



Florida Department of  
**TRANSPORTATION**

# Florida Performance Measures Workshop

David Lee  
Office of Policy Planning  
September 28, 2016





## Florida Takes Collaboration to the Next Level

### Collaboration Workshop

Florida has 27 Metropolitan Planning Organizations (MPOs), the most of any State in the country. Effective coordination among and between the MPOs, the Florida Department of Transportation (FDOT), and their Federal partners is especially important. One element of this cooperation is a Statewide Meeting, held over one-and-a-half days and attended by representatives of the MPOs, FDOT, the Federal Highway Administration (FHWA), and the Federal Transit Administration (FTA). The meeting provides opportunities for transportation staff from across the State to network, learn about current topics, and share ideas.

A full morning of the April 2014 meeting was devoted to a Performance Management Workshop. The Workshop included representatives from FHWA, FDOT, and nearly all of the Florida MPOs. FDOT selected performance management as the topic of special Workshop emphasis due to staff interest and questions about the new MAP-21 performance management requirements. Many MPO staff came to the Workshop with questions:

- What additional level of effort will performance management require?
- How will performance management become part of the Certification process?

### KEY ACCOMPLISHMENTS

- Early collaboration between Federal, State, and regional transportation agencies on performance management prepares Florida for successful implementation of the MAP-21 requirements.
- FDOT has created a Performance Measurement Task Force, which includes representatives from DOT district offices and the MPOs.
- How will performance management be useful for metropolitan planning if the data and targets are focused on the state level?



Figure 1. MPO participants at the Collaboration Workshop

The performance management session of the Workshop opened with a brief presentation on the performance management aspects of MAP-21 and on the process and schedule of rulemakings associated with performance management. The key message was that transportation funding will continue to be constrained at both the Federal and State levels, and performance management is a proven business practice to efficiently manage available funding around desired outcomes.



U.S. Department of Transportation  
Federal Highway Administration

# Noteworthy Practices

# Florida Performance Measures Workshops

FDOT • FHWA • FTA • MPO STATEWIDE MEETING



## Collaboration Workshop MAP-21 Performance Measures

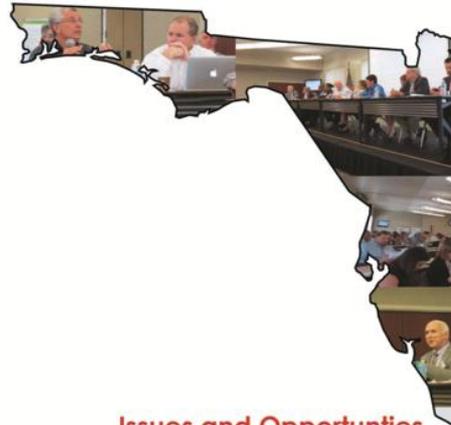
April 3, 2014



FDOT • FHWA • FTA • MPO STATEWIDE MEETING



## Collaboration Workshop Performance Measures



Issues and Opportunities  
April 15, 2015



FDOT • FHWA • FTA • MPO STATEWIDE MEETING



**FLORIDA METROPOLITAN  
PLANNING PARTNERSHIP  
STATEWIDE MEETING**

**SEPTEMBER 27 & 28, 2016**

Collaboration Workshop  
Performance Measures  
2016



# Agenda

- **Review Objectives and Interactive Approach**

- **Partner Updates**

- FDOT Update
- Federal Update
- MPOAC Update

- **Break**

- **Future Collaboration**

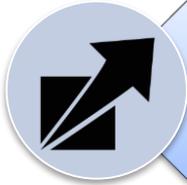
- MPO Pilot Project
- Moving Forward Together
- Closing / Workshop Evaluation

- **Adjourn**

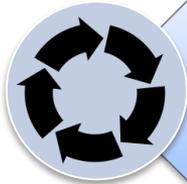
# Workshop Objectives



Provide an interactive forum to engage, ask questions, and offer ideas



Review recent performance activities, data resources, and other developments



Discuss the respective roles of and expectations for Central Office, Districts, and MPOs



Review the MPO Performance Pilot project status and obtain feedback



Evaluate Workshop value to participants

FLORIDA DEPARTMENT OF TRANSPORTATION



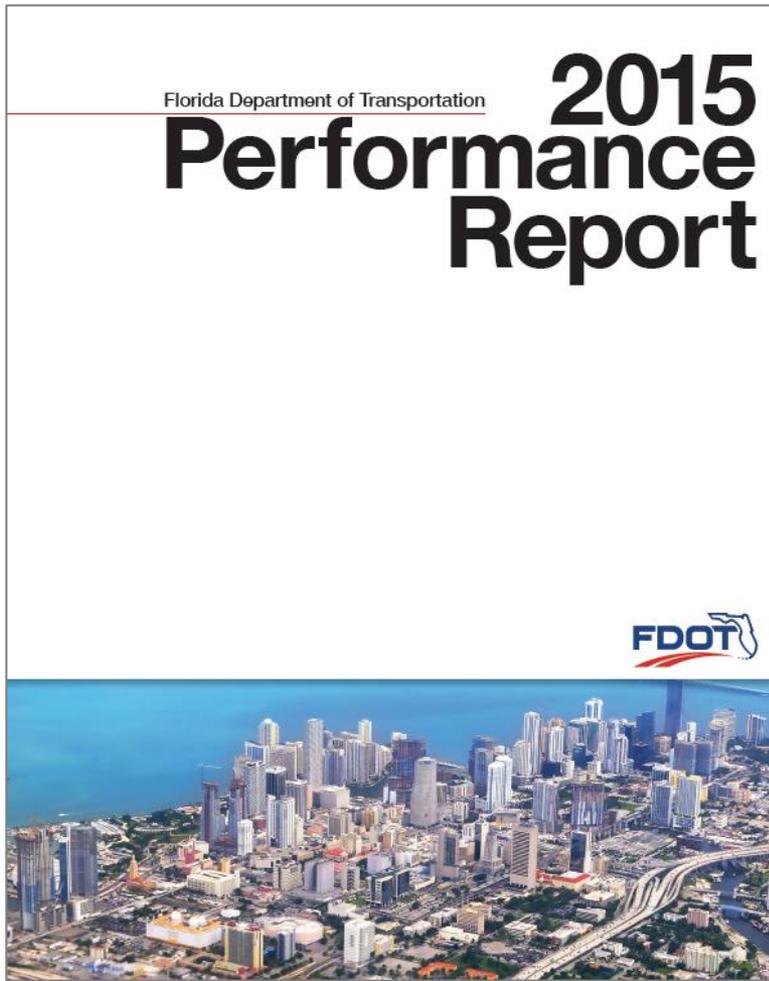
## ASSET MANAGEMENT PLAN

*PRESERVING THE STATE'S INFRASTRUCTURE*



# Asset Management Plan Adopted October 2015

# 2015 Performance Report



Safety

Preservation

Mobility

Economy

Environment

# 2 Types of Measures

**14**



**CORE  
MEASURES**

**73**



**SUPPORTING  
MEASURES**



# 14 Core Measures

## Safety

- **Fatalities**
- **Serious Injuries**

## Preservation

- Percent **Bridges** meeting standards
- Percent **Pavement** meeting standards
- **Maintenance** rating of the SHS
- **Transit** revenue miles between failures

## Mobility

- **Quantity:** e.g., Vehicle Miles traveled during peak hour
- **Quality:** e.g., Travel Time Reliability on Freeways
- **Accessibility:** e.g., Commute times less than 30 minutes
- **Utilization:** e.g., Travel on Severely Congested Roads

## Economy

- **Return on Investments**
- Construction project completed **On-Time**
- Construction projects completed **within Budget**

## Environment

- **Air Quality**



# 73 Supporting Measures

## Safety

- Fatality Rate
- Fatalities involving:
  - Lane Departures
  - Intersections
  - Construction Work Zones
  - Impaired Driving
  - Aggressive Driving
  - Distracted Driving
  - Drivers 65 and Over
  - Teen Drivers
  - Pedestrians
  - Bicyclists
  - Motorcyclists
  - Rail Crossings
  - Public Transit
  - Aviation
- Seat Belt Usage
- Commercial Vehicle Crash Rate
- Railroad Derailments
- Transit Miles Between Safety Incidents

## Preservation

- Lane Mile Resurfacing Projects
  - Bridges with Weight Restrictions
  - Bridge Repair Projects
  - Bridge Replacement Projects
  - Roadway Maintenance
  - Roadside Maintenance
  - Traffic Services Maintenance
  - Drainage Maintenance
  - Vegetation Aesthetics Maintenance
- for ITS
- ITS Miles Managed by FDOT
  - Florida 511 Program (FL511) Calls, Visits, Messages & Alerts
- FOR INCIDENT MANAGEMENT
- Road Rangers Service Assists
  - State Average Roadway Clearance Times
  - State Average Rapid Incident Scene
  - Clearance (RISC) Times

## Environment

- Carbon Dioxide (CO<sub>2</sub>)
  - Water Quality – Wetland Mitigation
  - Project Screenings
  - Recycled Pavement
  - Alternative Fuel Vehicles
- ENVIRONMENTAL AND WILDLIFE PROTECTION
- Miles of Noise Walls
  - Wildlife Crossings
- VIBRANT AND ATTRACTIVE COMMUNITIES
- Designated Scenic Highways
  - Roadside Attractiveness
  - Roadsides Kept Litter Free
  - Transportation Alternatives/Transportation Enhancements
  - Transportation Disadvantaged Trips
- CUSTOMER SATISFACTION SURVEYS
- Satisfaction with Florida Highways
  - Roadside Attractiveness
  - Roadside Kept Litter Free
- HEALTHY COMMUNITIES

## Economy

- Capacity Funds for the SIS
- Florida-Originating Exports
- Florida Share of US Trade Flow
- Total Value of Freight
- Jobs by Transportation-Intensive Sectors



# 73 Supporting Measures

## Mobility

### Travel Quantity

- Vehicle Miles of Travel
- Vehicle Miles Traveled per Capita
- Combination Truck Miles Traveled
- Transit Passenger Trips
- Aviation Passenger Boardings
- Seaport Passenger Trips
- Rail Passenger Trips
- TEU (20-foot equivalent unit) Containers
- Freight Tonnage

### Travel Quality

- Level of Service (LOS)
- Pedestrian and Bicycle LOS
- Vehicle Hours of Delay
- Combination Truck Hours of Delay
- Travel Time Reliability
- Aviation and Rail Departure Reliability
- Transit Headways

### Accessibility

- Commute Times Less Than 30 Minutes
- Bicycle and Pedestrian Facilities
- Aviation, Rail, and Seaport Highway Adequacy

### Utilization

- Miles Severely Congested
- Travel Severely Congested

# Florida Transportation Plan

## Vision Element

Trends, uncertainties, themes that will shape the future of transportation in Florida (50 years)



## Policy Element

Goals and objectives to guide FDOT and partners toward the vision (25 years)



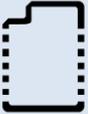
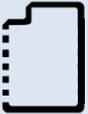
## Implementation Element (2016)

Emphasis areas with key actions (5-25 years)

# Performance Report - FTP Goal Connection



# FDOT Annual Performance Report Schedule

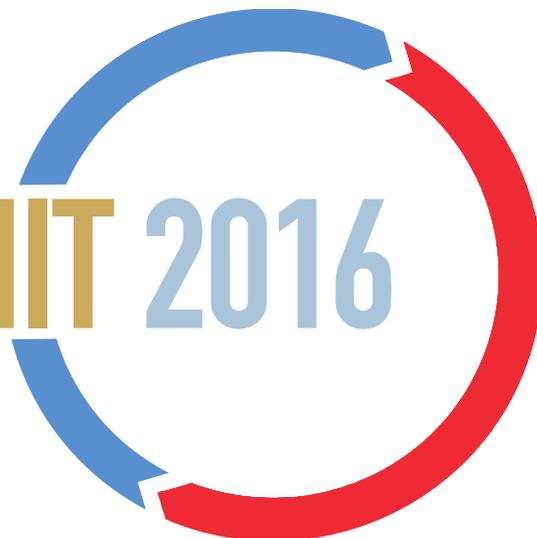
Month		Milestone
May		Conduct Performance Summit with Partners
June		Conduct Performance Workshops
October		Complete 1 <sup>st</sup> drafts of Performance Reports
December		Complete Final Drafts
January		Publish Performance Report
May		Presentation to management on prior year performance



Florida Department of  
**TRANSPORTATION**

# PERFORMANCE **SUMMIT** 2016

FOR TRANSPORTATION PARTNERS



Sponsored by the Florida Department of Transportation Office of Policy Planning

Opening  
(May 10)

**Brian Blanchard**  
Assistant Secretary FDOT



**Jim Wood**  
State Transportation Planning Administrator

Mobility  
(May 10)

**Beth Alden**  
Hillsborough MPO



**Brad Thoburn**  
Jacksonville Transportation Authority



**Michael Stewart**  
Jacksonville Aviation Authority



Economy  
(May 11)

**Mark Bontrager**  
Space Florida



**Tisha Keller**  
Florida Trucking Association



**Natacha Yacinthe**  
Port Everglades



Preservation  
(May 11)

**James Cromar**  
Broward MPO



**Jim Warren**  
Asphalt Contractors Association



**Chris Cochran**  
Pinellas Suncoast Transit Authority



Environment  
(May 12)

**Chris Stahl** Department of  
Environmental Protection



**Sam Poole**  
Urban Land Institute



**Julie Dudley**  
FL Department of Health



Safety  
(May 12)

**James Hightower** Department of  
Highway Safety and Motor Vehicles



**Steve Myers**  
Lee Tran



**Don Scott**  
Lee MPO



Results  
(May 25)

**Carl Mikyska**  
MPOAC



**Becky Afonso**  
Florida Bicycle Association



**Lee Ann Jacobs**  
FHWA



**Mike Rubin**  
Florida Ports Council



# Performance Summit Panelists

# Partner Perspectives

## Results

PERFORMANCE SUMMIT 2016  
FOR TRANSPORTATION PARTNERS



## Summary

FDOTPERFORMS.ORG



Office of Policy Planning  
david.lee@dot.state.fl.us

## Mobility Results



### IDEAS

- A peer exchange network for transit agencies to share and compare performance
- Integrate real time data into performance reporting
- Shared performance measures with joint partner monitoring
- Social media as a platform for performance information
- Incorporating bicycle and pedestrian usage, trip and other data
- An MPOAC subcommittee comprised of Bike/Ped Coordinators



### ISSUES TO CONSIDER

- Reporting both statewide and local performance
- Transportation/Land use connection (e.g., Transit Oriented Development)
- A results scorecard/dashboard program for MPOs
- Improved pedestrian access to fixed route bus stops and associated measures
- Balancing Speed vs. Mobility vs. Safety to assess performance



### POTENTIAL MEASURES

- Map showing travel time contours between major origins and destinations
- Bus and car travel time comparisons in key corridors
- Bike/ped number of trips
- Changes in customer satisfaction and usage of bike/ped networks
- ITS coverage
- Estimated use of automated vehicle technology
- Modal performance comparisons
- Average transit load factors
- Transit access
- On-time performance
- Telecommuting

6-5

View Complete Report : [www.dot.state.fl.us/planning/performance/summit/reports/MobilityResults.pdf](http://www.dot.state.fl.us/planning/performance/summit/reports/MobilityResults.pdf)



# FDOTPERFORMS.ORG

# 2016 Performance Workshops

## *“Making Connections for Performance Excellence”*

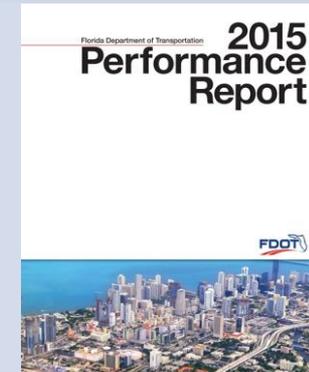
### Evaluate Summit Results



### Consider FTP Linkages



### Review 2015 Performance Report



	MON June 13	TUES June 14	WED June 15	THRS June 16
9 AM		Environment	Mobility	Safety
2 PM	Kick-off	Preservation	Economy	



## Florida Department of Transportation

605 Suwannee Street  
Tallahassee, FL 32399-0450

RICK SCOTT  
GOVERNOR

JIM BOXOLD  
SECRETARY

### POLICY

Effective: July 15, 2016  
Office: Policy Planning  
Topic No.: 000-525-052-b

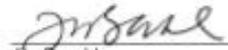
### PERFORMANCE MANAGEMENT

It is the policy of the Florida Department of Transportation (department) to link performance measures to planning and programming decision making. This informs decisions and provides feedback on transportation system performance, agency operations and program outcomes. Performance management also encompasses asset management and performance measurement reflecting the department's priorities for accountability and stewardship of resources.

As the department implements performance management, its agency-wide application will be improved by:

- Regularly reporting on performance measures spanning the department's operations including, but not limited to, transportation system performance measures, production measures and mission-related measures;
- Establishing and maintaining transportation system performance core measures that align with our mission, priorities, and long-term goals;
- Ensuring that our asset management efforts include useful measures of performance;
- Building performance measures into our plans and programs to advance performance-based planning and programming practices;
- Establishing and tracking future performance targets;
- Collaborating among Central Office and District Office staff, including a yearly performance measurement workshop to begin an annual cycle of performance report development;
- Collaborating with MPOs, transit operators and other stakeholders as appropriate for a coordinated approach to performance measurement; and
- Consistently reporting and communicating performance results to be used in informing planning and programming decision making.

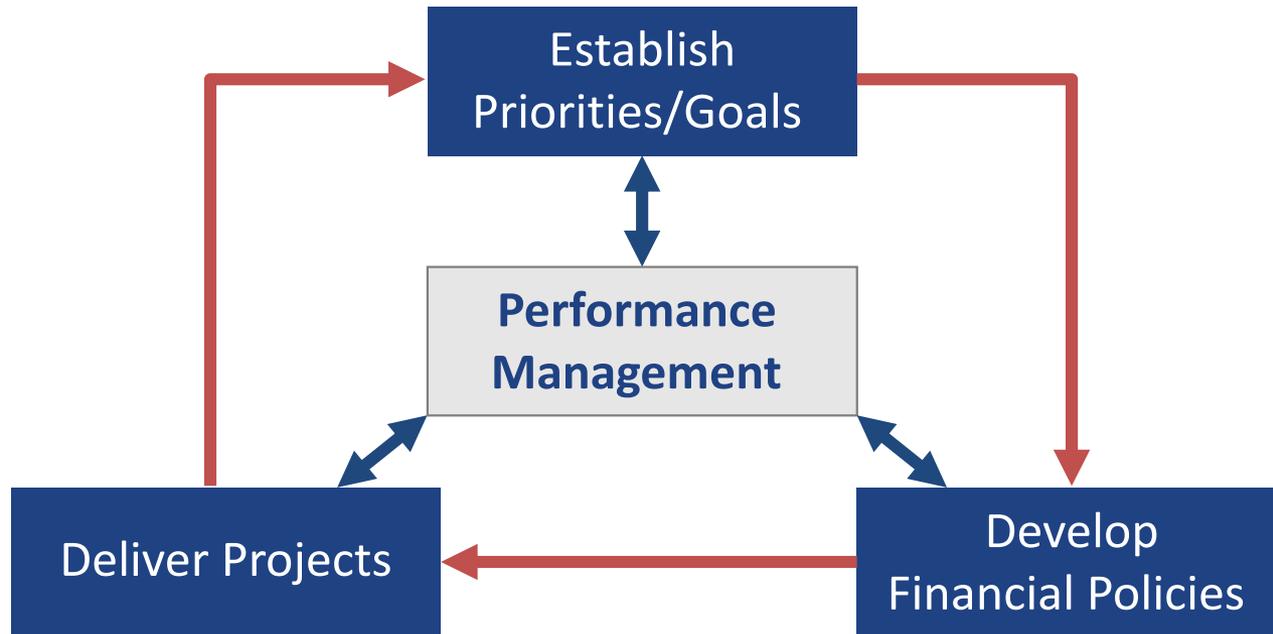
Because performance management generally, and performance measurement specifically depend on reliable data, department program and office managers are responsible for coordinating the measures they use to achieve consistent reporting of measures.

  
Jim Boxold  
Secretary

[www.dot.state.fl.us](http://www.dot.state.fl.us)

# Performance Measurement Policy Updated July 15, 2016

# Performance-Based Planning and Programming

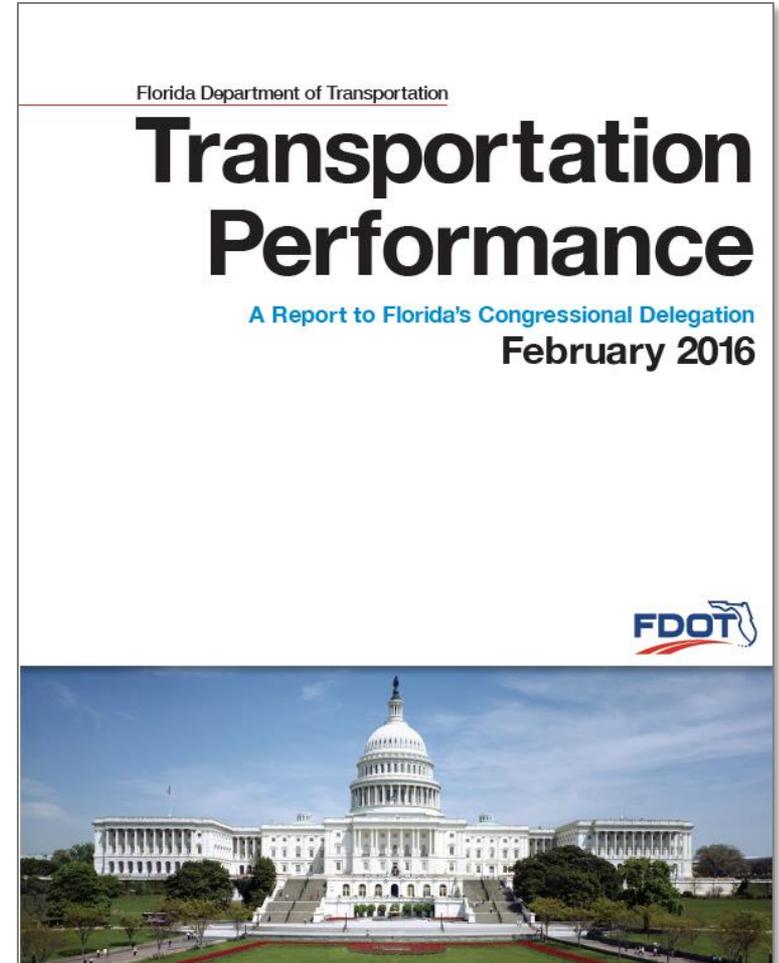
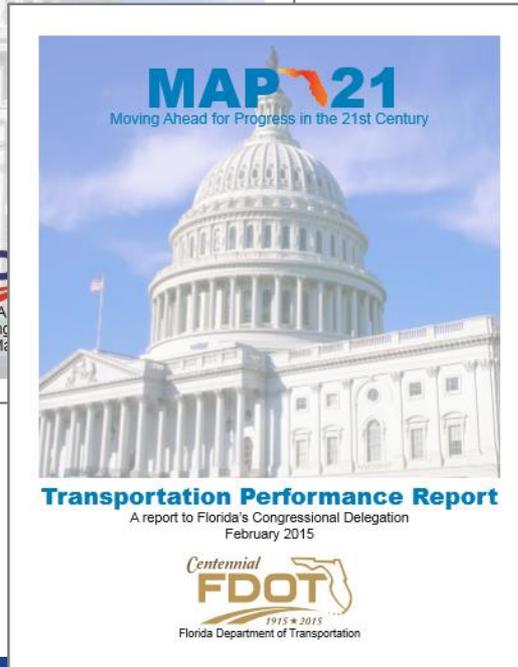
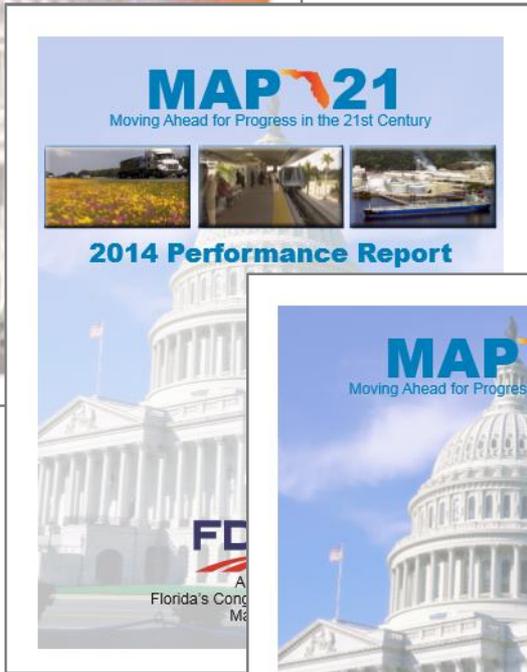
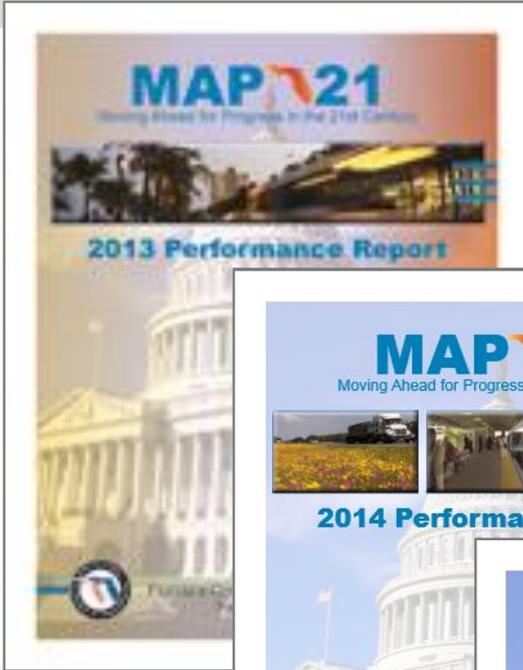




# Safety Partners



# Four Annual MAP-21 Performance Reports

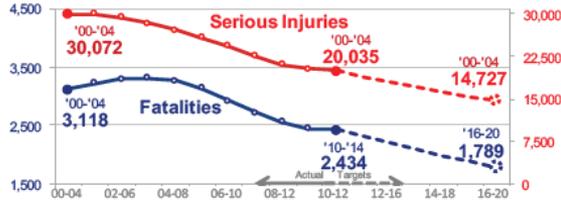


## SAFETY

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.

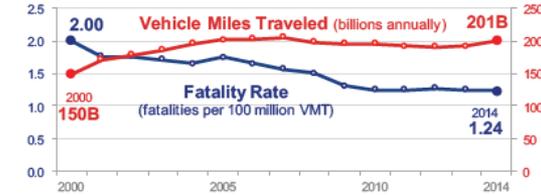
### Fatalities & Serious Injuries

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.

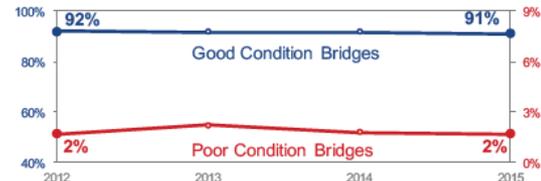


## PRESERVATION

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.

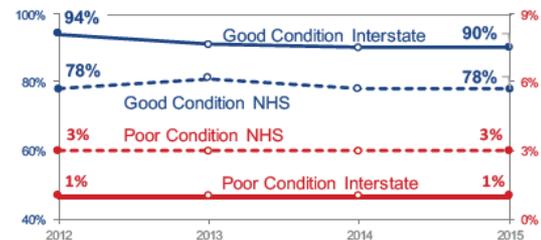
### Bridges

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.

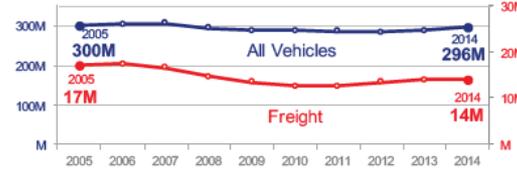


Moving people and goods is transportation's essential purpose. As travel demand changes, Florida continues to improve our multimodal transportation system. Data shows all vehicles and combination trucks (freight) for the State Highway System.

## MOBILITY

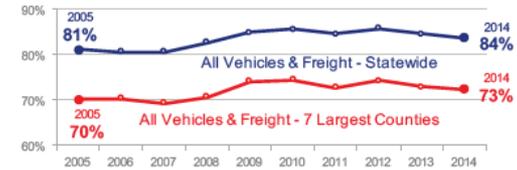
### Vehicle Miles Traveled

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.



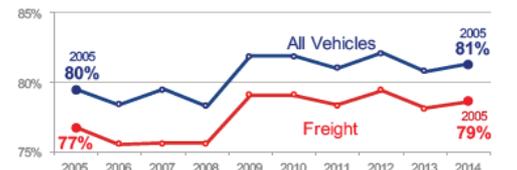
### Delay

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.



# 2016 MAP-21 Performance Report

# Federal Reporting Timeline





**Florida Department of Transportation**

RICK SCOTT  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

JIM BOXOLD  
SECRETARY

September 27, 2016

Francine Shaw Whitson  
Office of Transportation Performance Management (HIPM-10)  
Federal Highway Administration, Room E76-338  
1200 New Jersey Avenue, SE  
Washington, DC 20590

Dear Ms. Whitson:

The Florida Department of Transportation (FDOT) is pleased to provide you with our State Performance Report in accordance with the Guidance issued by Federal Highway Administration on August 31, 2016. FDOT's performance reporting aligns closely with the requirements for the federal-aid highway program found in section 150 of title 23, United States Code.

We have issued a MAP-21 Performance Report for each of the last four years. Our February 2016 report is enclosed. It summarizes Florida's transportation performance in three areas:

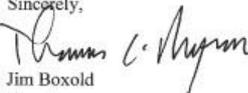
- Transportation safety
- Infrastructure preservation – bridges and pavements
- Mobility measures including freight and passenger transportation

We continue to expand our collaboration with Florida's 27 metropolitan planning organizations (and other partners as well). Thank you for being a valued partner by participating in each of our Collaboration Workshops over the past three years.

I am committed to us continuing to lead and innovate in the vitally important area of performance management. Our performance reports, Asset Management Plan and Performance Management Policy are available at [FDOTperforms.org](http://FDOTperforms.org).

Please contact David Lee at (850) 414-4802 if you have any questions about our report.

Sincerely,

  
For Jim Boxold  
Secretary

cc: James Christian, FHWA Division Administrator

[www.dot.state.fl.us](http://www.dot.state.fl.us)

# Florida Performance Report to FHWA by October 1, 2016

# Federal Rulemaking Status

Rulemaking	NPRM Schedule
Safety Performance Measures	NPRM: March 11, 2014 <b>Final Rule: March 15, 2016</b>
Highway Safety Improvement Program	NPRM: March 28, 2014 <b>Final Rule: March 15, 2016</b>
Statewide and Metropolitan Planning	NPRM: June 2, 2014 <b>Final Rule: May 27, 2016</b>
Pavement and Bridge Performance Measures	NPRM: January 5, 2015 <b>Closed May 8, 2015</b>
Highway Asset Management Plan	NPRM: February 20, 2015 <b>Closed May 29, 2015</b>
System, Congestion, Freight Performance Measures	NPRM: April 22, 2016 <b>Closed Aug 20, 2016</b>
MPO Coordination and Planning Area Reform	NPRM: June 27, 2016 <b>Reopened September 23</b>

# MPO Coordination and Planning Area Reform

## Reopened NPRM (comments due October 23)

### Impact of the requirements for unified planning products

where multiple MPOs serve the same urbanized area

### Potential exceptions

that should be included in the final rule and criteria for applying such exceptions

### Expected costs

of implementing the rule

# Proposed Federal Measures and Coverage

## Safety (all public roads)

- Number of Fatalities
- Number of Serious Injuries
- Rate of Fatalities per 100 million VMT
- Rate of Serious Injuries per 100 million VMT
- Number of non-motorized fatalities and non-motorized serious injuries

## Pavement

- % of pavements of the Interstate System in Good condition
- % of pavements of the non-Interstate NHS in Good condition
- % of pavements of the Interstate System in Poor condition
- % of pavements of the non-Interstate NHS in Poor condition

## Bridge

- % of NHS Bridges Classified as in “Good” Condition
- % of NHS Bridges Classified as in “Poor” Condition

# Proposed Federal Measures and Coverage

## NHS



- % of the Interstate System providing for Reliable Travel Times
- % of the non-Interstate NHS providing for Reliable Travel Times
- % of the Interstate System where Peak Hour Travel Times meet expectations
- % of the non-Interstate NHS where Peak Hour Travel Times meet expectations

## Freight



- % of the Interstate System Mileage providing for Reliable Truck Travel Times
- % of the Interstate System Mileage Uncongested

## CMAQ



- Annual Hours of Excessive Delay Per Capita
- Total Emission Reductions

# Federal Performance Measures

(as of 9/28/16)

**5**

**FINAL  
MEASURES (Safety)**

**14**

**PROPOSED  
MEASURES**

# Roles and Responsibilities - Performance Management Framework

## MAP-21 and FAST Act

- Establishes National Performance Goal Areas (Public Law)

## USDOT

- Establishes National Performance Measures (Final Rules)

## State DOTs, MPOs, Providers of Public Transportation

- Establish performance targets

## State DOTs and MPOs

- Include performance targets in their plans
- Link investment priorities to performance targets
- Report on progress



# What Has Not Changed: Establishment of Performance Targets

## States shall:

- set performance targets ***within 1-year*** of the effective date of the DOT final rule on performance measures for the performance areas described in 23 U.S.C. 150(c) and 23 CFR part 490. (450.206(c)(2))

## Each MPO shall:

- set performance targets ***not later than 180-days after*** the State or public transportation provider establishes performance targets. (450.306(d)(3))



# Florida Performance



The screenshot shows the top navigation bar of the FDOT website. The 'Performance' link is circled in red, with a red arrow pointing to it from the right. Below the navigation bar, a large banner reads 'Coming Soon... www.fdot.gov' with a magnifying glass icon. At the bottom of the banner, there is a text block and a numbered list of five items.

FDOT Florida Department of TRANSPORTATION

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Coming Soon...  
[www.fdot.gov](http://www.fdot.gov)

Coming Soon: [www.fdot.gov](http://www.fdot.gov)

On October 7th, FDOT's web address will change from [www.dot.state.fl.us](http://www.dot.state.fl.us) to [www.fdot.gov](http://www.fdot.gov). The goal is to make it easier to remember the department's web address when searching for FDOT information online. [More...](#)

- 1
- 2
- 3
- 4
- 5

[FDOTPerforms.org](http://FDOTPerforms.org)

# Thank you

**David Lee**

**Administrator, Statewide Planning & Policy Analysis**

**[david.lee@dot.state.fl.us](mailto:david.lee@dot.state.fl.us)**

**(850) 414-4802**

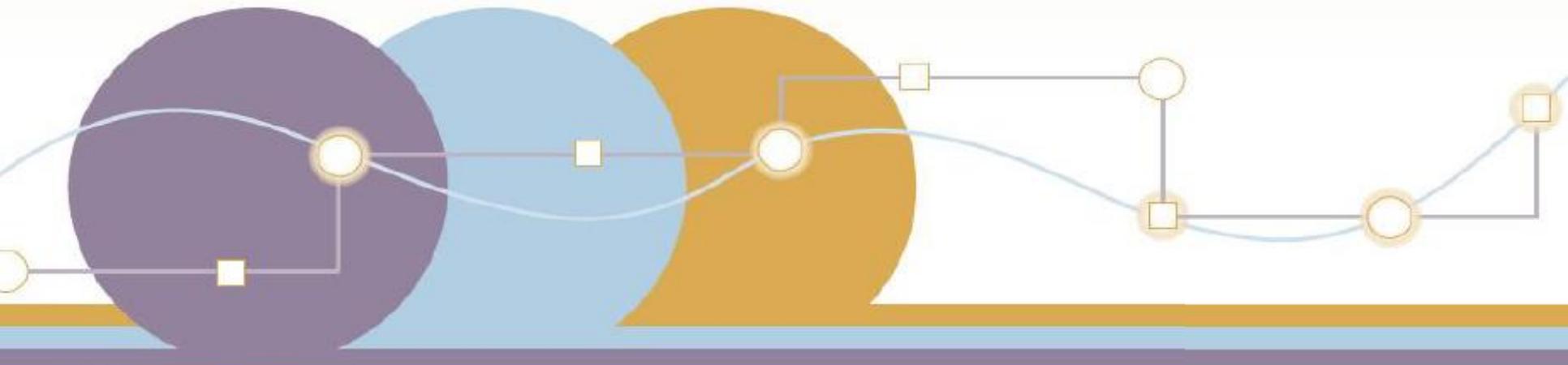


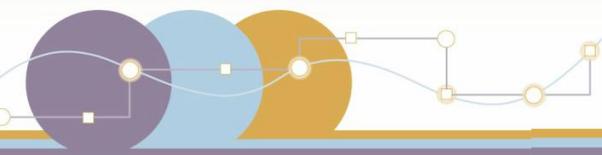
# Performance Management and Implementation

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Florida Statewide Performance Workshop  
Orlando, Florida  
September 28, 2016

Francine Shaw Whitson  
Federal Highway Administration





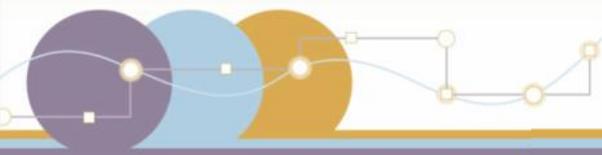
## *Presentation Outline*

Why Transportation Performance Management (TPM)?

National Performance Management Measures

What's Next for FHWA

TPM Professional Capacity Building



## *Why Are We Doing Performance Management?*

To transform the Federal-aid Highway Program and to provide a means to the **most efficient investment** of Federal transportation funds

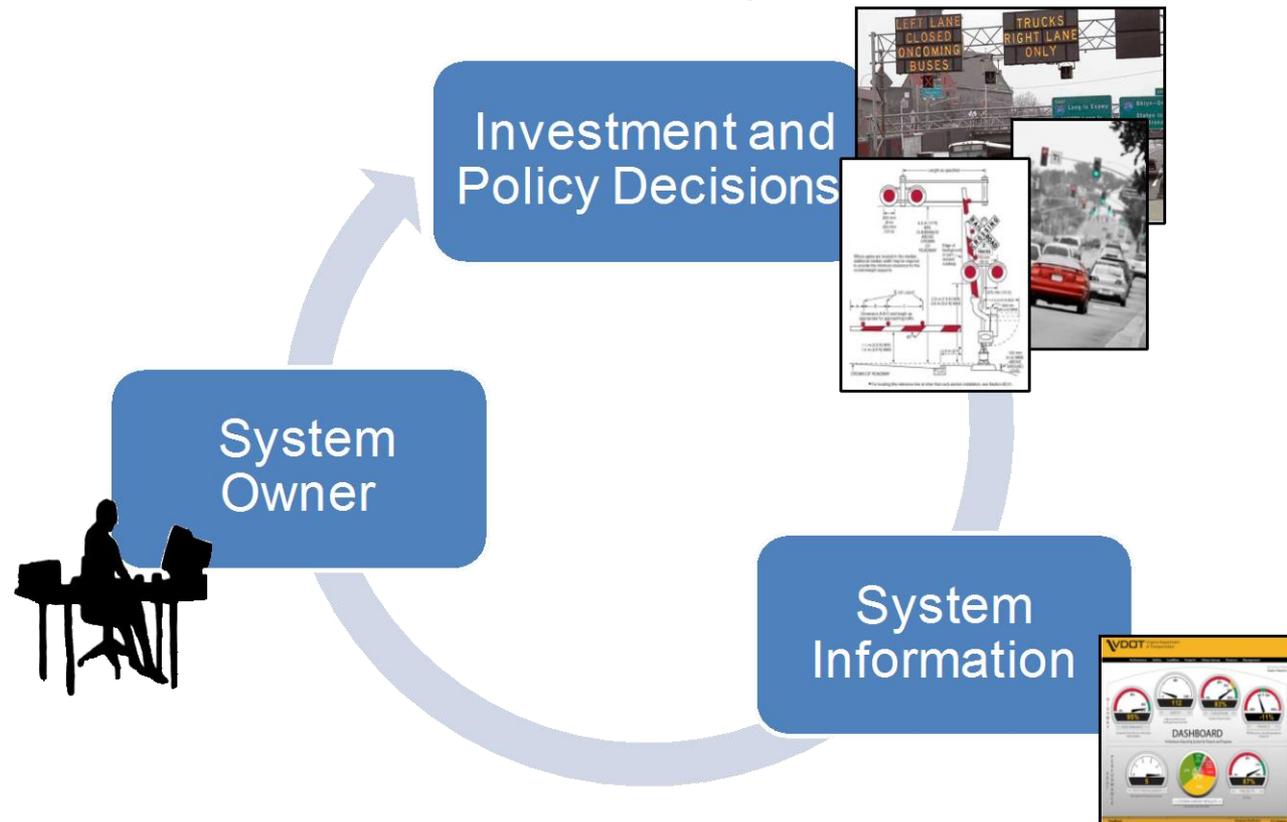
To refocus on **national transportation goals**

To increase the **accountability and transparency** of the Federal-aid Highway Program

To **improve decision-making** through performance-based planning and programming

# What is Transportation Performance Management (TPM)?

A strategic approach that uses system information to make investment and policy decisions to achieve transportation system performance goals



# TPM Roles and Responsibilities

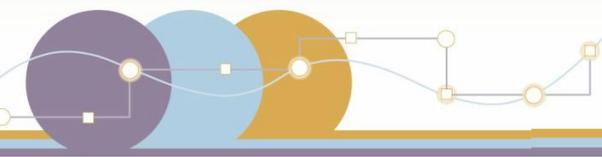
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## USDOT

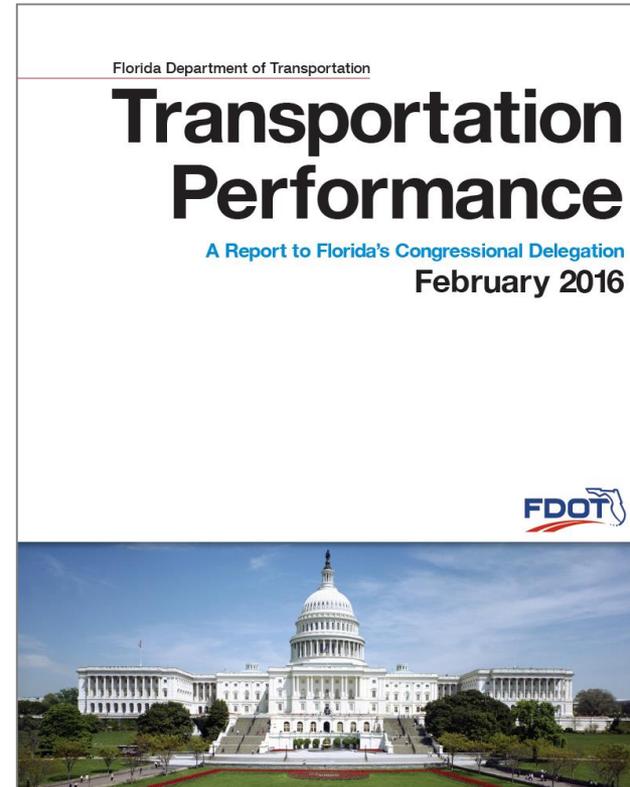
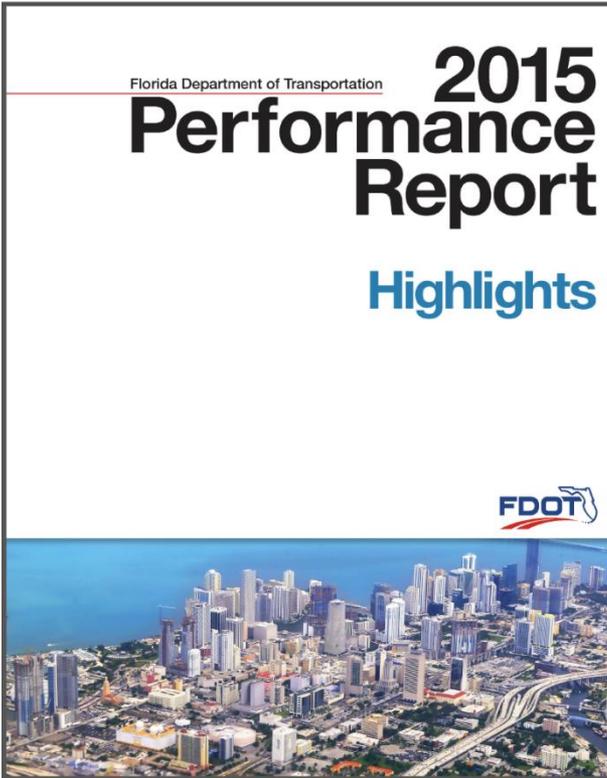
- Rulemaking
- Report to Congress
- Stewardship and oversight

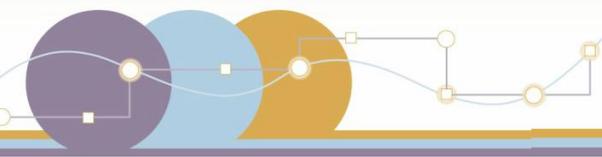
## States and MPOs

- Establish targets
- Incorporate national goals and measures into plans and programs
- Report progress to USDOT (States)

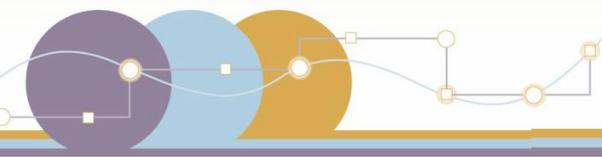


## Florida DOT and Performance Management



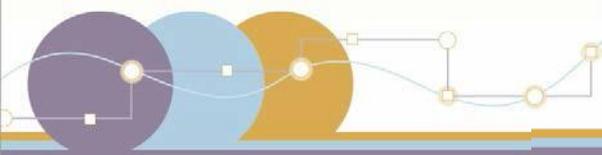


## *National Performance Management Measures*



## ***FHWA Performance Measure Areas***

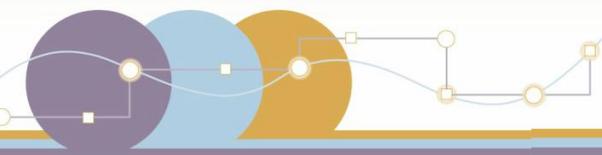
- Highway Safety
- Pavement Condition
- Bridge Condition
- System Performance
- Traffic Congestion
- On-road Mobile Source Emissions
- Freight Movement on the Interstate



# Transportation Performance Management

Performance Areas	NPRM	Final Rule
Safety Performance Measures	March 11, 2014	<b>Published</b> March 16, 2016
Highway Safety Improvement Program	March 28, 2014	<b>Published</b> March 16, 2016
Statewide and Metro Planning; Non-Metro Planning	June 2, 2014	<b>Published</b> May 27, 2016
Pavement and Bridge Condition Measures	January 5, 2015	Anticipated November 2016
Highway Asset Management Plan	February 20, 2015	Anticipated October 7, 2016
System Performance Measures	April 22, 2016	TBD
MPO Coordination	Comments Due October 24, 2016	TBD





## ***Safety Performance Final Rule***



- **5 Measures** (5 year rolling average)
  - Fatalities and Fatality Rate
  - Serious Injuries and Serious Injury Rate
  - Non-motorized safety (Fatalities plus Serious Injuries)

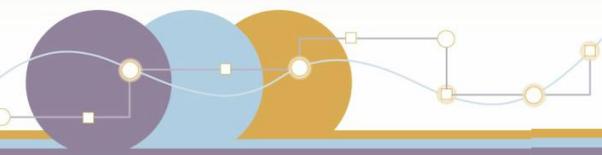


Annual State and MPO targets

One common definition for serious injuries

Annual reporting on performance

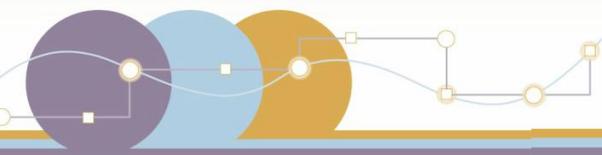
Annual assessment of progress



## *Key Safety Implementation Dates*



- Targets/Progress Reporting
  - July 1, 2017 – NHTSA targets due
  - August 31, 2017 – FHWA targets due
  - February, 2018 – MPO targets due
  - December, 2019 –Progress determination (2016 baseline)
  - March, 2020 – FHWA reports determination to States
  - October 1, 2020 – Consequence of non-compliance



## *Infrastructure Proposals*



### ■ Measures

#### – Bridge condition

- % of bridges in Good/Poor Condition

#### – Pavement condition

- % of pavements in Good/Poor Condition

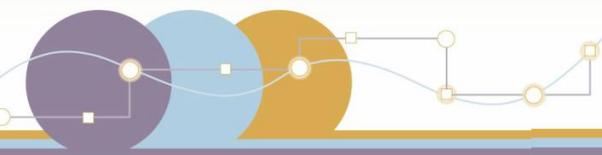


4 year performance periods

State and MPO target setting requirements

2 year progress reviews of States





## *Pavement/Bridge Comment Summary*



### Commenters

- Associations, States, Planning Organizations, Local Governments, Industry, Vendors, Individuals
- 43 States (34% of commenters)

### Themes

NHS Ownership

Declining Conditions

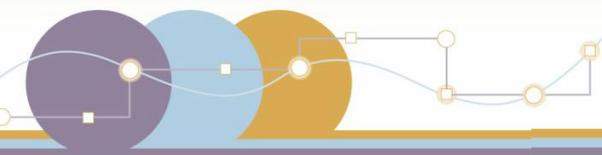
Implementation Timing

Minimum Condition Provisions

Pavement Measure

Data Collection and Reporting

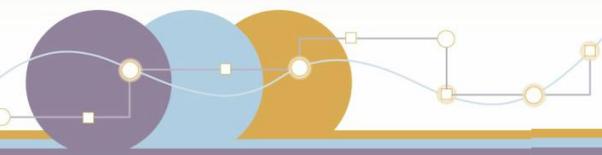




## ***Key Proposed Non-Safety Implementation Dates***



- **Targets/Progress Reporting**
  - October, 2018 – State targets/baseline report due
  - NLT 180 days after – MPO targets due
  - October, 2020 –Progress determination
  - October, 2022 – Consequence of non-compliance
- **Bridge/Pavement Minimum Condition**
  - June, 2016 – Bridge determination (3 consecutive years)
  - October, 2016 – Bridge penalty
  - 1 year after effective date – Pavement determination (1 year)
  - Following fiscal year – Pavement penalty



## System Performance/Freight/CMAQ Proposed Measures



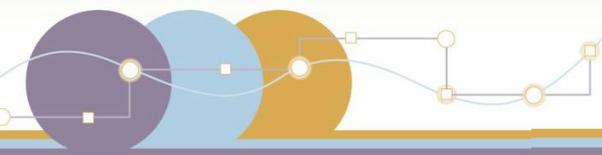
### ■ Performance of the NHS

#### Travel Time Reliability

- % of the Interstate System providing for reliable travel times
- % of the non-Interstate NHS providing for reliable travel times

#### Peak Hour Travel Time

- % of the Interstate system in urbanized areas over 1 million in population where peak hour travel times meet expectations
- % of the non-Interstate NHS in urbanized areas over 1 million in population where peak hour travel times meet expectations



## System Performance/Freight/CMAQ Proposed Measures



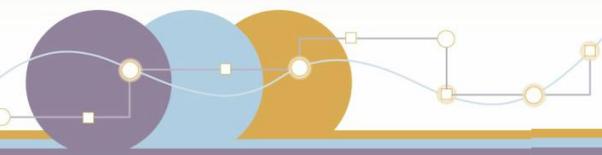
### Freight Movement on the Interstate System

- % of the Interstate System Mileage providing for Reliable Truck Travel Times
- % of the Interstate System Mileage Uncongested

### CMAQ Program

- Traffic Congestion
  - Annual Hours of Excessive Delay Per Capita
- On-Road Mobile Source Emissions
  - Total Emission Reductions





## System Performance/Freight/CMAQ Proposed Target Establishment



### For Travel Time Reliability and Freight Movement on the Interstate Measures

- State DOTs establish 2- and 4-year targets. MPOs either agree to support statewide target or establish their own.

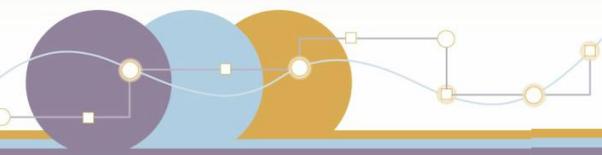
### For Peak Hour Travel Time and Traffic Congestion Measures

- State DOTs and MPOs collectively establish single, unified targets for each applicable urbanized area.

### For On-Road Mobile Source Emissions Measure

- MPOs that have applicable projects establish targets





## *System Performance/Freight/CMAQ Proposed Primary Data Sources*



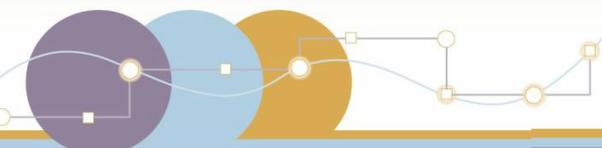
For Travel Time Reliability,  
Peak Hour Travel Time,  
Freight Movement, and  
Traffic Congestion Measures

- *National Performance Management Research Data Set (NPMRDS) or equivalent*

For On-Road Mobile Source  
Emissions Measure

- *CMAQ Public Access System*





## *Performance/Freight/CMAQ Comment Summary- as of August 20*

- Number of comments –  
**8888**
- Commenters
  - Associations (T4A, League of American Bicyclists, Safe Routes to School National Partnership, Rails to Trails, American Heart Association, People for Bikes, etc.), States, Planning Organizations, Local Governments, Industry, Vendors, Individuals
  - 65% States (34 total)

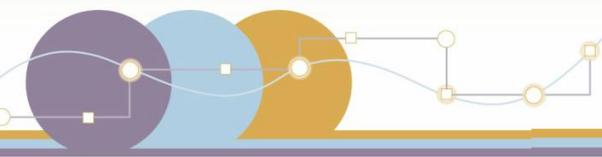
### Themes

Multi-modal reliability measures (i.e., bicyclists and pedestrians)

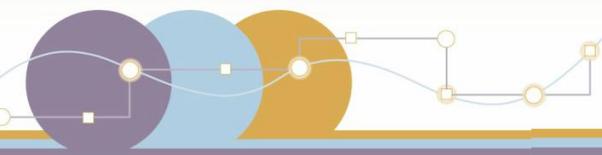
Multi-modal congestion measures (i.e., biking, walking or taking transit)

Greenhouse Gas (GHG) measure



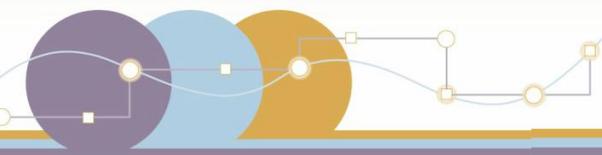


***What's next for FHWA?***



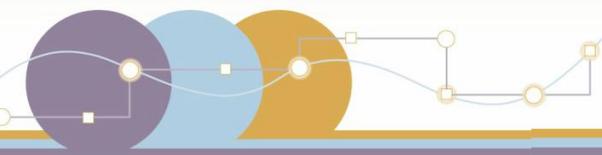
## *What's Next from FHWA?*

- Final Rules- Pavement/Bridge Condition Measures, System Performance/ Freight/ CMAQ Measures, Asset Management Plan
- Guidance
- Training
- Workshops and Peer Exchanges
- Technical assistance and support



## *Proposed Guidance Areas*

- Initial State Performance Report ✓
- Target Setting
- Significant Progress Determination
- Performance Reporting
- Others?



## ***TPM Training Courses***

**MAP-21 Transportation Performance Management Overview (Including FAST Act Updates)**

**Available Now**

TPM for Safety

Available in October

Performance-based Planning and Programming

Available in October

Effective Target Setting for Transportation Performance Management

Available in November

The Role of Data in TPM

in development

TPM for Pavement

in development

TPM for Bridges

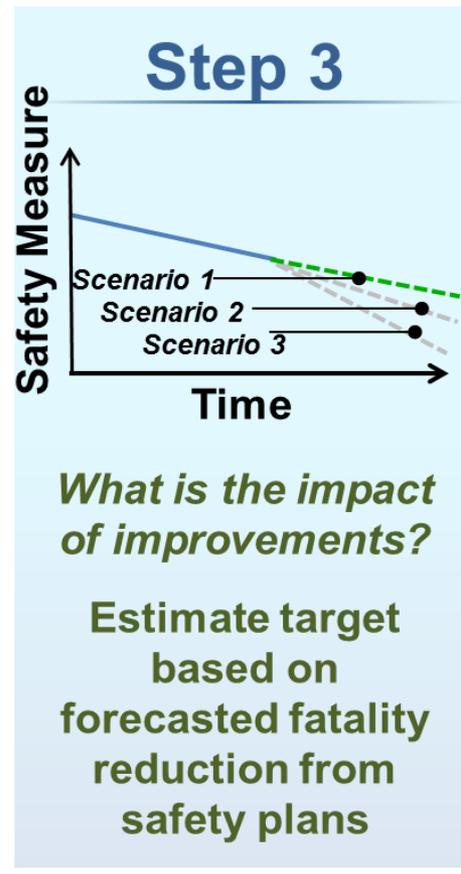
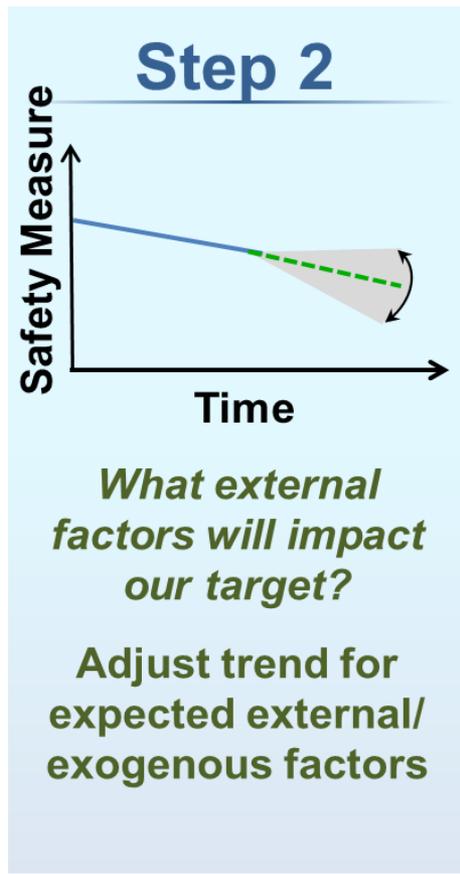
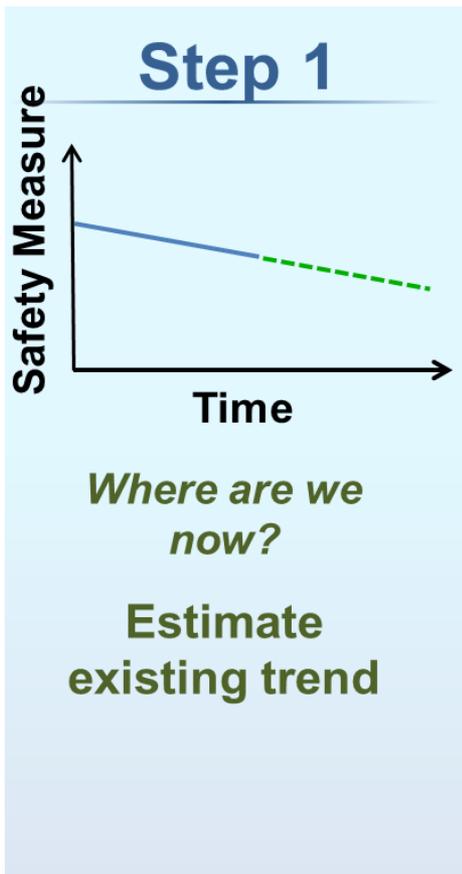
in development

TPM for Congestion Including Freight

in development



## Safety Target Setting Framework



<http://safety.fhwa.dot.gov/hsip/spm/docs/safetyfinalrpt.pdf>

# Safety Target Coordination Report

<http://safety.fhwa.dot.gov/hsip/spm/>

U.S. Department of Transportation  
Federal Highway Administration

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## Safety

About Office of Safety Programs Initiatives Resources Contact

Search Safety

FHWA Home / Safety / HSIP / Safety Performance Management (Safety PM) eSubscribe

### General (HSIP) Information

- Strategic Highway Safety Plan (SHSP)
- Data and Analysis Tools
- High Risk Rural Roads (HRRR)
- Railway-Highways Crossing (Section 130) Program
- Safety Performance Management (Safety PM)
- Rulemaking
- HSIP Resources
- Highway Safety Improvement Program Reports

### Program Contact

Robert Ritter  
robert.ritter@dot.gov  
(202) 366-8408

### Safety Performance Management (Safety PM)

Safety Performance Management (Safety PM) is part of the overall Transportation Performance Management (TPM) program, which FHWA defines as a strategic approach that uses system information to make investment and policy decision to achieve national performance goals. The Safety PM Final Rule supports the HSIP, as it establishes safety performance measure requirements for the purpose of carrying out the HSIP and to assess fatalities and serious injuries on all public roads.

The Safety PM Final Rule establishes five performance measures as the five-year rolling averages for: (1) Number of Fatalities, (2) Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT), (3) Number of Serious Injuries, (4) Rate of Serious Injuries per 100 million VMT, and (5) Number of Non-motorized Fatalities and Non-motorized Serious Injuries. The Safety PM Final Rule also establishes the process for State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to establish and report their safety targets, and the process that FHWA will use to assess whether State DOTs have met or made significant progress toward meeting their safety targets. The Safety PM Final Rule also establishes a common national definition for serious injuries.

Below are helpful resources to support safety target setting as required by the Safety PM Final Rule.

### Fact Sheets

- Safety Performance Measures Fact Sheet
- Met or Made Significant Progress Fact Sheet
- MPO Safety Performance Measures Fact Sheet **NEW!!**

### Supplemental Materials

- State Serious Injury Conversion Tables **NEW!!**
- 2018-2019 HSIP Safety Performance Targets Timeline **NEW!!**
- Safety Performance Measures Resources and Support **NEW!!**
- Technical Guidance to Support Local Computation of VMT-based Safety Performance Targets

U.S. Department of Transportation  
Federal Highway Administration

## Safety Target Coordination Report

September 2016

## TPM Workshop/Peer Exchange Requests

The screenshot shows a web browser window displaying the FHWA website. The page title is "TPM Professional Capacity Building Assistance Request Form". The main content area includes a description of the program, a list of resources (Training opportunities, TPM Workshops and Peer-to-Peer assistance, and Direct programmatic assistance), an eligibility section, and a TPM Request Form section. The right sidebar contains an Email Notification sign-up form, Related Links (FHWA/DOT TPM-related Links, TPM External links), and Contacts (Susanna Hughes-Reck and Michael Nesbitt). The browser's address bar shows the URL "http://www.fhwa.dot.gov/tpm/tpmrequest/".

U.S. Department of Transportation  
Federal Highway Administration

About Programs Resources Briefing Room Contact Search FHWA

### Transportation Performance Management

TPM and MAP-21 Engagement Resources

Home / Programs / Transportation Performance Management / Resources / TPM Professional Capacity Building Assistance Request Form

## TPM Professional Capacity Building Assistance Request Form

The overarching goal of the Federal Highway Administration (FHWA) Transportation Performance Management (TPM) Professional Capacity Building Program (PCB) is to ensure that federal, State departments of transportation (SDOT), metropolitan planning organizations (MPO), transit, and local partners are prepared to carry out performance-based transportation decision-making. Training and programmatic assistance is primarily provided through:

- [Training opportunities](#) (.pdf, 0.2 mb)
- [TPM Workshops and Peer-to-Peer assistance](#) (.pdf, 0.2 mb)
- Direct programmatic assistance from FHWA, other partner agencies, and other organizations via phone calls, web conferences, emails, general instruction, or site visits.

### Eligibility

Any public authority or transportation entity may apply for programmatic assistance for the TPM PCB assistance.

### TPM Request Form

Please complete the form below to request TPM programmatic assistance. FHWA will respond to all requests with recommendations on options for support and assistance.

\* Required Fields

\*First Name:

#### Email Notification

Sign up to receive general notices on TPM

Enter your E-mail

#### Related Links

- [FHWA/DOT TPM-related Links](#)
- [TPM External links](#)

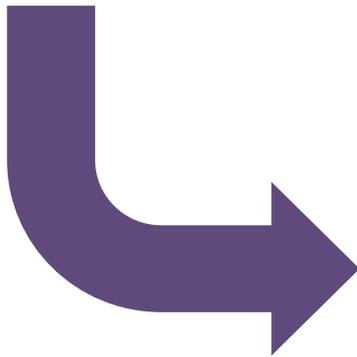
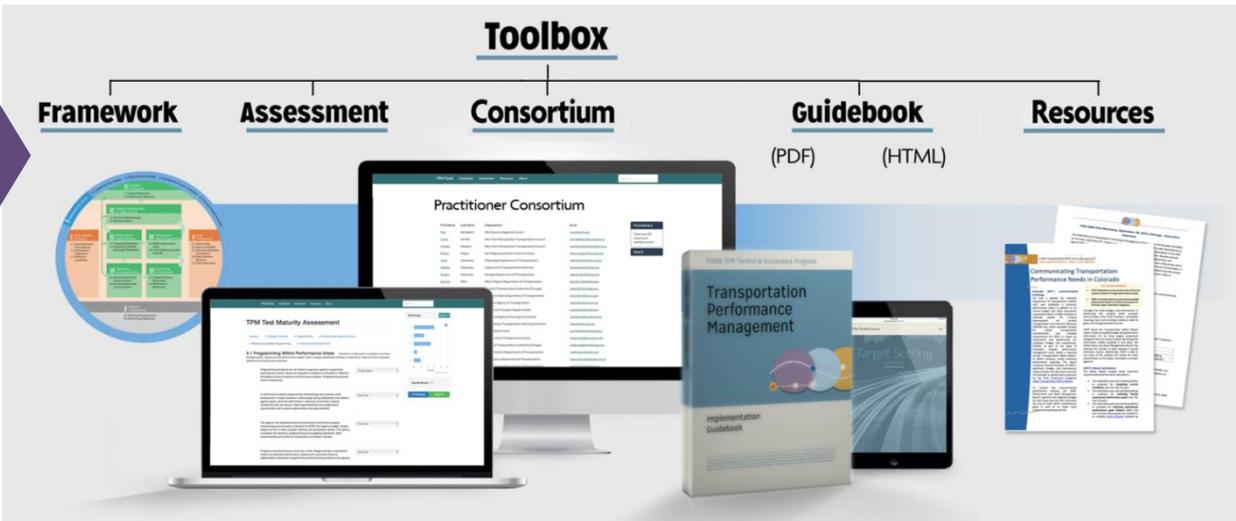
#### Contacts

- **Susanna Hughes-Reck**  
[Office of Transportation Performance Management](#)  
202-366-1548  
[E-mail Susanna](#)
- **Michael Nesbitt**  
[Office of Transportation Performance Management](#)

# Transportation Performance Management

## What is the TPM Toolbox?

CAPABILITY  
MATURITY MODEL



**Peer Exchange**  
*(May 9-10, 2016)*

**Workshops**  
*(Missouri – Pilot, Aug 24-25,  
Michigan –Sept. 29-30)*



**Spur adoption  
and  
advancement  
of TPM**

## Toolbox Homepage

TPM Tools   Guidebook   Assessment   Resources   About   Search

### TPM Toolbox

Development site. Demo only.

This is a draft web site for the FHWA Transportation Performance Management (TPM) Technical Assistance Program.

[Learn more about the TPM tools](#)

#### TPM Guidebook

The TPM Implementation Guidebook provides clear practical actionable steps that state DOT leadership, management, and staff can implement to enhance performance management practices.

#### Self-Assessment

The TPM self-assessment helps to determine your organization's level of performance management maturity. You can customize the self-assessment using the tools on this site.

#### TPM Resources

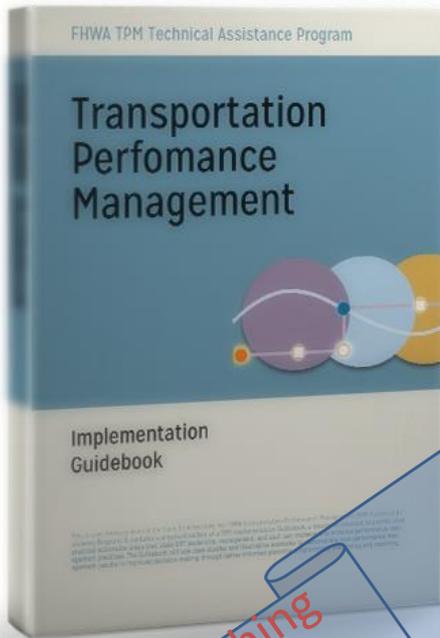
The TPM Resources Library contains best practices, precedents, and other helpful resources. Browse the library or quickly navigate to a specific document using our search tools.

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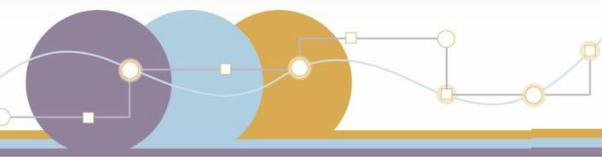
#### About the site

This is a preliminary draft of the web resource for the FHWA Transportation Performance Management (TPM) Technical Assistance Program. It contains the first pieces of the proposed outline and content of the TPM Implementation Guidebook. This document is intended to provide clear practical actionable steps that state DOT leadership, management, and staff can implement to enhance performance-management practices. The Guidebook will use case studies and illustrative examples to demonstrate how performance management results in improved decision-making through better-informed planning, programming, monitoring and reporting.

## TPM Guidebook



- Focuses on “how” rather than “what”
- Majority of guidebook devoted to implementation steps and related agency examples
- Self-contained and modular
- Note: not intended for regulatory compliance



## ***The Future of Transportation Performance Management***

## Communicating Transportation Performance

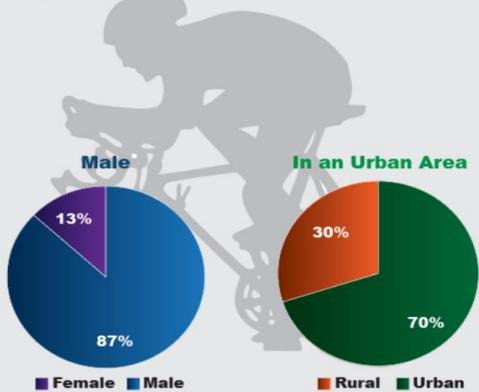
### Infographics

#### MOBILE MOMENTS: BICYCLE SAFETY

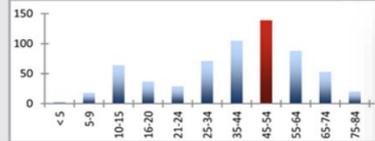


#### 630 cyclists died on U.S. highways in 2009

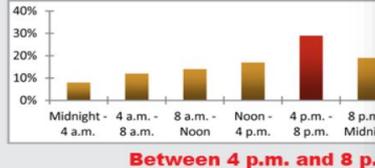
The typical bicycle fatality victim was...



#### Between 45 and 54 years old

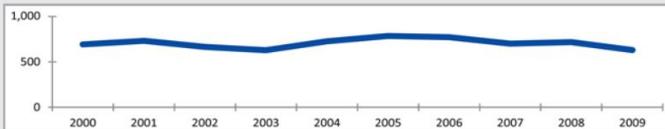


#### The Accident Occurred...



#### Between 4 p.m. and 8 p.m.

#### U.S. Cycling Fatalities



The number of trips by bicycle was **UP 25%** between 2001 and 2009

Sources: National Household Travel Survey

### Performance Reports

#### National Safety Report

#### Are We Making Our Roads Safer?

While the number of fatalities on our roads continues to decline, injuries have slightly increased. Certain driver behaviors and crash types have remained a persistent threat to the safety of our roadways.

#### Number of Fatalities

**33,210**

Annual 5-Year Average



TREND

#### Projection

States are projected to reduce fatalities below

**28,000**

by 2017

States that expect the number of fatalities to...

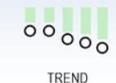


Data: Annual Fatal Crashes from FARS; Data are from latest available year.

#### Fatal Crash Rate

**1.14**

Per 100M VMT



TREND

#### Projection

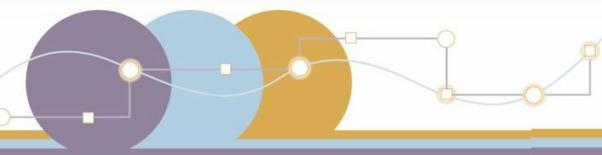
States are projected to reduce the fatal crash rate below

**1.0**

by 2017

States expect the fatal crash rate to ...





## Communicating Transportation Performance

TPM Home

Our Transportation Investment

Our Economic Well-Being

Our Mobile Lifestyle

Performance Reports

### Transportation Performance Management

FHWA > Transportation Performance Management



#### Our Mobile Lifestyle



No matter where you live or what your age, your lifestyle depends on transportation

[>>read more](#)

#### BORING BUT IMPORTANT

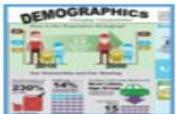
- Bridges in the U.S.: 599,766
- Bridges requiring repairs: 152,324
- Cost to repair them: \$140 billion
- What Americans spend each year on soft drinks: \$65 billion
- What the US spent in 2008 repairing bridges: \$12.8 billion

Source: AASHTO, ASCE, National Soft Drink Association



#### [America In Motion!](#)

It's hard not to marvel at the transportation system that keeps America – and you – going.



#### [Demographics Changing Transportation](#)

As we look to the future of transportation, we see that America's needs are evolving.



#### [How is Transportation Funded in the U.S.?](#)

Learn more about how the United States funds transportation and why innovative funding sources are needed.



#### [Mobile Moments: Bicycle Safety Infographic](#)

630 cyclists died on U.S. highways in 2009.

#### HOW ARE WE MEASURING UP?

HIGHLIGHTED MEASURE

#### LOWERING FATAL CRASHES

Number of Fatalities

# 33,210

Annual 5-Year Average



TREND



# Transportation Performance Management

## Transportation Performance Management

TPM and MAP-21 Engagement Resources

Home / Programs / Transportation Performance Management



**TPM DIGEST**  
FHWA Transportation Performance Management

**TPM Digest:** Find out the latest in TPM including: Online State Dashboards, Performance Reports, Mobility, Performance Based Planning, Safety, Events, Workshops, Webinars, Transportation Performance Management Research, and Innovation.

Pause Previous Next 1 2 3 4

### Events

- [Fundamentals of Transportation Data Part 2](#)  
Webinar  
June 9, 2015  
2:00-3:30 PM EST
- [View all Upcoming Events](#)

### Related Links

- [FHWA MAP-21](#)
- [FHWA Performance-based Planning](#)
- [FHWA Policy](#)

### Contacts

- [Susanna Hughes-Reck](#)  
[Office of Transportation Performance Management](#)  
202-366-1548  
[E-mail Susanna](#)

### TPM and MAP-21

- What is TPM?
- National Goals
- MAP-21 Performance Requirements Summary
- MAP-21 Putting Performance into Action (.pdf, 1.3 mb)
- Implementation Schedule

### Engagement

- Rulemaking Stakeholder Engagement
- Readiness Stakeholder Engagement
- Reporting

### Resources

- Apply for P2P Technical Assistance
- Noteworthy Practices
- Presentations and Webinars
- Publications
- Tools
- TPM Digest

### Email Notification

- Subscribe to email updates

# Thank You

[FSWhitson@dot.gov](mailto:FSWhitson@dot.gov)

<http://www.fhwa.dot.gov/tpm/>



Florida Department of  
**TRANSPORTATION**

Carl Mikyska, Executive Director  
(850) 414-4062  
[carl.mikyska@mpoac.org](mailto:carl.mikyska@mpoac.org)

**MPOAC**

**Update**

For further information please contact:

Carl Mykyska, Executive Director

Florida MPO Advisory Council

605 Suwannee Street, MS 28B

Tallahassee, FL 32399

(850) 414-4062 Office

(850) 545-1890 Cell

[www.mpoac.org](http://www.mpoac.org)





Florida Department of  
**TRANSPORTATION**

# **FDOT/MPO Pilot Update National Performance Measures**

# Panel

**Joe Crossett – High Street Consulting Group**

**Beth Alden – Hillsborough County MPO**

**James Cromar – Broward MPO**

**Phil Matson – Indian River County MPO**

**Mike Escalante – Gainesville MTPO**

# 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

Will not set targets yet; but consider implications for target setting

Recognize FHWA rulemaking still in progress (Nothing final yet!)

# FDOT's MAP-21 Measures Report



## STATEWIDE PERFORMANCE REPORT

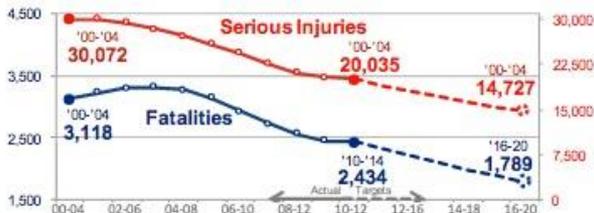
FDOTPERFORMS.ORG

### 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.

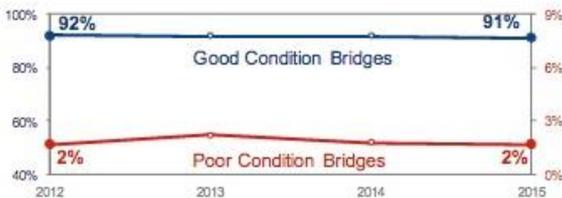


### PRESERVATION

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.

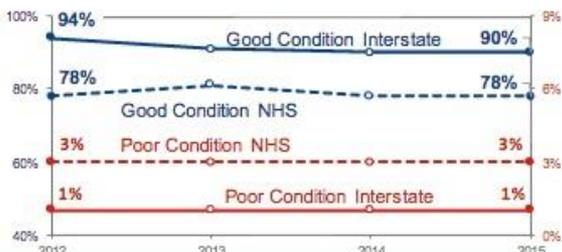
#### Bridges

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.

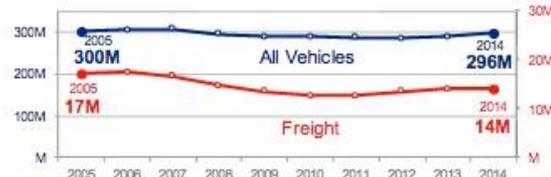


### MOBILITY

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.

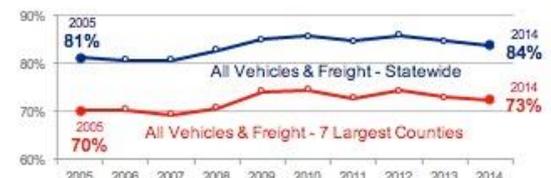
#### Vehicle Miles Traveled

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.



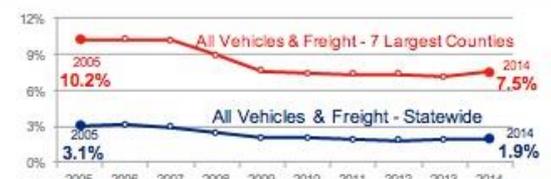
#### Travel Time Reliability

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

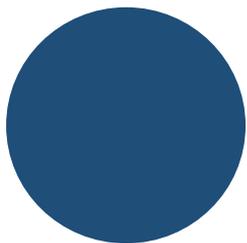
Miles Severely Congested During Peak Period  
Florida has experienced a notable reduction in the number of roads that are severely congested during the peak period.



# Daily Vehicle Miles Traveled in Pilot MPOs

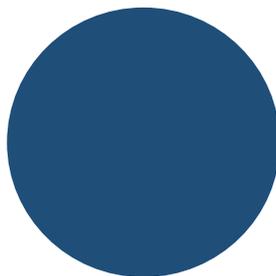
(2015 State Highway System Vehicle Miles Traveled by MPO/TPO Boundary)

## Hillsborough



21 Million VMT  
4% large trucks

## Broward



27 Million VMT  
4% large trucks

## Gainesville



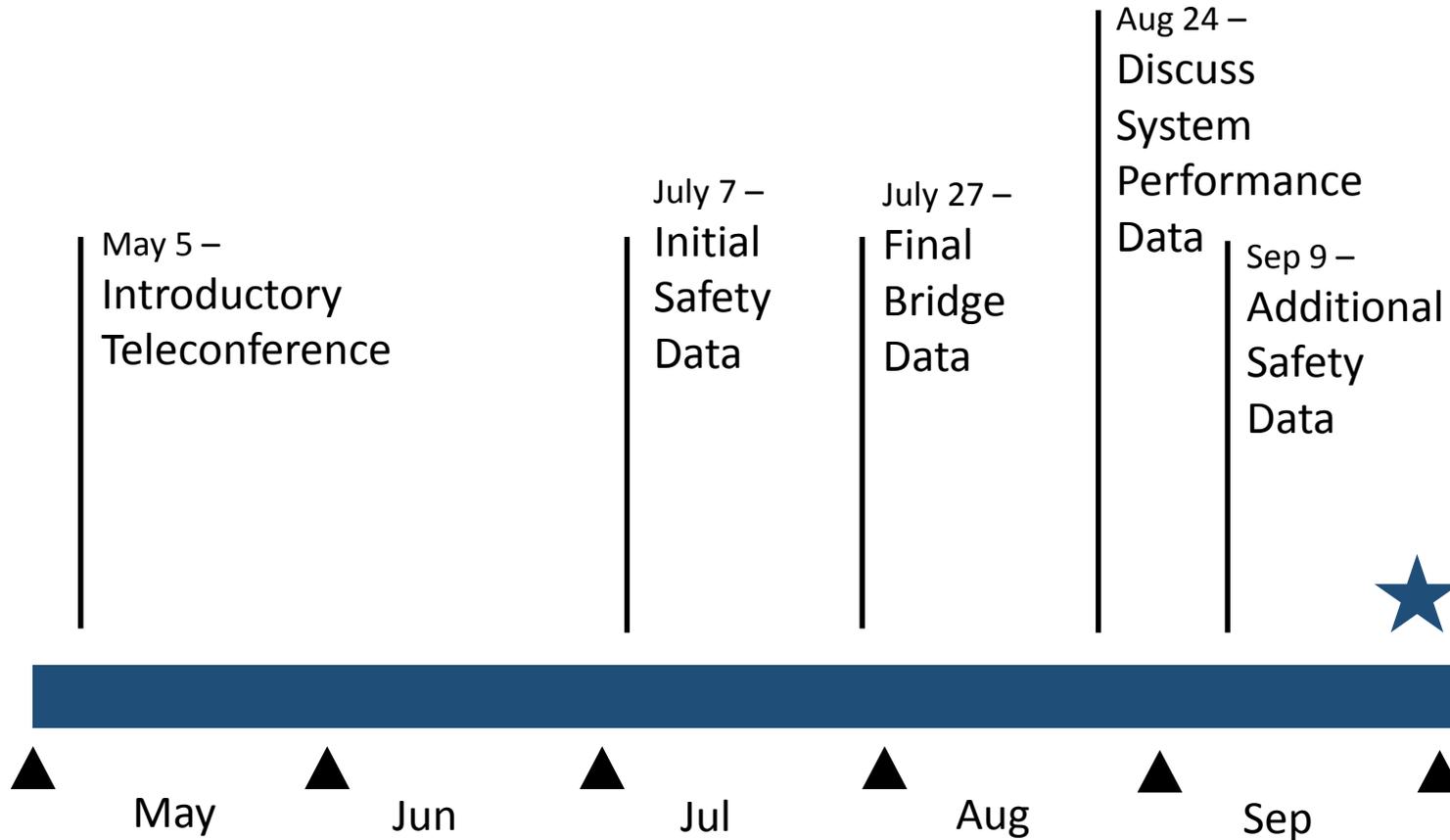
2.7 Million VMT  
5% large trucks

## Indian River



1.6 Million VMT  
4% large trucks

# Pilot MPO Process – Schedule to Date



# Measures in MPO Pilot

## Safety (Final Rule Published)

- ✓ • Number of fatalities (5-year rolling avg.)
- ✓ • Number of serious injuries (5-year rolling avg.)
- ✓ • Fatalities per 100M VMT (5-year rolling avg.)
- ✓ • Serious injuries per 100M VMT (5-year rolling avg.)
- ✓ • Number of non-motorized fatalities and serious injuries (5-year rolling avg.)

## Pavement & Bridges (Final Rule due late 2016)

- X • Percent of pavement on Interstate (IS) & non-IS NHS in good/poor condition
- ✓ • Percent of bridges on NHS in good/poor condition

## System Performance & Freight (NPRM released Apr. '16)

- ✓ • % of IS and freeways providing for peak hour reliable travel times  
(Similar to FHWA's system performance measures: % of IS and non-IS NHS providing for reliable travel times; % of IS and non-IS NHS where peak hour travel times meet expectations (urban areas 1M+ only))
- ✓ • % of IS and freeways providing for peak hour reliable truck travel times  
(Similar to FHWA's freight performance measures: % of IS providing for reliable truck travel times)

# Bridges - National Measures



- % of NHS bridges (by deck area) classified as good condition
- % of NHS bridges (by deck area) classified as in poor condition

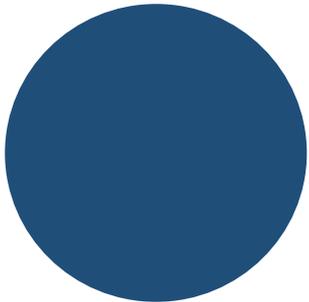
FHWA measure definition:

**deck area, NBI ratings for deck, superstructure, substructure  
rated 7+ = good; 4 or less = poor**

Note: percentage of the deck area of bridges rated 'structurally deficient' must not exceed 10.00 percent.

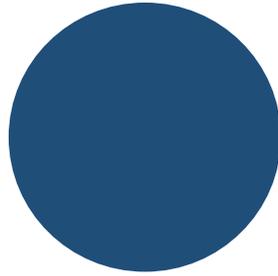
# Pilot MPOs – NHS Bridges

Hillsborough



479

Broward



391

Gainesville



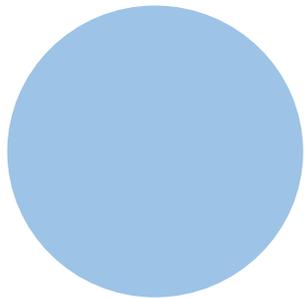
46

Indian River

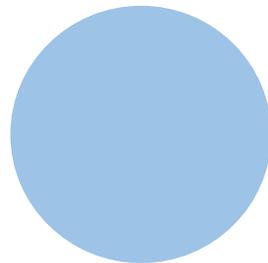


42

(# of NHS bridges by MPO boundary)



9.7M



12.5M



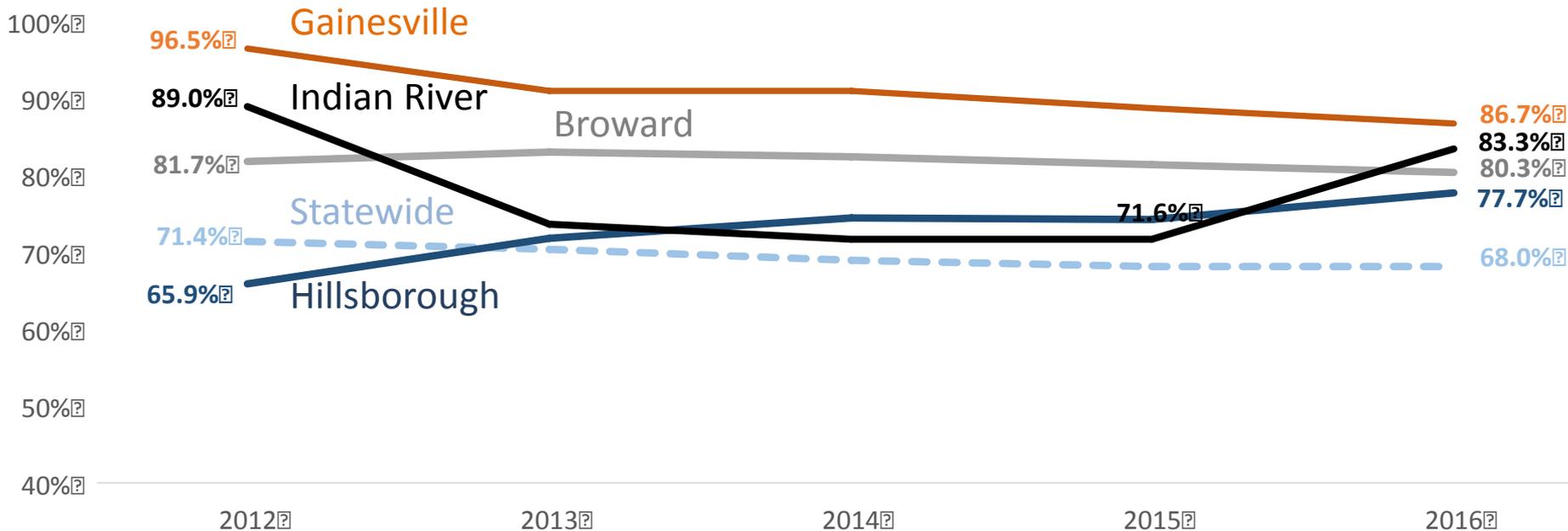
0.5M



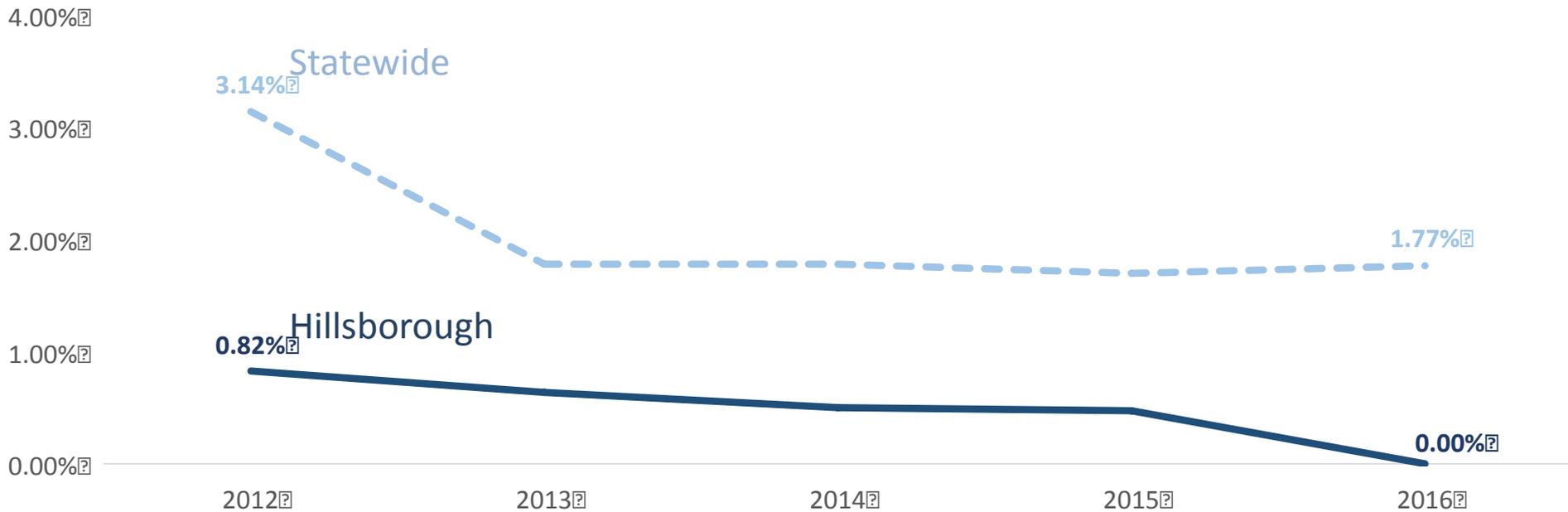
0.35M

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

# NHS Bridge Deck Area in Good Condition



# NHS Bridge Deck Area in Poor Condition



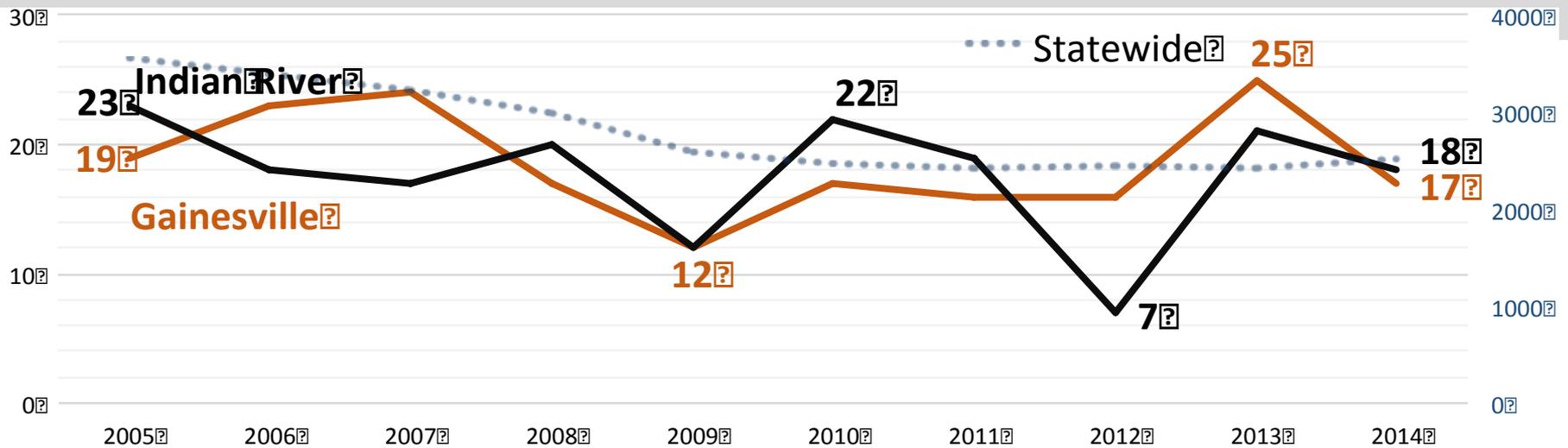
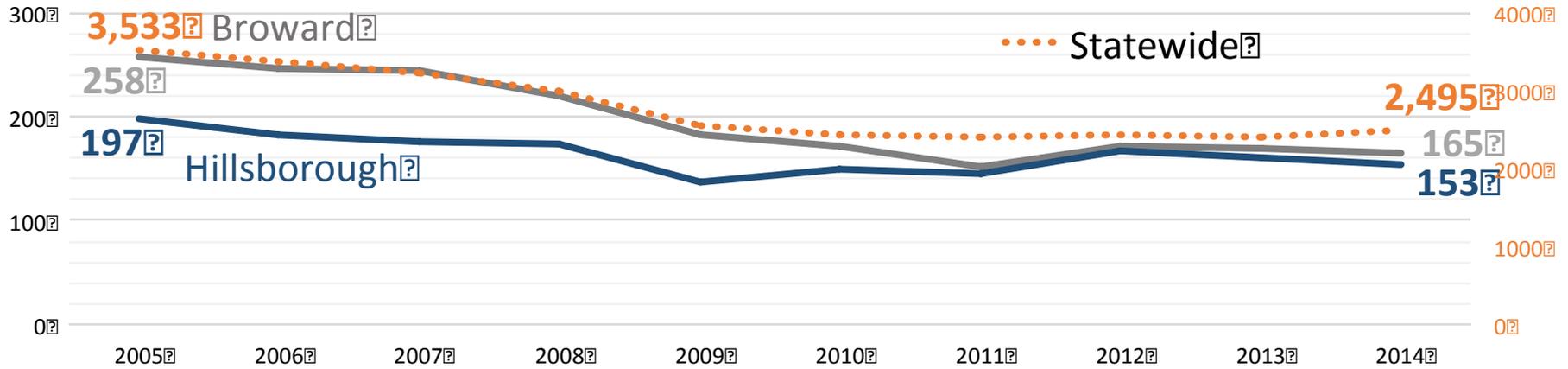


# MPO Pilot Perspectives

Broward  
Hillsborough  
Gainesville  
Indian River

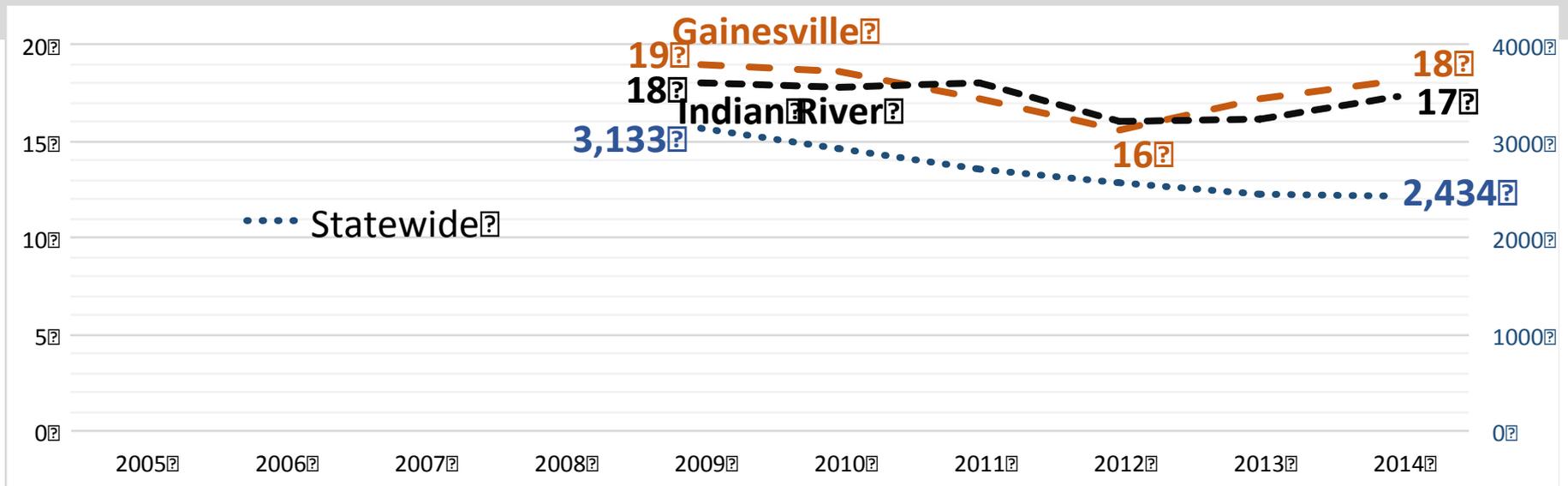
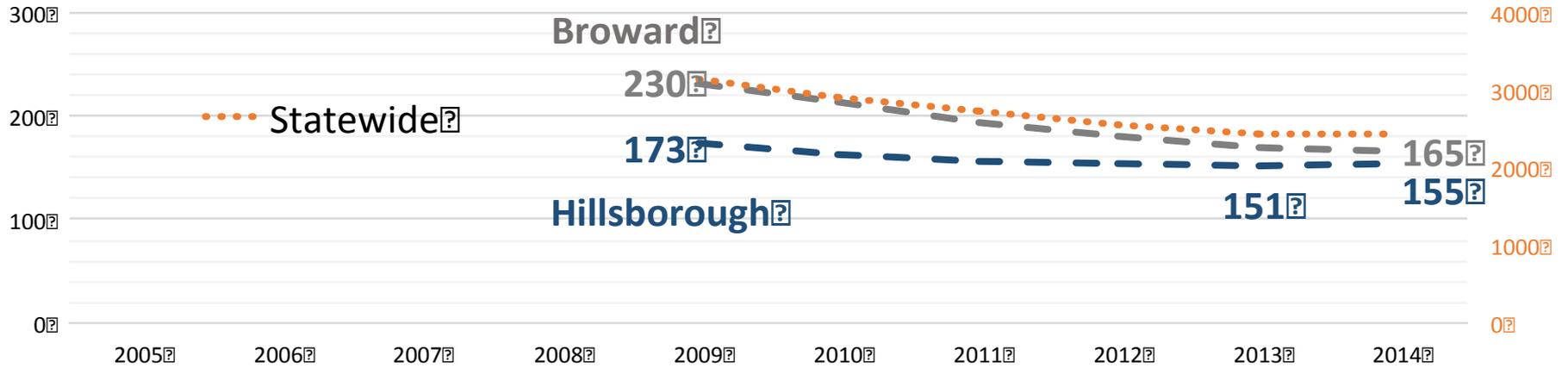
# Total Fatalities (Year-by-Year)

(All Public Roads)

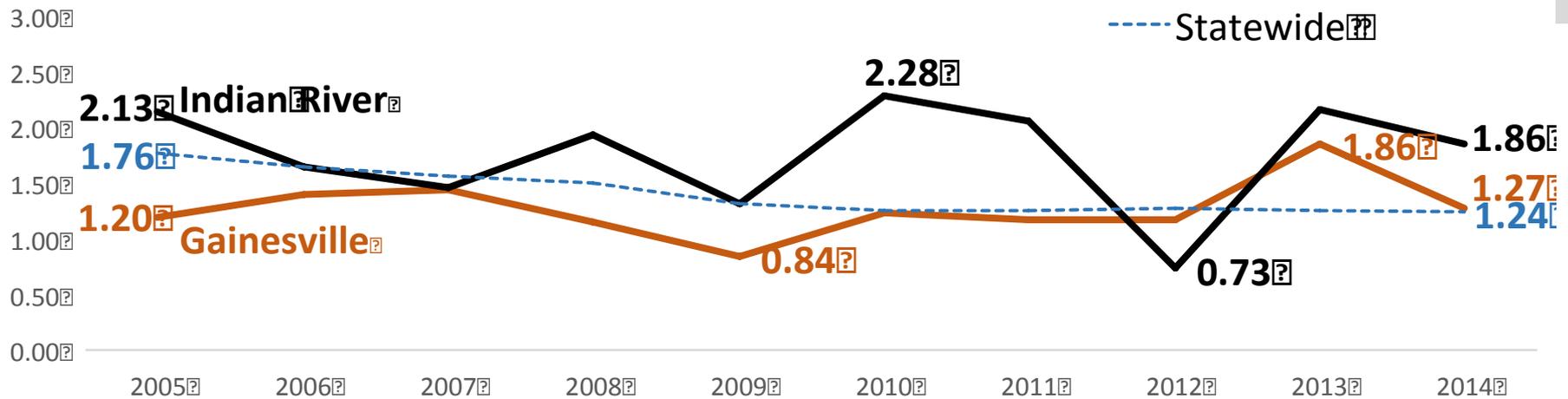
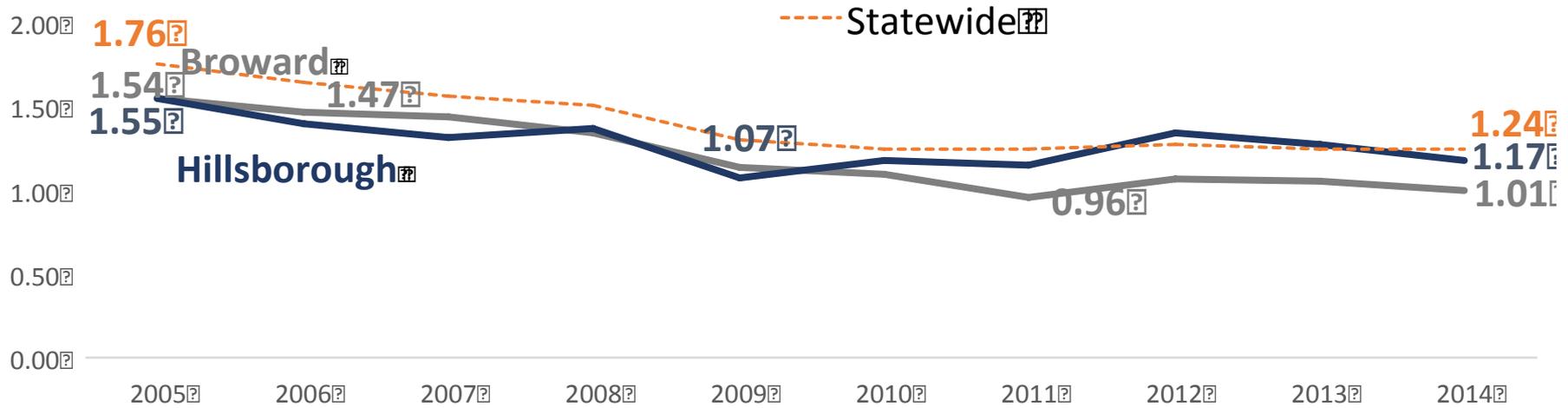


# Total Fatalities (5 Year Rolling Avg.)

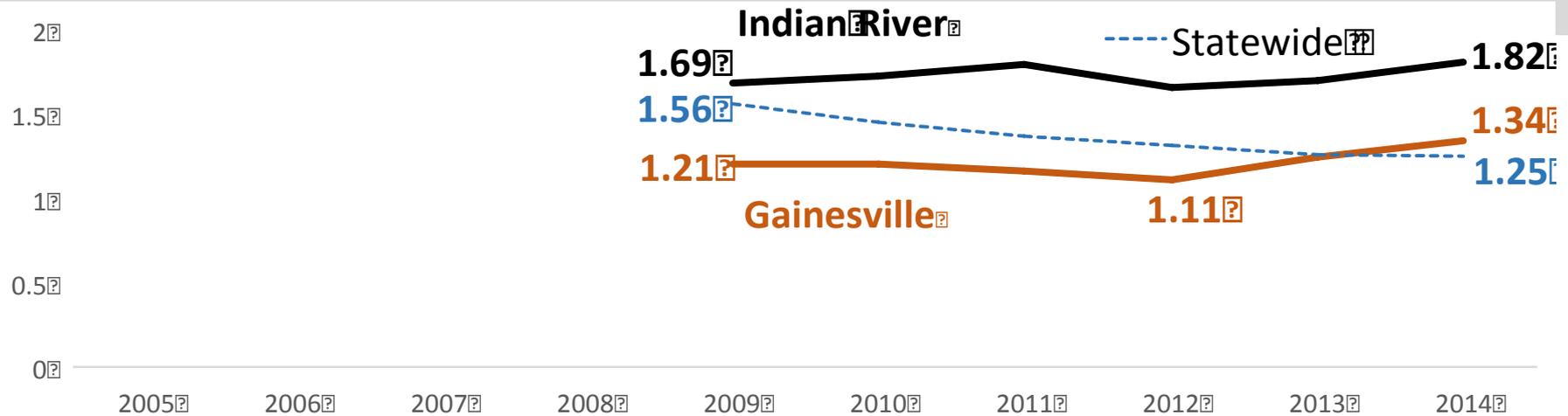
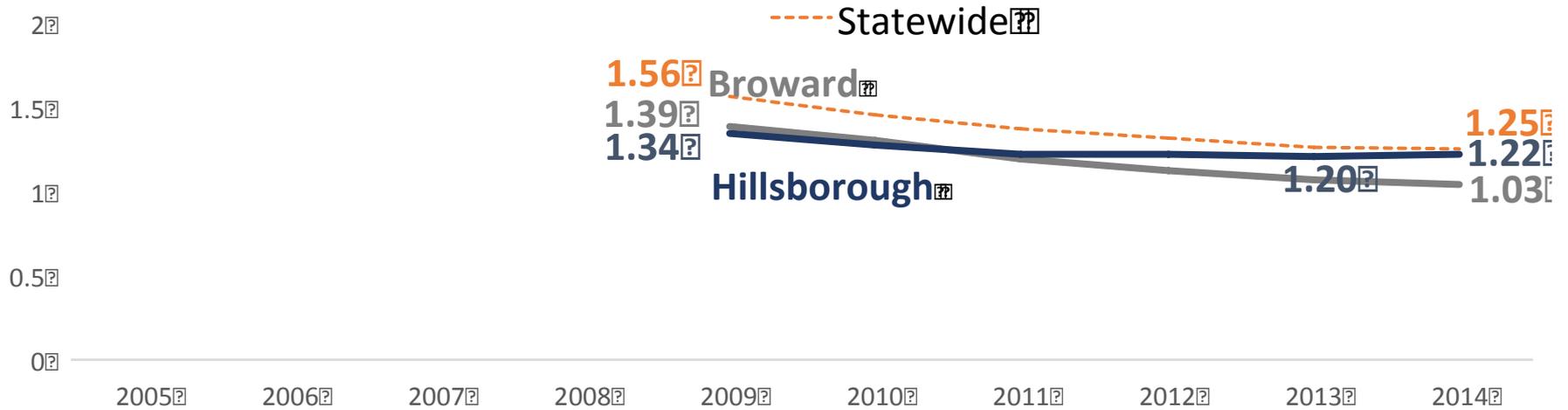
(All Public Roads)



# Fatalities/100M VMT (Year-by-Year)



# Total Fatalities/100M VMT (Rolling Avg.)



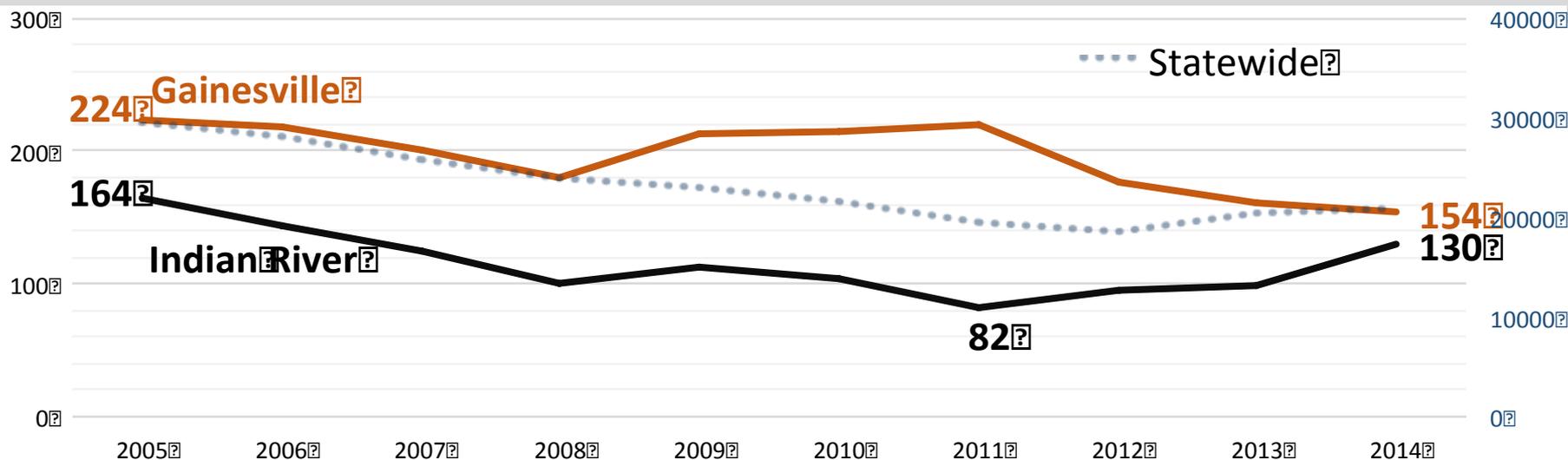
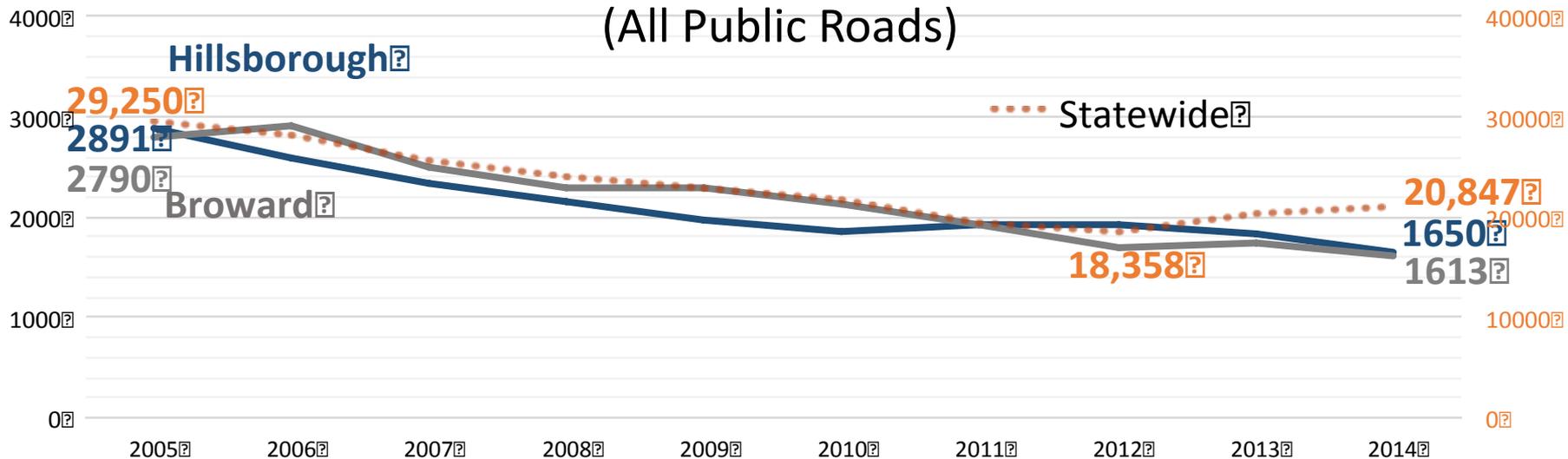


# MPO Pilot Perspectives

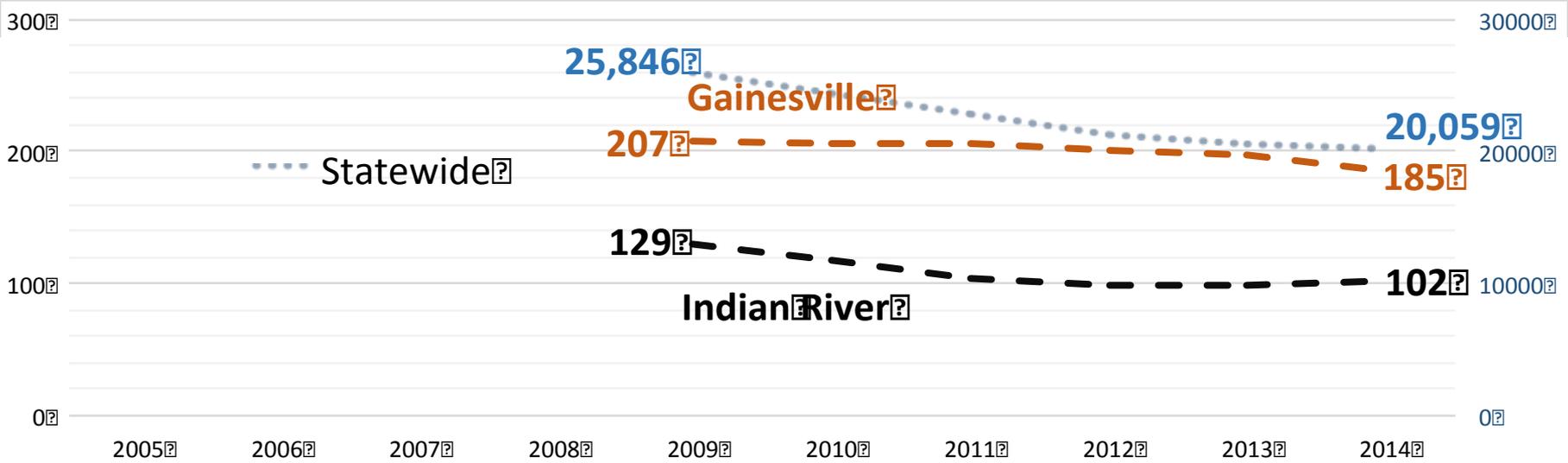
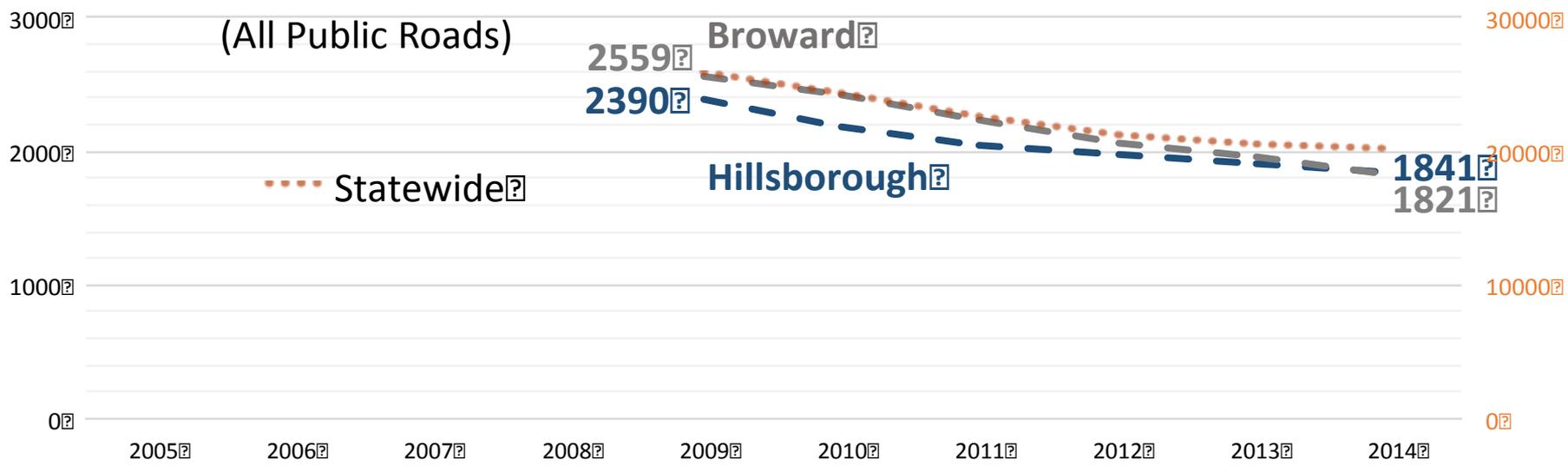
Broward  
Hillsborough  
Gainesville  
Indian River

# Total Serious Injuries (Year-by-Year)

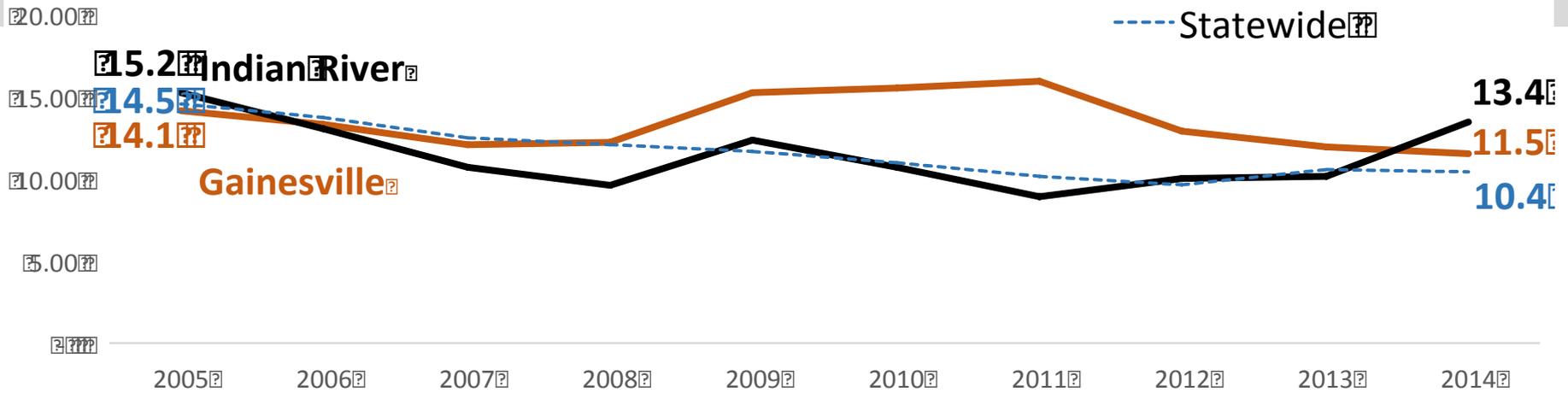
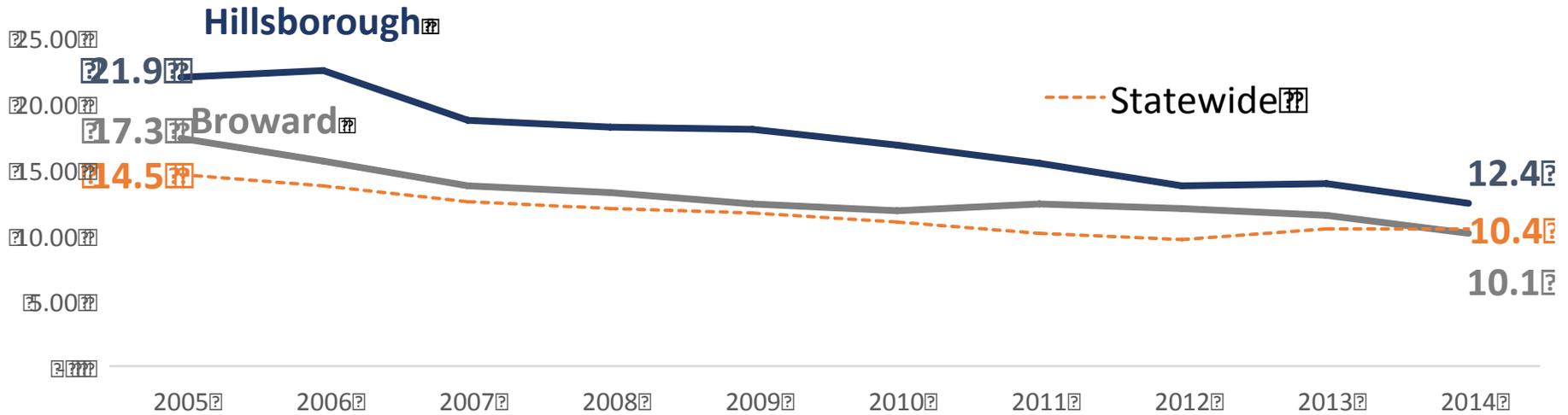
(All Public Roads)



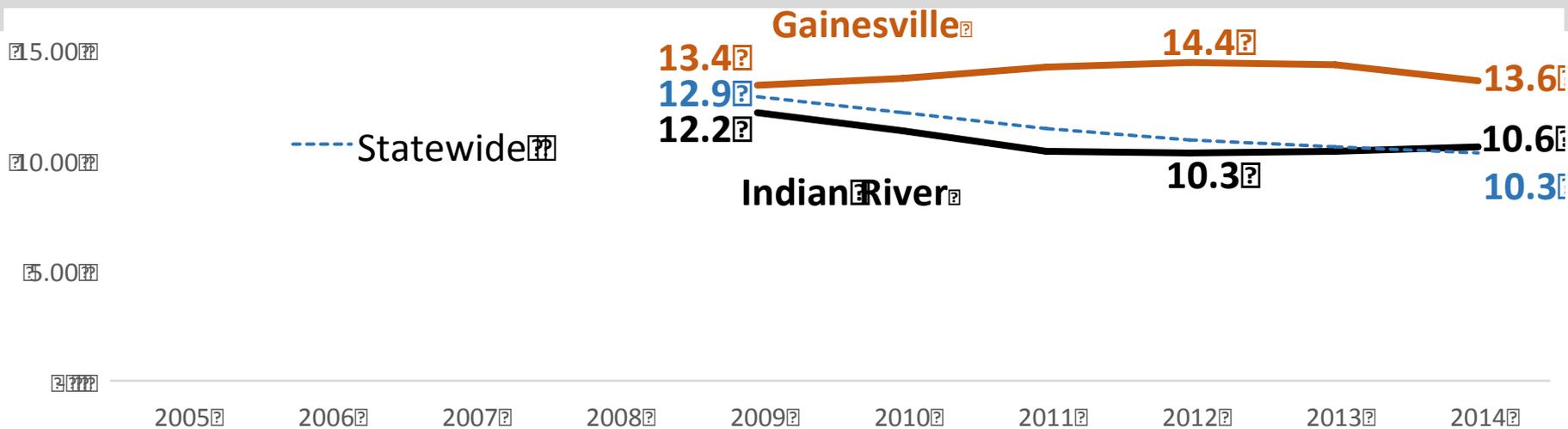
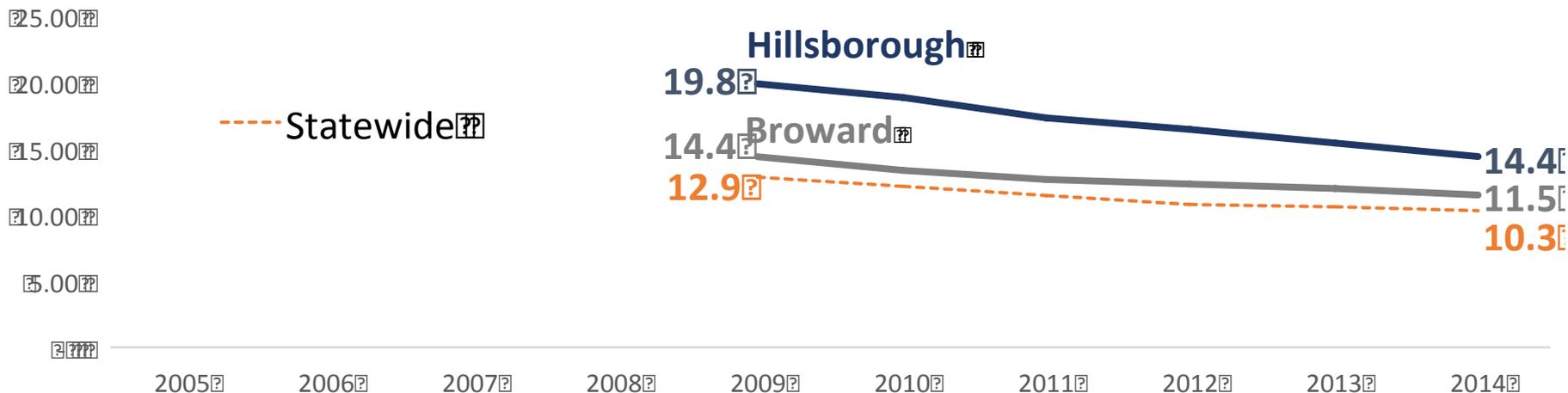
# Total Serious Injuries (5 Year Rolling Avg.)



# Serious Injuries/100M VMT (Yr-by-Yr)



# Serious Injuries/100M VMT (Rolling)

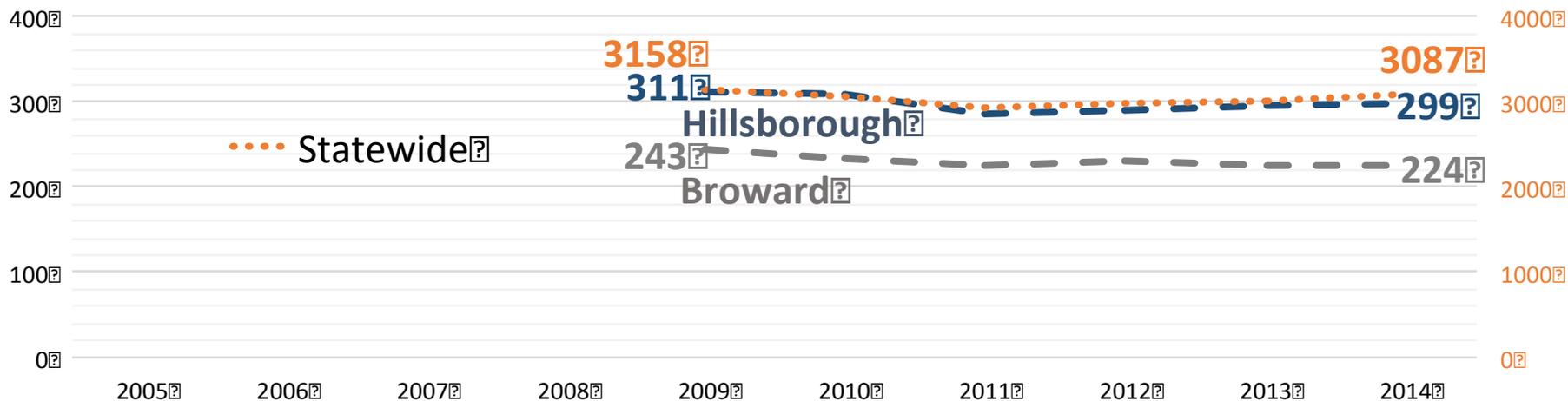
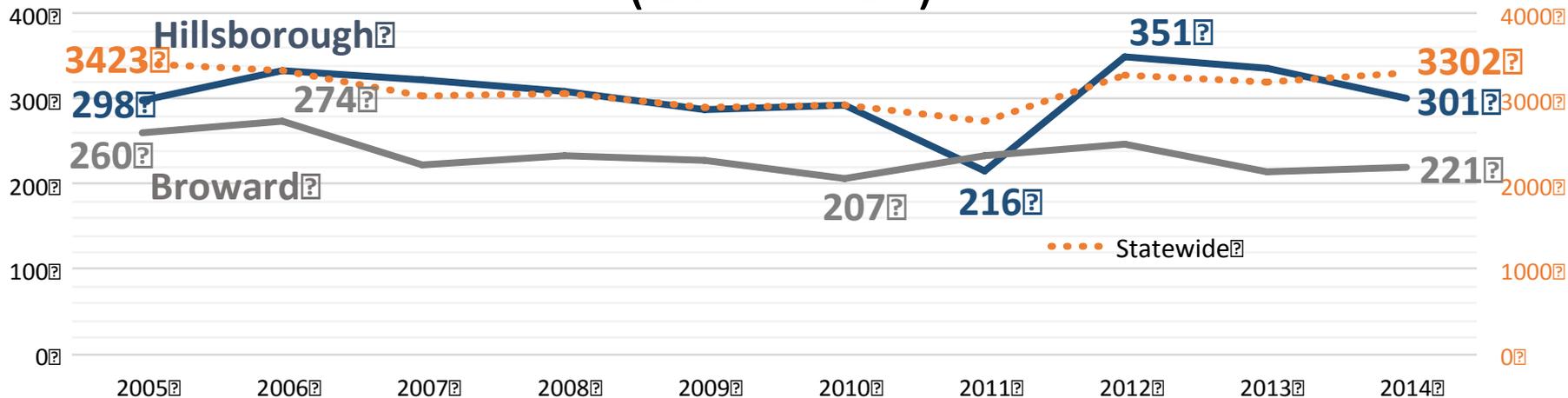




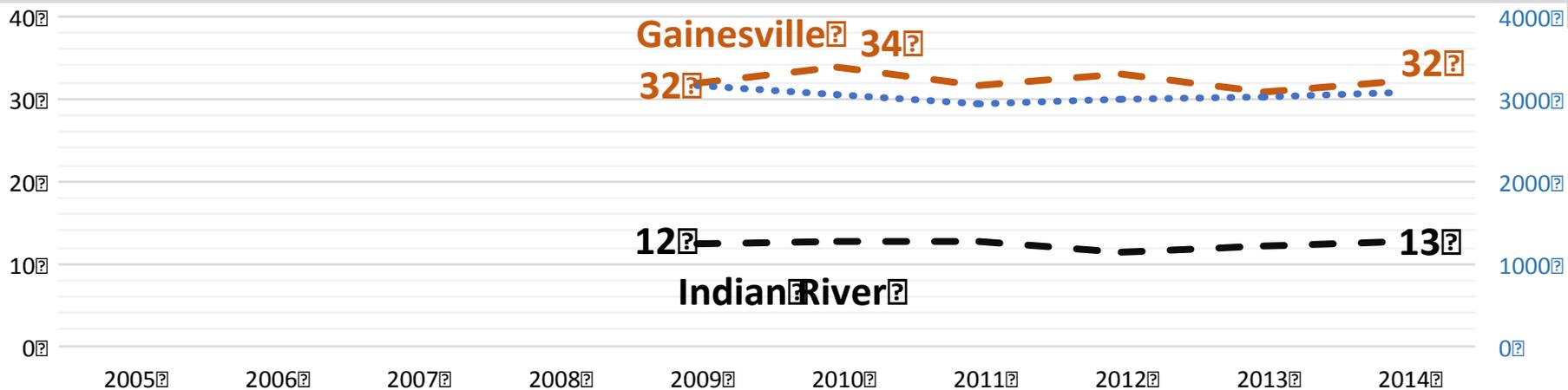
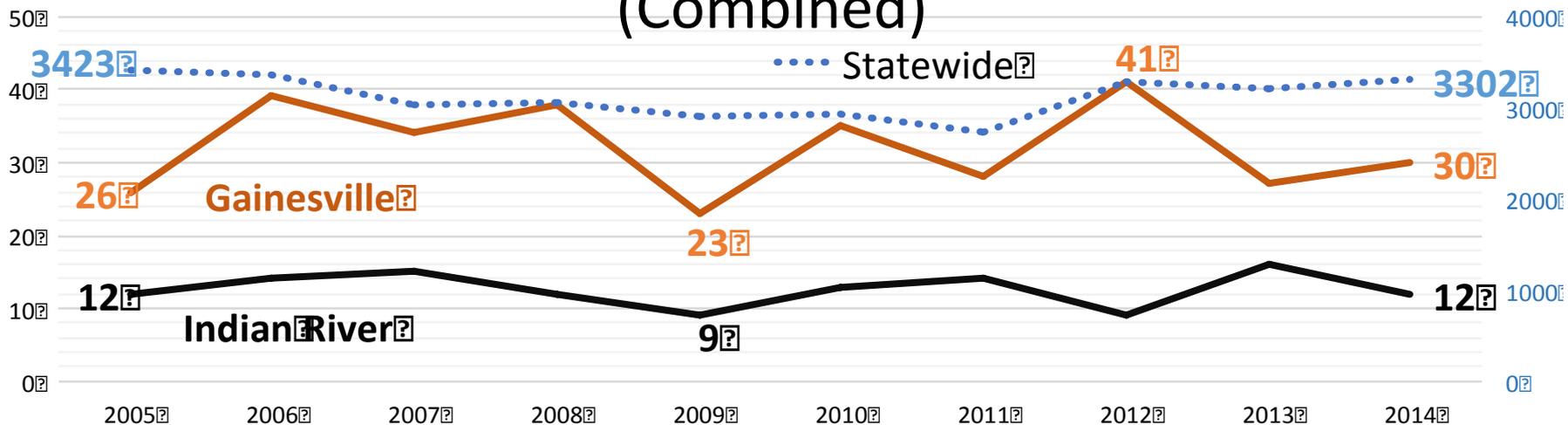
# MPO Pilot Perspectives

Broward  
Hillsborough  
Gainesville  
Indian River

# Number of Non-Motorized Fatalities & Serious Injuries (Combined)



# Number of Non-Motorized Fatalities & Serious Injuries (Combined)





# MPO Pilot Perspectives

Broward  
Hillsborough  
Gainesville  
Indian River

# System Performance & Freight - National Measures

- **% of IS and freeways providing for reliable peak hour travel times**



(Similar to FHWA's system performance measures:  
% of IS and non-IS NHS providing for reliable travel times;  
% of IS and non-IS NHS where peak hour travel times meet expectations  
(urban areas 1M+ only))

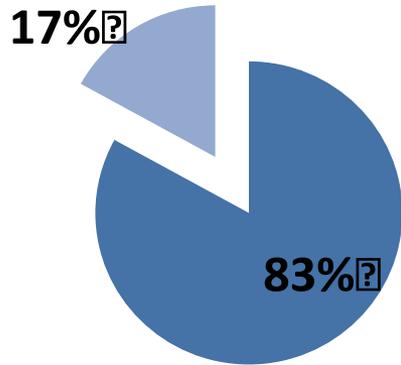
- **% of IS and freeways providing for reliable peak hour truck travel times**



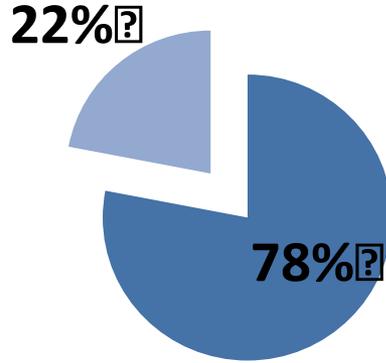
(Similar to FHWA's freight performance measures:  
% of IS providing for reliable truck travel times)

# Peak Hour Travel Reliability

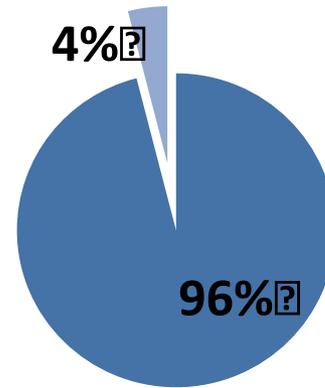
(Freeways Inside MPO Boundary)



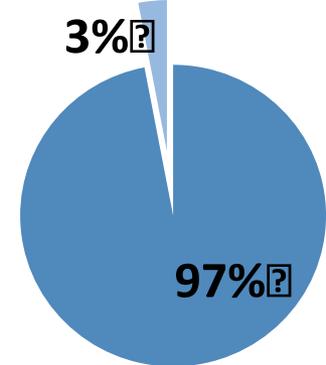
**Hillsborough**



**Broward**



**Gainesville**



**Indian River**

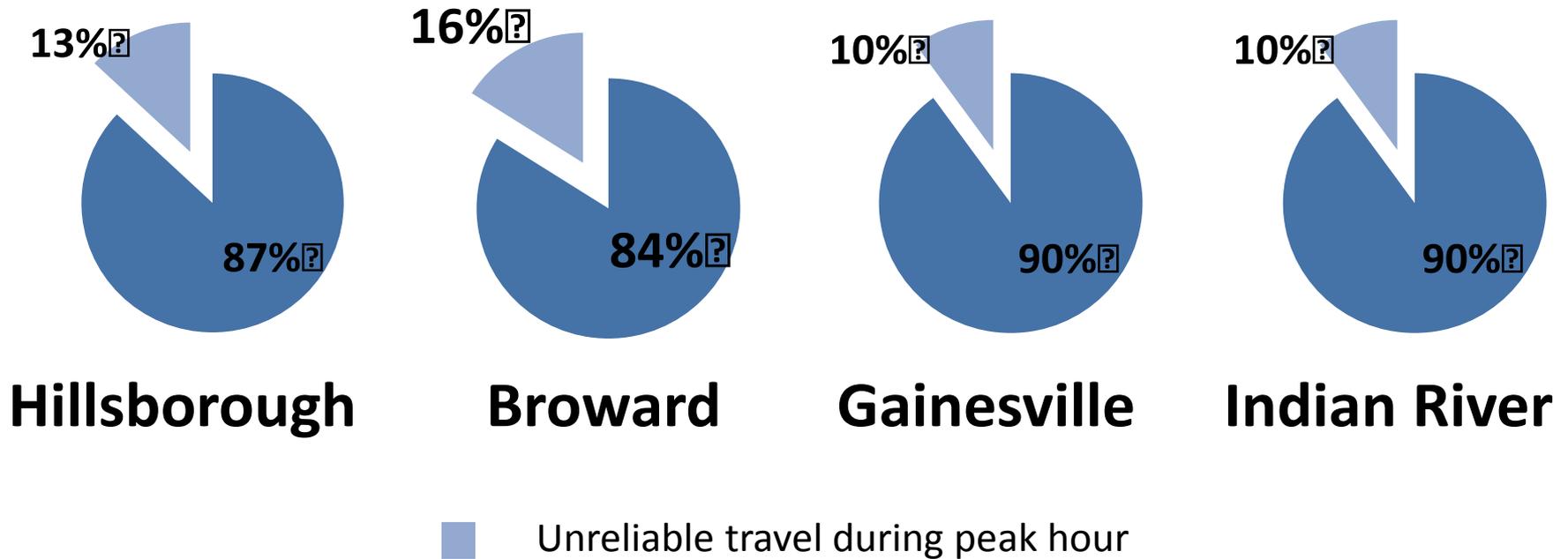
■ Unreliable travel during peak hour

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)

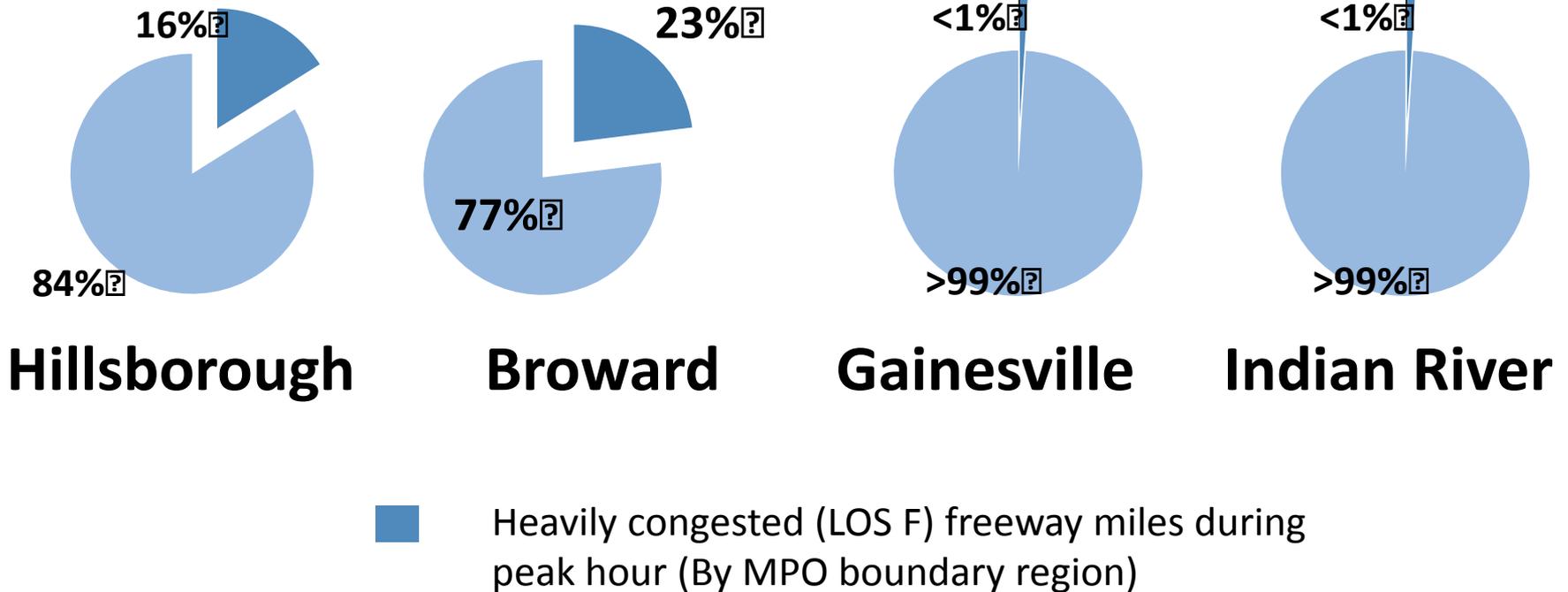


For seven largest counties travel time reliability is defined as the percentage of freeway trips traveling at least 45 mph.

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.

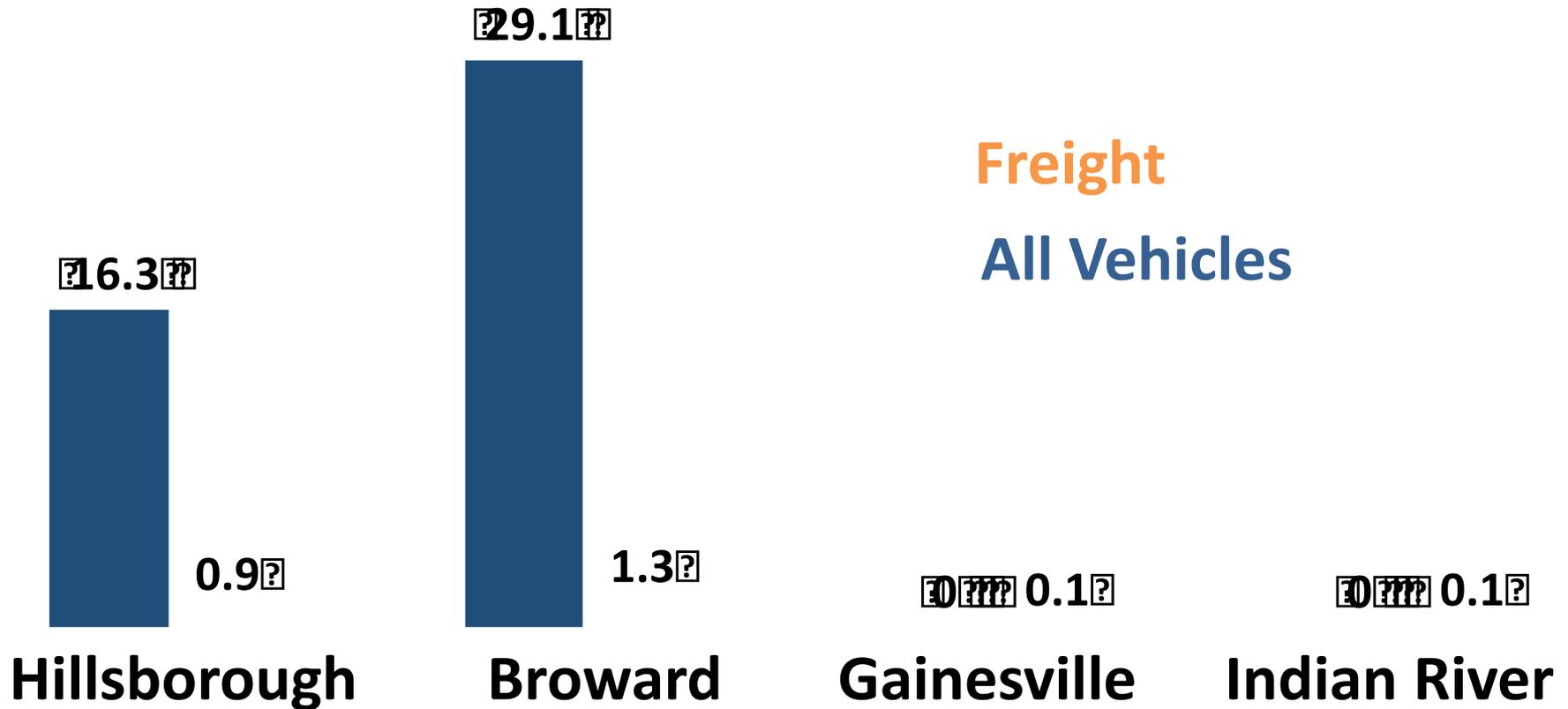
# Other FDOT Mobility Measures

## % of Heavily Congested Freeway Miles at Peak Hour



# 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



# MPO Pilot Perspectives

Broward  
Hillsborough  
Gainesville  
Indian River