SIS Policy & Implementation
Performance Planning & Programming (before it was cool)

presented by
Carl Mikyska, Florida MPO Advisory Council

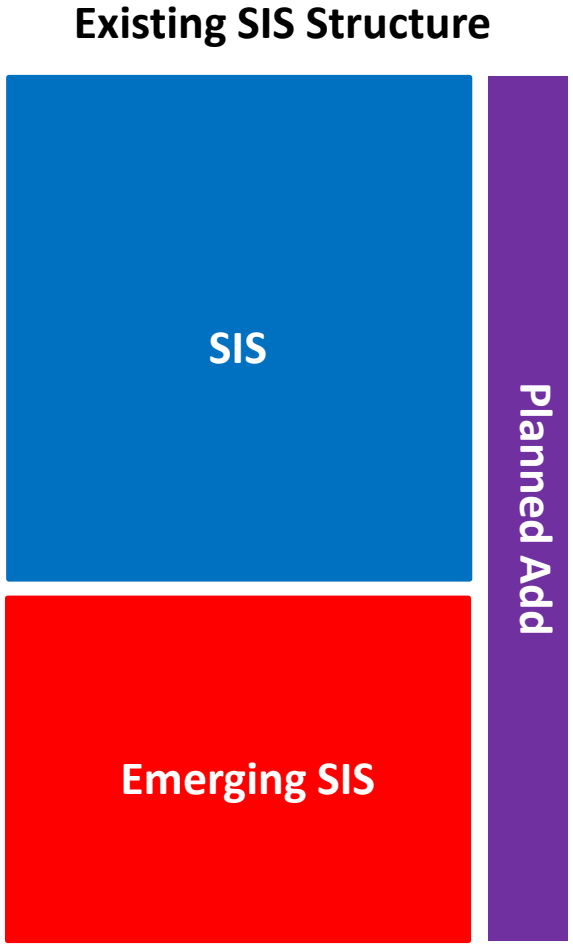
October 25, 2017

MPOAC


- **SIS established in 2003**
  - Enhance Florida's economic competitiveness
  - Focus resources on facilities most critical for statewide and interregional travel
  - Initial SIS designation criteria
- **SIS facilities**
  - Two system components: SIS facilities, Emerging SIS facilities
  - Types of facilities: hubs, corridors, connectors
  - Comprise state's largest and most strategic air, space, water, rail, transit and highway facilities
  - Primary means for moving people and freight

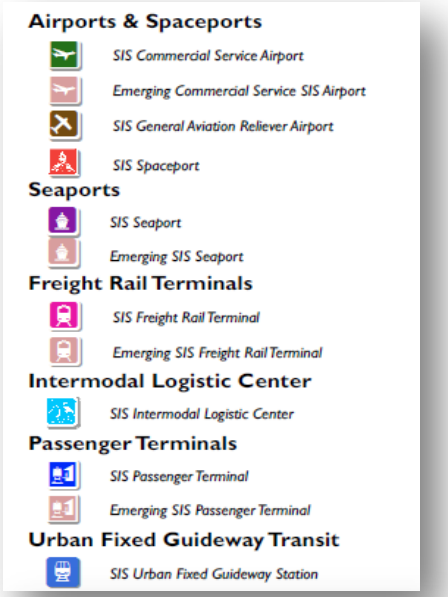

- 2000 – Initial call for development of the SIS
- 2002 – 41-member Steering Committee defines policy framework
- 2003 – Governor and Legislature establish the SIS and authorize designation of initial facilities as proposed
- 2004 – Governor and Legislature enact framework for funding future SIS improvements; first projects funded
- 2005 – Governor and Legislature provide recurring funding for SIS projects; first SIS Strategic Plan adopted
- 2010 – SIS Strategic Plan updated
- 2016 – SIS Policy Plan updated


- Help meet growing demand for moving people and freight
- Link Florida's economic regions
- Enhance Florida's competitiveness as a global trade hub
- Make strategic choices for transportation investments within financial constraints



- SIS Airports: 20
- SIS Spaceports: 2*
- SIS Seaports: 12*
- SIS Intermodal Logistic Center: 1*
- SIS Freight Terminals: 8*
- SIS Passenger Terminals: 20*
- SIS Urban Fixed Guideway Stations: 36*
- SIS Highway Miles: 4881*
- SIS Railroad Miles: 2325*
- SIS Waterway Miles: 1986*

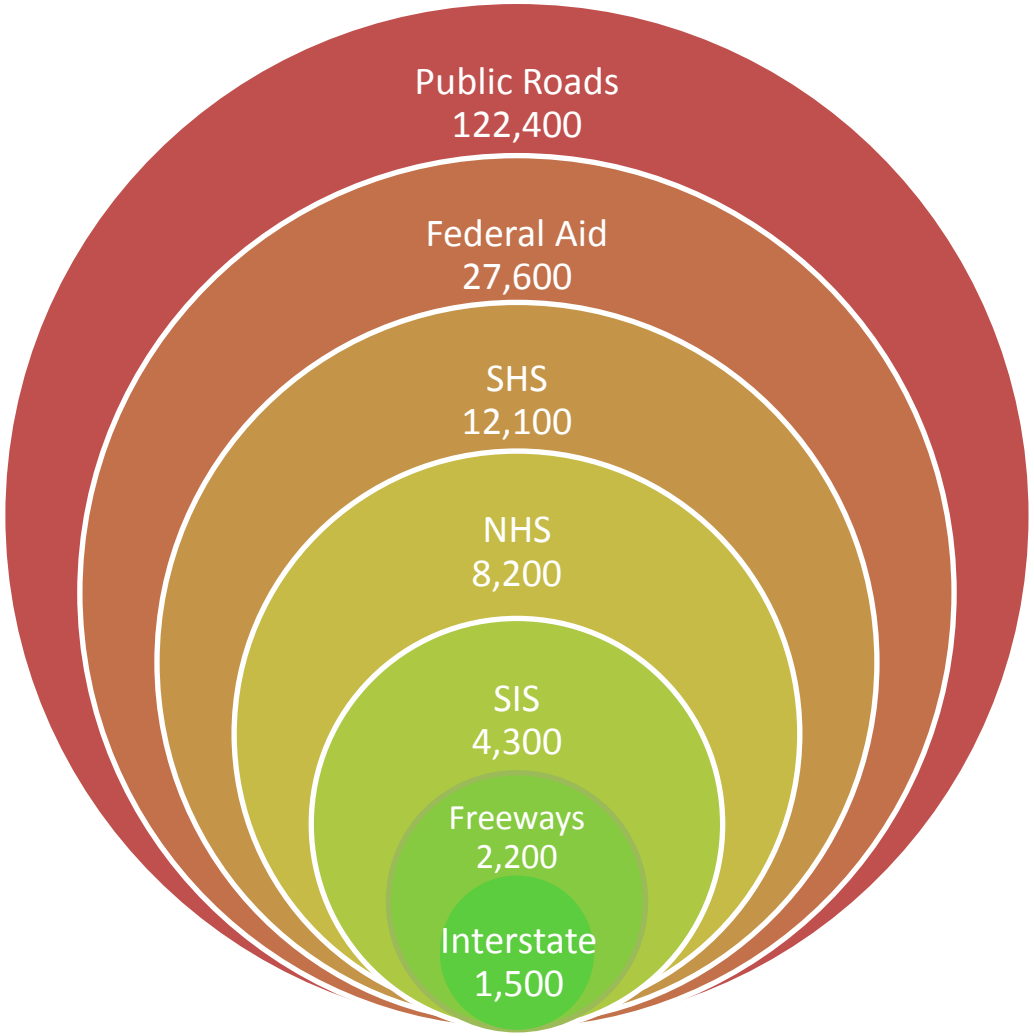
**Planned Add facilities included.*




- **54 percent of all traffic and 70 percent of all truck traffic** on the State Highway System although the highway portion of the SIS represents only **3 percent of the total road mileage in the state**;
- More than 99 percent of all airport passengers enplanements in Florida, and 99 percent of originating and terminating air cargo tonnage;
- 99 percent of all waterborne freight tonnage and virtually all home-port cruise passengers;
- 89 percent of interregional rail and bus passengers;
- Nearly all freight moving via rail; and,
- All waterborne freight on coastal and intracoastal shipping routes and 66% of waterborne freight on inland interregional waterways.

Florida Roadway Mileages

(Rounded)



- At least 50% of funding (policy set at 75%);
- 80% of Lane Miles Good or better (at 93%)
- 90% of Bridges Good or better (at 99%)

- Increasing Transportation Budgets
  - $2 Billion Federal
  - $12 Billion from all sources
  - $82 Billion Annual State Budget

2016 Performance Summit

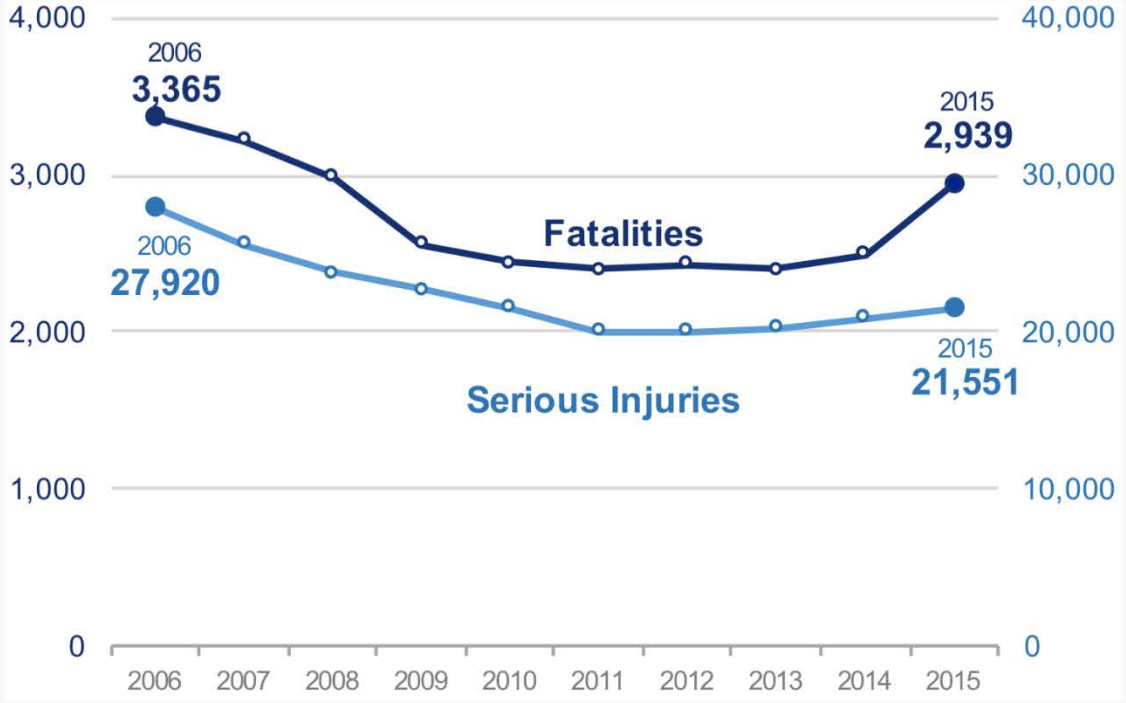
Opening (May 10)	Brian Blanchard Assistant Secretary FDOT	FDOT
	Jim Wood State Transportation Planning Administrator	
Mobility (May 10)	Beth Alden Hillsborough MPO	Metropolitan Planning Organization for Transportation
	Brad Thoburn Jacksonville Transportation Authorit	Jacksonville Transportation Authority
	Michael Stewart Jacksonville Aviation Authority	JAA Jacksonville Aviation Authority
Economy (May 11)	Mark Bontrager Space Florida	Space Florida
	Tisha Keller Florida Trucking Association	Florida Trucking Association
	Natacha Yacinthe Port Everglades	Port Everglades Broward County, Florida
Preservation (May 11)	James Cromar Broward MPO	broward MPO metropolitan planning organization
	Jim Warren Asphalt Contractors Association	Asphalt Contractors Association of Florida
	Chris Cochran Pinellas Suncoast Transit Authority	Pinellas Suncoast Transit Authority
Environment May 12)	Chris Stahl Department of Environmental Protection	Florida Department of Environmental Protection
	Sam Poole Urban Land Institute	ULI Urban Land Institute
	Julie Dudley FL Department of Health	Florida Department of Health
Safety (May 12)	James Hightower Department of Highway Safety and Motor Vehicles	A Safer Florida Highway Safety and Motor Vehicles
	Steve Myers Lee Tran	lee tran Your Ride Is Here
	Don Scott Lee MPO	Lee County MPO Metropolitan Planning Organization

Safety

PERFORMANCE \ SAFETY \ Fatalities and Serious Injuries

Fatalities and Serious Injuries continue to increase.

Between 2014 and 2015 fatalities increased 17.8% and serious injuries by 3.1%

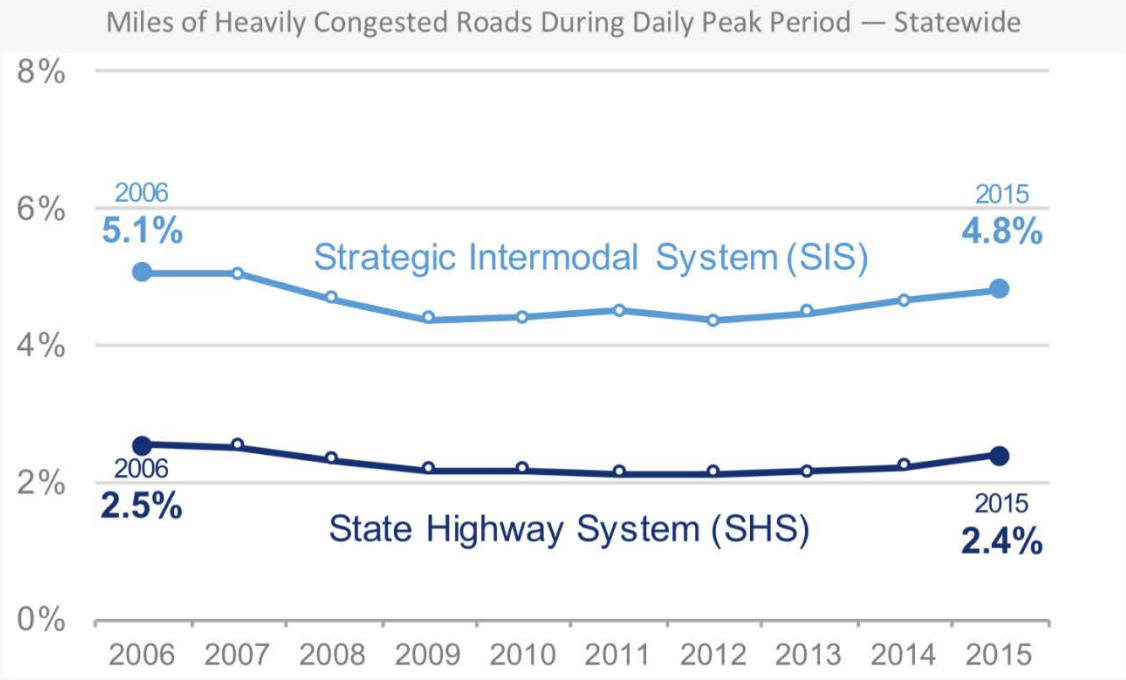


Mobility

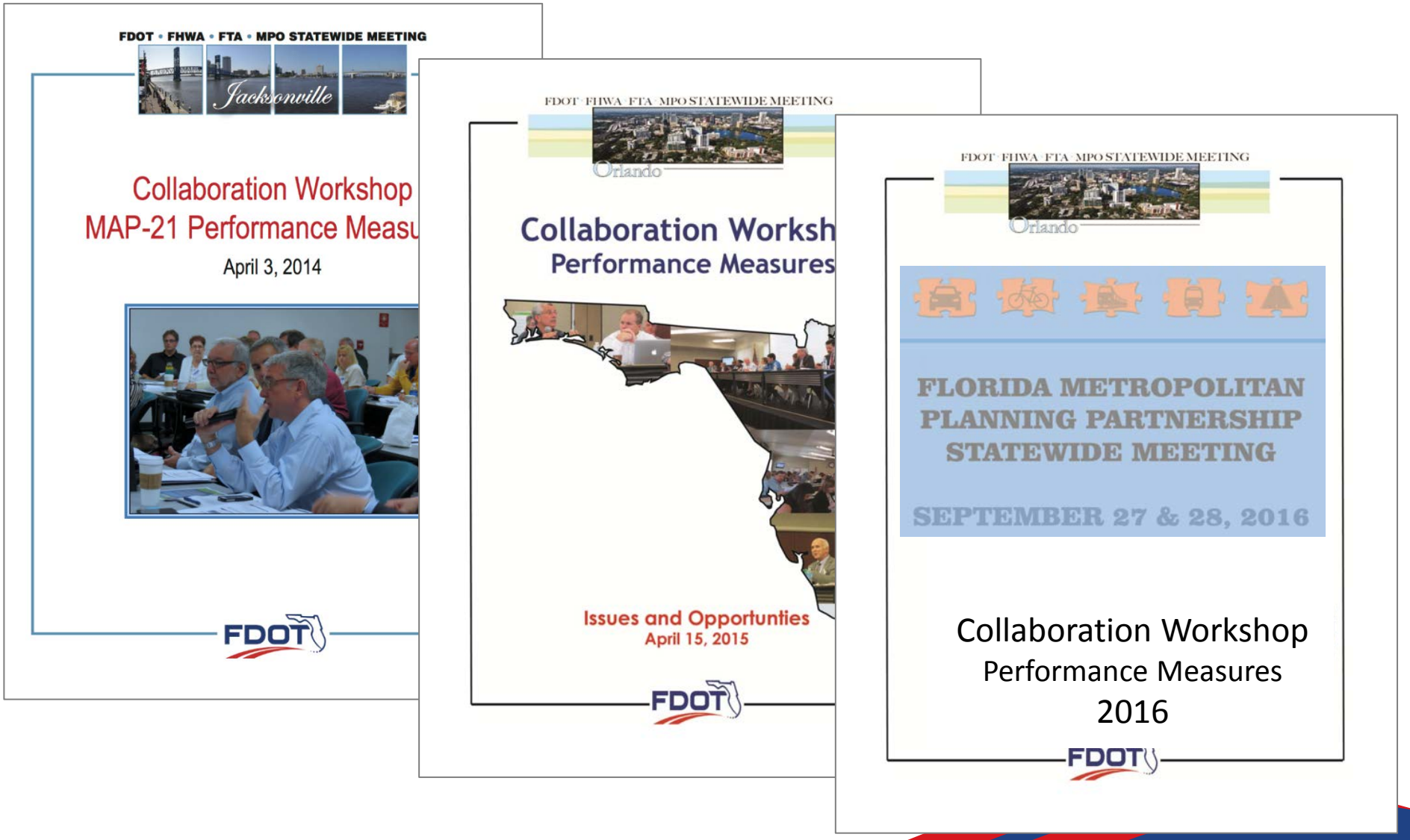
PERFORMANCE \ MOBILITY \ Utilization – Congestion

The percentage of heavily congested roads has been fairly level over the past decade.

Recent increases speak to the importance of increasing system capacity, improving operating efficiency, and providing transportation choices.



Florida Performance Measures Workshops

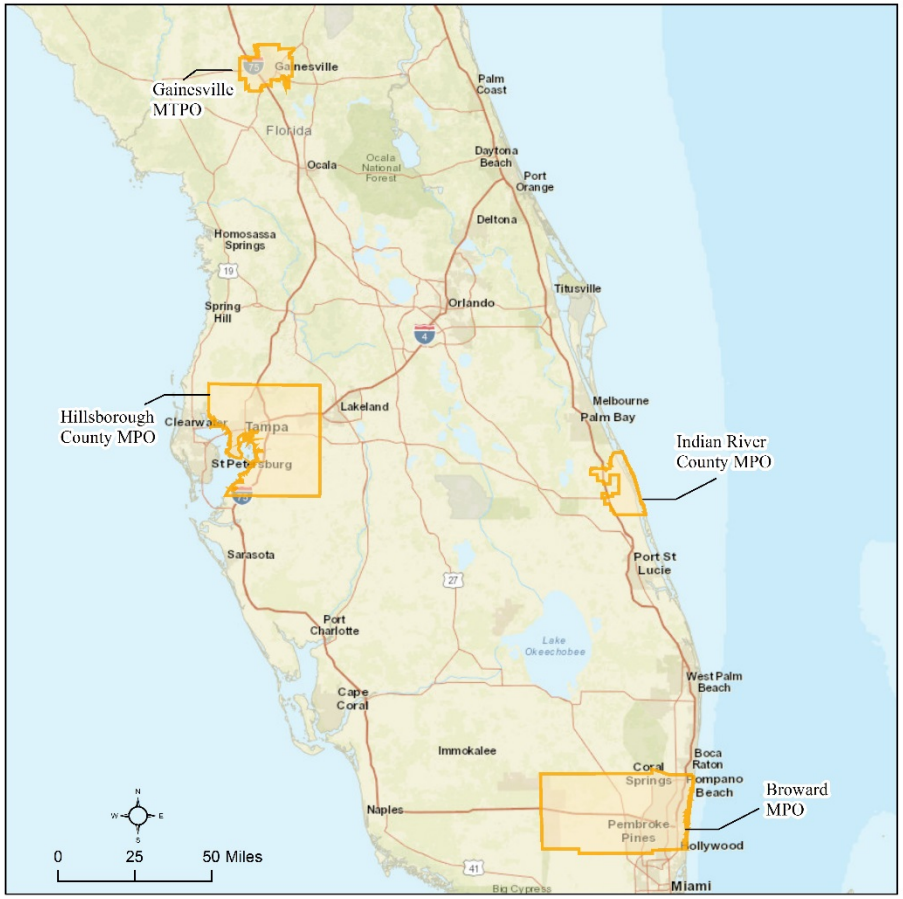
Purpose of MPO Pilot

Add data for 4 MPOs to FDOT statewide annual 'National Measures' report for Florida Congressional Delegation:

- Part of FDOT's efforts to collaborate on PM with state's MPOs
- Review MPO-level performance results for FHWA measures
- Compare statewide trends to MPO level patterns
- Not intended to set targets; but consider implications for target setting
- Give MPOs the ability to tell the story of transportation

MPO Pilots

- Federal funds
- Total transportation budget
- Policy of maintenance first



STATEWIDE PERFORMANCE REPORT

FDOT

FDOTPERFORMS.ORG

SAFETY

Transportation system safety is among Florida's highest commitment to its residents and visitors. Safety and security improvements save lives, enhance our quality of life, and support Florida's economic competitiveness.

Fatalities & Serious Injuries

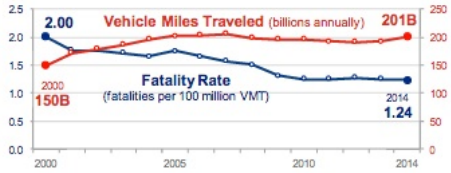
Florida's total annual serious injuries and fatalities (Rolling 5-year average)

Fewer deaths and serious injuries make travel safer in Florida. FDOT's long-term aspirational goal is zero deaths on our roadways.

Fatality Rate

Fatality Rate vs. Vehicle Miles Traveled

Florida's rates of serious injuries and fatalities have steadily decreased over the past decade, even as VMT has increased.



PRESERVATION

Transportation system preservation is at the heart of FDOT's business. FDOT's maintenance program is one of the best in the country, and has met or exceeded standards for bridges, pavement and maintenance since 1994.

Bridges

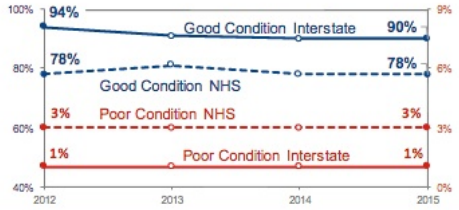
Condition of National Highway System (NHS) Bridges

The vast majority of Florida bridges do not show evidence of structural deterioration nor are they weight restricted.

Pavements

Condition of Interstate and National Highway System (NHS) Pavements

Regular maintenance improvements keep assets operating efficiently, extending their useful life and delaying the substantial cost of reconstruction or replacement.



MOBILITY

Moving people and goods is transportation's essential purpose. As travel demand changes, Florida continues to improve our multimodal transportation system. Data shows all vehicles and combination trucks (freight) for the State Highway System.

Vehicle Miles Traveled

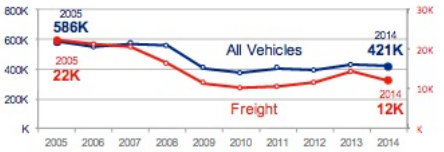
Daily Vehicle Miles Traveled (millions)

Over the last decade, daily VMT has remained steady for all vehicles, but combination truck mileage has decreased.

Acceptable Travel

Travel Meeting Acceptable Level of Service During Peak Period

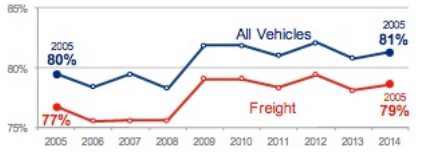
The overall trend is one of generally steady travel improvement, but a decrease occurred after 2012.



Delay

Vehicle Hours of Delay During Peak Period

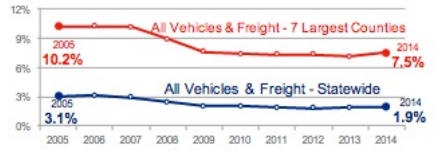
During the most congested period, vehicle hours of delay have generally been declining over the past decade.



Travel Time Reliability

Travel Time Reliability on Freeways During Peak Period

Travel Time Reliability is slightly improving—translating to time and cost savings for shippers and carriers.



Severely Congested

Miles Severely Congested During Peak Period

Florida has experienced a notable reduction in the number of roads that are severely congested during the peak period.

FDOTPERFORMS.ORG

OFFICE OF POLICY PLANNING CONTACT: DAVID LEE (850) 414-4802

Daily VMT in Pilot MPOs

(2015 State Highway System Vehicle Miles Traveled by MPO/TPO Boundary)

Hillsborough	Broward	Gainesville	Indian River
21 Million VMT 4% large trucks	27 Million VMT 4% large trucks	2.7 Million VMT 5% large trucks	1.6 Million VMT 4% large trucks

Pilot MPOs – NHS Bridges

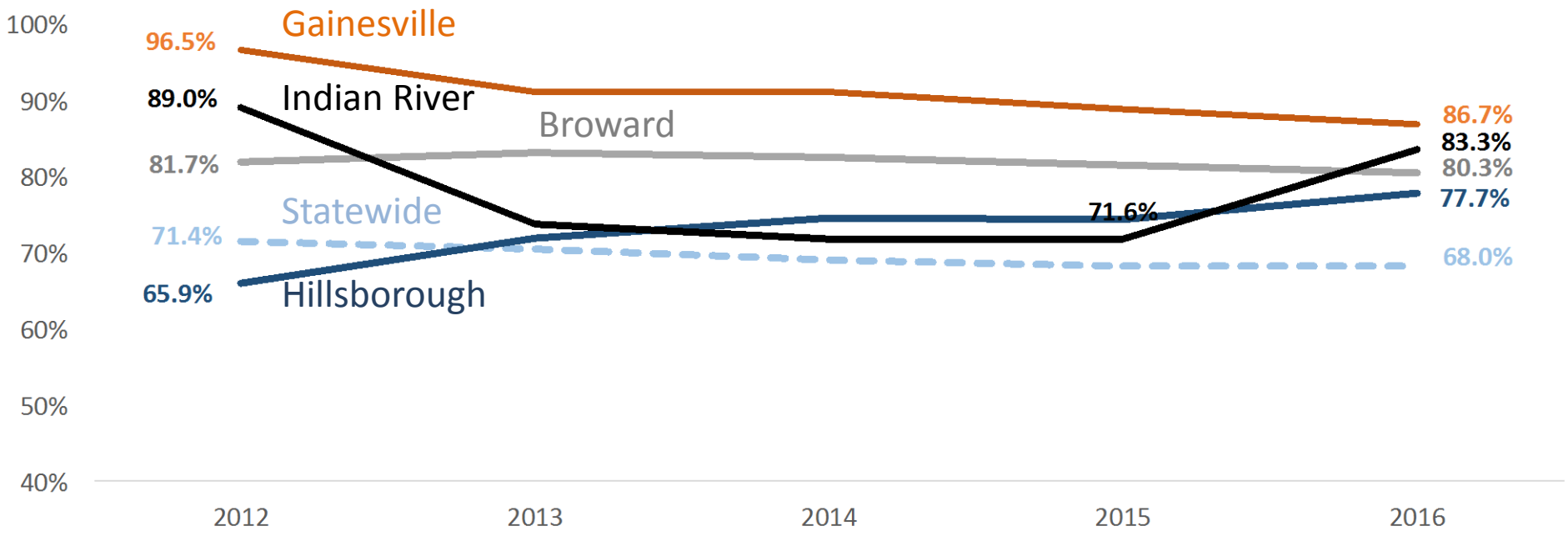
Hillsborough	Broward	Gainesville	Indian River
479	391	46	42

(# of NHS bridges by MPO boundary)

9.7M	12.5M	0.5M	0.35M

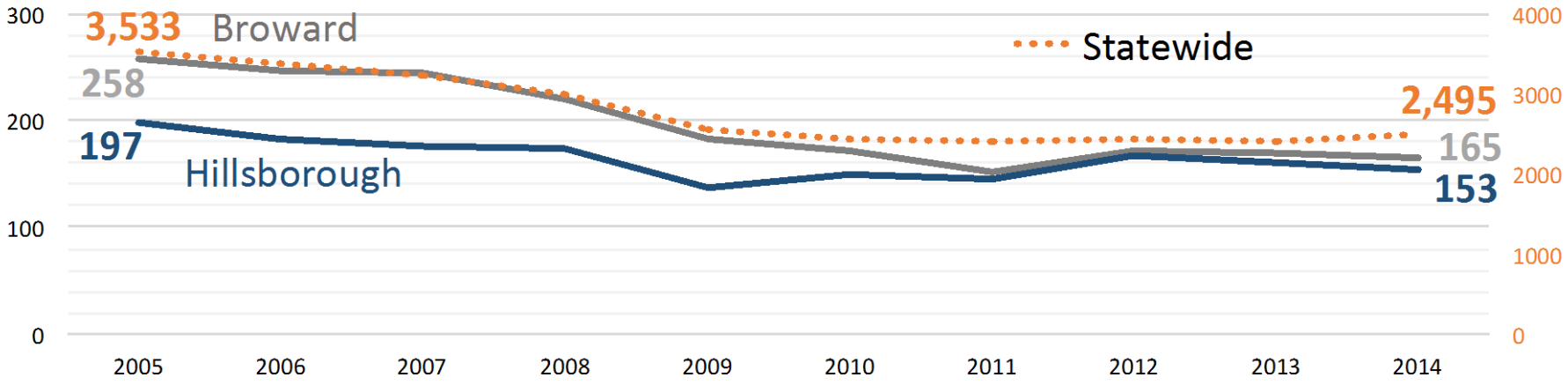
(Square footage of NHS bridge deck area by MPO boundary)

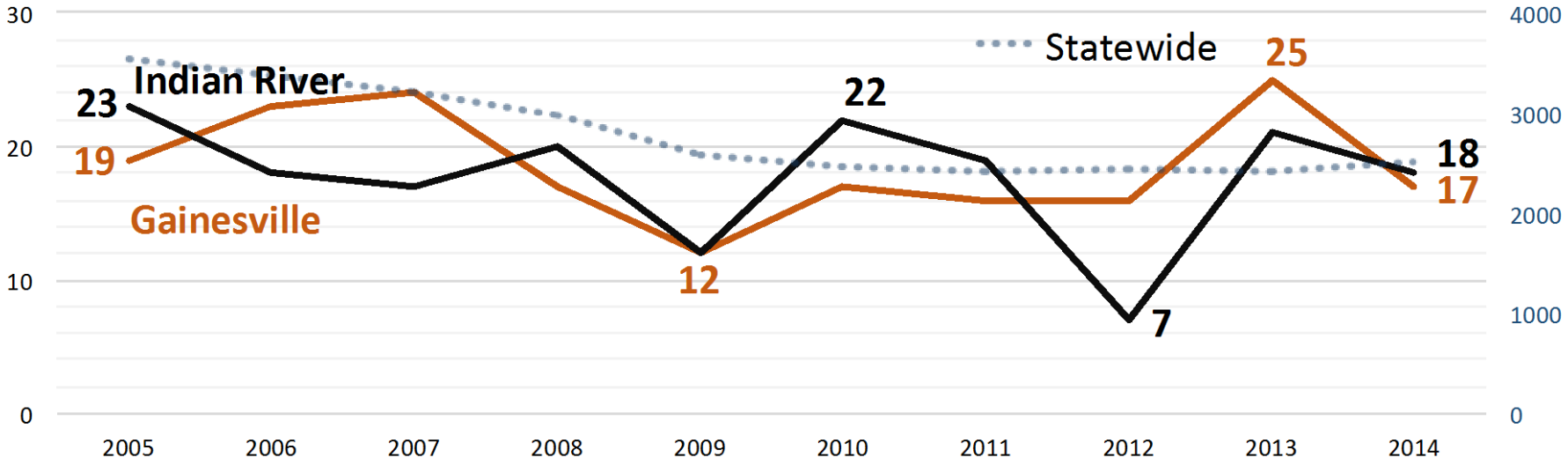
NHS Bridge Deck Area in Good Condition



Total Fatalities (Year-by-Year)

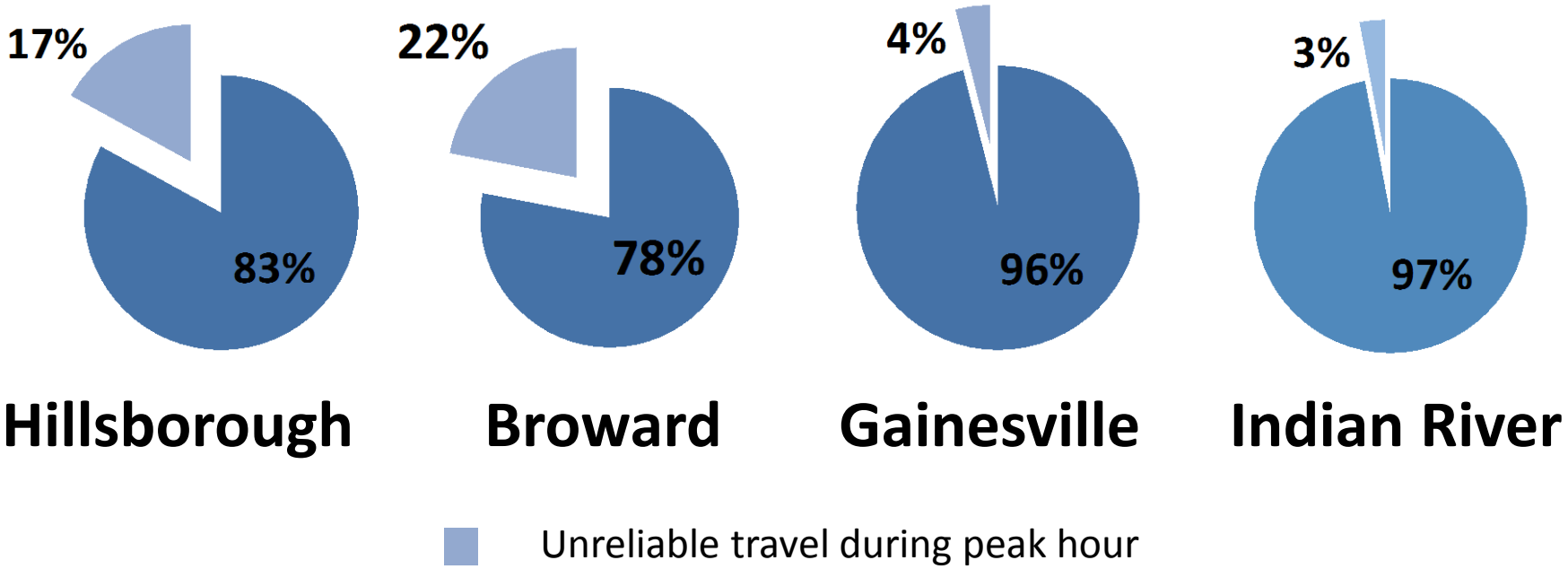
(All Public Roads)





Peak Hour Travel Reliability

(Freeways Inside MPO Boundary)

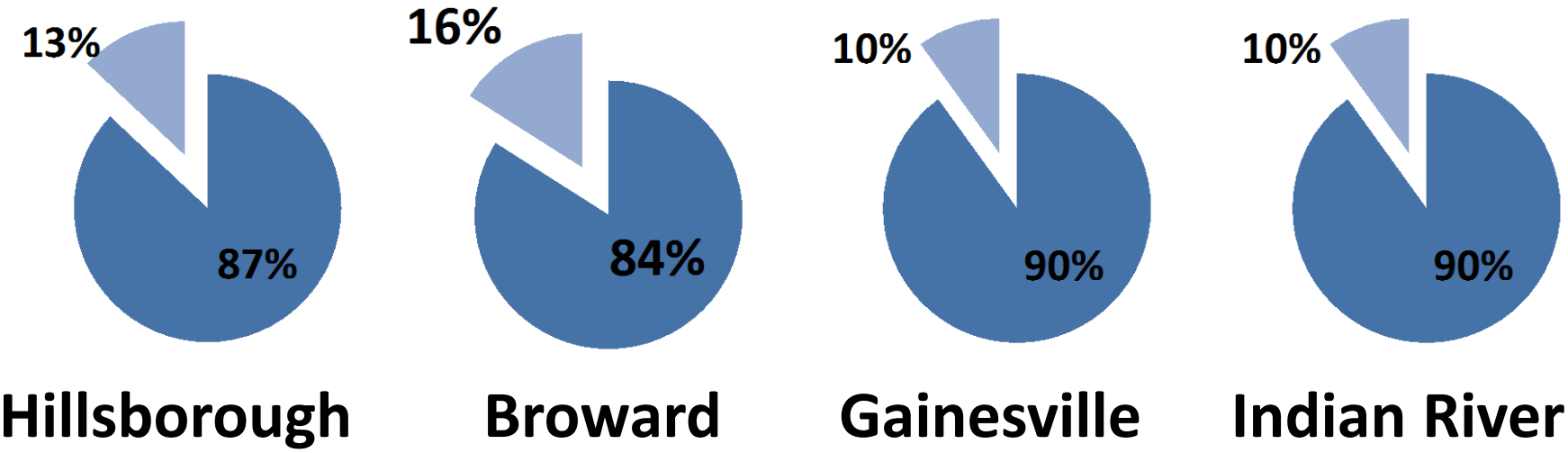


For seven largest counties travel time reliability is defined as the percentage of freeway trips traveling at least 45 mph.

For all others travel time reliability is defined as the percentage of freeway trips travelling at greater than or equal to 5 mph below the posted speed limit.

Peak Hour Truck Travel Reliability

(Freeways Inside MPO Boundary)

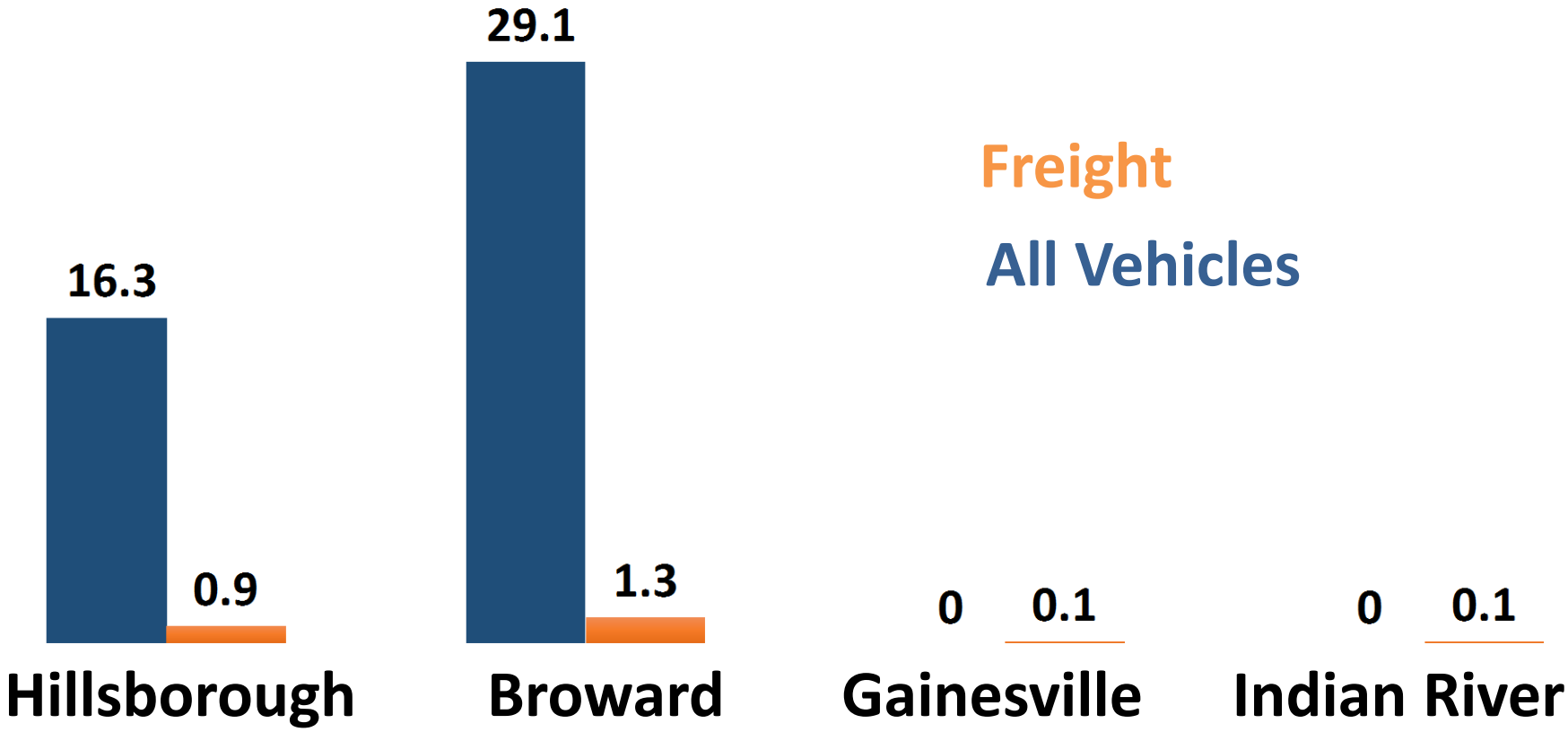


For seven largest counties travel time reliability is defined as the percentage of freeway trips traveling at least 45 mph.

For all others travel time reliability is defined as the percentage of freeway trips travelling at greater than or equal to 5 mph below the posted speed limit.

Other FDOT Mobility Measures

Daily Hours of Vehicle Delay ('000s) (Freeways Inside MPO Boundary)



Delay is difference between threshold speed (LOS B) and travel time at average speed


Perceived Keys to Success in Florida

Our (FDOT/MPO) joint coordination with a common approach

We (FDOT & MPOs) will comply with ultimate federal requirements

FHWA Headquarters quote

FDOT/MPOs can "use their own measures in performance-based planning"

- Florida can use measures and calculation techniques most relevant to us
  - Travel time reliability
  - Congestion
  - Multimodal
  - Other

Target establishment (conservative approach)

FDOT/ MPOs submit consistently and together

FDOT supply every MPO

- Federally required measures
- MPOAC agreed upon additional measures

Statewide Mobility Performance Measures Team Purpose

To provide guidance and support to FDOT and the state's MPOs on **multimodal** mobility performance measures including reporting for internal and MAP-21 purposes

Consensus in approach and measures

FDOT's Intent

FDOT provides all MAP-21 **measures**

For the **state** as a whole & each **MPO**

Areawide groupings

- Urbanized boundaries
- Planning boundaries
- County boundaries
- Regional boundaries

Preliminary Recommendation for Map-21 Purposes

(federal reporting requirements)

Allows FDOT and MPOs most **flexibility** to use our current/evolving (☺)

"Keep the Feds out of our business"; "set our internal targets to strive to do better"

Use our own existing performance based planning processes

Highway and multimodal mobility performance measures

Allows more time to get our "feet wet"

Be careful of MAP21 System Performance and Freight Measures

MAP-21

Multimodal

Mobility Performance Measures MPOs Would Like FDOT to Supply

Networks

- National Highway System
- Interstate
- SIS (Strategic Intermodal System)
- State Highway System
- Freeways
- Non-Freeways (SHS)

Areas

Broward (Urbanized Area)

Urbanized Area

Networks/Measures	A: Daily vehicle miles traveled (Mill	B: Daily truck miles traveled	C:Travel time reliability in the	D:Travel time ibility	E: Daily vehicle hours of delay (Thousands)	F: Percent miles heavily congested	G: Percent sidewalk coverage	H: Percent bicycle lane coverage
A: National Highway System					66.9	13%		
B: Interstate				1.94	23.6	42%		
C: Strategic Intermodal System[1]	16.2	1.6	69%	1.83	31.5	25%		
D: State Highway System	26.3	2.0			73.5	14%		
E: Freeways	15.5	1.5	77%	1.76	26.8	26%		
F: Non-freeways (SHS)	10.8	0.5			46.7	9%	89.3%	42.7%

Broward (MPO/TPO Boundary)

MPO/TPO Boundaries

Networks/Measures	A: Daily vehicle miles traveled (Mi	B: Daily truck miles traveled	C:Travel time reliability in the	D:Travel time	E: Daily vehicle hours of delay sands)	F: Percent miles heavily congested	G: Percent sidewalk coverage	H: Percent bicycle lane coverage	I: Average job accessibility within 30 minute car trip (Millions)	J: Average job accessibility within 30 minute transit trip (Thousands)
A: National Highway System					67.4	12%			1.1	8.9
B: Interstate					24.0	29%				
C: Strategic Intermodal System[1]	17.0	1.7	73%	1.65	32.0	19%				
D: State Highway System	27.1	2.1			74.0	12%				
E: Freeways	16.2	1.6	78%	1.72	27.2	21%				
F: Non-freeways (SHS)[2]	11.0	0.6			46.8	9%	89.3%	34.6%		

Broward (County Boundary)

County Boundaries

Networks/Measures	A: Daily vehicle mile (Mill	B: Daily truck	C:Travel time		E: Daily vehicle hours of delay (Thousands)	F: Percent miles heavily congested	G: Percent sidewalk coverage	H: Percent bicycle lane coverage	I: Average job accessibility within 30 minute car trip (Millions)	J: Average job accessibility within 30 minute transit trip (Thousands)
A: National Highway System					67.4	12%			1.1	8.9
B: Interstate					24.0	29%				
C: Strategic Intermodal System[1]	17.0	1.7	73%	1.65	32.0	19%				
D: State Highway System	27.1	2.1			74.0	12%				
E: Freeways	16.2	1.6	78%	1.71	27.2	21%				
F: Non-freeways (SHS)[2]	11.0	0.6			46.8	9%	89.3%	34.6%		

Primary and Secondary Measures

Daily VMT	Daily Truck miles traveled	Travel Time Reliability	Travel Time Variability	Daily vehicle hours of delay	Percent miles heavily congested	Percent sidewalk coverage	Percent bicycle lane coverage	Average job accessibility (Auto)	Average job accessibility (Transit)

Broward (MPO/TPO Boundary)

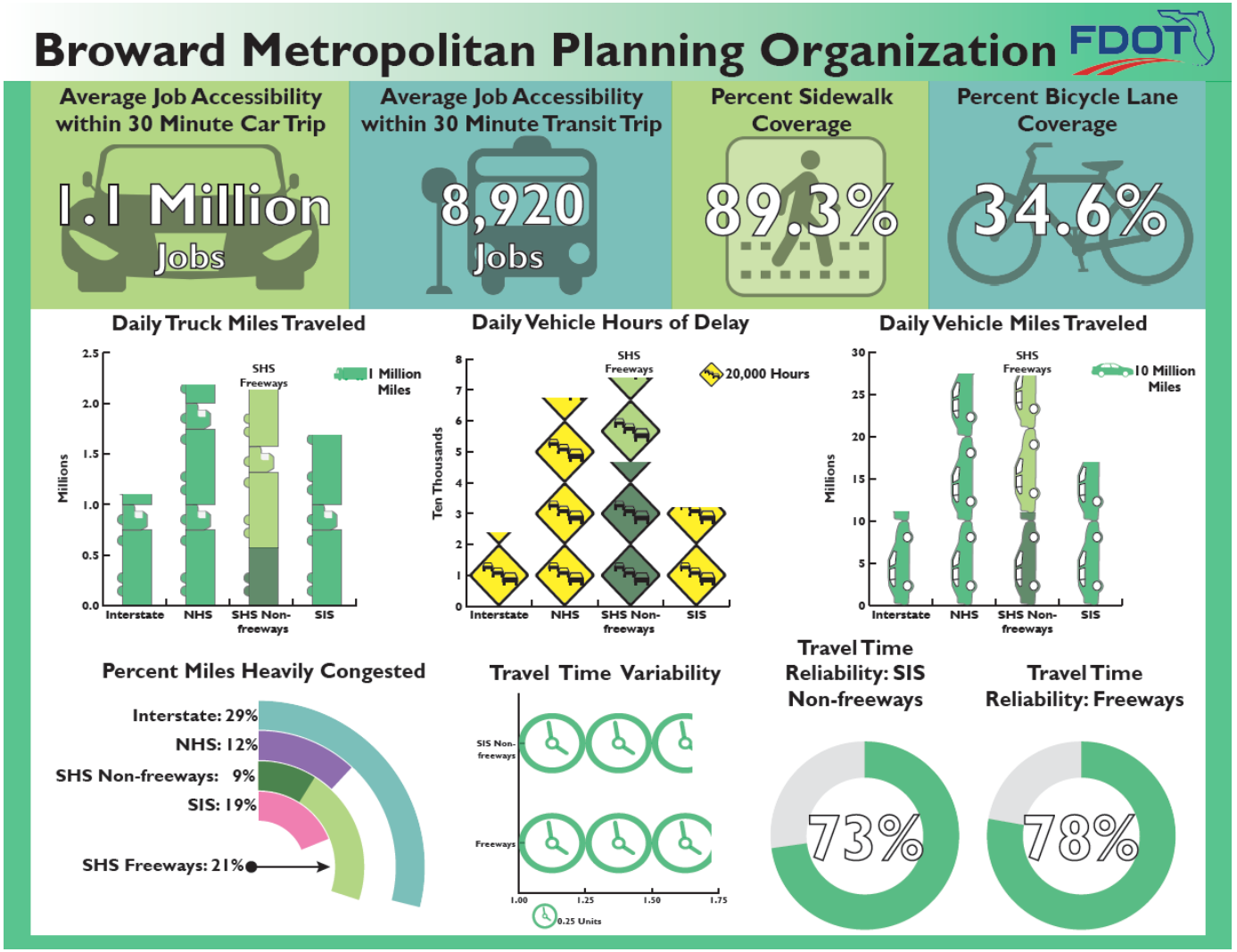
Networks/Measures	A: Daily vehicle miles traveled (Millions)	B: Daily truck miles traveled (Millions)	C:Travel time reliability in the peak hour	D:Travel time variability	E: Daily vehicle hours of delay (Thousands)	F: Percent miles heavily congested	G: Percent sidewalk coverage	H: Percent bicycle lane coverage	I: Average job accessibility within 30 minute car trip (Millions)	J: Average job accessibility within 30 minute transit trip (Thousands)
A: National Highway System	27.4	2.2			67.4	12%			1.1	8.9
B: Interstate	11.2	1.1	71%	1.85	24.0	29%				
C: Strategic Intermodal System[1]	17.0	1.7	73%	1.65	32.0	19%				
D: State Highway System	27.1	2.1			74.0	12%				
E: Freeways	16.2	1.6	78%	1.72	27.2	21%				
F: Non-freeways (SHS)[2]	11.0	0.6			46.8	9%	89.3%	34.6%		

In 2018:

Daily VMT	Daily Truck miles traveled	Travel Time Reliability	Travel Time Variability	Daily vehicle hours of delay	Percent miles heavily congested	Person miles traveled	Truck Travel Time Reliability	Average Travel Speed	Percent of travel meeting LOS criteria

Sample Handout

Infographics



Perceived Keys to Success in Florida

Our (FDOT/MPO) joint coordination with a common approach

We (FDOT & MPOs) will comply with ultimate federal requirements

FHWA Headquarters quote

FDOT/MPOs can "use their own measures in performance-based planning"

- Florida can use measures and calculation techniques most relevant to us
  - Travel time reliability
  - Congestion
  - Multimodal
  - Other

Target establishment (conservative approach)

FDOT supply every MPO

- Federally required measures
- MPOAC agreed upon additional measures