

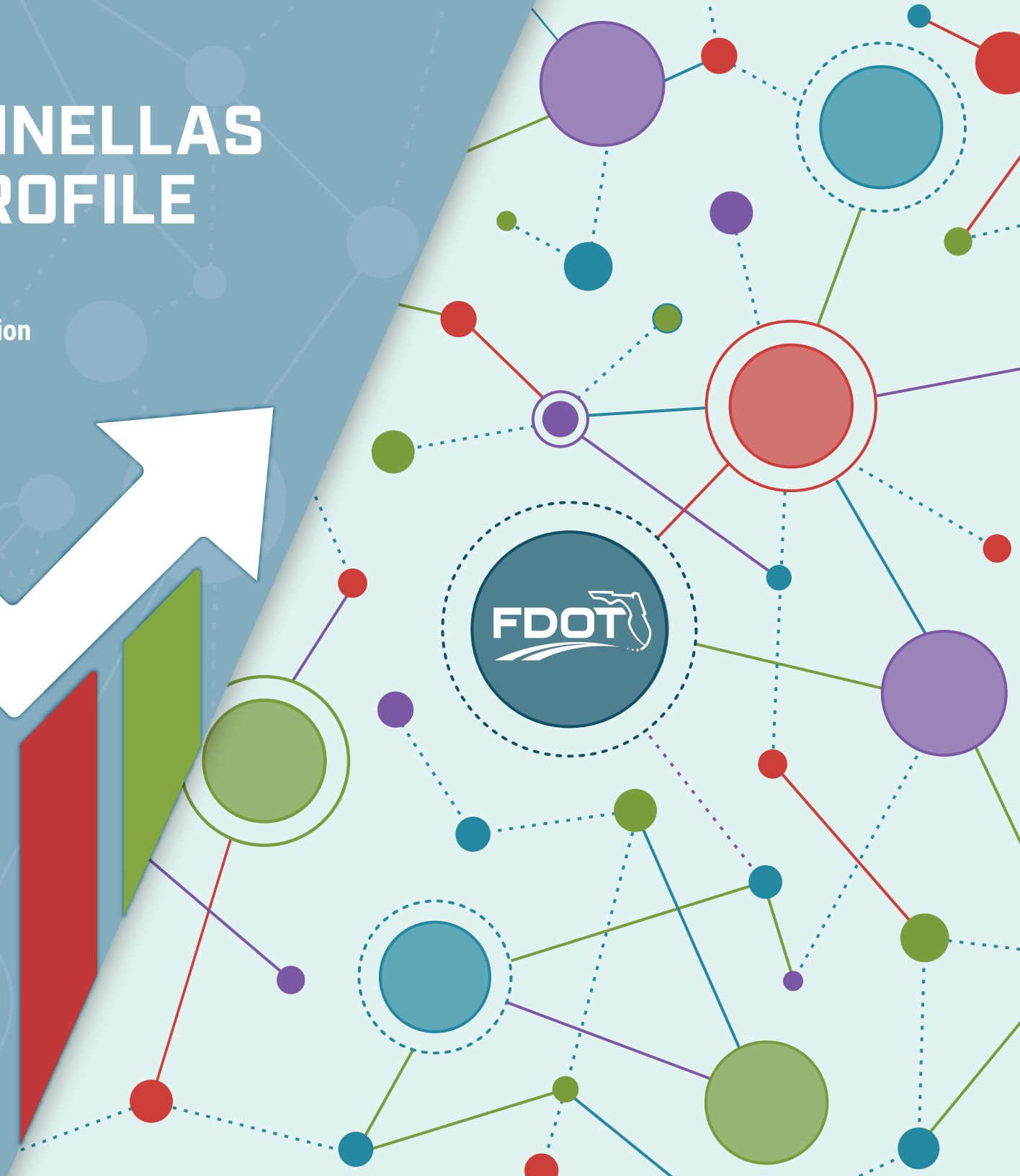
FORWARD PINELLAS MOBILITY PROFILE

produced by

Florida Department of Transportation
Forecasting and Trends Office

published

2019



FORWARD PINELLAS MOBILITY PERFORMANCE PROFILE 2017

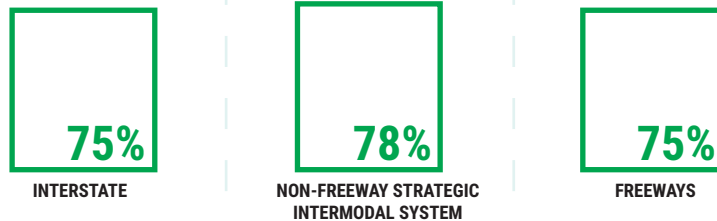


Travel Time Reliability

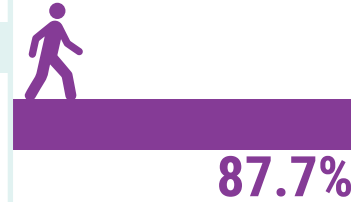
Planning
Time
Index



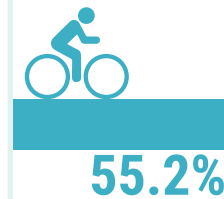
On-Time
Arrival



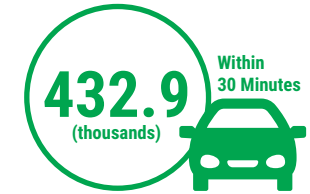
% Pedestrian
Facility Coverage



% Bicycle
Facility Coverage



Average
Job Accessibility
by Automobile



Average
Job Accessibility
by Transit



Daily Vehicle Hours of Delay



Percent Miles Heavily Congested

NATIONAL HIGHWAY SYSTEM



STATE HIGHWAY SYSTEM



FREEWAYS



NON-FREEWAYS



Daily Truck Miles Traveled Daily Vehicle Miles Traveled



NOTE: Profile is based on TPA Boundary

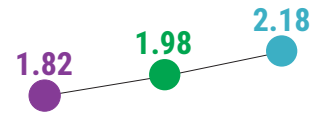
FORWARD PINELLAS MOBILITY TRENDS 2015-2017



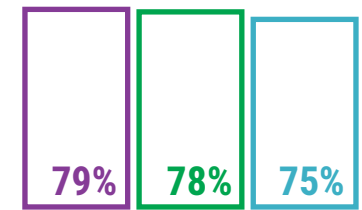
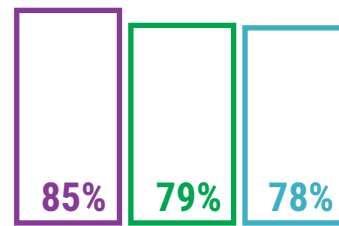
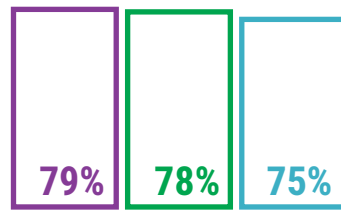
2015 2016 2017

Travel Time Reliability

Planning Time Index



On-Time Arrival



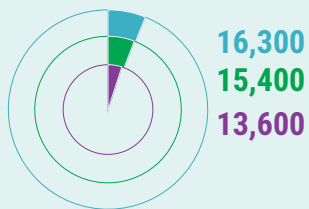
INTERSTATE

NON-FREEWAY STRATEGIC INTERMODAL SYSTEM

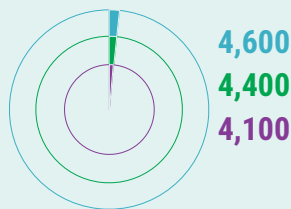
FREEWAYS

Daily Vehicle Hours of Delay

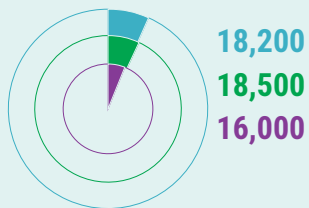
NATIONAL HIGHWAY SYSTEM



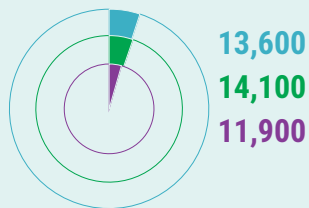
FREEWAYS



STATE HIGHWAY SYSTEM



NON-FREEWAYS



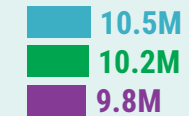
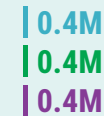
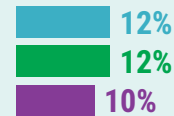
NOTE: Profile is based on TPA Boundary

Percent Miles Heavily Congested

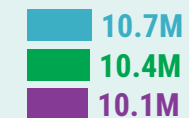
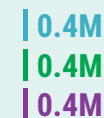
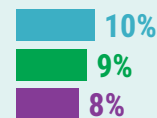
Daily Truck Miles Traveled

Daily Vehicle Miles Traveled

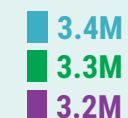
NATIONAL HIGHWAY SYSTEM



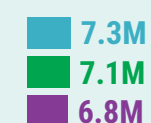
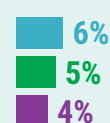
STATE HIGHWAY SYSTEM



FREEWAYS



NON-FREEWAYS



DEFINITIONS

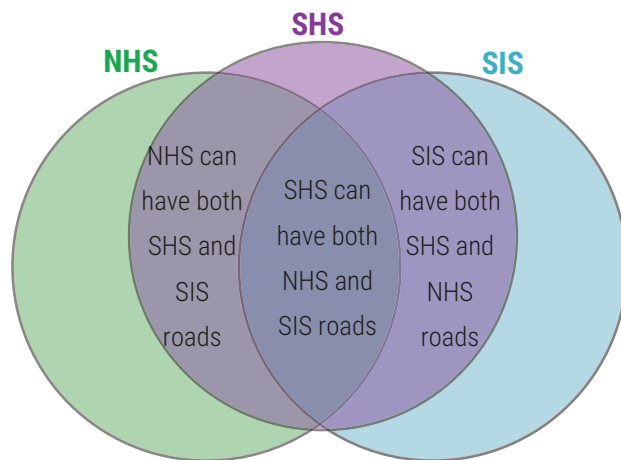
Travel Time Reliability: (1) the percent of trips that succeed in accordance with a predetermined performance standard for time or speed; and/or (2) the variability of travel times that occur on a facility or a trip over a period of time.

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.

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.

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 LOS B as defined by FDOT.

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



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.

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.

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 12): The total number of miles traveled by trucks using a highway system.

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

FDOT Supplied MPO Mobility Performance Measure Analyses for 2017 (Forward Pinellas)

Date: 4/15/2019

| Forward Pinellas (MPO Boundary) | Annual Measures ¹ | | | | | | Rotating Measures ² | | | |
|---|--|--|---|-------------------------------------|---|---|-----------------------------------|--------------------------------|---|--|
| Networks/Measures | A: Daily vehicle miles traveled (Millions) | B: Daily truck miles traveled (Millions) | C: On-Time Arrival (Vehicle) ³ | D: Planning Time Index ³ | E: Daily vehicle hours of delay (Thousands) | F: Percent miles heavily congested ³ | 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 | 10.5 | 0.4 | | | 16.3 | 12% | | | 432.9 | 9.0 |
| B: State Highway System | 10.7 | 0.4 | | | 18.2 | 10% | | | | |
| C: Strategic Intermodal System ⁴ | 5.5 | 0.2 | 78% | 2.18 | 6.1 | 27% | | | | |
| D: Freeways | 3.4 | 0.2 | 75% | 2.00 | 4.6 | 32% | | | | |
| E: Interstate | 3.4 | 0.2 | 75% | 2.00 | 4.6 | 32% | | | | |
| F: Non-Freeways (SHS) | 7.3 | 0.2 | | | 13.6 | 6% | 87.7% 55.2% | | | |

Forward Pinellas (Urbanized Area)

| Networks/Measures | A: Daily vehicle miles traveled (Millions) | B: Daily truck miles traveled (Millions) | C: On-Time Arrival (Vehicle) ³ | D: Planning Time Index ³ | E: Daily vehicle hours of delay (Thousands) | F: Percent miles heavily congested ³ | G: % Pedestrian Facility Coverage | H: % Bicycle Facility Coverage |
|---|--|--|---|-------------------------------------|---|---|-----------------------------------|--------------------------------|
| A: National Highway System | 10.2 | 0.4 | | | 16.3 | 12% | | |
| B: State Highway System | 10.5 | 0.4 | | | 18.2 | 10% | | |
| C: Strategic Intermodal System ⁴ | 5.2 | 0.2 | 78% | 2.18 | 6.1 | 29% | | |
| D: Freeways | 3.2 | 0.1 | 75% | 2.00 | 4.6 | 37% | | |
| E: Interstate | 3.2 | 0.1 | 75% | 2.00 | 4.6 | 37% | | |
| F: Non-Freeways (SHS) | 7.3 | 0.2 | | | 13.6 | 6% | 87.7% 55.3% | |

Pinellas (County Boundary)

| Networks/Measures | A: Daily vehicle miles traveled (Millions) | B: Daily truck miles traveled (Millions) | C: On-Time Arrival (Vehicle) ³ | D: Planning Time Index ³ | E: Daily vehicle hours of delay (Thousands) | F: Percent miles heavily congested ³ | 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 | 10.5 | 0.4 | | | 16.3 | 12% | | | 430.5 | 8.8 |
| B: State Highway System | 10.7 | 0.4 | | | 18.2 | 10% | | | | |
| C: Strategic Intermodal System ⁴ | 5.5 | 0.2 | 78% | 2.18 | 6.1 | 27% | | | | |
| D: Freeways | 3.4 | 0.2 | 77% | 1.92 | 4.6 | 32% | | | | |
| E: Interstate | 3.4 | 0.2 | 77% | 1.92 | 4.6 | 32% | | | | |
| F: Non-Freeways (SHS) | 7.3 | 0.2 | | | 13.6 | 6% | 87.7% 55.2% | | | |

¹These six Annual Measures are reported each year.

²These four Rotating Measures change every other year. Even year measures consist of 1) Person miles traveled, 2) On-Time Arrival (Truck), 3) Average Travel Speed, and 4) Percent Travel Meeting LOS Criteria.

³Measures C, D, and F are captured in the PM peak period (4:00-6:00); measure I reflects conditions for an 8 AM departure on Wednesdays; measure J is captured in the AM peak period (7:00-9:00).

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

Annual MPO Performance Measures by MPO Population Size

Forward Pinellas 2017 Population: 962,000

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, nine medium, and eleven 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, 2017:
Forward Pinellas 18.2

| Vehicle Hours of Delay (Thousands) | Low | Median | High |
|---|------|--------|-------|
| Small-Sized MPO (Population ¹ below 368,100) | 0.4 | 1.6 | 6.7 |
| Medium-Sized MPO (Population ¹ 368,100 to 776,000) | 1.2 | 6.5 | 10.4 |
| Large MPO² (Population ¹ over 776,000) | 18.2 | 44.6 | 245.2 |

SHS Percent Miles Heavily Congested, 2017:
Forward Pinellas 10%

| Percent Miles Heavily Congested | Low | Median | High |
|---|-----|--------|------|
| Small-Sized MPO (Population ¹ below 368,100) | <1% | <1% | 9% |
| Medium-Sized MPO (Population ¹ 368,100 to 776,000) | <1% | 1% | 3% |
| Large MPO² (Population ¹ over 776,000) | 4% | 15% | 41% |

¹2017 MPO Population is derived from FDOT Forecasting and Trends Office

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

SHS Daily Vehicle Miles Traveled in Millions, 2017:
Forward Pinellas 10.7

| Vehicle Miles Traveled (Millions) | Low | Median | High |
|---|------|--------|------|
| Small-Sized MPO (Population¹ below 368,100) | 1.7 | 3.8 | 6.1 |
| Medium-Sized MPO (Population¹ 368,100 to 776,000) | 6.7 | 8.5 | 12.3 |
| Large MPO² (Population¹ over 776,000) | 10.7 | 27.9 | 33.9 |

SHS Daily Truck Miles Traveled in Millions, 2017:
Forward Pinellas 0.4

| Truck Miles Traveled | Low | Median | High |
|---|-------|--------|---------|
| Small-Sized MPO (Thousands) (Population¹ below 368,100) | 177.1 | 367.0 | 900.2 |
| Medium-Sized MPO (Thousands) (Population¹ 368,100 to 776,000) | 552.5 | 886.7 | 1,350.8 |
| Large MPO² (Millions) (Population¹ over 776,000) | 0.4 | 1.7 | 2.9 |

Freeway On-Time Arrival, 2017:
Forward Pinellas 75%

| On-Time Arrival | Low | Median | High |
|---|-----|--------|------|
| Small-Sized MPO (Population¹ below 368,100) | 90% | 96% | >99% |
| Medium-Sized MPO (Population¹ 368,100 to 776,000) | 74% | 92% | 97% |
| Large MPO² (Population¹ over 776,000) | 48% | 75% | 85% |

Freeway Planning Time Index, 2017:
Forward Pinellas 2.00

| Planning Time Index | Low | Median | High |
|---|------|--------|------|
| Small-Sized MPO (Population¹ below 368,100) | 1.10 | 1.18 | 1.42 |
| Medium-Sized MPO (Population¹ 368,100 to 776,000) | 1.12 | 1.22 | 1.52 |
| Large MPO² (Population¹ over 776,000) | 1.51 | 1.73 | 2.34 |

¹2017 MPO Population is derived from FDOT Forecasting and Trends Office

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

