ST. LUCIE TPO MOBILITY PROFILE

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Forecasting and Trends Office

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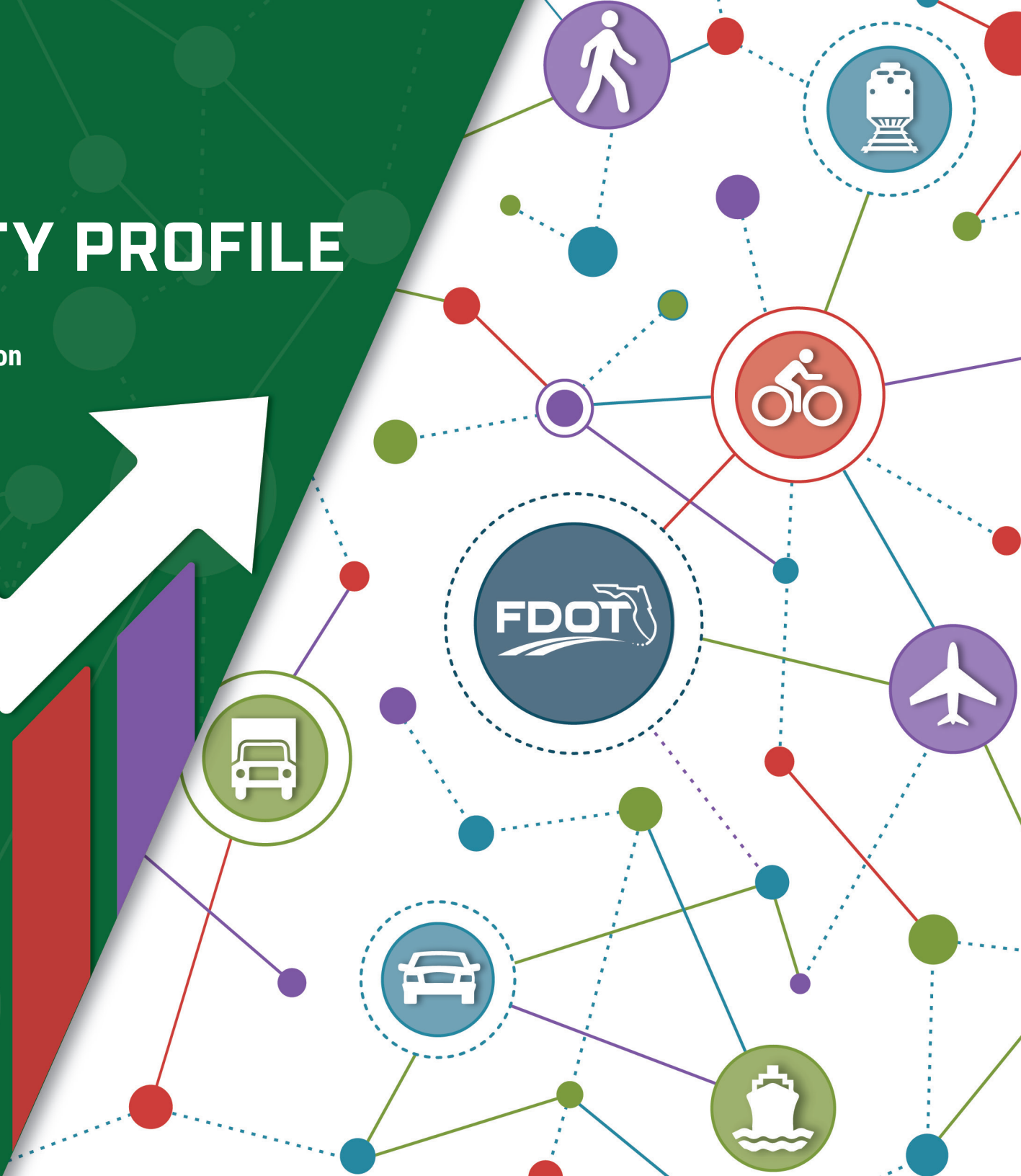

St. Lucie

TPO Mobility Profile - 2019

FDOT
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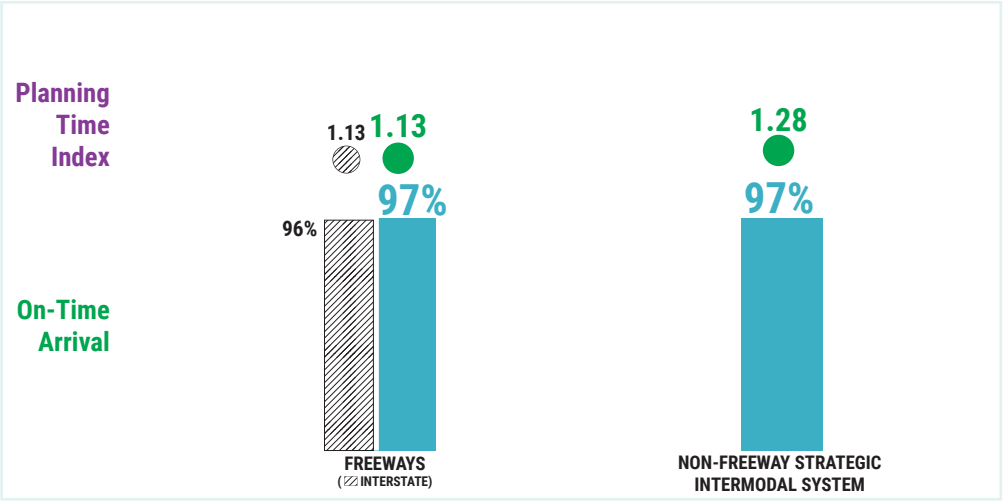
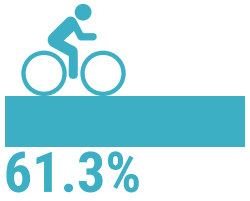
Travel Time Reliability

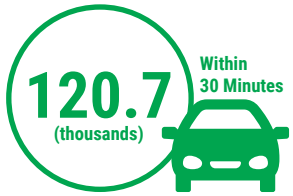


% Pedestrian Facility Coverage in Urban Areas

% Bicycle Facility Coverage

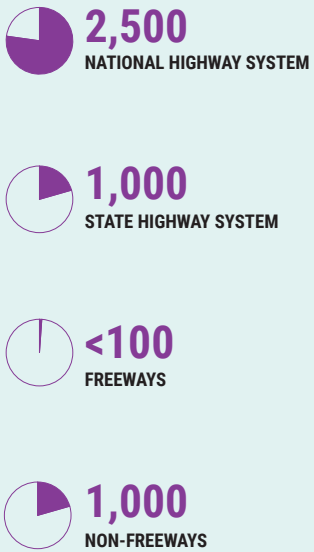


Average Job Accessibility by Automobile

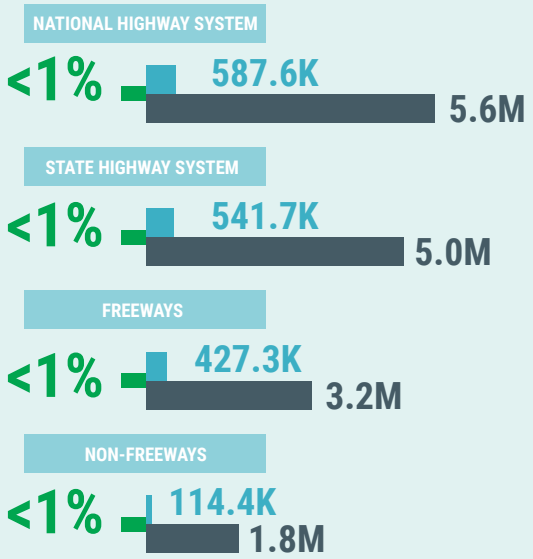


Average Job Accessibility by Transit

Daily Vehicle Hours of Delay



Percent Miles Heavily Congested | Daily Truck Miles Traveled Daily Vehicle Miles Traveled

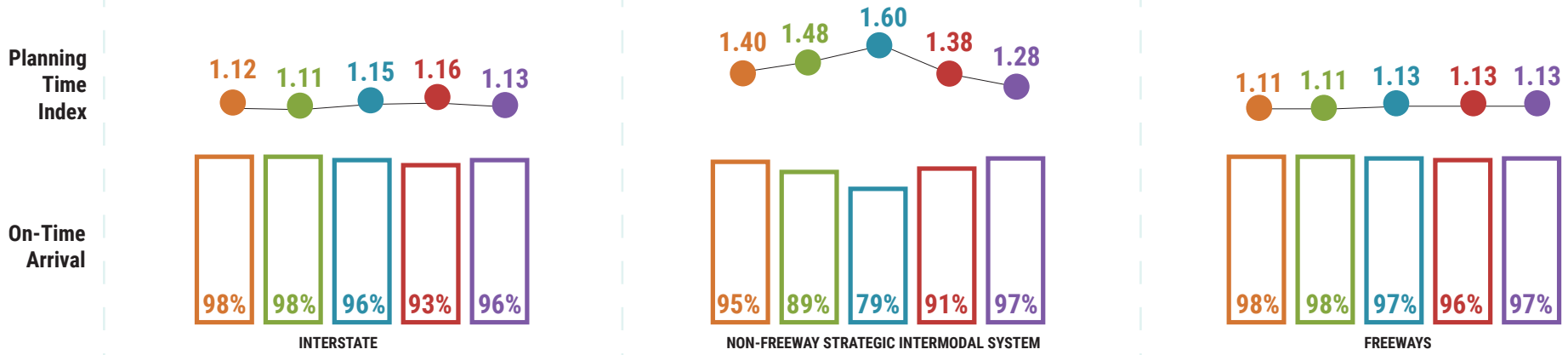


NOTE: Please go to Page 3 for measure definitions.

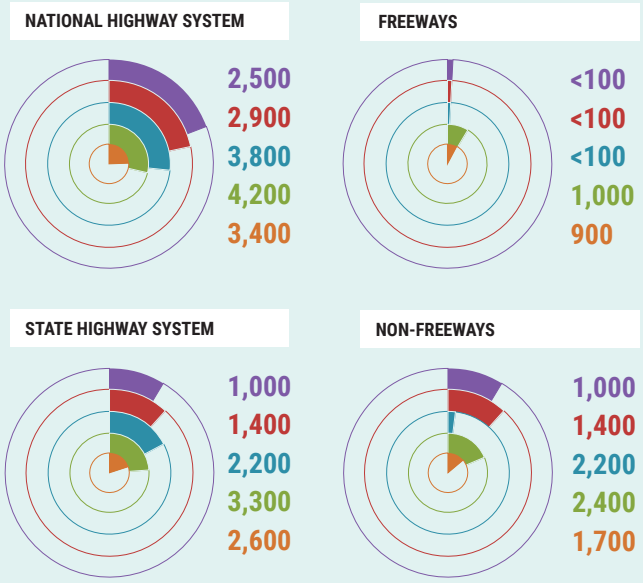
ST. LUCIE TPO MOBILITY TRENDS 2015-2019

2015 2016 2017 2018 2019

Travel Time Reliability



Daily Vehicle Hours of Delay



	Percent Miles Heavily Congested	Daily Truck Miles Traveled	Daily Vehicle Miles Traveled
NATIONAL HIGHWAY SYSTEM	<1%	587.6K	5.6M
	<1%	636.9K	5.5M
	1%	563.2K	5.4M
	1%	616.0K	5.1M
	<1%	517.7K	4.9M
STATE HIGHWAY SYSTEM	<1%	541.7K	5.0M
	<1%	588.6K	4.9M
	1%	529.9K	4.9M
	<1%	499.4K	4.7M
	<1%	425.6K	4.4M
FREEWAYS	<1%	427.3K	3.2M
	<1%	430.4K	3.2M
	<1%	402.3K	3.1M
	<1%	371.6K	3.0M
	<1%	306.2K	2.8M
NON-FREEWAYS	<1%	114.4K	1.8M
	1%	158.2K	1.7M
	1%	127.6K	1.8M
	<1%	127.7K	1.7M
	<1%	119.4K	1.6M

DEFINITIONS

Travel Time Reliability:

Planning Time Index: The 95th percentile travel time divided by free flow travel time. A planning time index of 1.5 means a 20-minute trip at free flow speed takes 30 minutes - an informed traveler should plan for the extra 10 minutes to arrive on time. For this reporting, the measure is captured in the peak hour, which is from 5 to 6 pm.

Vehicle On-Time Arrival: The percentage of freeway trips traveling at greater than or equal to five mph below the posted speed limit. In the urbanized areas of the seven largest MPOs, on-time arrival is defined as the percentage of freeway trips traveling at least 45 mph. For arterials, travel time reliability is defined as the percentage of trips traveling greater than or equal to 20 mph. For this reporting, the measure is captured in the peak hour, which is from 5 to 6 pm.

Daily Vehicle Hours of Delay: Delay is the product of directional hourly volume and the difference between travel time at "threshold" speeds and travel time at the average speed. The thresholds are based on Level of Service (LOS) B as defined by FDOT. For the definitions of LOS B, please refer to 2020 Source Book Methodology publication for more details.

Percent Miles Heavily Congested: Arterial segments operating at LOS E or worse in urbanized areas and D or worse in non-urbanized areas; highways operating at LOS E or worse; and freeways operating at 45 mph or worse. For more calculations details, please refer to 2020 Source Book Methodology publication.

Daily Truck Miles Traveled: (for all trucks class 4 through 13): The total number of miles traveled daily by trucks using a roadway system. For truck classifications, please refer to Federal Highway Administration (FHWA) classification.

Daily Vehicle Miles Traveled: The product of a road's length and its AADT. If a 10-mile-long road has an AADT of 5,000 vehicles, then its daily VMT is 50,000.

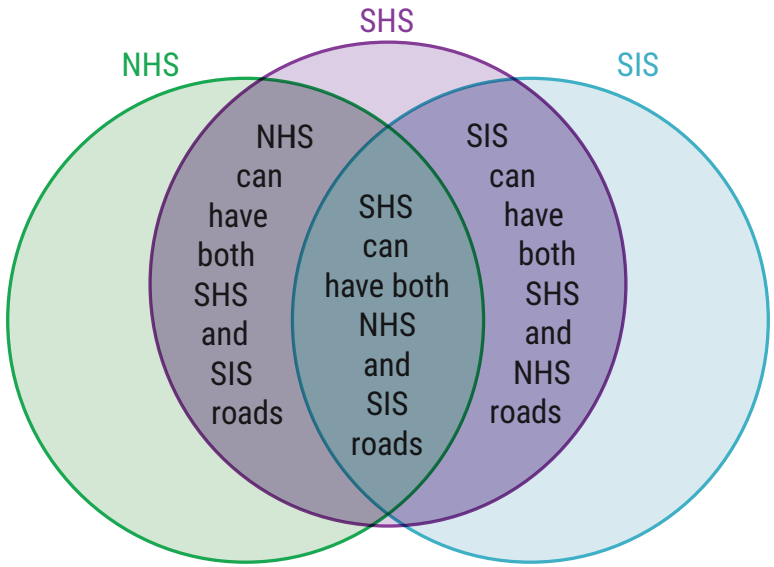
Percentage of Pedestrian Facilities: The percentage of pedestrian facilities and shared path coverage along the SHS within the metropolitan planning organization's (MPO's) urbanized area.

Percentage of Bicycle Facilities: The percentage of bicycle facilities and shared path coverage along the SHS within the MPO's boundary, the MPO's urbanized area, and within the county boundary (or county boundaries if more than one county) that the MPO is comprised of.

Average Job Accessibility by Automobile: The number of jobs accessible within a 30-minute automobile trip for each MPO. The Accessibility Observatory at the University of Minnesota calculated accessibility at the Census block level by measuring the travel time from each block to the neighboring blocks, then summing the total number of jobs that can be accessed within a 30-minute time period. Visit the FDOT Accessibility page for more details.

Average Job Accessibility by Transit: The number of jobs accessible within a 30-minute transit trip for each MPO. The Accessibility Observatory at the University of Minnesota calculated accessibility at the Census block level by measuring the travel time from each block to the neighboring blocks, then summing the total number of jobs that can be accessed within a 30-minute time period. Visit the FDOT Accessibility page for more details.

Three roadway systems are reported: National Highway System (NHS), State Highway System (SHS), and Strategic Intermodal System (SIS).



Sources

FDOT Traffic Characteristics Inventory, FDOT Roadway Characteristics Inventory, 2020 Quality/Level of Service Handbook, and HERE vehicle probe speed.

FDOT Supplied MPO Mobility Performance Measure Analyses for 2019 (St. Lucie TPO)

St. Lucie (TPO Boundary)

	Annual Measures [1]						Rotating Measures [2]			
Networks/Measures	**A: Daily Vehicle Miles Traveled (Millions)**	**B: Daily Truck Miles Traveled (Thousands)**	**C: On-Time Arrival (Vehicle)[3]**	**D: Planning Time Index[3]**	**E: Daily Vehicle Hours of Delay (Thousands)**	**F: Percent Miles Heavily Congested**	**G: % Pedestrian Facility Coverage**	**H: % Bicycle Facility Coverage**	**I: Average Job Accessibility by Automobile (Thousands)[3]**	**J: Average Job Accessibility by Transit (Thousands)[3]**
A: National Highway System	5.6	587.6			2.5	<1%			120.7	1.5
B. State Highway System	5.0	541.7			1.0	<1%				
C: Strategic Intermodal System[4]	3.6	459.3	97%	1.28	0.3	<1%				
D. Freeways	3.2	427.3	97%	1.13	0.0	<1%				
E. Interstates	1.8	203.4	96%	1.13	0.0	<1%				
F: Non-freeways (SHS)	1.8	114.4			1.0	<1%	79%	61%		

St. Lucie (Urbanized Area Boundary)

Networks/Measures	**A: Daily Vehicle Miles Traveled (Millions)**	**B: Daily Truck Miles Traveled (Thousands)**	**C: On-Time Arrival (Vehicle)[3]**	**D: Planning Time Index[3]**	**E: Daily Vehicle Hours of Delay (Thousands)**	**F: Percent Miles Heavily Congested**	**G: % Pedestrian Facility Coverage**	**H: % Bicycle Facility Coverage**	**I: Average Job Accessibility by Automobile (Thousands)[3]**	**J: Average Job Accessibility by Transit (Thousands)[3]**
A: National Highway System	4.2	363.9			2.5	<1%				
B. State Highway System	3.6	322.1			1.0	<1%				
C: Strategic Intermodal System[4]	2.3	241.8	91%	1.93	0.3	<1%				
D. Freeways	2.1	229.1	96%	1.14	0.0	<1%				
E. Interstates	1.3	121.4	95%	1.15	0.0	<1%				
F: Non-freeways (SHS)	1.6	93.0			1.0	<1%	79%	54%		

St. Lucie (County Boundary)

Networks/Measures	**A: Daily Vehicle Miles Traveled (Millions)**	**B: Daily Truck Miles Traveled (Thousands)**	**C: On-Time Arrival (Vehicle)[3]**	**D: Planning Time Index[3]**	**E: Daily Vehicle Hours of Delay (Thousands)**	**F: Percent Miles Heavily Congested**	**G: % Pedestrian Facility Coverage**	**H: % Bicycle Facility Coverage**	**I: Average Job Accessibility by Automobile (Thousands)[3]**	**J: Average Job Accessibility by Transit (Thousands)[3]**
A: National Highway System	5.6	587.9			2.5	<1%			120.7	1.5
B. State Highway System	5.0	542.0			1.0	<1%				
C: Strategic Intermodal System[4]	3.6	459.5	97%	1.28	0.3	<1%				
D. Freeways	3.2	427.6	97%	1.12	0.0	<1%				
E. Interstates	1.8	203.7	96%	1.13	0.0	<1%				
F: Non-freeways (SHS)	1.8	114.4			1.0	<1%	79%	61%		

1. These six Annual Measures are reported each year.

2. These four Rotating Measures change every other year. Odd year measures consist of 1) Percent Sidewalk Coverage, 2) Percent Bicycle Lane Coverage, and 3) Average Job Accessibility within a 30-minute car trip and 4) within a 30-minute transit trip.

3. Measures C and D are captured in the peak hour, which is from 5 to 6 pm.

4. SIS On-Time Arrival and Planning Time Index exclude freeways

Annual MPO Performance Measures by MPO Population Size

FDOT
Forecasting
& Trends Office

2019
St. Lucie TPO
Population
309,400

Florida Department of Transportation Mobility Measures Program provides valuable information on performance measures for all 27 MPOs in Florida. On an annual basis the MPOs receive reports on ten measures, six measures annually and four rotating measures biennially for the entire MPO boundary, urbanized area within the MPO, and for counties within the MPO. The annual measures, in combination with the rotating biennial measures, cover the spectrum of mobility dimensions and multiple modes. These measures can be used however each MPO sees fit such as in the development of an MPO's Long Range Transportation Plan, Congestion Management Process, or State of the System Report. The following tables provide high, median, and low ranges for the State Highway System within the MPO boundary. MPOs are categorized as large, medium and small based on their population. The MPOs were distributed into the seven largest, ten medium, and ten small-sized MPOs. For more information, please contact Monica Zhong at Monica.Zhong@dot.state.fl.us or (850) 414-4808.

SHS Daily Vehicle Hours of Delay in Thousands, 2019

ST. LUCIE TPO
1.0

Vehicle Hours of Delay (Thousands)	Low	Median	High
Small-Sized MPO (Population[1] below 360,400)	0.3	1.0	4.9
Medium-Sized MPO (Population[1] 360,400 to 813,700)	0.7	4.6	9.0
Large MPO[2] (Population[1] over 813,700)	14.5	52.8	199.0

SHS Percent Miles Heavily Congested, 2019

ST. LUCIE TPO
<1%

Percent Miles Heavily Congested	Low	Median	High
Small-Sized MPO (Population[1] below 360,400)	<1%	<1%	7%
Medium-Sized MPO (Population[1] 360,400 to 813,700)	<1%	1%	3%
Large MPO[2] (Population[1] over 813,700)	5%	12%	37%

[1]2019 MPO Population is derived from FDOT Forecasting and Trends Office which provides population estimates each year based on the population study of the Bureau of Economic and Business Research (BEBR) at the University of Florida.
[2]Seven Largest MPOs include Broward MPO, Hillsborough MPO, MetroPlan Orlando, Miami-Dade TPO, North Florida TPO, Palm Beach TPA, and Forward Pinellas

2019 St. Lucie TPO

Population 309,400

Forecasting & Trends Office

SHS Daily Vehicle Miles Traveled in Millions, 2019	Vehicle Miles Traveled (Millions)	Low	Median	High
ST. LUCIE TPO 5.0	Small-Sized MPO (Population[1] below 360,400)	1.6	4.3	6.6
	Medium-Sized MPO (Population[1] 360,400 to 813,700)	4.2	8.8	12.7
	Large MPO[2] (Population[1] over 813,700)	10.2	28.3	35.9

SHS Daily Truck Miles Traveled in Thousands, 2019	Truck Miles Traveled (Thousands)	Low	Median	High
ST. LUCIE TPO 541.7	Small-Sized MPO (Population[1] below 360,400)	149.6	434.2	939.8
	Medium-Sized MPO (Population[1] 360,400 to 813,700)	390.2	907.9	1,365.8
	Large MPO[2] (Population[1] over 813,700)	380.0	1,820.4	3,118.2

Freeway On-Time Arrival, 2019	On-Time Arrival	Low	Median	High
ST. LUCIE TPO 97%	Small-Sized MPO (Population[1] below 360,400)	88%	97%	99%
	Medium-Sized MPO (Population[1] 360,400 to 813,700)	85%	93%	97%
	Large MPO[2] (Population[1] over 813,700)	68%	82%	88%

Freeway Planning Time Index, 2019	Planning Time Index	Low	Median	High
ST. LUCIE TPO 1.13	Small-Sized MPO (Population[1] below 360,400)	1.11	1.14	1.35
	Medium-Sized MPO (Population[1] 360,400 to 813,700)	1.12	1.19	1.45
	Large MPO[2] (Population[1] over 813,700)	1.64	1.91	2.63

[1]2019 MPO Population is derived from FDOT Forecasting and Trends Office which provides population estimates each year based on the population study of the Bureau of Economic and Business Research (BEBR) at the University of Florida.

[2]Seven Largest MPOs include Broward MPO, Hillsborough MPO, MetroPlan Orlando, Miami-Dade TPO, North Florida TPO, Palm Beach TPA, and Forward Pinellas

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