ACTIVE ARTERIAL MANAGEMENT AND PERFORMANCE MEASURES MANAGEMENT AND REPORTING

Hosted By:

Florida Section ITE

FDOT

FLORIDA'S TURNPIKE
Agenda

1. Introduction to Active Arterial Management (AAM)
2. AAM Program – FDOT District Three
3. AAM Program – FDOT District Five
   Networking Break
4. AAM Program – FDOT District Six
   Lunch
5. AAM Program – FDOT District Four
6. AAM Program – City of Gainesville
7. AAM Program – Manatee County
   Networking Break
9. Arterial Performance Measure Reporting
10. Hillsborough County MPO’s Data Platform
Introduction to Active Arterial Management

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What is Transportation Systems Management and Operations (TSM&O)?

• Measuring transportation performance
• Actively managing the transportation network
• Providing beneficial safety and mobility outcomes to the public
TSM&O

On-going Management Process

- Monitor Traffic Conditions
- Identify Delay Causing Issue
- Select Appropriate Countermeasure
- Implement Countermeasure
TSM&O

- Not a new concept in freeway operations
TSM&O

- A relatively new concept in surface street arterial operations
Statistics – Florida’s Roadways

Centerline Miles
- Interstate: 43%
- Turnpike & Freeways: 42%
- Other Principal Arterials: 10%
- Minor Arterials: 5%

Vehicle Miles Traveled
- Interstate: 24%
- Turnpike & Freeways: 37%
- Other Principal Arterials: 28%
- Minor Arterials: 11%

Source: FDOT Public Road Mileage and Miles Traveled
One Major Difference in Arterial Types
Based on FHWA Report: *Traffic Congestion and Reliability: Linking Solutions to Problems*  
July 2004

**Causes of Traffic Congestion**  
**Arterial Roadways**

- Bottlenecks: 40%
- Traffic Incidents: 25%
- Bad Weather: 15%
- Work Zones: 10%
- Special Events: 5%
- Poor Signal Timing: 5%

Opportunities for Congestion Mitigation through Arterial Management
“The industry often promises what it cannot deliver, and then fails to deliver what it could, with better commitment and resources.”

The Basic Service Concept

• Clarity of Objectives
• Attainable Performance Measures and Standards of Performance
• Field Infrastructure Reliability
• Signal Timing
• Objective-Based Resource Allocation
• Clear Communications Up the Line
• Meaningful Systems Engineering
A Simple Objective

“We will do our best to avoid making drivers stop, but when we must make them stop, we will delay them as little as possible, within the context of safe operation.”
How Do We Know If We Are Achieving This Simple Objective?
Applications and Practices to Improve Traffic Incident Management

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District Five - Active Arterial Management (AAM) Strategies and Initiatives

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Networking Break

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FLORIDA’S TURNPIKE
Active Arterial Management Projects in Miami-Dade and Monroe Counties

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District Four – Active Arterial Management (AAM) Strategies and Initiatives

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City of Gainesville’s Active Arterial Management and Performance Measures Initiatives

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Manatee County’s Active Arterial Management and Performance Measures Programs

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Arterial Performance Measure Reporting: Three Agencies Case Studies

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Networking Break

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FLORIDA'S TURNPIKE
Automated Traffic Signal Performance Measures Implementation and Use Cases

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Hillsborough MPO’s Data Platform for Performance Monitoring and Project Evaluation

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Florida Turnpike