

UPDATE ON THE MATOC PROGRAM AND REGIONAL INFORMATION SHARING

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TPB Systems Performance Planning Director

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MATOC Facilitator

Clint Osborn
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Transportation Planning Board
January 22, 2020

Outline

- Introductory Remarks and Context
Andrew Meese, TPB Systems Performance Planning Director
- Update on the Metropolitan Area Transportation Operations Coordination (MATOC) Program
Taran Hutchinson, MATOC Facilitator
- Overview of the D.C. Homeland Security and Emergency Management Agency (DC HSEMA)
Clint Osborn, DC HSEMA Chief of Operations
- Regional Approaches to Incident Information Sharing – General Approach and for Recent Noteworthy Incidents
All
- Questions and Discussion



Introduction

- At the October 16 TPB meeting, questions were raised about an October 11 incident closing Independence Avenue
- Staff was asked to look incident specifics, plus related activities of MATOC, other involved entities, and media awareness
- Today's presentations will provide specifics and the overall regional context of:
 - “Transportation incidents” primarily managed by transportation and partner agencies
 - “Non-transportation incidents” with spillover effects onto transportation facilities, primarily managed by public safety agencies
 - Some complex, multi-faceted incidents may be both



MATOC

Metropolitan Area Transportation
Operations Coordination

MATOC and Regional Information Sharing

Mr. Taran Hutchinson
Facilitator

January 22, 2020



"Working together to reduce incident-related travel delays through improved coordination, cooperation and information sharing."

- **Normal Operations**

- Monday-Friday, 4:30am-8:00pm
- On-Call after hours and weekends; rotating schedule
- Able to ramp up to 24/7 coverage
- Five staff; two frontline operators and three in support roles

- **Operational Posture**

- Normal Operations: Focus on regular weekday AM/PM rush
- Enhanced Operations:
 - Planned/Special Events – July 4th, Inaugurations, etc.
 - Severe Weather – Winter storms, derechos, hurricanes, etc.

- MATOC Staff **regularly communicates** with area transportation, public safety operations centers and watch desks on a daily basis

- Serves as a **transportation watch desk / information clearing house / resource desk** for its stakeholders

- “Detect, Verify, Evaluate, Elevate, Re-evaluate” (Goal: 15 minutes or less)



- **Collaborating Agencies – Traffic Incidents**

- DDOT, MDOT-SHA, VDOT, WMATA
- U.S. Park Police
- Regional Homeland Security Watch Desks

- **Additional Collaborating Agencies as Needed**

- Regional/Local Transit Bus Operators - MATOC Transit Task Force (TTF)
- Tolling Facilities: Transurban, MDTA, etc.
- Selected major local jurisdictions
- National Weather Service
- COG Public Safety (“COG Snow Calls” staff) and Public Information Officers Committee/staff

- **Recipients of MATOC Notifications**

- Notifications go out to subscribing federal, state, and local public agencies – these agencies also may monitor RITIS or receive RITIS-based automated data feeds

- **MATOC Monitors Other Agencies on an Ongoing Basis**

- Public safety, transportation, other public agencies communications, social media

- **Systems Monitored**

- **Regional Integrated Transportation Information System (RITIS)**, CapWIN, WebEOC, NCR Dashboard, HSIN NCR Connect, Video Sharing Platforms (MView/Clarix), Public Safety & Media Scanners, Local-Regional-Statewide Alerts, Commuter Bus & Rail Operations, Weather, DOT mobilization plans, and Social Media (*Twitter & Waze*)

- **Communications**

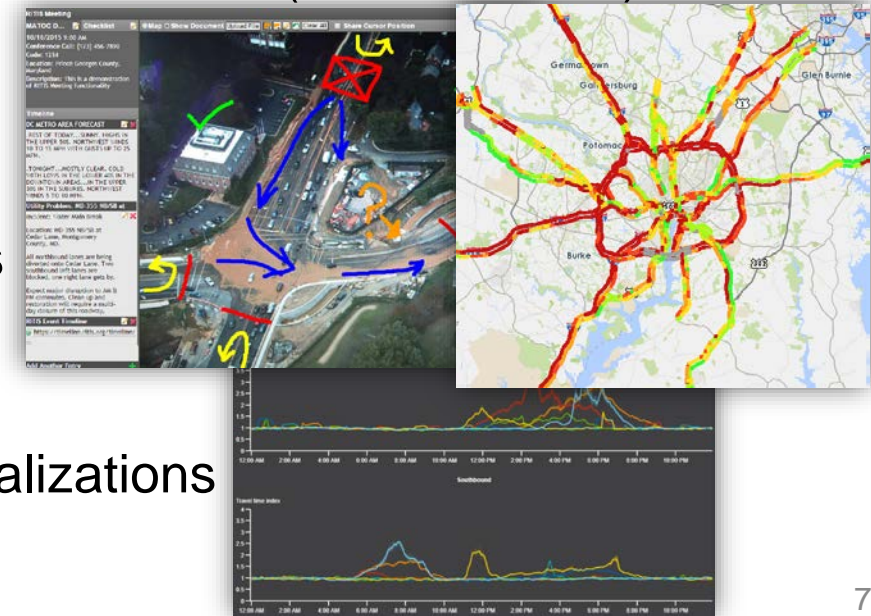
- Phone, CapWIN, **MATOC Alerts (Everbridge)**, **RICCS Alerts**, TMARS (800Mhz radio)

- MATOC Staff provide

- **Enhanced monitoring** of the area's transportation network
- Weekly **travel advisories** (planned & special events)
- Incident and severe weather based **coordination activities**
- Onsite and online **RITIS training**

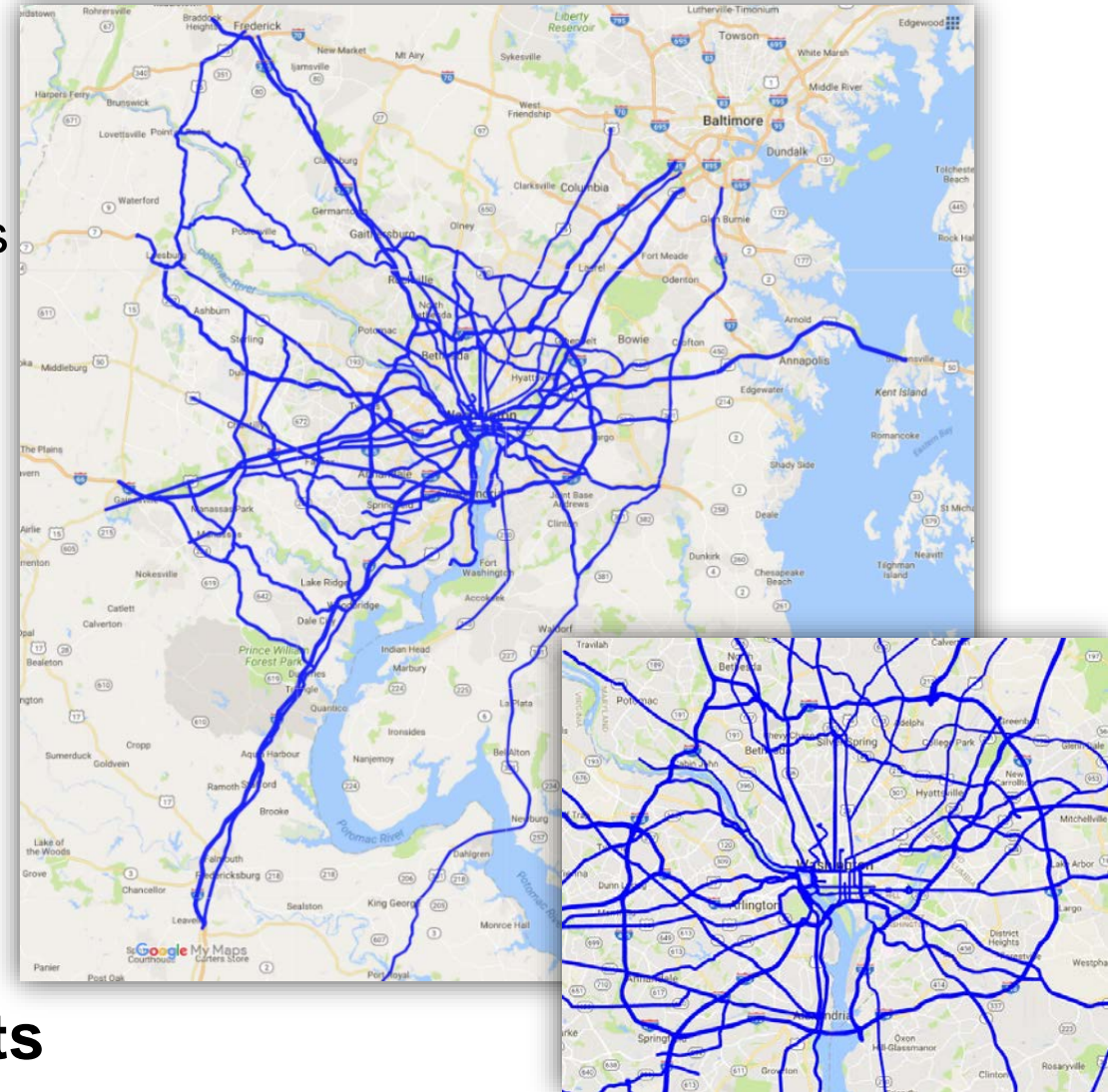
- Other RITIS related tools

- Probe Data Analytics (PDA) Suite – Various traffic data visualizations
- RITIS Meeting – Collaborative decision making tool



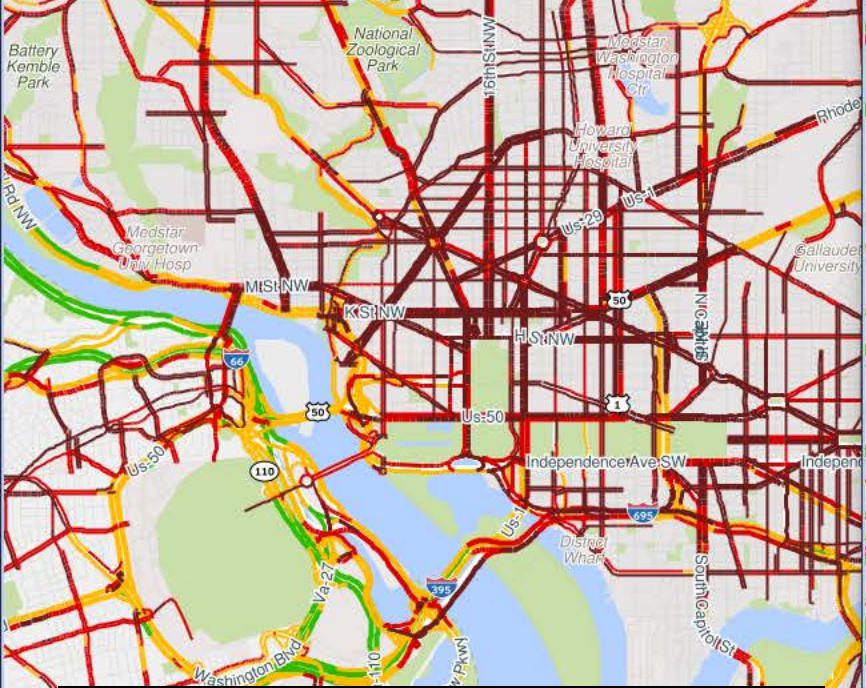
MATOC's Area of Interest

- **Area of Interest**
 - National Capital Region "+1"
 - Roadway network defined by MATOC Operations Subcommittee
 - Expands and contracts based on travel patterns
- **Focus Areas**
 - Interstates and major arterials
 - Jurisdictional borders and river crossings
 - Incidents or events that may impact multiple jurisdictions or transportation modes
 - Special events and seasonal hotspots and bottlenecks
- **MATOC has tools to evaluate ripple effects**

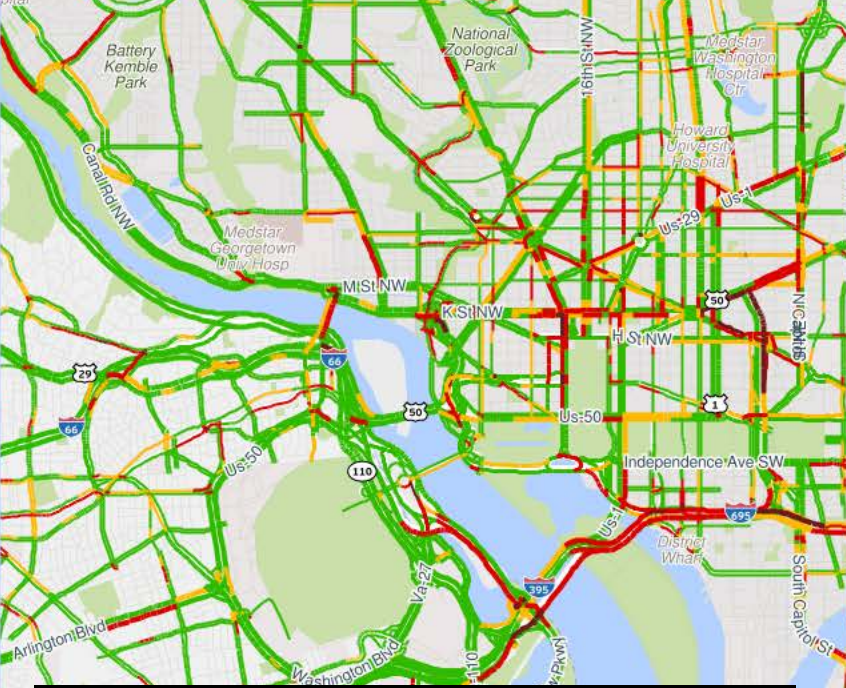




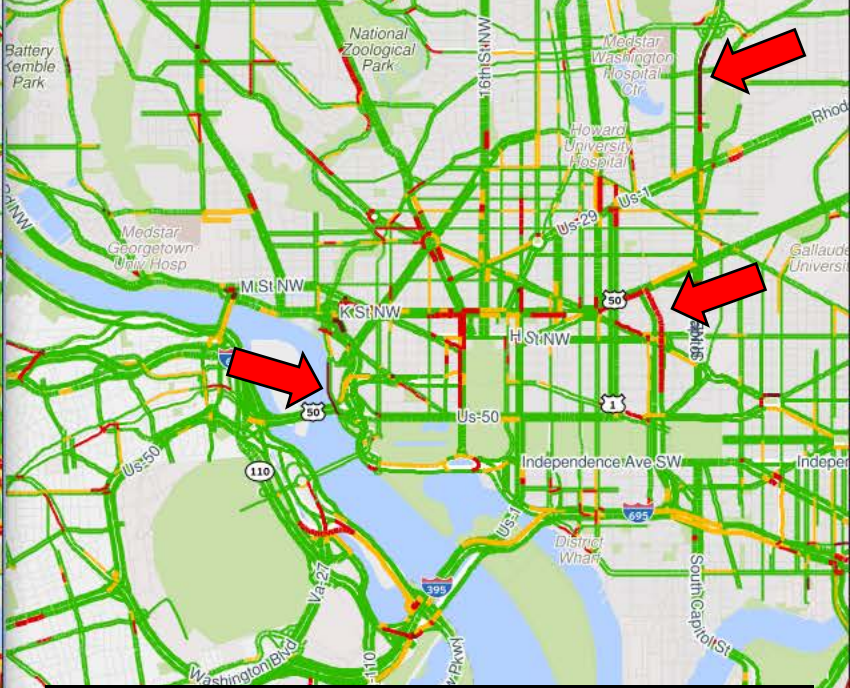
Probe Speed Data: Homing in on an incident



Speed Mode
 Measured (Raw) Speed
"What your vehicle/phone is reporting"



Congestion Mode
 Measured Speed vs Free Flow Speed
"Visualizing congestion"



Comparative Speed Mode
 Measured Speed vs Historical Speeds
"Detecting abnormal congestion"

Connecting the Dots



Incident
US 1 SOUTH/NORTH AT CRITTENDEN ST
 Prince Georges County, Maryland

Started: 7/31/2014 4:54 PM
 Updated: 8/1/2014 11:15 AM

1) Water Main Break (Road & Rails Closed)

Description: CALLED WSSC (301-206-4002) ...
 2 Responders of ...
 South ...

SCENE AND DETOUR
 DETOUR TO JEFFERSON ST TO B ...
 RTNKG OVER

Nearby FITM Plans
 01 MD 295 - Benning Road ...
 02 MD 295 - US 50 to MD 2...
 03 MD 295 - MD 202 to MD ...

Media
 S-1 at Crittenden St Wate...
 S-1 at Crittenden St Wate...
 S-1 at Crittenden St Wate...
 Add File/Link

Special Event

2) Special Event (Increased Traffic)

Started: ...
 Updated: ...
 Join Incident Chat Room

Fatalities Involved

I-95 INNER LOOP/OUTER LOOP AT EXIT 19 US 50
 Prince Georges County, Maryland

Major Crash! (Interstate Closed)

-Fatalities Involved
 Description

Started: ...
 Updated: ...
 6 Resp...
 Inner...

Nearby FITM Plans
 I495 Exit 16 to Exit 17
 I495 Exit 17 to Exit 19
 I495 Exit 19 to Exit 20

Media
 95-495 NB at US-50 - Multi...
 95-495 NB at US-50 - Multi...
 Add File/Link



3) Unusual Delays (Roadwork)

4) Planned Event (Drawbridge Opening)

5) DMS Support (VA to MD)

MAJOR ACCIDENT IN MD AT EX. 19 EXPECT DELAYS
 Updated: 08/01/2014 10:58 AM

MAJOR ACCIDENT IN MD AT EX. 19 EXPECT DELAYS
 Updated: 08/01/2014 10:58 AM

CRASH AHEAD AT EXIT 19 US 50 ALL LANES BLOCKED
 Updated: 08/01/2014 10:55 AM

Collision (Fatality) @ I-95 INNER LOOP/OUTER LOOP AT EXIT 19 US 50 - Event Timeline - Google Chrome

https://timeline.ritis.org/timeline/?incidentId=MDOT_CHART_e100fc4e638d04db0053fa2ec4235c0a

I-95 INNER LOOP/OUTER LOOP AT EXIT 19 US 50

Collision (Fatality)

Time: August 1, 2014 8:41:00 AM
 Distance: 15.5 miles upstream
 Speed: 40 - 50 mph

Incident location

MATOC's Triggers and Incident Classifications

- **Triggers**

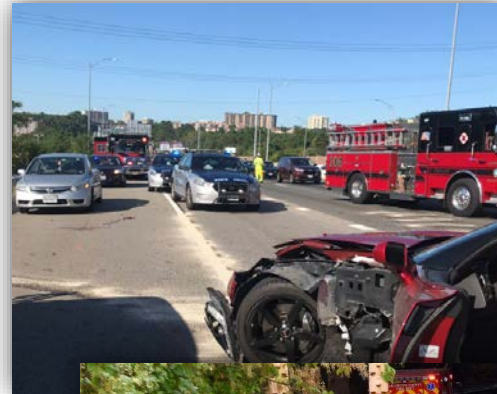
- Capacity: **50%** travel lanes closed
- Incident Duration: **>30** minutes
- Queue: **>4** mile delay (freeways)

- **Institutional knowledge**

- Operator experience and intuition
- Incident response activity
- Speed probe data

- **Incident Classification**

- **Minor** (<30min)
- **Intermediate** (>30min to 2hrs)
- **Major** (>2hrs)



TrafficView [Live Traffic](#) [My Routes](#) [Camera List](#) [Login](#) | [Register](#)

Layers

- Accidents and Events Legend
- Severity Low Medium High
- Overhead Signs
- Traffic Cameras
- Comparative Speed
- Weather Radar
- Weather Alerts Legend

Collision
Incident 1 of 2
BACK TO LIST
MD 355 SOUTH AT SHADY GROVE RD
Started 34 minutes ago
South North

Disabled Vehicle
Incident 1 of 5
BACK TO LIST
I-95 SOUTH PRIOR TO BALTIMORE AVE
Started 58 minutes ago

Collision
This incident has been closed.
I-66 west @ MM 67.800
Started 2 hours, 1 minute ago

Camera Feeds:
 - I-485 N OF AMER LEGION
 - I-85/485 ON U.U.B. MD
 - EAST

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MATOC Website: www.matoc.org

Twitter: @MATOC



District of Columbia

DC Homeland Security
and Emergency Management Agency

Clint Osborn, Chief - Division of Operations

MWCOG Transportation Planning Board
January 22, 2020 Meeting



DC Joint All-Hazards Operations Center (JAHOC)



JAHOC Center Management

DC Watch: Alert, warning, and notification; resource management; incident support

Local-level NCR Watch: Alert, warning, and notification *in coordination with FEMA*



FEMA Office of National Capital Region Coordination

Federal-level NCR Watch: Alert, warning, and notification *in coordination with NCR Watch*



District Traffic Management Center (TMC)

DC Traffic Management: Traffic monitoring, Roadway Operations Patrol (ROP) Team coordination, traffic control officer (TCO) coordination, and Inter-jurisdictional TMC Coordination



MPD Emergency Liaison Officer

Coordination with Law Enforcement: Liaison officer to coordinate with MPD's Command Information Center to streamline communications during incidents



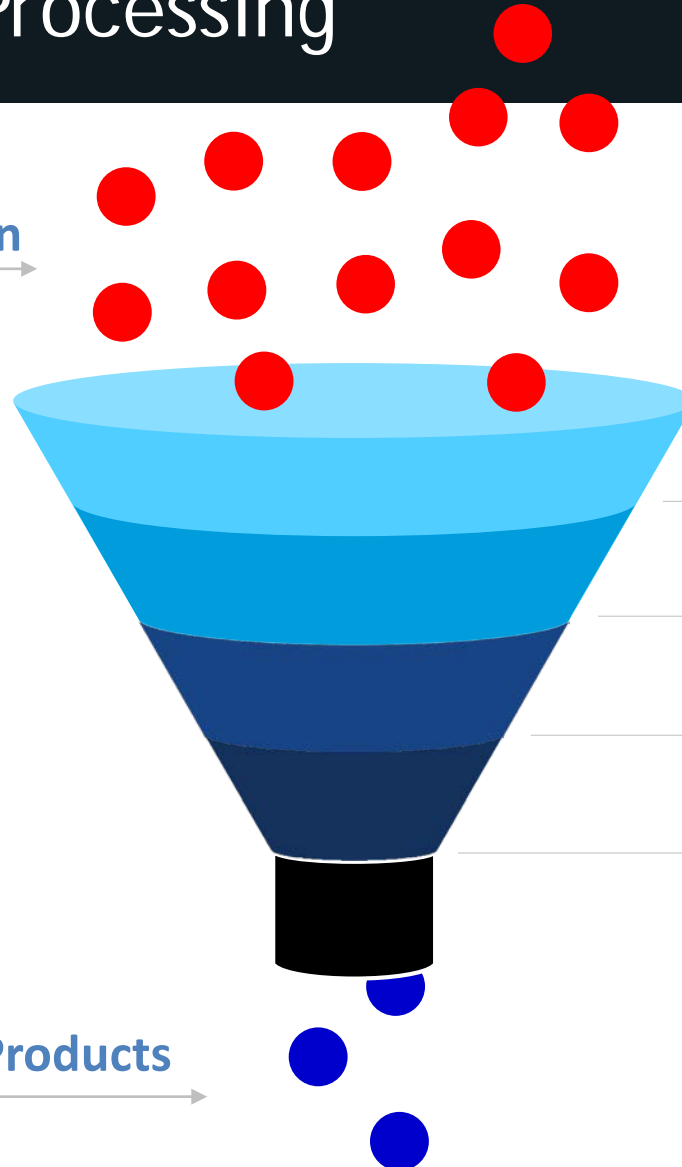
DCPS School Police

DCPS Facility Monitoring: Monitoring school facility and emergency needs across the public schools to streamline communications during incidents



Information Processing

Incident Information



- ▶ Collection
- ▶ Validation
- ▶ Analysis
- ▶ Dissemination

Intelligent Products



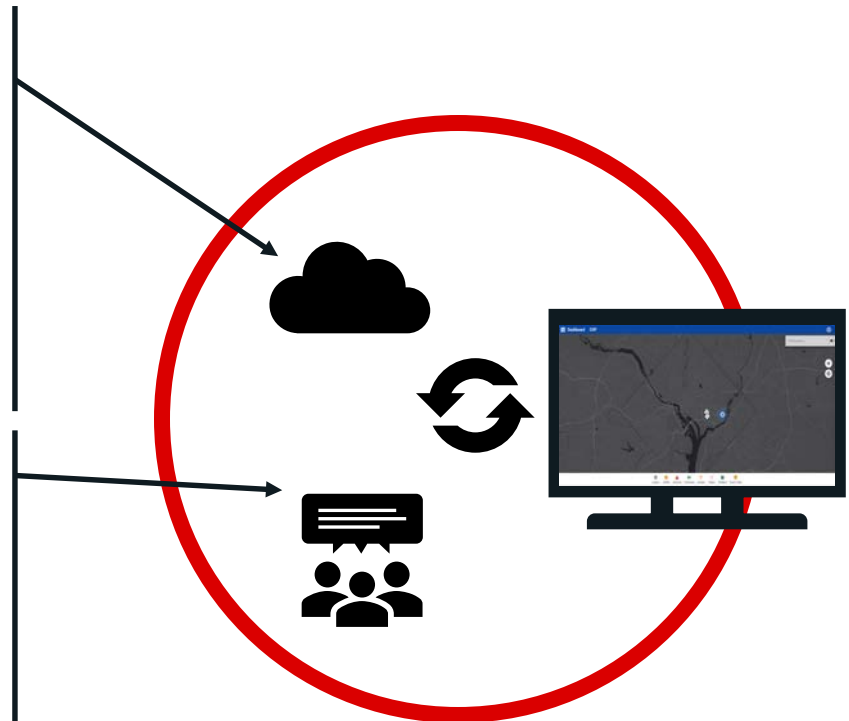
Collection - Information In

Automated Feeds – Human Review

Computer-Aided Dispatch
Central Email Account/Listservs
National Weather Service
RITIS & WMATA Service Alerts
DataMiner

Staff Collected Sources

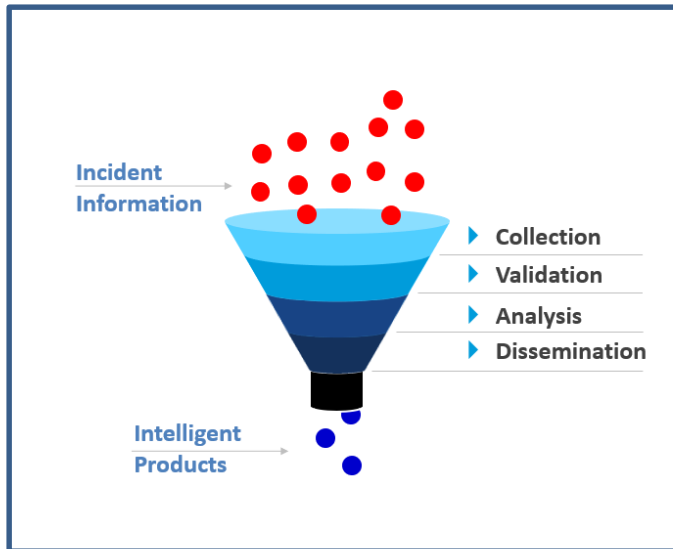
Staff in the Field
MView Camera Feeds
Telephone Calls
Open Source Media
Social Media
Radio: NAWAS, WAWAS, DENS, HAN
Partners Operations Centers



Metrics that Matter – JAHOC Local Watch

In 2018: Received over 295,000 alerts
In 2020 Q1: processed 2,670 incidents

Validation - Getting the Best Look at the Info



Do we have the correct information and all of it?

Challenges with Validation

Initial information is often wrong

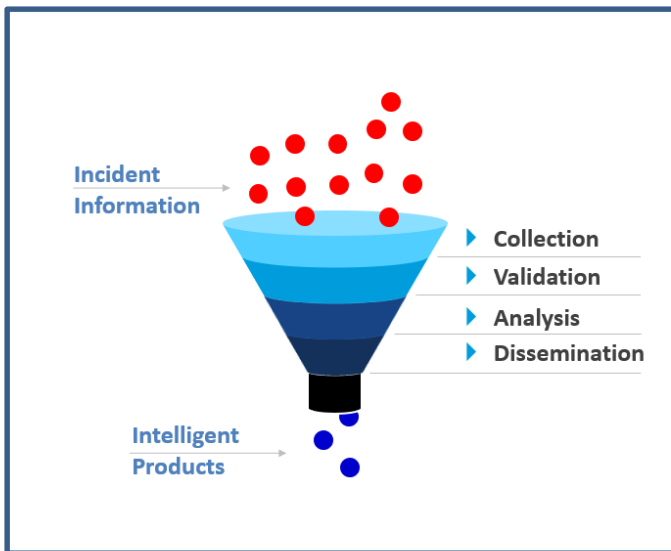
Validation takes time

Information keeps changing:
“just give it another minute!”

Multiple (competing) information sources

When is information “good enough”?

Analysis - Making the Most of the Info



What does the information tell us – what actions does it trigger for the audience?

Challenges with Analysis

Varying triggers and thresholds

Different products using the same information

Different audiences need different information

The human factor comes into play and acuity can change the calculus

Pause, probe, or publish?

Dissemination - Internal DCGov Alerts



Target: DC Gov Employees

Reply Reply All Forward
Wed 4/24/2019 7:30 AM
DH DC HSEMA Alert <noreply@everbridge.net>
Road Closure / Water Repairs (Douglas Street NE)

Reply Reply All Forward
Wed 4/24/2019 10:19 AM
DH DC HSEMA Alert <noreply@everbridge.net>
Traffic Advisory: Tenley Tiger Run - Sunday, April 28th 2019

Reply Reply All Forward
Wed 4/24/2019 11:15 AM
DH DC HSEMA Alert <noreply@everbridge.net>
PEPCO Road Closure.: 1900 17th St NW



Dissemination - Public AlertDC Notifications*



Target Audience: DC Community Subscribers

Get emergency alerts when you need them wherever you are!

Email Mobile Phones Text Messaging

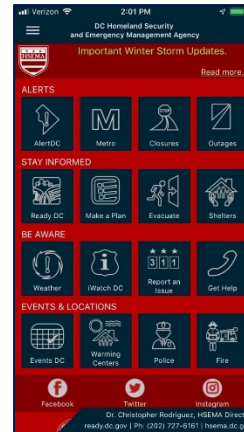
Sign up

Creating a profile takes just a few minutes. Remember your username and password so you can log in and change your information at any time.

* Username

This field is required.

Username must be a minimum of 4 acceptable characters. Acceptable characters are uppercase and lowercase letters, numbers, period, dash (-), underscore (_), and at symbol (@). No other characters or symbols are permitted at this time.



*MATOC receives these








Dissemination - NCR Watch Desk Alerts*



Target Audience: NCR Regional Emergency Responders

NCR Watch Desk: Virginia EOC Activation-Update 1

 NCR Watch Desk <noreply@everbridge.net>
To: Osborn, Clint (HSEMA)

 Reply  Reply All  Forward 

Mon 1/20/2020 5:11 PM

NCR Watch Desk: Virginia EOC Activation-Update 1

Update 1: The Virginia Emergency Operations Center has transitioned back to Yellow (Monitoring) status.

Location: Virginia

Source of Information: VDEM

Date of Information: 17:05:11 on 01-20-2020

Cross Jurisdictional or Cascading Impacts: None at this time.

Triggered CIR(s): CIR 9 EOC Activation

Distribution: Sent by NCR Watch Desk to RESF 5all, NCROps via MWCOG RICCS

Do not distribute this information beyond Trusted Agents. This message is used for internal regional Situational Awareness and not intended for public dissemination.

Desk: 202-481-3191

Email: Ncric3.hsema@dc.gov

*MATOC receives these



Dissemination - FEMA Watch Desk Alerts*



Target Audience: Regional and Federal Emergency Response Leaders

FEMA Region III SPOT Report 20-006 (CIR# 2, 5): Virginia State of Emergency (UPDATE 3)



FEMA-R03-RRCC-WATCH <FEMA-R03-RRCC-WATCH@fema.dhs.gov>

To: FEMA-R03-RRCC-WATCH
Cc: Afman, Jeffrey; Duguay, Robert

Reply Reply All Forward

Mon 1/20/2020 4:00 PM

CAUTION: This email originated from outside of the DC Government. Do not click on links or open attachments unless you recognize the sender and know that the content is safe. If you believe that this email is suspicious, please forward to phishing@dc.gov for additional analysis by OCTO Security Operations Center (SOC).

Report: 20 - 006

Initial/Update: Update 3

CIR(s) Triggered: #2 A FEMA Declaration is approved by the President, or a State of Emergency/Preparedness is declared by a State Governor or County Government, in Region III. State request for FEMA Declaration or PDA/IMAT Teams. Any SBA Declaration issued in Region III. #5 Changes in Emergency Operations Status EOC activation level at the State or County level

Report Date/Time: Monday, January 20, 2020 / 4:00 pm

Updates in Blue:

Summary (BLUF): Per the Virginia Governors Website: Governor Northam of Virginia Declares State of Emergency in advance of Capitol Square Demonstration. Credible intelligence gathered by Virginia's law enforcement agencies indicates that tens of thousands of advocates plan to converge on Capitol Square for events culminating on January 20, 2020. This emergency declaration is temporary, and extends from Friday, January 17, 2020, at 5:00 pm until Tuesday, January 21, 2020, at 5:00 pm.

*MATOC receives these



Discussion

- Incident Examples:
 - Incident on a Roadway
 - March 28, 2019 Capital Beltway tanker truck incident
 - Incident Away from a Roadway but Impacting a Roadway:
 - October 11, 2019 building fire alarm incident impacting Independence Avenue
- Questions and discussion



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National Capital Region
Transportation Planning Board