

# Briefing on the Washington Metropolitan Area Transportation Operations Coordination (MATOC) Program

Presentation to the Transportation Planning Board

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January 19, 2011

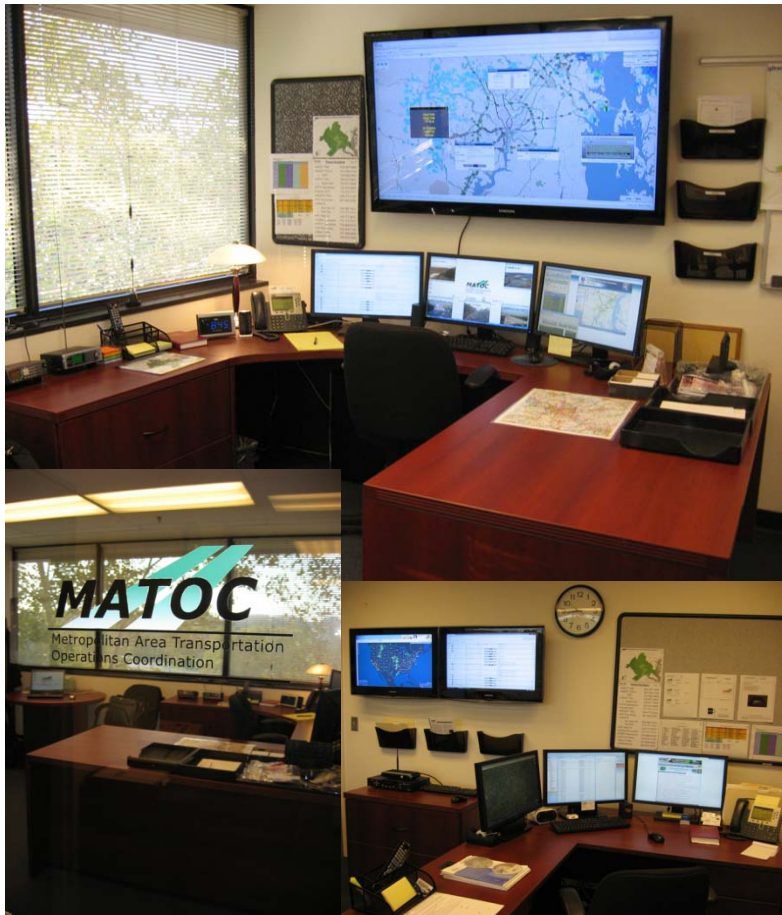
DRAFT for TPB Technical Committee  
January 7, 2011

- Recap Overview of the MATOC Program
- A Look at a MATOC Incident
  - MATOC Perspective
  - The End User Perspective
    - Overview
    - Front Line Operator Perspective

## About MATOC

- Established in 2008, MATOC is a joint program of the District of Columbia, Maryland, and Virginia DOTs and the Washington Metropolitan Area Transit Authority (WMATA)
  - Mission: regional situational awareness of transportation conditions and incidents
  - Goals: improve traveler safety and reduce transportation delays
- MATOC activities include:
  - Monitoring and communicating reliable information during major incidents
    - Enabling operating agencies and the traveling public to make effective, coordinated and timely decisions
  - Maintaining a web-based transportation information system
  - Facilitating standard operating procedures among transportation agencies

## MATOC Operations



### Hours of Operation

- Monday-Friday
  - 4:30am-8:00pm
- After hours: On-Call Schedule

### Staff

- 1 Facilitator, 2 Operators

### Day-to-Day Duties

- Monitor several public and private feeds
- Maintain Situational Awareness of significant incidents affecting the region's transportation network.
- Recommend actions to mitigate delays
- Develop and maintain relationships amongst affected stakeholders

- Criteria
  - **Lane Closure & Delays** – 50% closure for 30 minutes and/or a 4 mile delay (freeway)
  - **Incident Severity** – Injury, Multi vehicle, Tractor Trailer, Vehicle Fire, Mass Causality, Transit/Bus Incidents, Roadwork (unplanned/planned), etc.
  - **Location/Direction** – Affected Stakeholders, parallel routes, opposing stream, alternate modes
  - **Time of Day** – Peak/Non-Peak
- Develop and page out a “MATOC Situational Awareness Alert”
  - Follow up with host agency
  - Updated every 30 min or as situation changes
  - Incident close out



Metropolitan Area Transportation  
Operations Coordination

# MATOC Situational Awareness Alert

Sent: Tuesday, January 04, 2011 5:19 PM  
Subject: MATOC Situational Awareness Alert: Vehicle Accident, I-95/495 Southbound (Inner Loop) at the Telegraph Road Exit (Exit 176), Fairfax County, VA

MATOC Stakeholders,

For your situational awareness

Location: I-95/495 Southbound (Inner Loop) at the Telegraph Road Exit (Exit 176), Fairfax County, VA

Incident: Vehicle Accident

INITIAL NOTIFICATION: The south right lane is blocked immediately after the Local Lanes and Thru Lanes merge. Motorists can use the Thru Lanes to avoid delays. Local Lane delays begin in Maryland just before the Woodrow Wilson Bridge, approximately 3.5 miles.

UPDATE #1: Emergency responders are on scene. Southbound Local Lanes are saturated across the Woodrow Wilson Bridge. Thru Lanes are below speed, but traffic is flowing. Delays have stretched onto Southbound I-295 coming out of the District of Columbia.

FINAL UPDATE: All travel lanes are now open, the incident is clear. Inner Loop delays begin prior to MD-210. I-295 Southbound delays begin at Bolling Air Force Base.

## Sent to:

- Transportation Operations Centers
  - State/District DOTs
  - WMATA/Metrobus
  - MWAA/Dulles Toll Road
- Local Traffic Management Centers
- Local Transit Agencies
- Commuter Bus Service
  - MTA/Martz/Eyre/Dillon's
  - PRTC/OmniRide
- Emergency Management Agencies
  - VDEM, HSEMA, FEMA





## Incident Monitoring: RITIS

**Transportation System Status** | Address Book | Data Archive | Performance Measures | User Settings

Incident List | **Traffic Map** | RSS Incident Feed

Add Filter...

**Re-Center**

**ACCIDENT AHEAD LOCAL LANES USE CAUTION**  
I-95 South @ MM 176.8

**ACCIDENT I-95 S AT EXIT 176 EXPECT DELAYS**  
Route 1 South @ MM 192.1

**ACCIDENT I-95 S AT EXIT 176 EXPECT DELAYS**  
Route 1 North @ MM 191.5

**Accident**  
I-95 south @ MM 176.0 - WB 495 AT TELEGRAPH RD EXIT 176 : LOCAL LN - RL SUPERSHUTTLE VAN VS BMW  
Time: 1/4/2011 4:07 PM  
Description: VEHICLE ACCIDENT RESPONDER ON SCENE  
Lane Status: South

**Vehicle Accident @ WB 495 AT TELEGRAPH RD EXIT 176 : LOCAL LN - RL SUPERSHUTTLE VAN VS BMW - Event Timeline - Google Chr...**  
https://timeline.ritis.org/timeline/?database=RITIS&incidentId=VDOT\_NOVA\_NOVA906062  
WB 495 AT TELEGRAPH RD EXIT 176 : LOCAL LN - RL SUPERSHUTTLE VAN VS BMW  
Vehicle Accident

**CHARTWeb Live Traffic in Flash Streaming Format Video Page - Go...**  
www.chart.state.md.us/video/video.asp?feed=43  
I-95/495 AT MD 210

**CHARTWeb Live Traffic in Flash Streaming Format Video Page - Go...**  
www.chart.state.md.us/video/video.asp?feed=47  
I-95/495 ON U.J. BRG

DDOT | MDT | VDOT | WMATA | University of Maryland CATT Lab © 2008, 2009

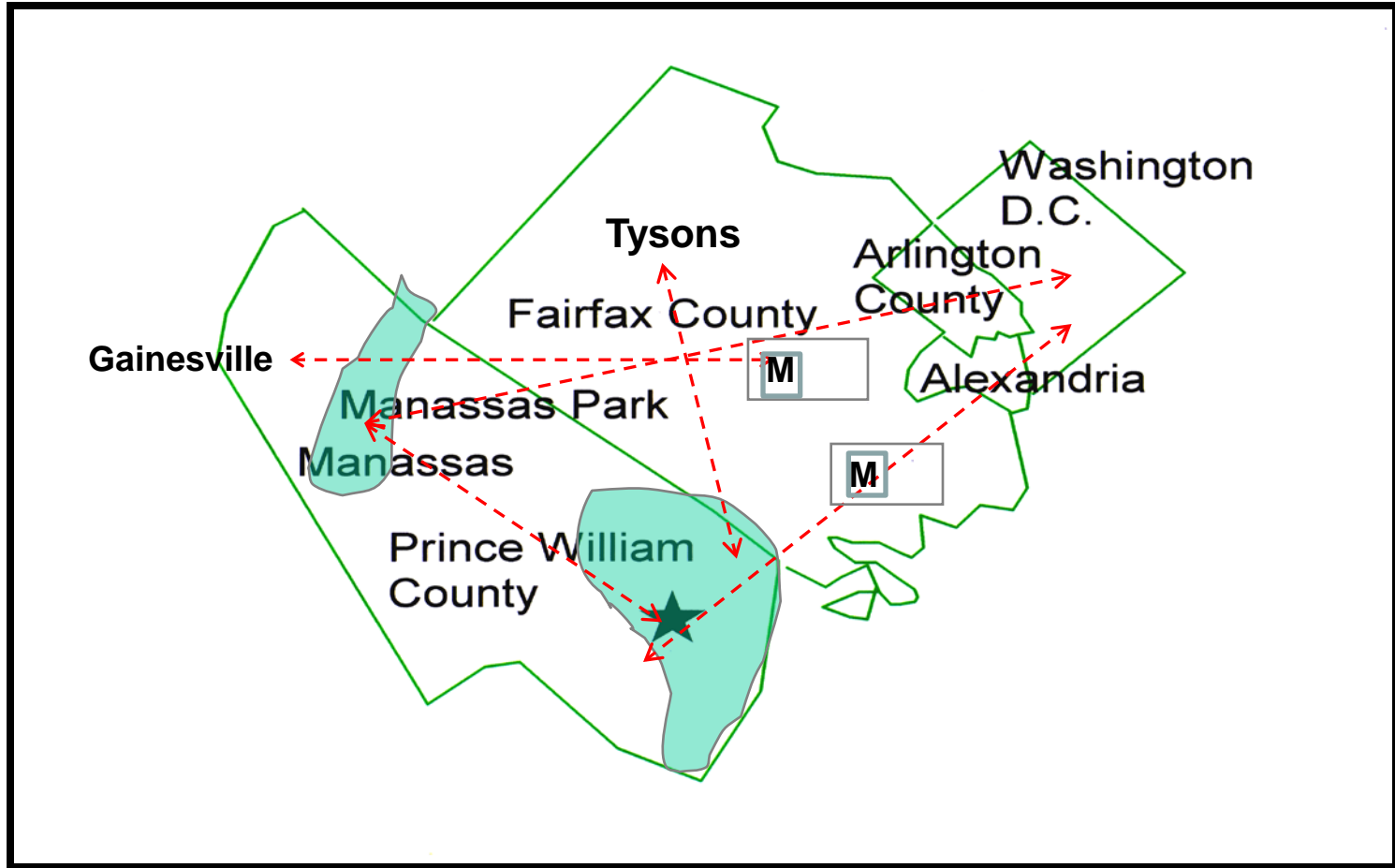
## The End User Perspective on MATOC Information

- How is MATOC-generated information used by an individual transportation agency?
- How does MATOC-generated information advise transit operations?
- What benefits is an individual agency receiving from MATOC, and what more can be done?
- PRTC/OmniRide
  - Eric Marx, Director of Planning & Operations
  - Doris Chism, Director of Customer Service & Dispatch



- Suburban public transit agency
  - Providing express bus (OmniRide), local bus (OmniLink), commuter rail (VRE), ride-matching (OmniMatch)
  - Member Jurisdictions – Prince William, Stafford, and Spotsylvania Counties and the Cities of Manassas, Manassas Park, and Fredericksburg
    - Only Prince William, Manassas, and Manassas Park receive bus service
- Bus services:
  - Commuters to/from DC, Pentagon, Arlington and Tysons Corner
    - >200 trips per day via HOV Lanes
  - Peak direction & reverse commute to/from Franconia/Springfield and West Falls Church Metrorail
  - Local flex-routes within eastern Prince William & Manassas
  - 133 buses serving 19 routes
  - 13,000 daily bus riders





- **Commuter service is primary beneficiary of MATOC “event” notifications**
- **Timely notification crucial to mitigate negative impacts/maintain OTP**
  - PM particularly volatile due to 25 mile “deadhead” to starting locations
- **When alert received we quickly assess potential impact and implement changes as warranted/possible, given limited resources**
- **Notifications need to be accurate, frequently updated, related to our service**
  - Dispatchers have many inputs, simultaneous issues, etc.
  - Before MATOC we did not receive enough information to make informed decisions - we determined the impact to our service based on past experiences with similar events. Hit or miss at best.
- **MATOC is helping us make informed decisions under less than ideal conditions**
  - Quick notifications
  - Live body to clarify, investigate
- **Desired enhancements**
  - More targeted notifications
  - Track upcoming significant events, notify accordingly, serve as central contact