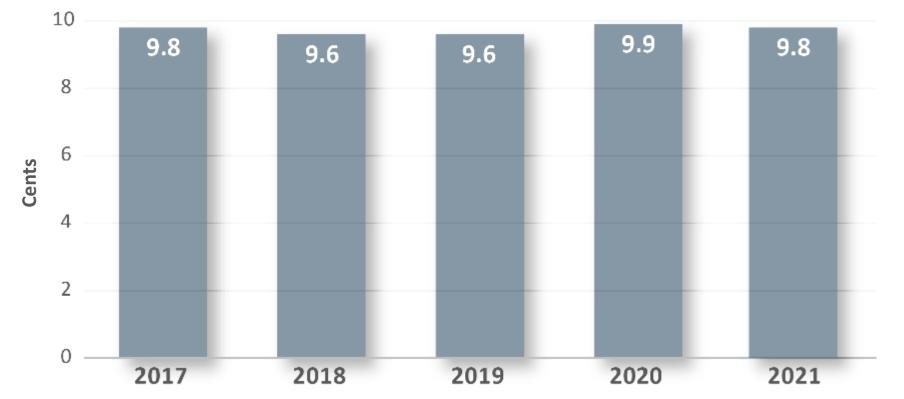
Year	Interchanges	Centerline Miles	% Change		
2006	122	460			
2021	144	498	24%		
2022-2026	3	53	11%		

- System growth last 15 years
- Planned growth next 5 years
- Affordable Toll Rates
- Diverse Customer Base
- Investment in Transportation
  - \$8.7B current Tentative Work Program

### Affordability Index

# Affordability Index is a measure of toll revenue to annual vehicle miles traveled.

Fiscal Years 2017 - 2021



### Challenges and Opportunities

Project coordination with Florida Gas Transmission Company (FGT)

### Background

- Natural gas pipeline system located within Florida's Turnpike right-of-way
- Easement and right-of-way agreement
  - FGT 90-day review of plans for improvements within specified width
  - FDOT and FGT each responsible for 50%
    - Relocation costs
    - Right-of-Way acquisition costs

### **Challenges and Opportunities**

### **Project coordination with FGT**

	FY 2023-27	FY 2028-32	
Number of projects to coordinate with FGT	27	19	
Impacted centerline miles	74	55	
Estimated pipeline relocations	11 miles	8.5 miles	
Estimated relocation cost per mile	\$9M		
Estimated ROW cost per mile	\$9M		
Project schedule impacts			
FGT plan review	minimum 3 months		
Relocation impact to design	12 months		
Right-of-way acquisition; FERC filing	24 months		
FGT Pipeline relocation before letting	6 months		

# Recent Successes

#### Mainline Widening & SR 417 Interchange



- Opened to traffic May 2021 120 days ahead of schedule and within budget
- 3 new ramps for drivers at Exit 251
  - 1 NB Mainline to SB SR 417
  - 1 SB Mainline to NB SR 417
  - 1 SB Mainline to SB SR 417
- Widening of Mainline from Osceola Parkway (MP247 to Beachline Expressway (MP255) from 4 to 8 lanes
- 2 Cost Saving Initiatives implemented
- Technology Rebar tying robot
- Reduce congestion and improve traffic flow

# Recent Successes

2021 FTBA Awards

- 2021 FTBA Best in Construction Award – Florida Turnpike Mainline widening 4 to 8 lanes, from Osceola Parkway to Beachline Expressway
- 2021 FTBA Best in Construction ITS Award – Turnpike Mainline from MP 54 to 88, widen and convert 5 toll sites to electronic tolling



Nicola Liquori, CPA Executive Director and CEO

# Thank You

