



Quarterly Meeting • March 9, 2017







Webcast and audio information

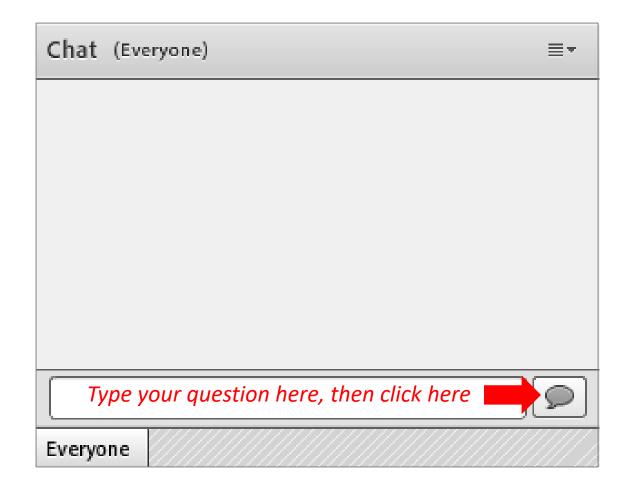
> The call-in phone number is:

1-719-867-1571 & enter 725437# at the prompt

- > Your phone line will be muted throughout the webcast
- > Please press *0 to speak to an operator for questions regarding audio
- > Please call 917-974-4810 for difficulties with the web or audio application
- > This web meeting is being recorded
- > All materials will be available to participants after the web meeting

Asking questions

- > Please pose your questions using the chat box
- > Questions will be monitored, then answered by the speakers during their presentation or at the end of the webcast



Welcome & introductions



Denise Markow, PE

I-95 Corridor Coalition TSMO

Program Coordinator

DMarkow@i95coalition.org



Michael Pack

CATT Lab

Director

PackML@umd.edu



Jason Dicembre

Maryland SHA

TMC Operations SOC Manager

JDicembre1@sha.state.md.us



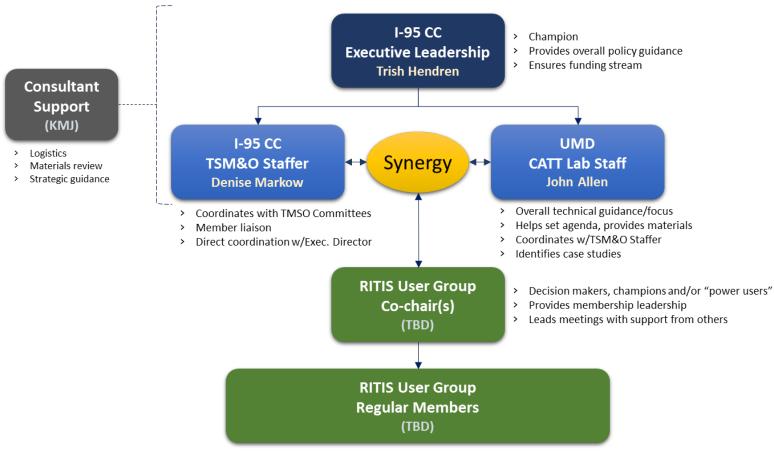
Andrew Worrell

DC HSEMA

IC3 Program Manager, Operations

andrew.worrell@dc.gov

User Groups • Organization, interaction, function (RITIS example)



- > Coalition Members (operations, planning, traveler info, and research)
- > Identify and prioritize features; provide use cases
- > Function as a feedback loop to system developers
- Liaison to agency data feeds and systems to facilitate system stability and/or encourage adoption of best practices in data and info sharing

Meeting agenda

- > Follow up on Action Items from the Last Meeting
- > Survey Results
- > Co-chair Update
- > Spotlight Presentations
- > Pack's Pointers
- > RITIS Roadmap
- > Agency Input Session
- > Wrap up

Follow-up on last meeting's action items

- > We'll provide updates on...
 - ✓ Agency survey results
 - Co-chair selections
 - ✓ The RITIS Roadmap (prioritizing features & functions)

...and have some *really interesting* spotlight presentations in store!

Follow-up survey

After our inaugural meeting, we conducted a brief follow-up survey of 72 representatives from:

- Federal agencies
- Authorities

Law enforcement

State DOTs

Counties / cities

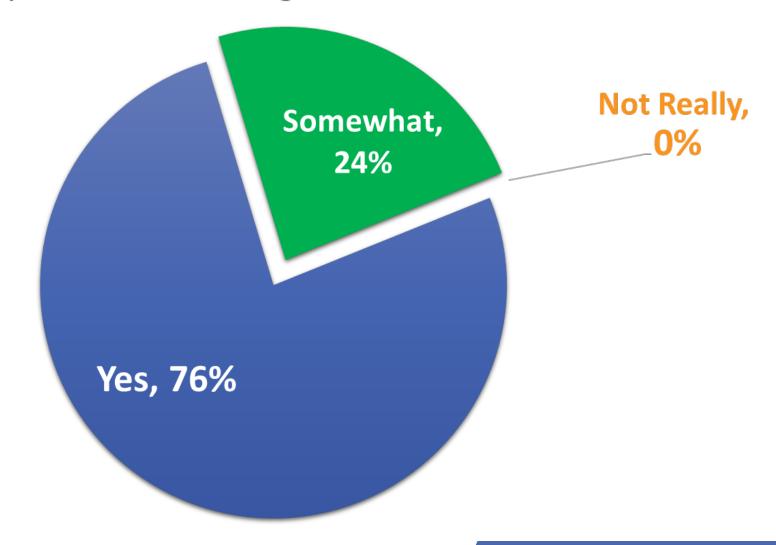
Universities

• MPOs

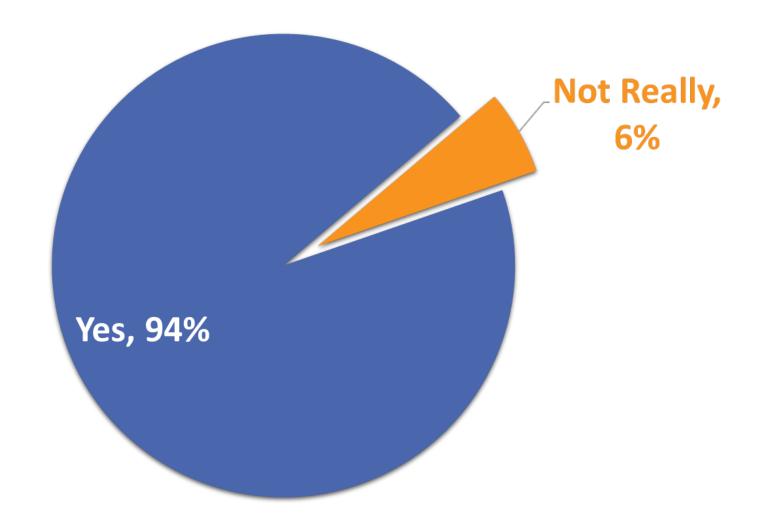
- Emergency management
- Consultants

Thanks for taking part!

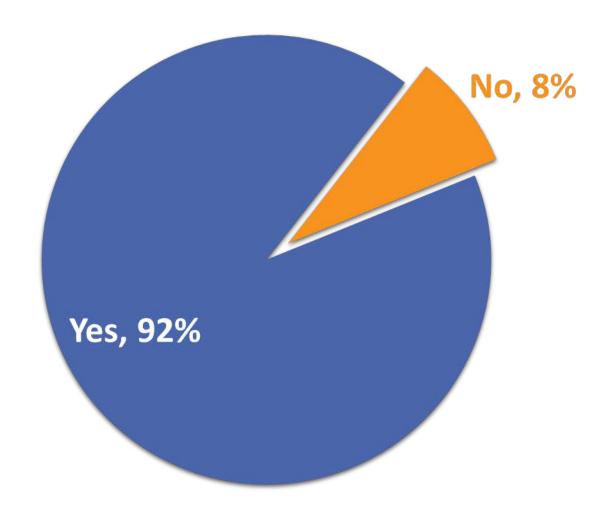
Did you find the meeting useful/informative?



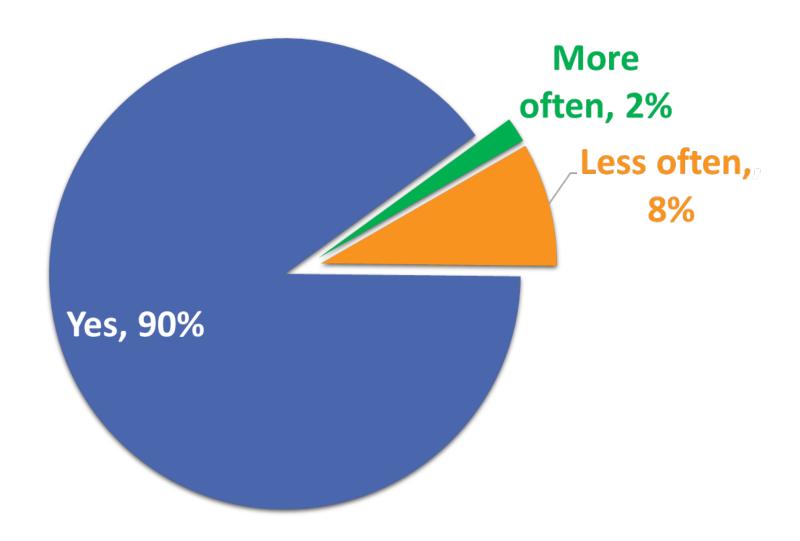
Did you find the Spotlight Presentation useful?



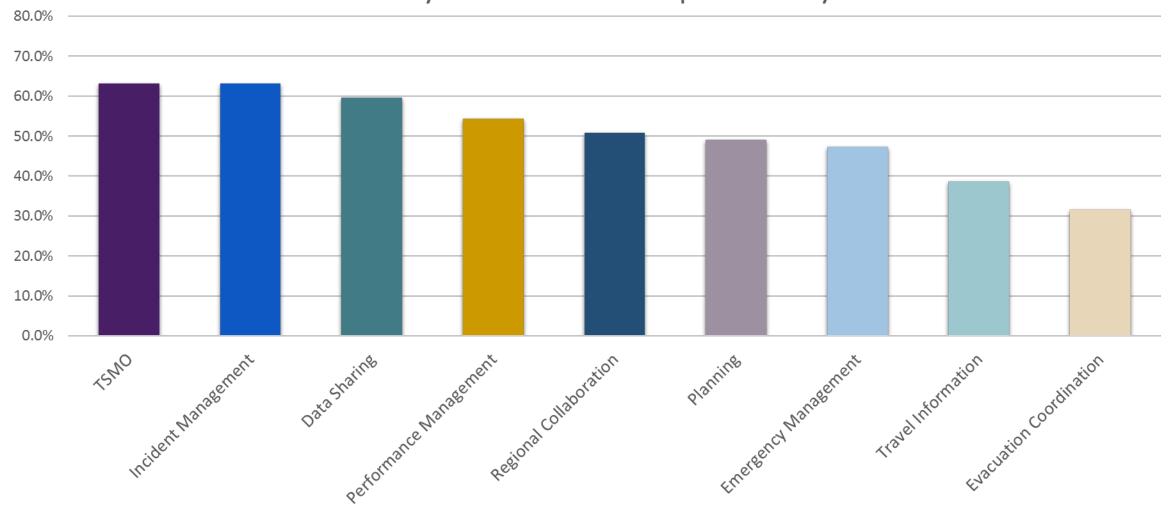
Are you Interested in participating in future meetings?



Does holding quarterly meetings work for you?







- > Takeaways...
 - Everyone found the meetings informative at some level
 - The spotlight presentation was a BIG hit
 - Virtually everyone will continue participating
 - Most prefer quarterly meetings
 - 5 We'll concentrate on the top five key focus areas

In the spotlight...

I-70 Fatality Incident / After Action Review

Jason Dicembre

Maryland Department of Transportation



> Background...

- Occurred on October 29, 2016 at around 4:30 AM
- Located on I-70 West, past Exit 80 MD 32 Sykesville Rd
- A car hit a deer, then a tractor trailer hit the car, and jack-knifed, resulting in one fatality
- All lanes were closed in the WB direction for over 7 hr
- It took about 11 hr to fully clear the incident and reopen all lanes





> Several RITIS / PDA tools were used to conduct impact analysis and provide visual content as part of an After Action Review...











EQT/ Incident Timeline

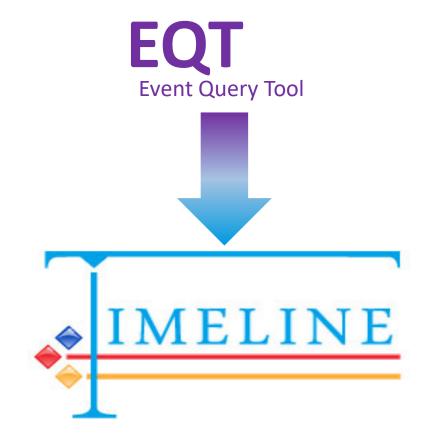
Region Explorer

Trend Map

Congestion Scan

User Delay Cost

- > Incident Timeline...
- Used to review responder response times, lane
 & event clearance times, and Operator notes.
- Timeline graphics are inserted in to AARs
- "Heat Map" is used to see trends in incident activity



EQT analyzes your ATMS event data for insight into event impacts on your roadway system, through auto-created tables, charts and maps.

Timeline displays how an incident is being managed by showing the relationships between responder notifications & arrival times, lane status, traffic queues, clearance times, communication logs, CCTV, and DMS.

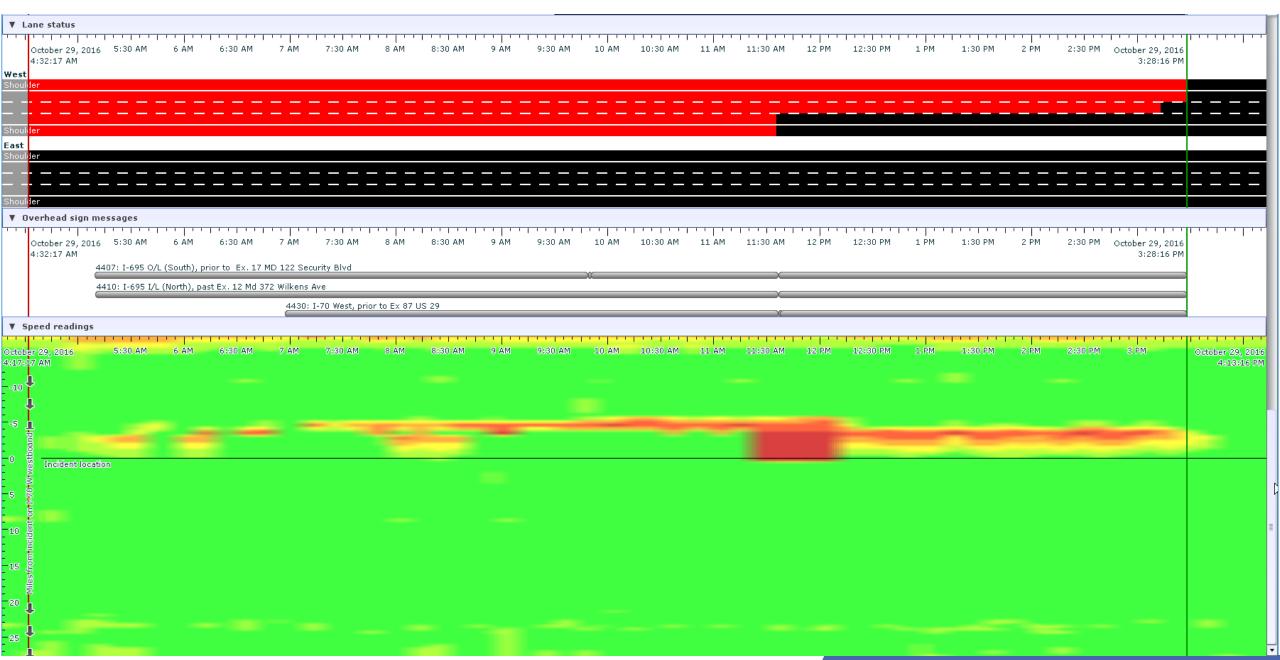
70 WEST PAST EXIT 80 MD 32 SYKESVILLE RD (EB) - Collision (Fatality) Integrated Event Management October 29, 2016 5:30 AM 6 AM 6:30 AM 7 AM 7:30 AM 8 AM 8:30 AM 9 AM 9:30 AM 10 AM 10:30 AM 11 AM 11:30 AM 12 PM 12:30 PM 1 PM 1:30 PM 2 PM SOC (tgibson) **TOC Communications** SOC (ecoffman) TOC7 (kcreamer) Show full text ▼ Notifications and responders October 29, 2016 5:30 AM 6 AM 6:30 AM 7:30 AM 7:30 AM 8 AM 8:30 AM 9:30 AM 10 AM 10:30 AM 11 AM 11:30 AM 12 PM 12:30 PM 1 PM 1:30 PM 2 PM 2:30 PM October 29, 2016 State Police SHA Shop Dayton Arrow Board Sand Truck CHART Unit SG80377 CHART Unit 9701 SG01018 Notifications & Responders CHART Unit 9004 Field Ops Division Chief CHART Unit 9700 SG01009 Priv. Tow Heavy Duty 8:30 AM 9 AM 9:30 AM 10 AM 10:30 AM 11 AM 11:30 AM 12 PM 12:30 PM 1 PM 1:30 PM 2 PM 2:30 PM October 29, 2016 **Lane Status** 7:30 AM 8 AM 8:30 AM 9 AM 9:30 AM 10 AM 10:30 AM 11 AM 11:30 AM 12 PM 12:30 PM 1 PM 1:30 PM 2 PM 2:30 PM October 29, 2016 Overhead Sign Messages 4407: I-695 O/L (South), prior to Ex. 17 MD 122 Security Blvd 4430: I-70 West, prior to Ex 87 US 29 **Speed Readings** 1-95 Corridor Coalition • RITIS User Group • The

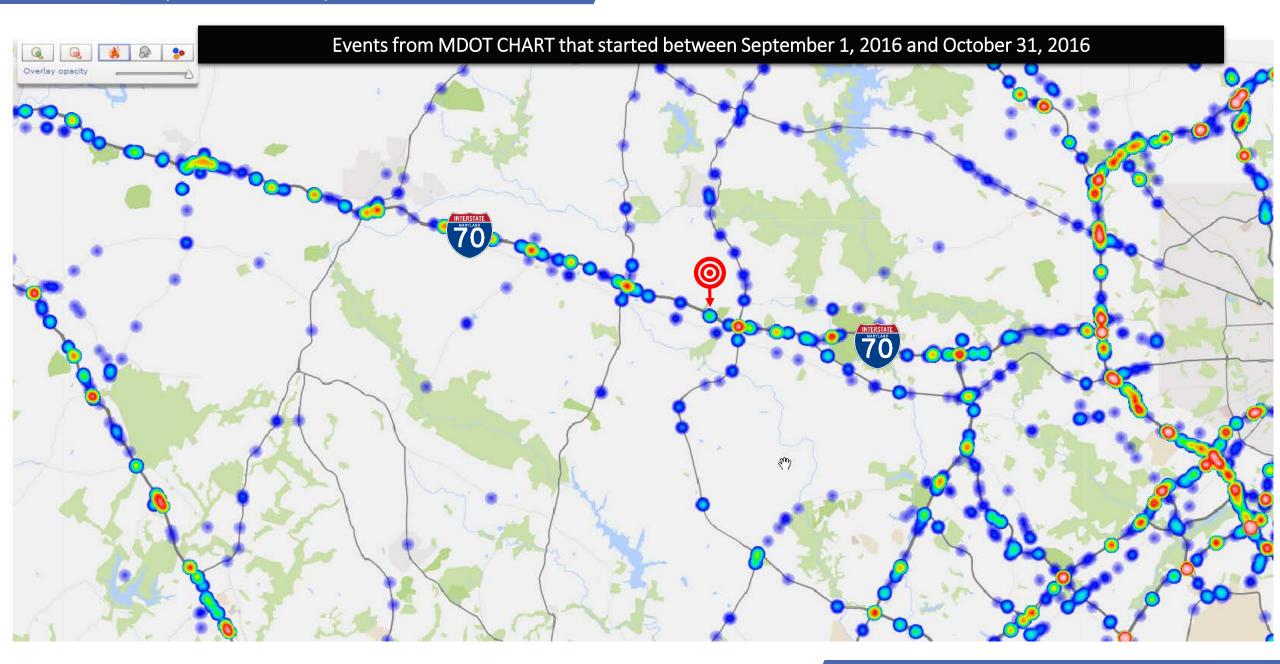
TOC Communications Collision (Fatality) 🚙 🚟 🕒 🕦 💹 Map ▼ Traffic management center communications October 29, 2016 7 AM 9 AM 9:30 AM 10 AM 10:30 AM 11 AM 11:30 AM October 29, 2016 4:32:17 AM 3:28:16 PM SOC (alindsey) SOC (tgibson) SOC (mgrollman) SOC (ecoffman) TOC7 (kcreamer) SOC (alindsey) (5:12:40 AM): 9413 EVENT PAST 32 ABLE TO ACCESS EXIT RAMP SOC (alindsey) (5:13:59 AM): CAR HIT A DEER THEN THE TT CAME AND HIT THE CAR PRIORITY 4 SOC (alindsey) (5:22:29 AM): WAITING FOR ROUGH ETC FROM 9413 BEFORE ADVISE OCRI SOC (alindsey) (5:29:18 AM): OCRI ADVISED SOC (alindsey) (5:31:59 AM): OIL PAN ON THE TRACTOR MY BE COMPROMISED HAZMAT IS ON SCENE PUMPING THE TANKS SOC (alindsey) (5:32:11 AM): MSP ADVISED REQUESTING MDE SOC (alindsey) (5:46:53 AM): MSP ADVISED NO ETC AT THIS TIME AND CONFIRMED THAT THIS IS A F SOC (tgibson) (5:47:48 AM): DETOUR WILL BE 70 W TO MD 32 TO MD 144 TO MD 97 TO 70 SOC (tgibson) (5:48:14 AM): 7315 ON SCENE TO SET UP DETOUR SOC (alindsey) (5:50:30 AM): DETOUR 70W TO 32 TO 144 TO 97 BACK ONTO 70W SOC (alindsey) (5:51:26 AM): AT ACTUAL LOCATION IS RIGHT BEFORE THE ENTRANCE FOR THE SCALE HOUSE SOC (mgrollman) (6:04:52 AM): CALLED 9700 UNABLE TO LEAVE MESSAGE PHONE KEPT RINGING SOC (mgrollman) (6:21:49 AM): 9701 HAS BEEN NOTIFIED OF THE UPDATES SOC (mgrollman) (6:32:10 AM): 9413 ADV AT THIS POINT HE DOES NOT KNOW WHAT THE TT IS LOADED WITH SOC (mgrollman) (6:32:21 AM): 9413 ADV HE CONTACTED 9004 BUT WAS UNABLE TO REACH 9701 SOC (mgrollman) (6:33:45 AM): 9413 ADV TT WAS HAULING AMAZON PACKAGES SOC (mgrollman) (6:34:52 AM): 9413 ADV HE LEFT HIS STATE PHONE IN HIS REGULAR TRUCK, # TO REACH HIM AT IS 443 698 2648 SOC (mgrollman) (6:36:10 AM): 9701 ADV OF 9413'S PHONE # SOC (mgrollman) (6:54:47 AM): OCRI UPDATED ON EVENT SOC (mgrollman) (7:04:06 AM): 9413 ADV MSP IS ALLOWING THE REMOVAL OF THE DEER CARCASS IN LN/1 SOC (mgrollman) (7:22:15 AM): 9413 ADV DEBRIS HAS BEEN REMOVED OUT OF LN/1 AND SAND TRUCK IS GETTING READY TO MAKE A PASS SOC (mgrollman) (7:45:03 AM): 9413 ADV AN ETC OF 10 MINS TO REOPEN THE LEFT LANE, HOWEVER DID NOT MENTION AT FIRST IT WAS JUST TO RELIEVE THE TRAFFIC STUCK IN THE QUEUE SOC (mgrollman) (7:45:05 AM): UPDATED PAGE SENT OUT SOC (mgrollman) (7:45:19 AM): 9413 ADV CRASH TEAM IS STILL ANOTHER HOUR OUT DUE TO COMING FROM THE EASTERN SHORE SOC (mgrollman) (8:01:37 AM): 9703 ADV HE IS ENROUTE TO ASSIST 9413 SOC (ecoffman) (8:02:49 AM): 9315 ADV DETOUR IN PLACE WB 32 TO MD 97 SOC (magrollman) (8:16:09 AM): 9413 ADV CRASH TEAM THAT WAS ORIGINALLY COMING IS NO LONGER GOING TO BE ENROUTE, MSP ON SCENE WILL HANDLE THE REST OF THE PICTURES AND INVESTIGATION TOW HAS BEEN CALLED SOC (mgrollman) (8:16:12 AM): 9413 ADV STILL NOT ETC SOC (mgrollman) (8:16:54 AM): 9413 ADV THE QUEUE HAS BEEN CLEARED SOC (mgrollman) (8:47:45 AM): 9703 ADV WB DELAYS BEGIN AT SANDS HILL RD SOC (mgrollman) (8:47:54 AM): 9703 ADV RUNNING CODE SOC (mgrollman) (9:35:22 AM): 9703 ADV THE INVESTIGATION IS COMPLETE PASSENGER CAR IS GOING TO REMOVED FIRST AND THEN THEY ARE GOING TO CUT MORE GUARDRAIL TO FREE THE TT SOC (mgrollman) (9:35:25 AM): NO ETC SOC (mgrollman) (9:49:20 AM): MSP HEADQUARTERS SENT OUT AN EMAIL THAT ALO SOC (mgrollman) (9:49:57 AM): CONFIRMED WITH 9703 THAT ALL LANES WERE STILL CLOSED SOC (mgrollman) (9:50:11 AM): CALLED WATERLOO BARRACK TO ADVITHEM TO TELL HEADQUARTERS THAT ALL LANES STILL REMAINED CLOSED SOC (mgrollman) (9:50:29 AM): W/B I-70 @ MD RT 32 is now open MSP Headquarters Duty Officer P.C.S.D. 410-653-4200 MSP.HQDO@Maryland.gov SOC (mgrollman) (11:14:19 AM): 9703 ADV RECOVERY PROCESS IS NOT GOING WELL THEY ARE TRYING TO GET THINGS CLEARED OUT OF THE WAY SO THEY CAN REOPEN LN/1 IN THE NEXT 30 MINS TOC7 (kcreamer) (11:30:25 AM): 9711 ADVISED MD 144 IS BACKED UP TO MD 32 SOC (mgrollman) (11:39:14 AM): 9703 ADV ROTATOR IS ENROUTE SOC (mgrollman) (11:39:35 AM): 9703 ADV LEFT LN IS OPEN AT THE SCENE AND THEY ARE LETTING THE SHOP KNOW TO LIFT THEIR DETOUR SOC (mgrollman) (12:51:31 PM): 16 MSP 044425 SOC (mgrollman) (12:51:36 PM): 50-60 FT OF GUARDRAIL DAMAGE SOC (mgrollman) (12:55:37 PM): 9703 ADV 2 ROTATORS ARE ON SCENE FROM MORTONS SOC (ecoffman) (1:10:41 PM): SHOP ADV DETOUR REMOVED SOC (mgrollman) (2:26:31 PM): 9703 ADV TT IS BACK UP ON ITS WHEELS SOC (mgrollman) (2:26:36 PM): APPROX 15 MINS TO REOPEN LN/2 SOC (mgrollman) (3:08:48 PM): 9703 ADV THE TT HAS BEEN TOWED TO THE SCALEHOUSE AND LN/2 IS NOW REOPEN HOWEVER LN/1 WILL REMAIN CLOSED FOR CLEANUP

Notifications & Responders



Lane Status, Sign Messages, Speeds



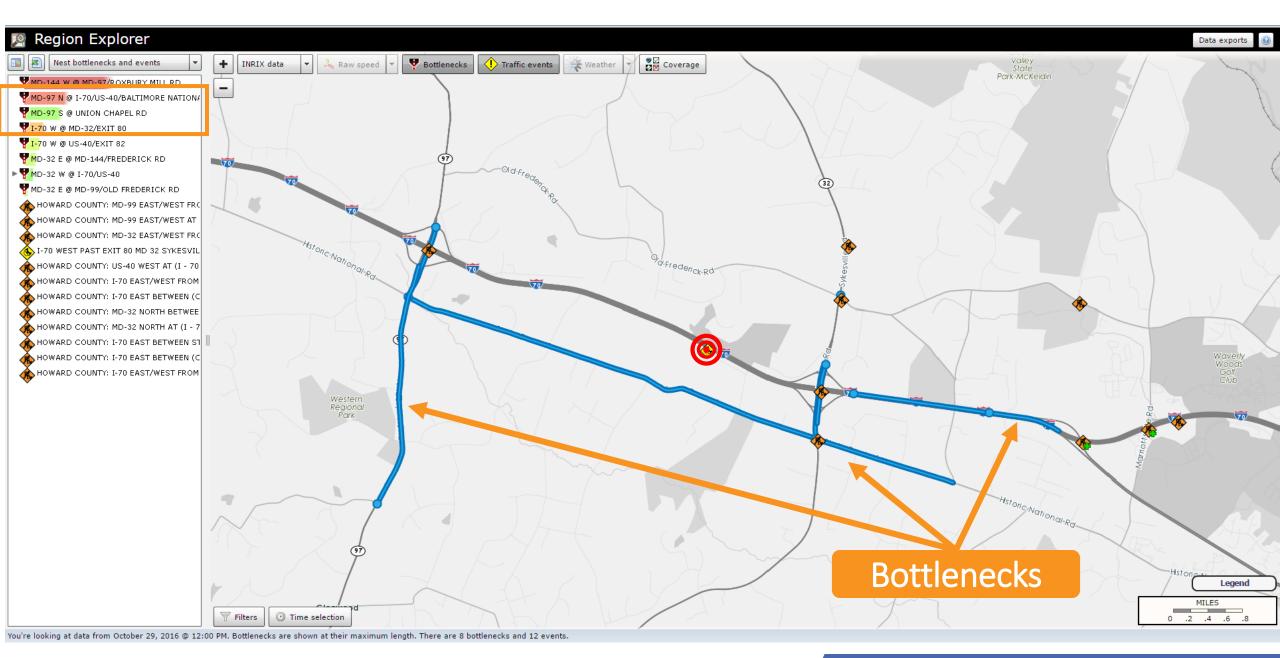


- > Region Explorer...
- Used to determine the choke points of traffic during the incident, and future detour points
- Helps improve Quick Clearance practices by honing in on the effects on tertiary roadways



An interactive traffic conditions app that can be used to explore the impacts of bottlenecks and incidents along a road, in real-time, or previous point in time.

Bottleneck Locations at 12:00 PM on 10.29.2016

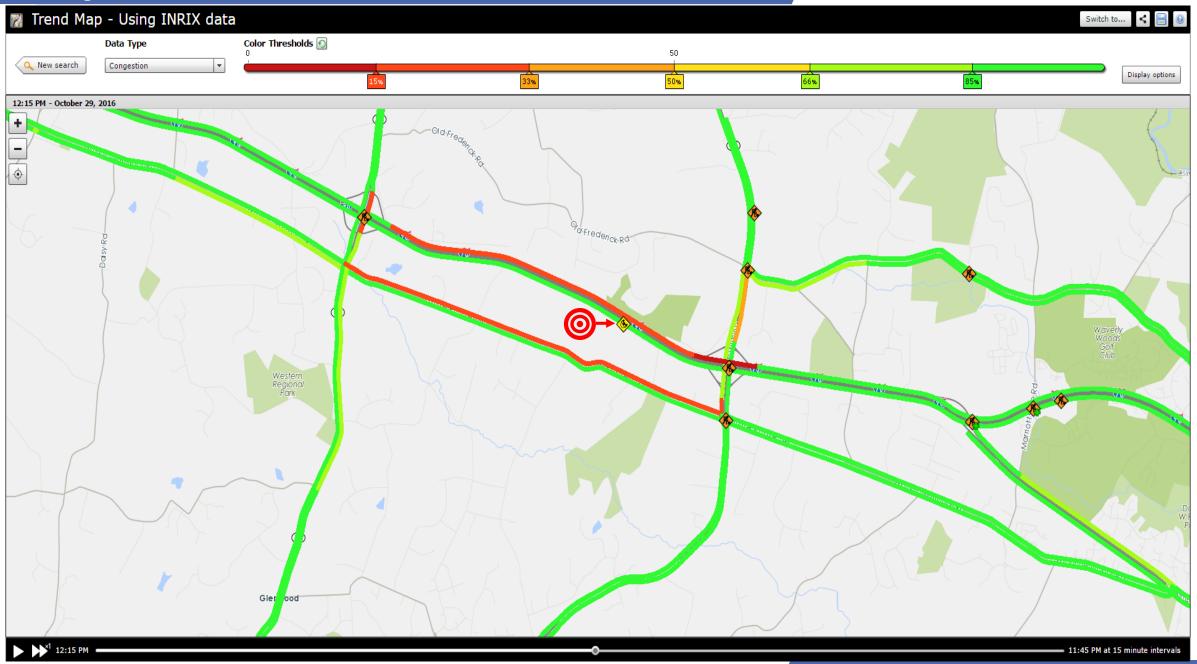


- > Trend Map...
- Used it to determine the significance of the delay over the time of the incident's duration
- Using it as a case to promote Quick Clearance practices



An animated congestion and event conditions map that dynamically displays changes over time.

Congested Locations at 12:15 PM on 10.29.2016

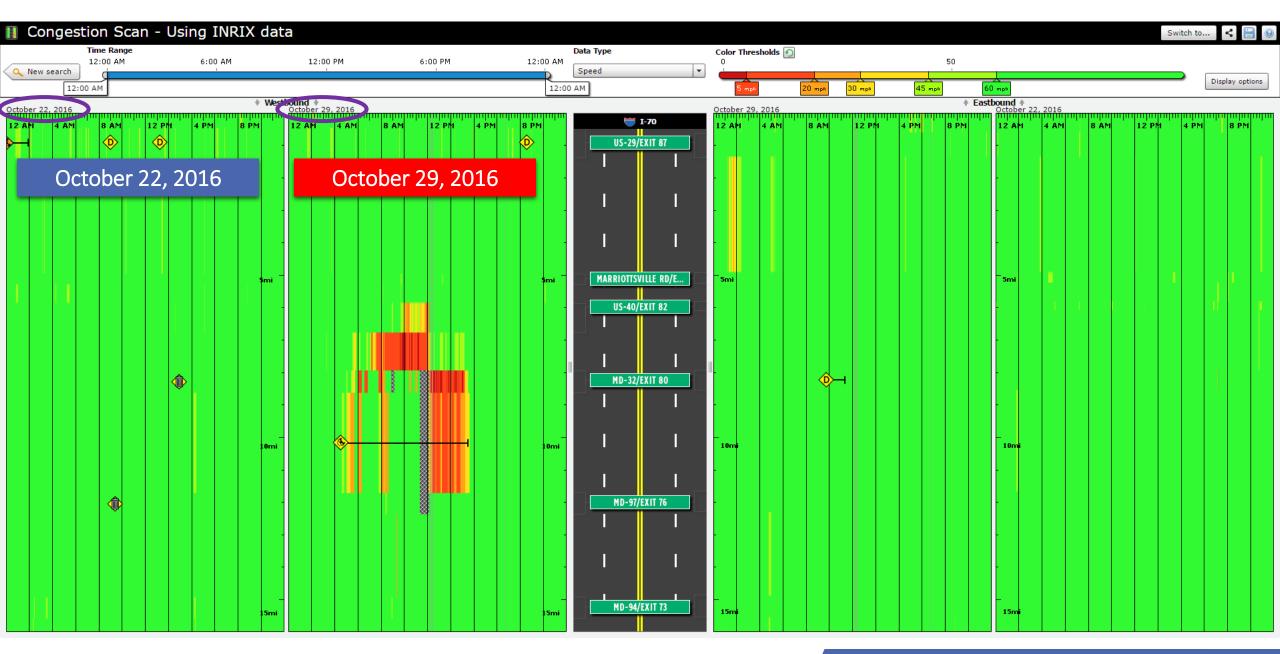


- > Congestion Scan...
- Used to view historical extent of the queue
- Queue graphics are inserted into AARs for emphasis



Analyze temporal and spatial conditions on one or more stretches for road, selecting from several mobility and reliability performance metrics.

Comparing Oct. 29th to the prior Saturday



- > User Delay Cost...
- The tool we use more heavily
- Helps put things into dollars and cents, to prove the value of our TSM&O program
- Crucial to our program's funding is to prove the benefit of Quick Clearance practices
- By analyzing the cost of a long-duration incident, we can better make the case for additional or improved resources

Example: for this incident, we were able to make the case that the State Police need an adjustment to how it manages it's tow list (i.e.; a company should be able to prove that it has the necessary equipment for heavy duty operations)



Combine speed data with volume data to estimate the cost of delay (and other measures) due to congestion.

What's the User Delay Cost on the following roads

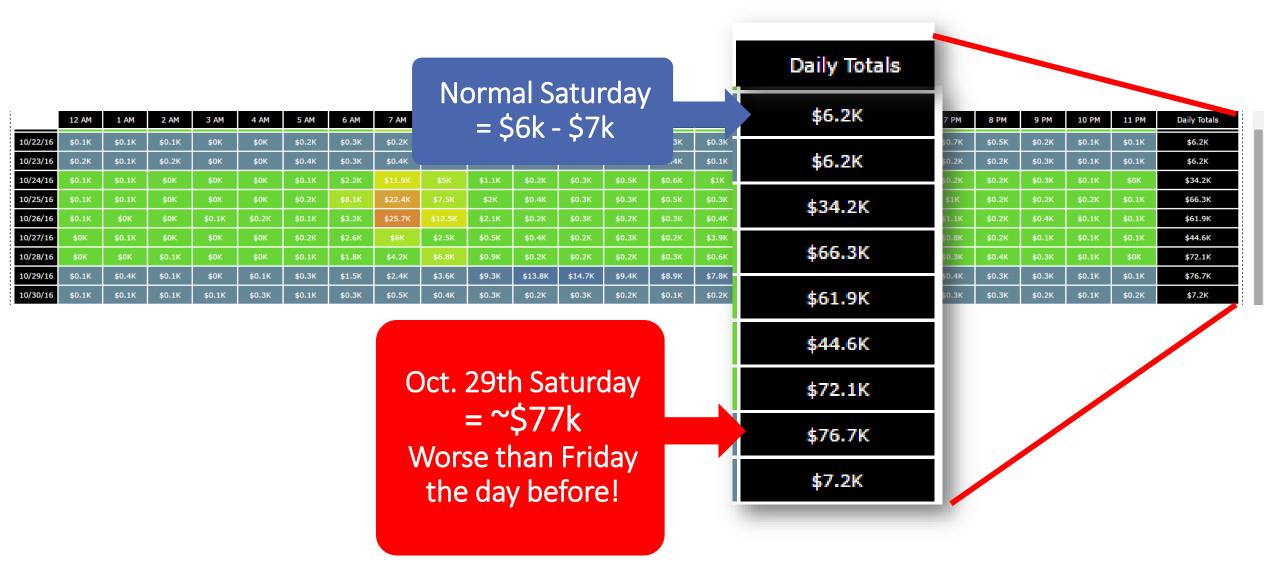


Assuming an Average Value of time of:

\$16.79 per hour (Passenger Vehicles) \$86.81 per hour (Commercial Vehicles)

(NOTE: User Delay is calculated any time speeds fall below free-flow)

User delay on I-70 and nearby arterials



> Takeaways...

Now I get it

 Tools provide quick access to data and show the benefits of quick clearance practices and the value of TSM&O Programs

It is all about justification

Gives ammunition for requests for funding, positions, and equipment

It is not a perception, it's a reality

- Tools provide data-backed conclusions for After-Action Reports
- Assists with making cases to external (and internal) partners about improving current practices
- Over time, we can analyze trends along individual corridors

Thanks!



For more information, please contact:

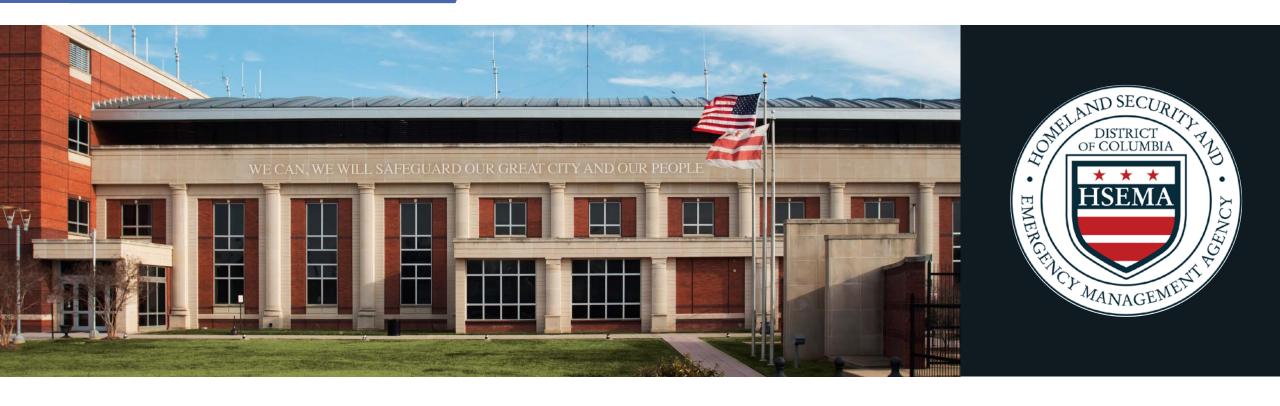
Jason Dicembre
TMC Operations SOC Manager
Maryland Department of Transportation
State Highway Administration
Office of CHART & ITS Development
jdicembre1@sha.state.md.us

In the spotlight...

RITIS Situational Awareness Capability: Emergency Management Partnerships

Andrew Worrell
District of Columbia Homeland Security and
Emergency Management Agency





IC3 RITIS User's Group Brief

RITIS Situational Awareness Capability: Spotlight on Emergency Management Partnerships

Agenda

- Information Collection and Coordination Center (IC3) background
- National Capital Region (NCR) Composition
- > Alert Notification Message Analysis
- RITIS-based Essential Elements of Information (EEI)
- Cascading Impacts/Consequence Management
- Dashboard Management/RITIS Integration
- Summary of RITIS Advantages
- **Contact Information**



Information Collection & Coordination Center (IC3)

IC3 Mission

- Improve regional situational awareness
- Enhance regional coordination of information

> IC3 Objectives

- Identify regional priorities for information sharing
- Monitor emerging incidents and potential threats, and provide regionally-focused situational awareness beyond Notification

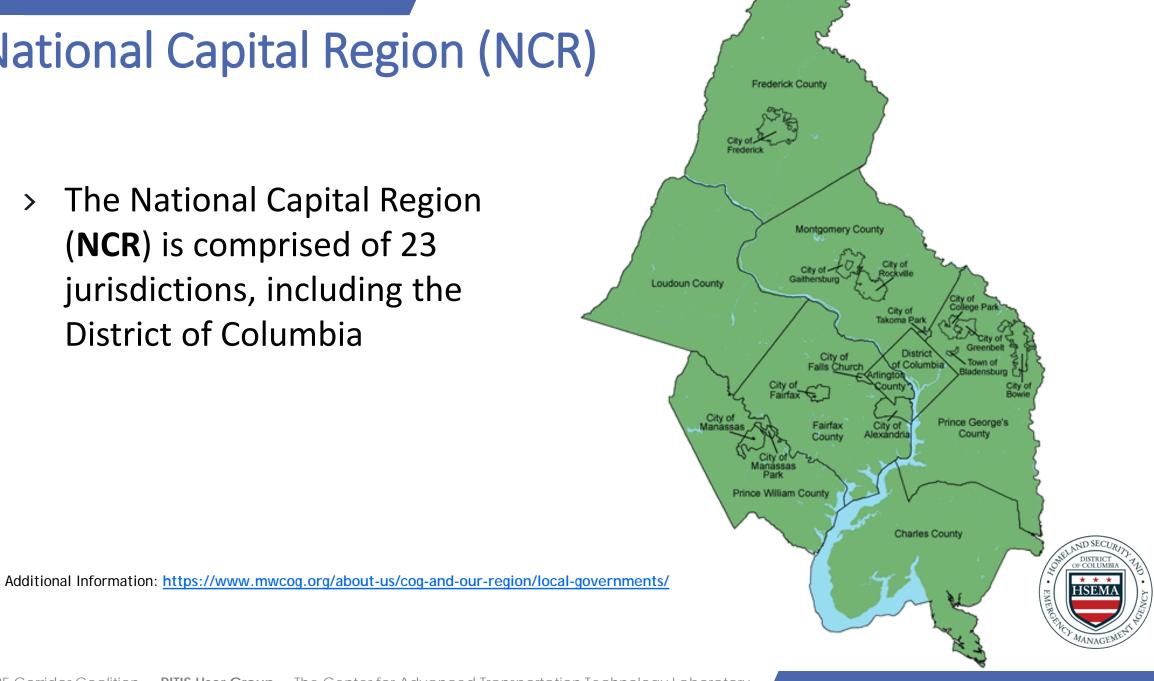
> IC3 Outputs

- RICCS-based Alert Messaging SPOT Reports based on CIR thresholds
- Dashboard Incident Management
- ✓ 21 Incident Types, Critical Information Requirements Thresholds
- ✓ Federal, State, and Local jurisdictional partners



National Capital Region (NCR)

The National Capital Region (NCR) is comprised of 23 jurisdictions, including the District of Columbia



Alert notification analysis

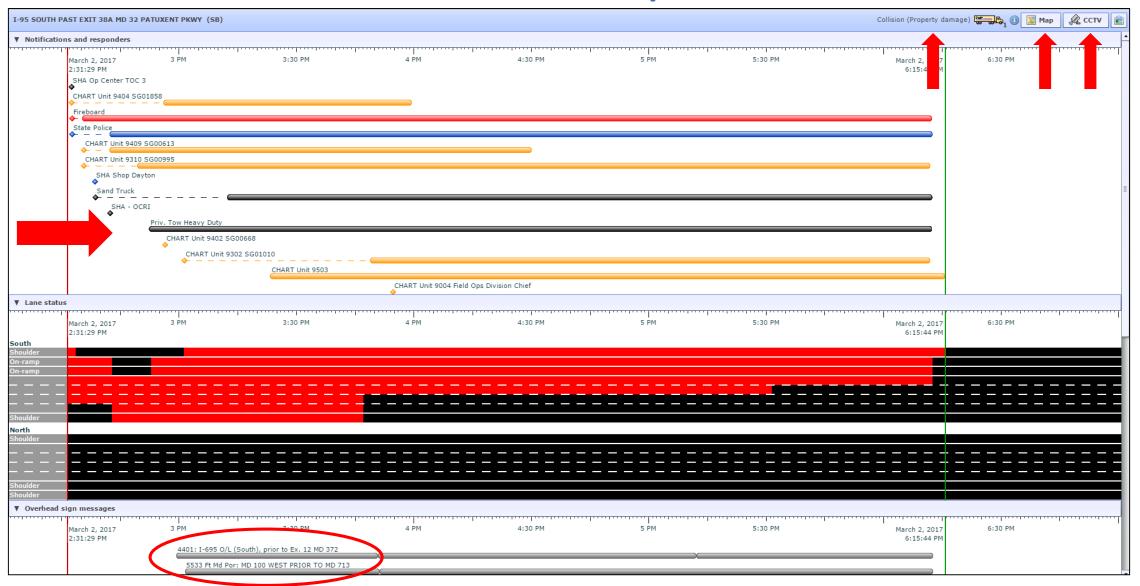
MATOC Alert: TT Crash. I-95 SB past MD-32. Ho Co, MD. MATOC Alerts <conf-1186802727@everbridge.net> Associated to CIR Sent: Thu 3/2/2017 2:47 PM hsema, NCRIC3 MATOC can be reached by email at operations@matoc.org For your situational awareness; Incident: Tractor Trailer Crash (involving overturned tractor trailer) Location: I-95 SB past MD-32 (Exit 38). Howard County, MD. All southbound lanes are blocked; traffic is being diverted to MD-32. Motorists stuck past the diversion point are being allowed past the incident using the right shoulder. Southbound delays to MD-32 begin at MD-175, approximately 3 miles. Heavier than normal traffic should be expected on MD-295 and US-29. RITIS Timeline: https://timeline.ritis.org/timeline/? incidentId=MDOT CHART 7b00b711bb7300b80058fa2ec4235c0a MATOC Operations 301-614-3703 Sent by MATOC Staff via MATOC Alerts notification system

Analyzing Incident Characteristics:

- > Incident Type
- > Thresholds
- > Critical Info Reqmts.
- > (CIRs) components
- Essential Elements of Info (EEIs)



RITIS-based incident EEI development



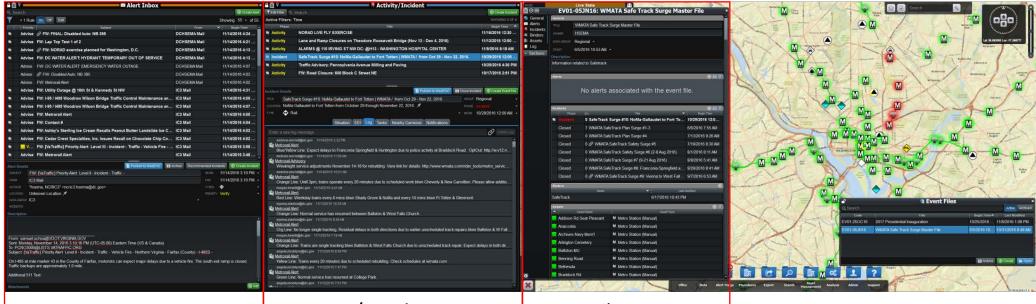
Cascading impacts/consequence management





Dashboard management/RITIS integration

> Operators View at HSEMA, FFX, MGC, ARL, and PGC



Alert Inbox

- Alert triage
- Incident Creation

Activity/Incident

- CIR trigger
- Threshold exceeded
- Log Entry
- EEIs
- GIS location

Event File

- Multi-Incident/Alert association
- Log Entry
- TDLs
- Consequence Managememt

<u>GIS</u>

Map Overlays



Advantages of RITIS

- > Increases efficiency for Alert Messaging
- > Comprehensive tools and resource information
- > Vetted information
- Ability to develop Essential Elements of Information (EEIs)
- > GIS capabilities with multiple layers:
 - Cameras (DDOT, MDOT, VDOT)
 - Multiple Incident types
 - Probe Speed Data
 - Metro / Public Transit Routes
 - Weather Radar



HSEMA Contact Information

> JAHOC Watch Desk

- EMADC.ECC@dc.gov
- 202-727-6161

> FEMA-NCR Watch Desk

- FEMA-NCR-WATCH@fema.dhs.gov
- 202-610-1483

> IC3 Watch Desk

- NCRIC3.hsema@dc.gov
- 202-481-3191



Thanks!



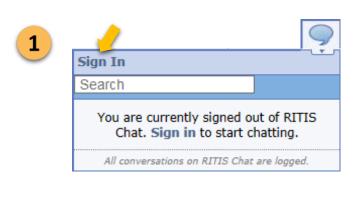
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District of Columbia Homeland Security and
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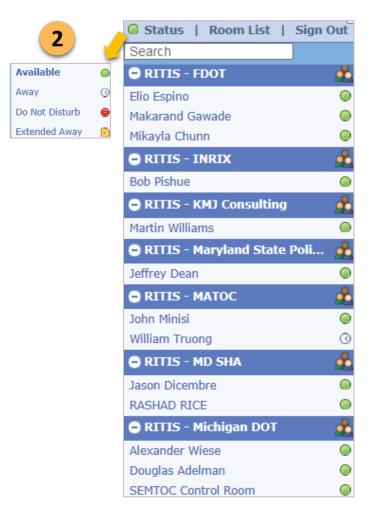


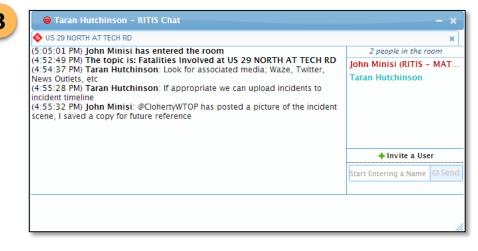
Using chatroom in RITIS

> Sign into RITIS Chat to be part of the action...



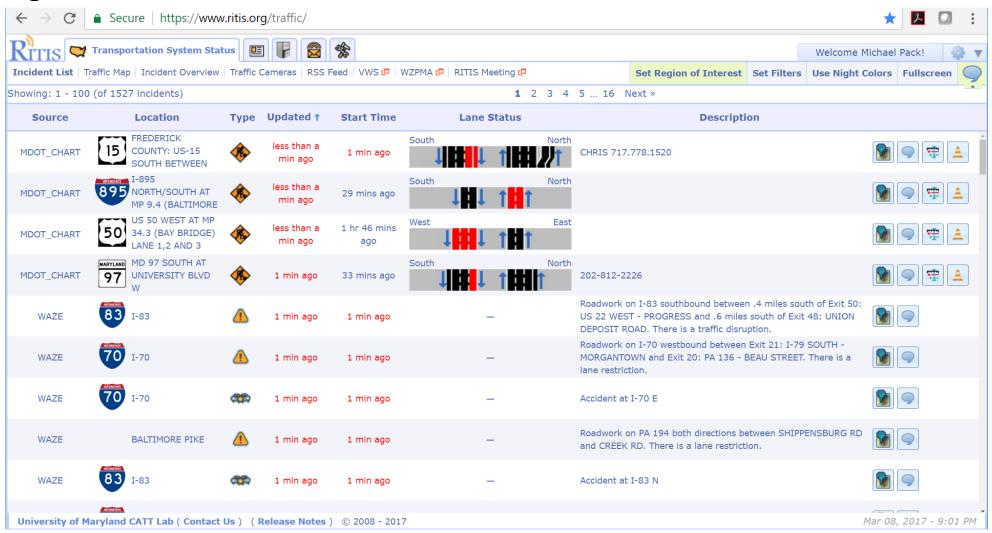
- 1 Click "Sign In"
- **2** From the drop down, click on a user and start chatting, or;
- 3 Click on an Event icon loin a specific event chat





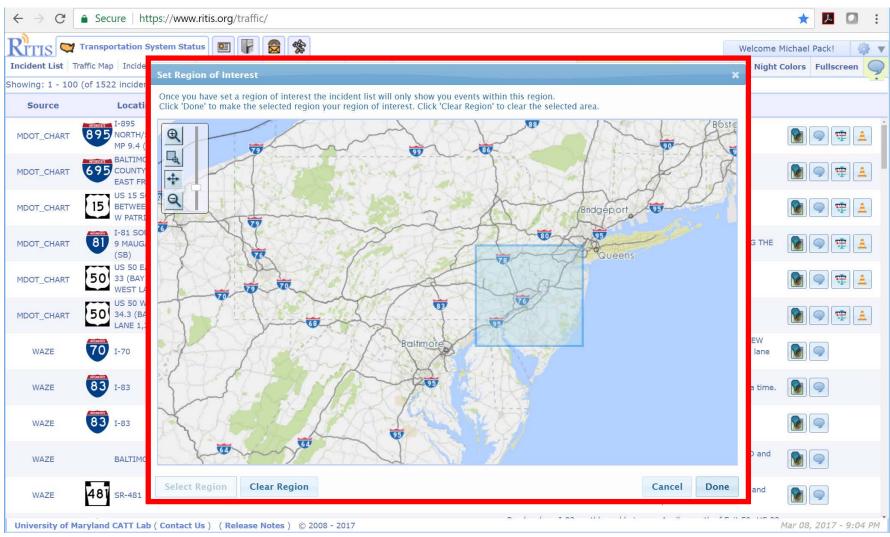
Setting your Region of Interest

> Cutting down on clutter in the Incident List...



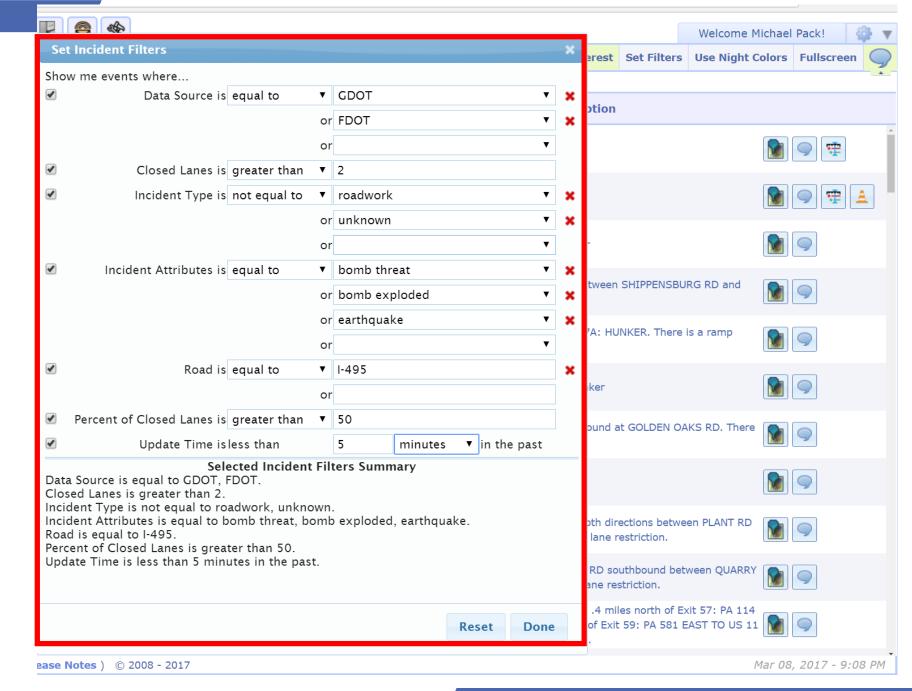
Setting your Region of Interest

- > Cutting down on clutter in the Incident List...
- > Applies ONLY to the LIST



Applying filters

- > But don't forget about them...
- > The apply to the MAP and the LIST



RITIS roadmap

Calendar Year 2017

Q1 2017

- Separate Planned Events Layer
- WAZE Data Integration
- Flash migration for Probe Data Analytics
- Evacuation Documents Upgrade
- Basemap updates
- New CCTV Feed Integration
- Additional Agency-funded Customization/New Features*
- Additional Agency-funded new data sources[†]

Q2 2017

- WAZE Data aggregation and speed improvements
- National Transit Data Integration through GTFS Feeds (real-time and schedules)
- Flash Migration for Timeline
- Basemap Updates
- Dashcam CCTV integration for MDSHA
- Additional Agency-funded Customization/New Features*
- Additional Agency-funded new data sources[†]

Q3 2017

- Tiling infrastructure modernization
- Evacuation Documents Upgrade
- Basemap updates
- CCTV Enhancements
- Weather Radar Mapped to TMCs
- WAZE Analytics
- Additional Agency-funded Customization/New Features*
- Additional Agency-funded new data sources[†]

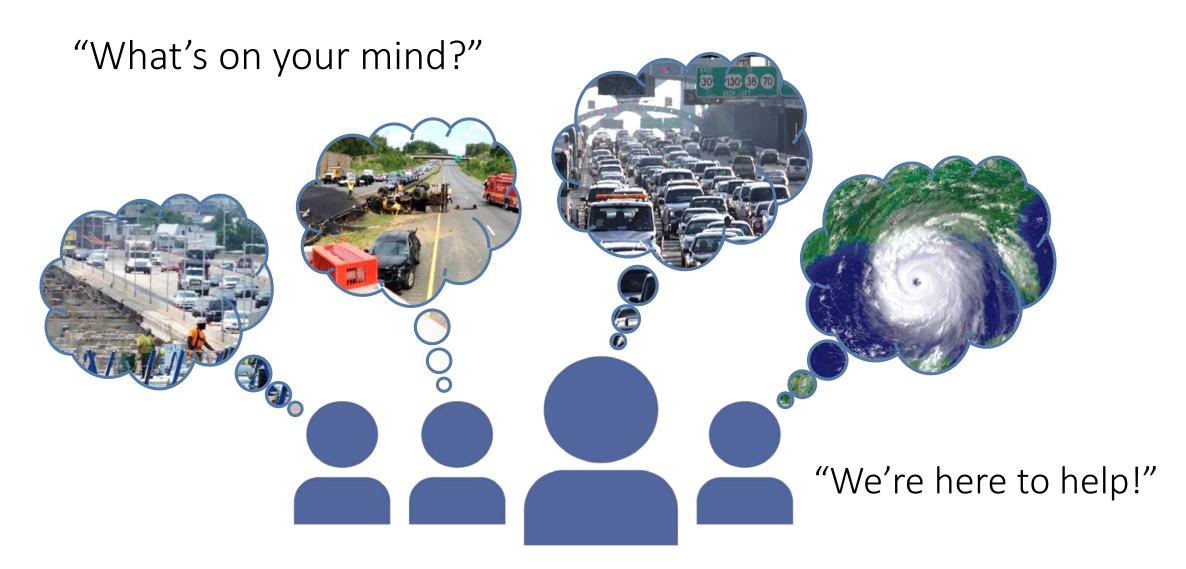
Q4 2017

- Basemap updates
- Police/Fire/Rescue Radio Audio on Timelines
- Evacuation Documents Refresh
- RITIS Input early designs
- TBD
- Additional Agency-funded*
 Customization/New Features TBD
- Additional Agency-funded new data sources TBD †

NOTE: Final list of priorities to be defined and prioritized with guidance from the RITIS User Group which will consist of members from each state in operations, planning, and research.

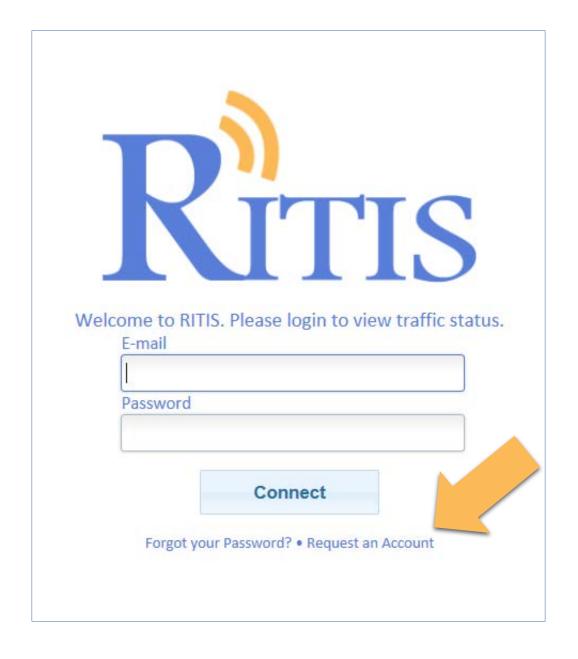
- * each state has the option of customizing features and/or building new functionality if state funding is available.
- † each state has the option of adding new data sources as requested if state funding is available.

Agency input session



Reminder: How to get access

- www.ritis.org
- Click "Request an Account"
- 3 You're on your way...



Member involvement (a reminder)

The **key** to success of the RITIS User Group is **your** involvement:

- > Share common or unique use of the tools in your work
- > Present after-action reviews, lessons learned
- > Demonstrate accomplishments, big or small
- > Contribute ideas, suggestions, feedback
- > Help prioritize and guide RITIS feature enhancements



Free RITIS training

> MATOC Staff offer free monthly webinars to transportation, public safety, and emergency management agencies interested in incorporating the RITIS platform into their operations.



Remaining **2017 Webinar Schedule**

RITIS 101 Learn the Basics

- March 24th
- May 26th
- July 28th
- September 22nd
- November 17th

RITIS Refresher / Advanced Features

- April 28th
- June 23rd
- August 25th
- October 27th
- December 15th

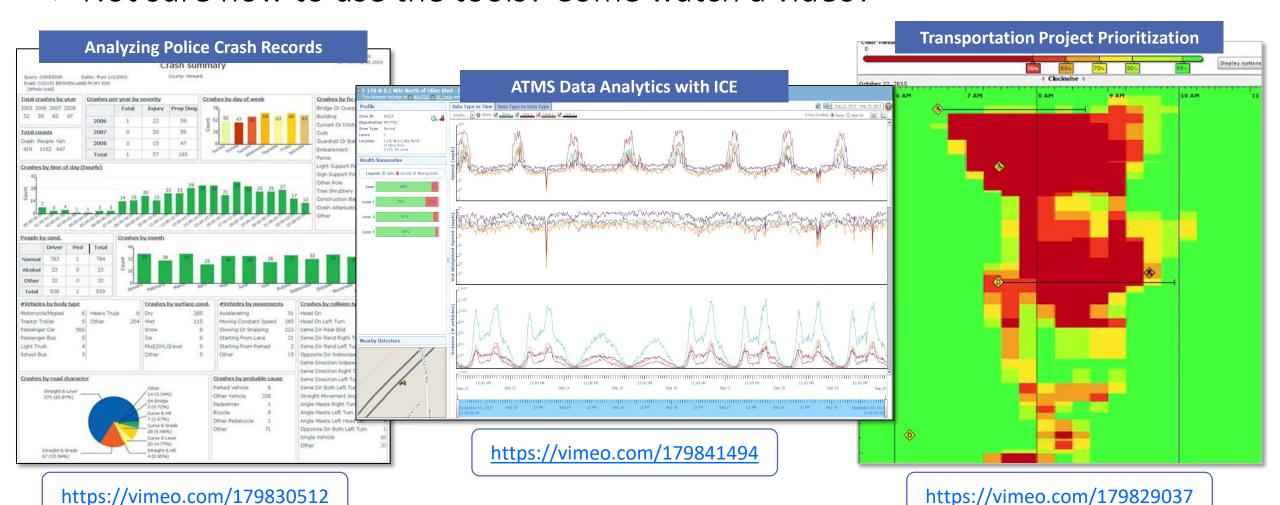
If you are interested in attending a webinar or would like additional information about these sessions please email:

training@matoc.org

Free video tutorials



> Not sure how to use the tools? Come watch a video!



(More are available; new videos added regularly)

I-95 Corridor Coalition • RITIS User Group • The Center for Advanced Transportation Technology Laboratory

March 9, 2017

Next steps

- ✓ Schedule in-person (optional) User Group Meetings which will include
 - ✓ hands-on training
 - ✓ First-look feature review
 - ✓ Early design feedback
 - ✓ Agency tour
- ✓ Announce co-chairs later this month
- ✓ Identify Agency Use-Cases and/or AARs for the next User Group Meeting

Contact info

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Thanks!

These slides will be made available after the call

Next meeting

June 8th, 2017 ° 10:30 AM – 12:00 PM



