MARTIN MPO MOBILITY PROFILE

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Forecasting and Trends Office

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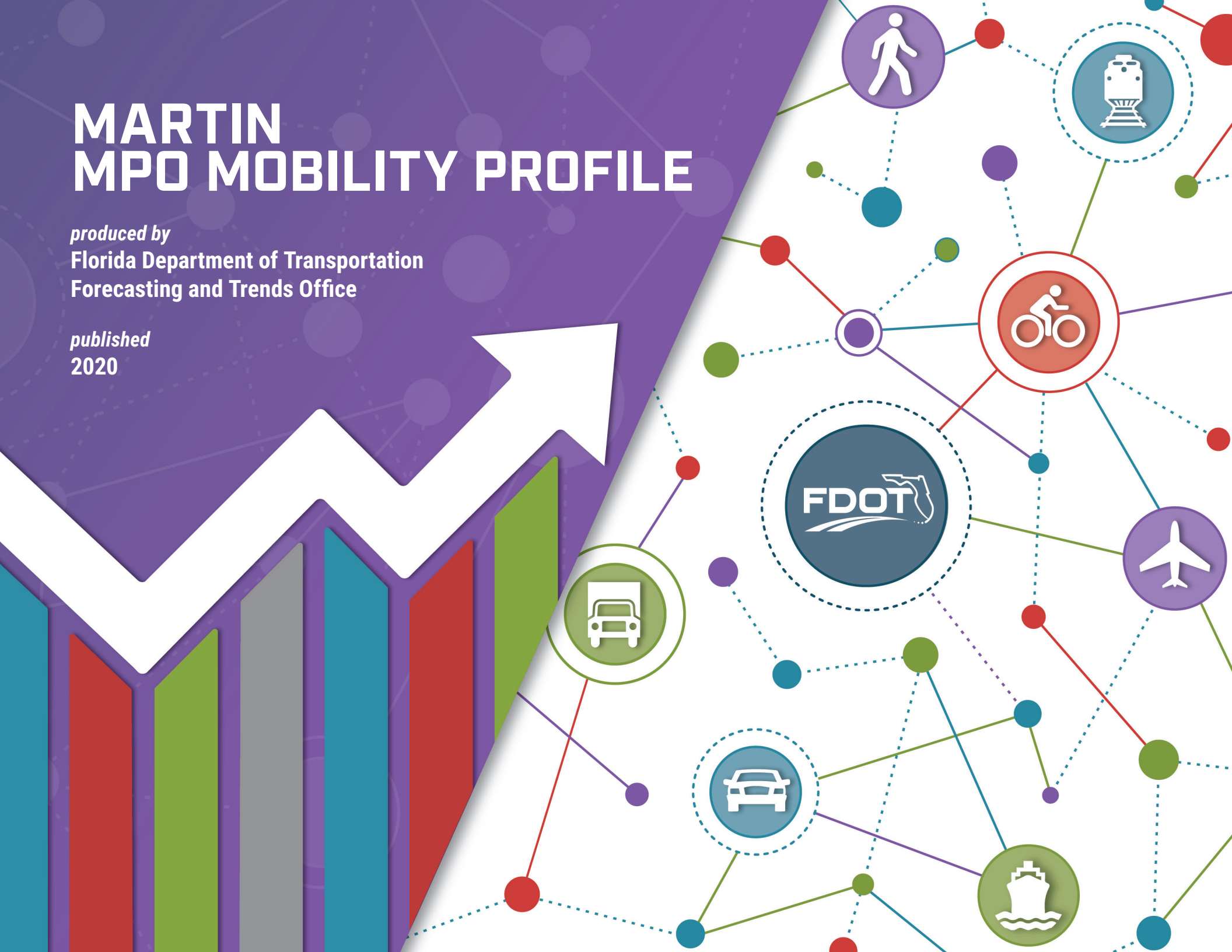

Martin

MPO Boundary - 2018

FDOT
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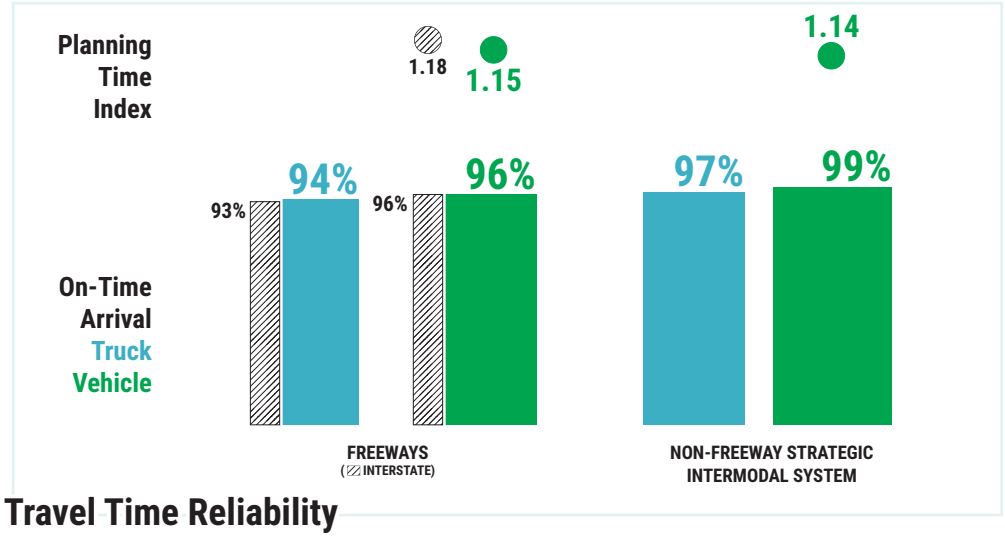
Travel Time Reliability



	Average Travel Speed	Travel Meeting LOS Target	Person Miles Traveled
NATIONAL HIGHWAY SYSTEM	SPEED 60	>99%	8.5M
STATE HIGHWAY SYSTEM	SPEED 59	>99%	8.9M
FREEWAYS	SPEED 71	>99%	5.5M
NON-FREEWAYS	SPEED 40	>99%	3.4M

Daily Vehicle Hours of Delay

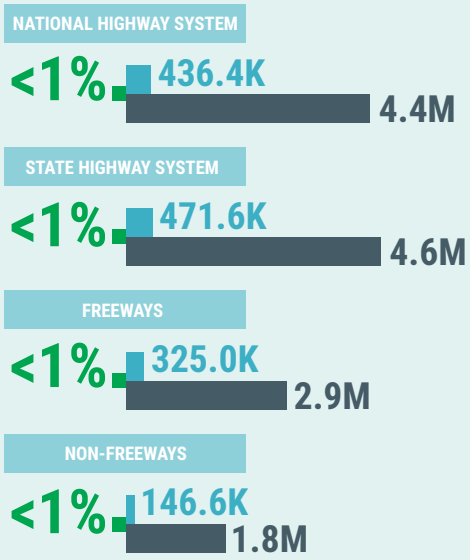
1,300
NATIONAL HIGHWAY SYSTEM

1,100
STATE HIGHWAY SYSTEM

<100
FREEWAYS

1,100
NON-FREEWAYS

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



MARTIN MPO
MOBILITY TRENDS 2016-2018

2016 2017 2018

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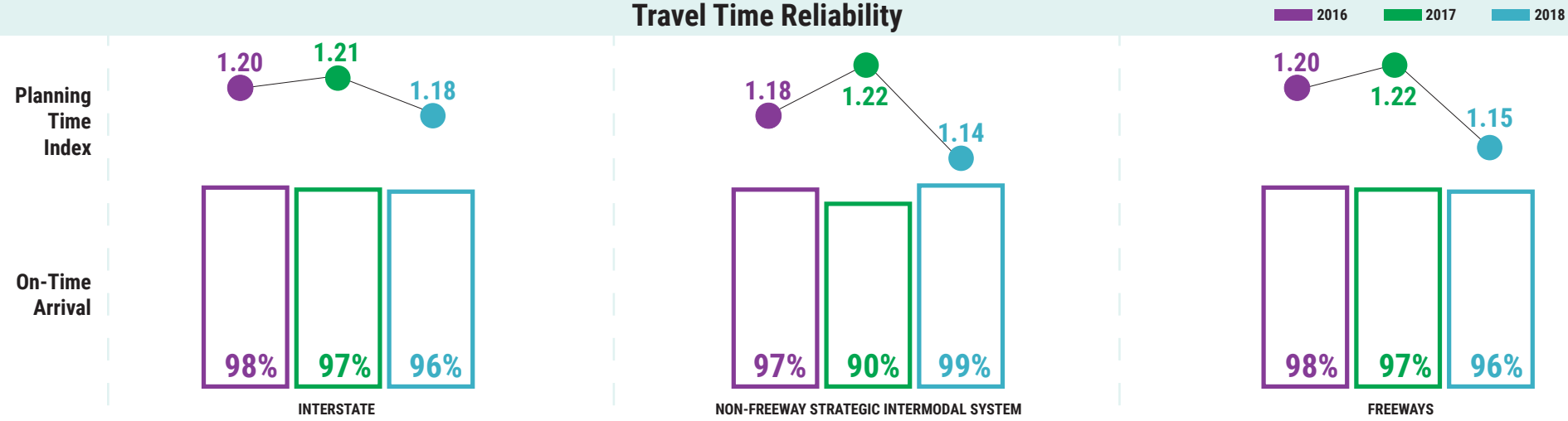
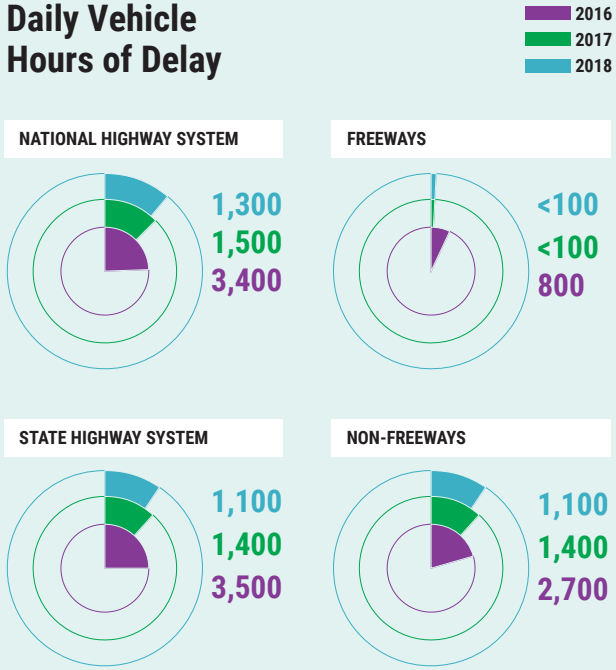
Travel Time Reliability



Daily Vehicle Hours of Delay



NOTE: Profile is based on MPO Boundary

	Percent Miles Heavily Congested	Daily Truck Miles Traveled	Daily Vehicle Miles Traveled
NATIONAL HIGHWAY SYSTEM	<1%	436.4K	4.4M
	<1%	329.4K	3.5M
	<1%	412.6K	4.1M
STATE HIGHWAY SYSTEM	<1%	471.6K	4.6M
	<1%	363.8K	3.8M
	<1%	445.5K	4.4M
FREEWAYS	<1%	325.0K	2.9M
	<1%	217.8K	1.9M
	<1%	301.0K	2.7M
NON-FREEWAYS	<1%	146.6K	1.8M
	<1%	145.9K	1.8M
	<1%	144.5K	1.7M

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DEFINITIONS

Travel Time Reliability: (1) the percent of trips that succeed in accordance with a predetermined performance standard for time or speed; and/or (2) the variability of travel times that occur on a facility or a trip over a period of time.

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.

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.

Truck On-Time Arrival: The percentage of freeway trips by combination trucks traveling at greater than or equal to 5 mph below posted speed limit. In the urbanized areas of the 7 largest MPOs, on-time arrival is defined as the percentage of freeway trips by combination trucks traveling at least 45 mph.

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.

Average Travel Speed: The length of the highway segment divided by the average travel time of all vehicles traversing the segment, including all stopped delay times.

Percent of Travel Meeting LOS Target: The percentage of travel meeting FDOT's LOS standards is determined by summing the vehicle miles traveled on roadways operating acceptably and then dividing by the total system vehicle miles traveled.

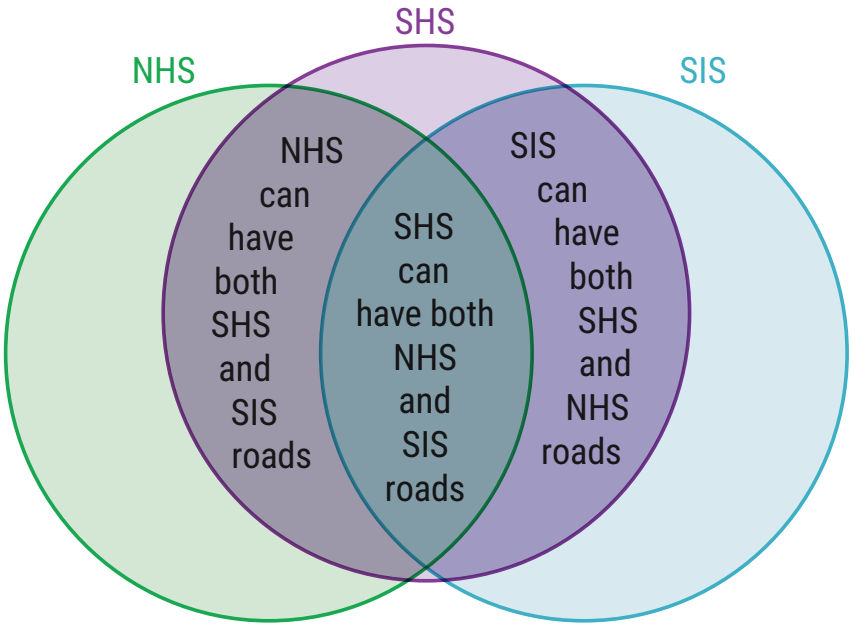
Person Miles Traveled Daily: Person miles traveled consists of the total number of miles traveled by people using the SHS or other components of it. This is calculated by adding each roadway segment's vehicle miles traveled multiplied by average vehicle occupancy.

Percent Miles Heavily Congested: Heavy congestion is a situation in which average travel speeds are in the range from 20-44 mph for freeways and equal to or worse than the LOS standards for arterials and highways.

Daily Truck Miles Traveled: (for all trucks class 4 through 13): The total number of miles traveled daily by trucks using a roadway system.

Daily Vehicle Miles Traveled: The total number of miles traveled daily by vehicles using a roadway system.

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 2018 (Martin MPO)

Date: 10/13/2020

Martin (MPO/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: Person miles traveled (Millions)	H: On-Time Arrival (Truck)[3]	I: Average Travel Speed	J: Percent Travel Meeting LOS Criteria[3]
A: National Highway System	4.4	436.4			1.3	<1%	8.5		60	>99%
B. State Highway System	4.6	471.6			1.1	<1%	8.9		59	>99%
C: Strategic Intermodal System[4]	3.1	380.7	99%	1.14	0.0	<1%	5.9	97%	70	>99%
D. Freeways	2.9	325.0	96%	1.15	0.0	<1%	5.5	94%	71	>99%
E. Interstates	1.9	185.5	96%	1.18	0.0	<1%	3.6	93%	71	>99%
F: Non-freeways (SHS)	1.8	146.6			1.1	<1%	3.4		40	>99%

Martin (Urbanized Area)

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: Person miles traveled (Millions)	H: On-Time Arrival (Truck)[3]	I: Average Travel Speed	J: Percent Travel Meeting LOS Criteria[3]
A: National Highway System	2.1	165.7			1.3	1%	4.0		49	>99%
B. State Highway System	2.2	168.7			1.1	1%	4.2		48	>99%
C: Strategic Intermodal System[4]	0.8	102.1			1.0	<1%	1.5		71	>99%
D. Freeways	0.8	102.1	97%	1.12	0.0	<1%	1.5	94%	71	>99%
E. Interstates	0.3	29.1	96%	1.14	0.0	<1%	0.5	93%	71	>99%
F: Non-freeways (SHS)	1.4	66.5			1.1	1%	2.7		36	>99%

Martin (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: Person miles traveled (Millions)	H: On-Time Arrival (Truck)[3]	I: Average Travel Speed	J: Percent Travel Meeting LOS Criteria[3]
A: National Highway System	4.4	435.7			1.3	<1%	8.5		60	>99%
B. State Highway System	4.6	470.9			1.1	<1%	8.9		59	>99%
C: Strategic Intermodal System[4]	3.1	380.1	99%	1.14	0.0	<1%	5.9	97%	70	>99%
D. Freeways	2.9	325.2	96%	1.15	0.0	<1%	5.5	94%	71	>99%
E. Interstates	1.9	185.6	96%	1.18	0.0	<1%	3.6	93%	71	>99%
F: Non-freeways (SHS)	1.8	145.7			1.1	<1%	3.4		40	>99%

[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, D, H, and J 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

Forecasting & Trends Office

2018 Martin MPO

Population
155,600

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, 2018	Vehicle Hours of Delay (Thousands)	Low	Median	High
MARTIN MPO 1.1	Small-Sized MPO (Population[1] below 367,300)	0.3	1.2	5.6
	Medium-Sized MPO (Population[1] 367,300 to 795,300)	0.8	4.5	7.7
	Large MPO[2] (Population[1] over 795,300)	13.2	51.1	212.6

SHS Percent Miles Heavily Congested, 2018	Percent Miles Heavily Congested	Low	Median	High
MARTIN MPO <1%	Small-Sized MPO (Population[1] below 367,300)	<1%	<1%	8%
	Medium-Sized MPO (Population[1] 367,300 to 795,300)	<1%	1%	4%
	Large MPO[2] (Population[1] over 795,300)	4%	14%	35%

[1]2018 MPO Population is derived from FDOT Forecasting and Trends Office
[2]Seven Largest MPOs include Broward MPO, Hillsborough MPO, MetroPlan Orlando, Miami-Dade TPO, North Florida TPO, Palm Beach TPA, and Forward Pinellas

2018 Martin MPO
Population 155,600

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SHS Daily Vehicle Miles Traveled in Millions, 2018	Vehicle Miles Traveled (Millions)	Low	Median	High
MARTIN MPO 4.6	Small-Sized MPO (Population[1] below 367,300)	1.7	4.2	6.3
	Medium-Sized MPO (Population[1] 367,300 to 795,300)	4.0	8.4	12.5
	Large MPO[2] (Population[1] over 795,300)	10.1	28.0	34.7

SHS Daily Truck Miles Traveled in Thousands, 2018	Truck Miles Traveled (Thousands)	Low	Median	High
MARTIN MPO 471.6	Small-Sized MPO (Population[1] below 367,300)	168.1	416.2	893.4
	Medium-Sized MPO (Population[1] 367,300 to 795,300)	377.5	910.8	1,440.5
	Large MPO[2] (Population[1] over 795,300)	390.1	1,797.0	3,006.0

Freeway On-Time Arrival, 2018	On-Time Arrival	Low	Median	High
MARTIN MPO 96%	Small-Sized MPO (Population[1] below 367,300)	86%	96%	98%
	Medium-Sized MPO (Population[1] 367,300 to 795,300)	85%	89%	98%
	Large MPO[2] (Population[1] over 795,300)	63%	86%	88%

Freeway Planning Time Index, 2018	Planning Time Index	Low	Median	High
MARTIN MPO 1.15	Small-Sized MPO (Population[1] below 367,300)	1.11	1.13	1.34
	Medium-Sized MPO (Population[1] 367,300 to 795,300)	1.12	1.20	1.48
	Large MPO[2] (Population[1] over 795,300)	1.64	1.91	2.63

[1]2018 MPO Population is derived from FDOT Forecasting and Trends Office
[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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