

# MATOC

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Metropolitan Area Transportation  
Operations Coordination

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## MATOC Briefing for MWCOG Winter Weather Conference

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MATOC Facilitator

November 10, 2020



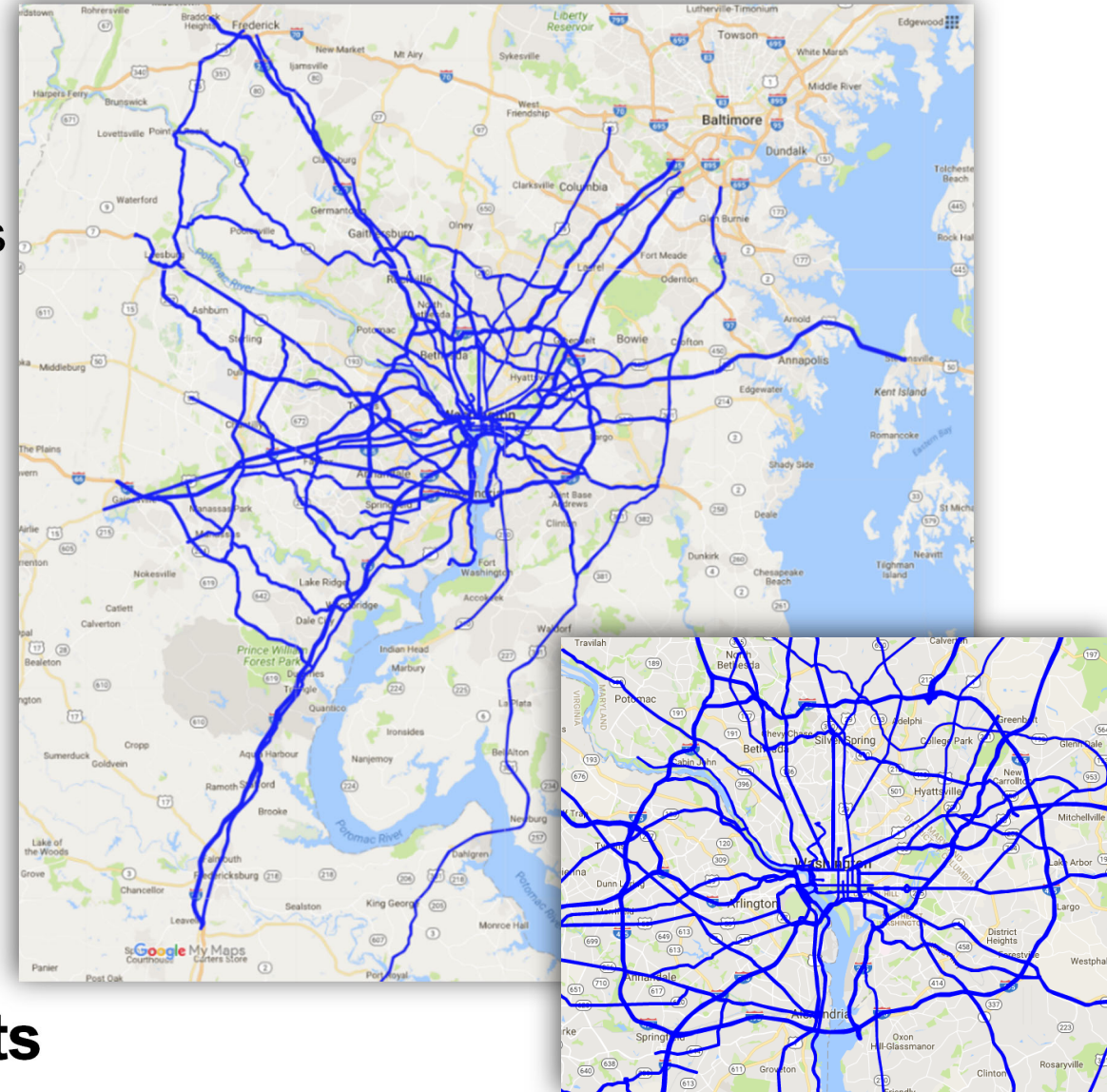
"Working together to reduce incident-related travel delays through improved coordination, cooperation and information sharing."

# MATOC Mission and Operations

- A joint operations program between **DDOT, MDOT, VDOT, & WMATA** to improve **inter-agency** information sharing and coordination
  - Focuses on DOT **Operations** and Traffic Incident Management
- MATOC's mission is to provide **situational awareness** of day-to-day transportation operations in and around the National Capital Region (NCR)
- **Develop tools and processes** that enables operating agencies and the traveling public to make better decisions
- The MATOC Program is governed by a Steering Committee and supported by several committees and working groups covering specific DOT topic areas;
  - Roadway Operations, Transit Operations, Information Systems
  - **Maintenance / Severe Weather**
  - Construction / Planned Events
- MATOC is **not command and control**, it is **advisory in nature** and serves as a decision support function

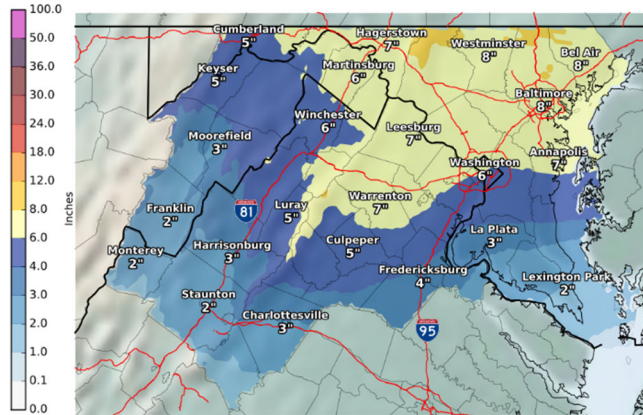
## MATOC's Area of Interest

- **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**

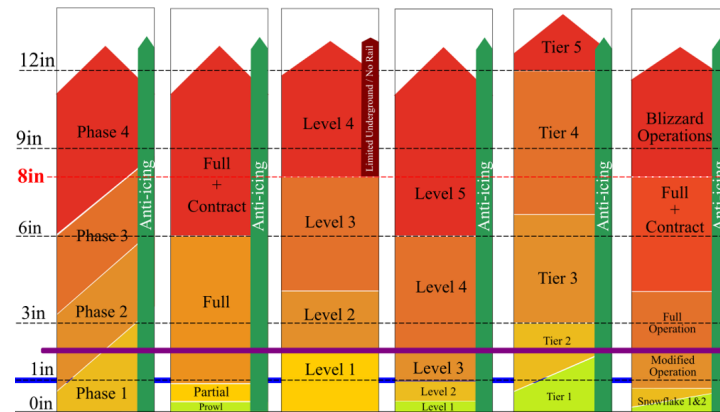


# Focus Area: Winter Operations

- **MATOC Severe Weather Coordination Working Group (SWCWG)** serves as a forum for select DOT maintenance representatives to share/discuss mobilization and recovery plans before, during and after widespread severe weather events
- **MATOC Transit Task Force (TTF)** is a forum for regional/local transit operators to discuss service coordination issues related to unplanned and planned events



Weather Forecast



Agency Mobilization Plans

Transportation System Status Levels		Suggested terminology and PID Templates
<b>Road Condition 5: IMPASSABLE/ DANGEROUS/ TREACHEROUS</b> Some roads could be temporarily impassable. This may be the result of severe weather (low visibility, etc.) or road conditions (drifting, excessive unplowed snow, glare, ice, accidents, stranded vehicles, etc.) Skeletal transit services. Limited above-ground rail service if more than 8" of accumulation. Lane drops in certain sections.		"treacherous", "impassable" "Gangbusters" Be where you need to be by <time>. Get where you need to be before the weather gets bad. Stay where you are.
<b>Road Condition 4: ICY/SNOW PACKED</b> The pavement surface is covered with packed snow and/or ice. There may be loose snow on top of the icy or packed snow surface. Transit timeline services only with significant delays for rail and bus. Refreeze possible. Lane drops in certain sections.		"unsafe", "impassable" "major delays" Be where you need to be by <time>. Avoid or postpone travel for next <hours>. Stay at the office on extra <hour>, or leave early, to avoid travel during a winter storm.
<b>Road Condition 3: SNOW AND/OR SLUSH COVERED</b> The pavement surface has continuous stretches of packed snow with or without loose snow on top of the packed snow or ice. Core bus services only, delays in rail services. Lane drops on certain sections of roadways.		"caution", "passable" Avoid being stranded at bus stops Avoid or postpone travel for next <hours>. Stay off the roads. Stay at the office on extra <hour>, or leave early, to avoid travel during a winter storm.
<b>Road Condition 2: SNOW / SLUSH COVERED W/ WHEEL TRACKS EXPOSED</b> Accumulations of loose snow or slush up to 2 inches are found on the pavement surface. Packed and bonded snow and ice are not present. Regular transit services with some minor exceptions and detours for buses. Drifting snow.		Avoid discretionary travel. Road crews engaged in clearing activities. Cautail "selective" travel. Avoid unnecessary travel.
<b>Road Condition 1: CLEAR WET/DRY</b> Clear and wet/dry pavement surface is the general condition. There are occasional areas having snow or ice accumulations resulting in drifting, sheltering, cold spots, frozen melt-water, etc. Transit operations per schedules.		"passable"

Road Conditions  
Anticipated/Observed

# MATOC Operations Center

- **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 weekday AM/PM rush
- **Enhanced Operations:**
  - Planned/Special Events – July 4<sup>th</sup>, Inaugurations, etc.
  - Severe Weather – Winter storms, derechos, hurricanes, etc.

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

- Operations transitioned to a virtual environment in early March 2020 due to COVID-19 pandemic



# MATOC Operations

## Severe Weather/Special/Short or No Notice Events

### 1) Pre-Event

- Monitor weather forecasts and **DOT mobilization plans**
- Consult with the **MATOC Severe Weather Coordination Working Group (SWCWG)**
- Participate in and monitor regional communications:
  - MATOC SWCWG Calls/Listserv
  - MATOC Transit Task Force Calls/Listserv
  - MWCOC Severe Weather Calls
- Ramp up to Enhanced Operations 2-3 hours prior to the event entering NCR
- Two 2-person teams work in shifts filling Operations & Support roles

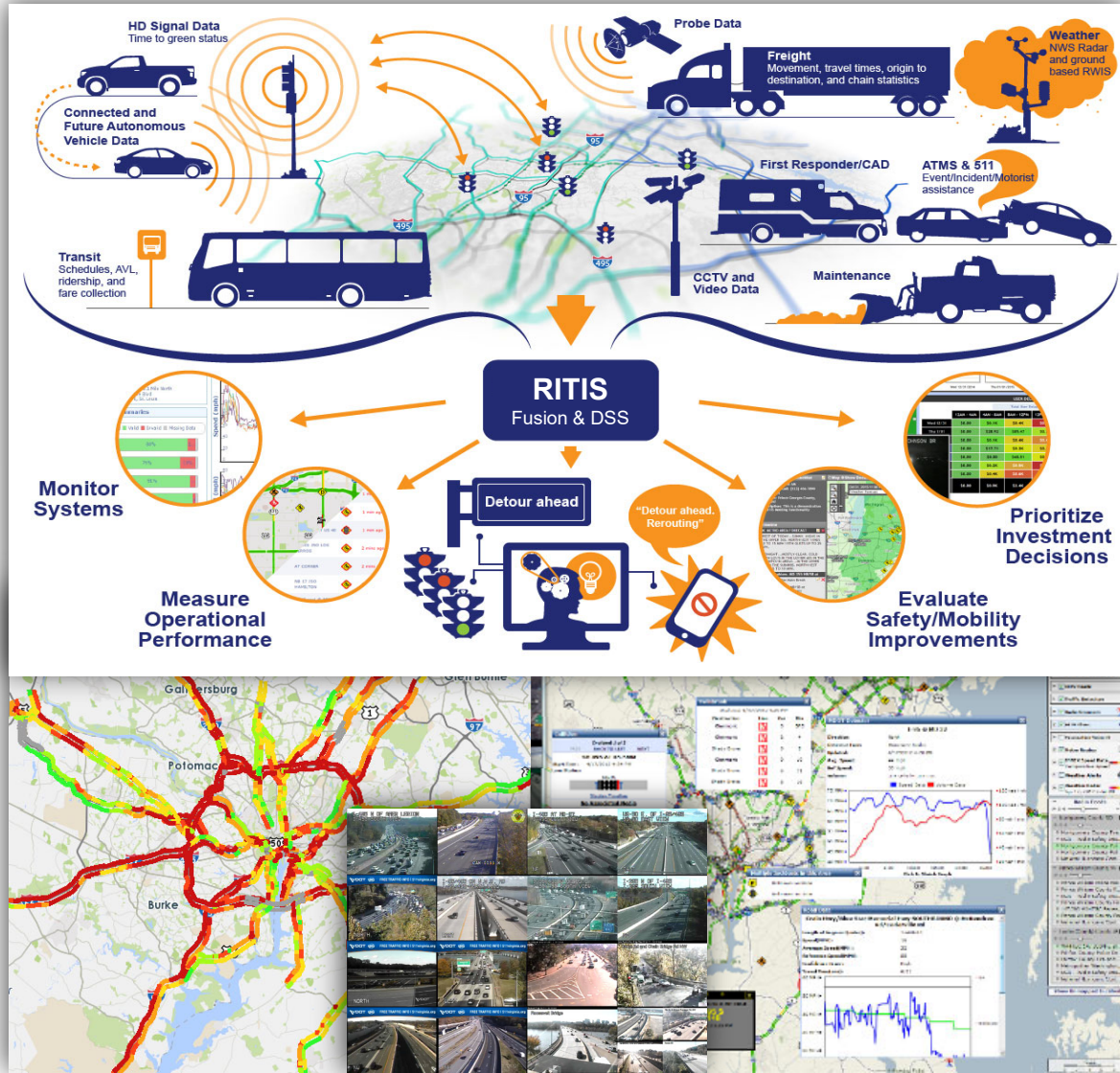
### 2) During Event

- Monitor core systems as well as other storm related resources
- Provide hourly reporting of major transportation incidents, road closures, and changes in transit (bus & rail) service levels
- Consult with the DOT Operations, RITIS Support team, MATOC SWCWG, MATOC Transit Task Force as needed

### 3) Post-Event

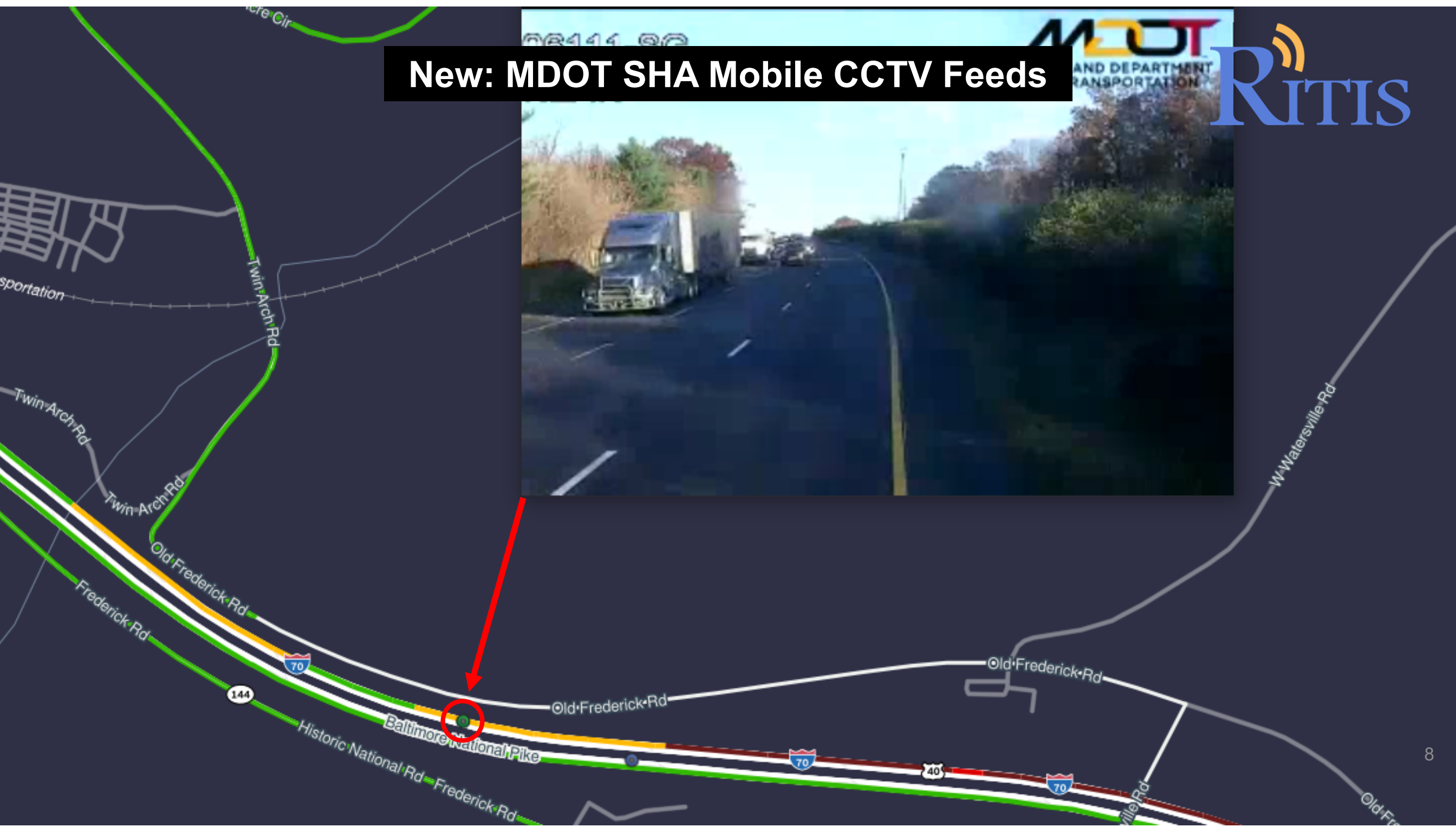
- Return to Normal Operations & Reporting as recovery operations begin to wind down

# Regional Integrated Transportation Information System



- **MATOC's core system to monitor roadway conditions** in and around the National Capital Region
- **Limited to public sector agencies**
- Over **12,000 RITIS users** from around the nation representing various disciplines
- Gives users a **common operating picture** of a region's transportation network
- **New for 2020:** Mobile CCTV feeds, updated user interface, improved granularity, new transit data
- **RITIS Training Available**
  - RITIS 101 – For Operations Centers & Staff
  - Webinar: November 20 @10:00AM EST

# New: MDOT SHA Mobile CCTV Feeds



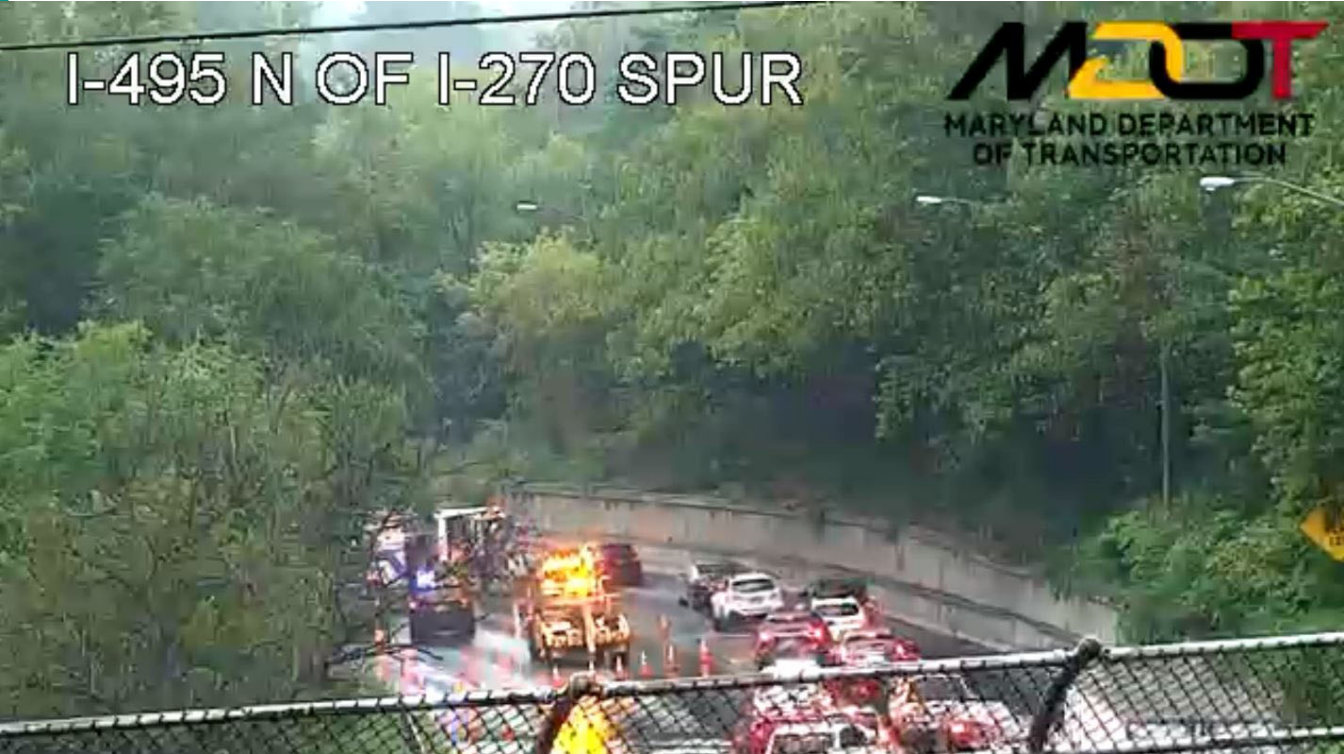


I-495 AT BRADLEY BLVD

New: MDOT SHA Mobile CCTV Feeds



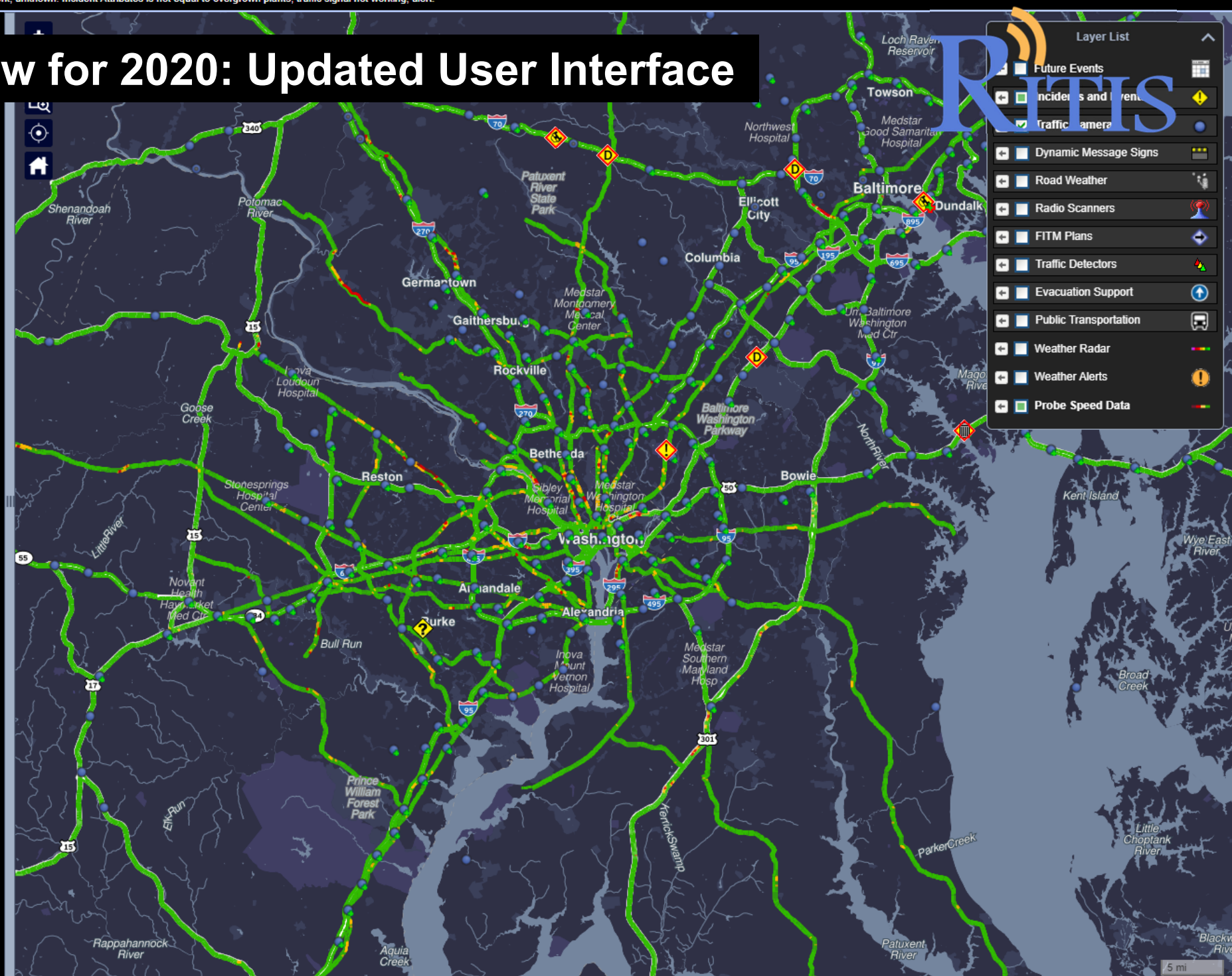
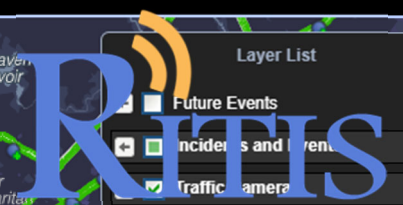
I-495 N OF I-270 SPUR



Applied Filters: Data Source is not equal to WAZE, HOCOCAD, PGOCAD, INRIX. Incident Type is not equal to roadwork, unknown. Incident Attributes is not equal to overgrown plants, traffic signal not working, alert.

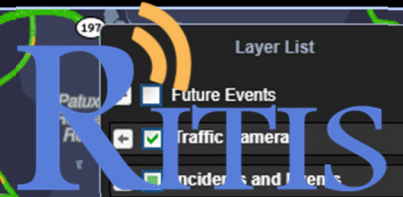
Location	Type	Lane Status	Updated
<b>Baltimore City, MD</b> I-95 SOUTH AT MP 55.7 (TOLL PLAZA) LANE 19			
<b>Anne Arundel County, MD</b> US 50 WEST PAST EXIT 27 MD 2 GOV RITCHIE HWY (EB)			1 min ago
<b>Baltimore County, MD</b> I-695 INNER LOOP AT SECURITY BLVD			2 mins ago
<b>Anne Arundel County, MD</b> MD 295 SOUTH PAST MD 198			3 mins ago
<b>Harford County, MD</b> MD 152 MOUNTAIN RD TO I-95 NORTH AT EXIT 74 (NB)			3 mins ago
<b>Howard County, MD</b> I-70 WEST PAST MM 72.0			4 mins ago
<b>Howard County, MD</b> I-70 EAST PRIOR TO EXIT 78 MD 97 ROXBURY MILLS RD (EB)			5 mins ago
<b>Prince Georges County, MD</b> US 1 NORTH AT LAKELAND RD			6 mins ago
<b>Baltimore County, MD</b> I-83 NORTH PAST EXIT 16B TIMONIUM RD (NB)			13 mins ago
<b>Baltimore City, MD</b> I-95 SOUTH PRIOR TO EXIT 57 O'DONNELL ST (58.8 MM)			14 mins ago
<b>Fairfax County, VA</b> RT 6440W (Fairfax County) north			28 mins ago

# New for 2020: Updated User Interface



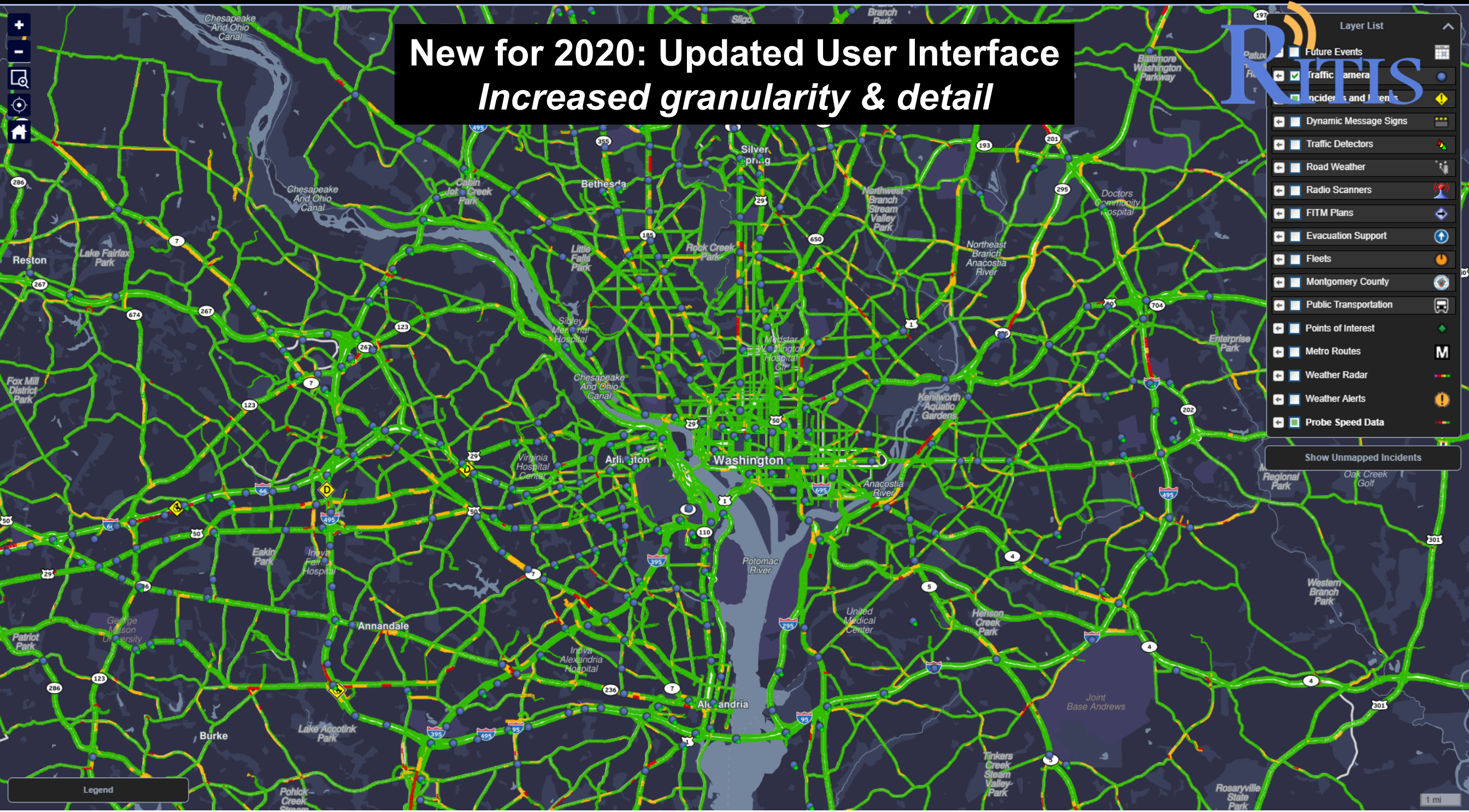
# New for 2020: Updated User Interface

## Increased granularity & detail



- Layer List
- Future Events
  - Traffic Camera
  - Incidents and Alerts
  - Dynamic Message Signs
  - Traffic Detectors
  - Road Weather
  - Radio Scanners
  - FITM Plans
  - Evacuation Support
  - Fleets
  - Montgomery County
  - Public Transportation
  - Points of Interest
  - Metro Routes
  - Weather Radar
  - Weather Alerts
  - Probe Speed Data

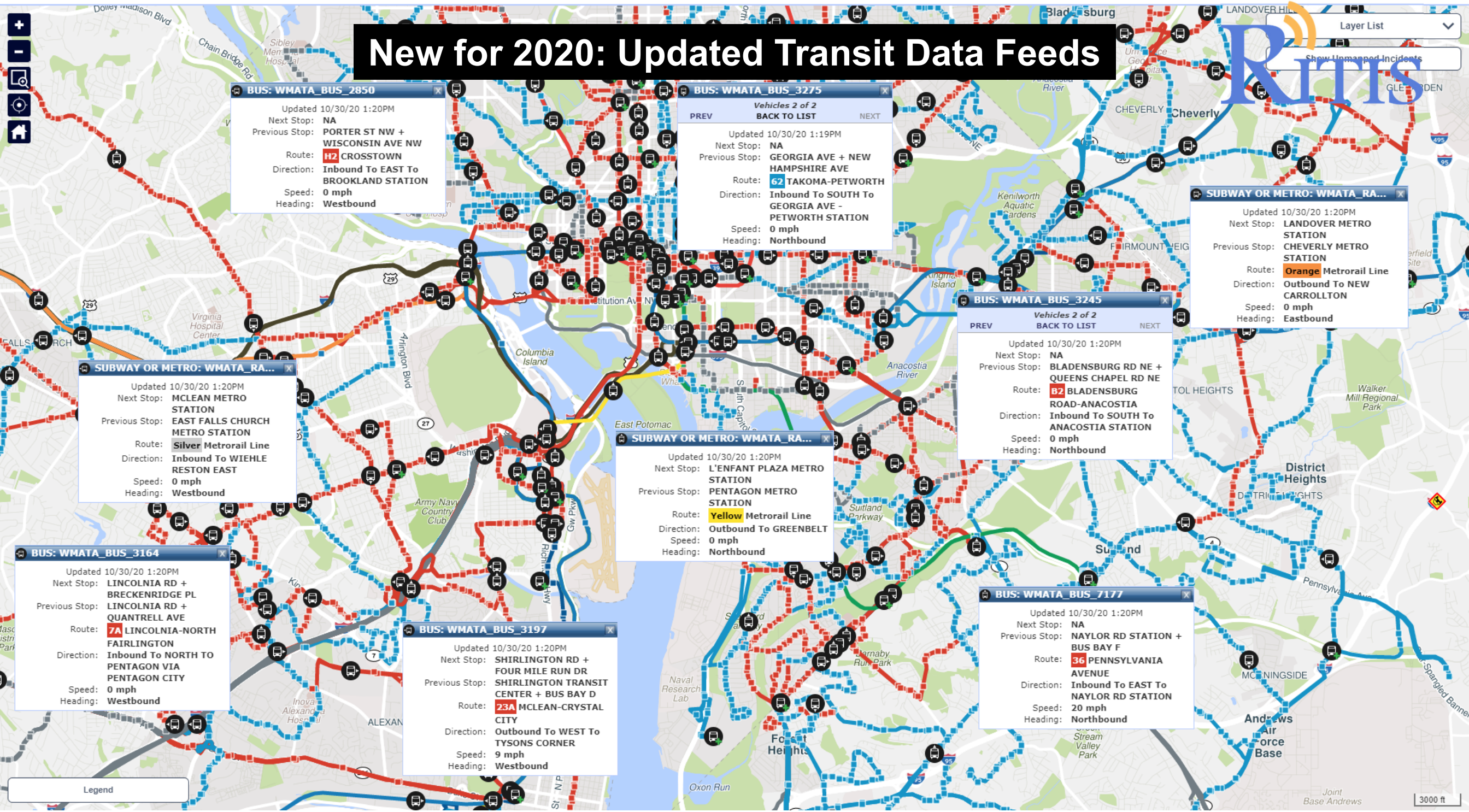
Show Unmapped Incidents



Legend

1 mi

# New for 2020: Updated Transit Data Feeds



**BUS: WMATA\_BUS\_2850**

Updated 10/30/20 1:20PM

Next Stop: **NA**

Previous Stop: **PORTER ST NW + WISCONSIN AVE NW**

Route: **H2 CROSSTOWN**

Direction: **Inbound To EAST To BROOKLAND STATION**

Speed: **0 mph**

Heading: **Westbound**

**BUS: WMATA\_BUS\_3275**

Vehicles 2 of 2

PREV BACK TO LIST NEXT

Updated 10/30/20 1:19PM

Next Stop: **NA**

Previous Stop: **GEORGIA AVE + NEW HAMPSHIRE AVE**

Route: **62 TAKOMA-PETWORTH**

Direction: **Inbound To SOUTH To GEORGIA AVE - PETWORTH STATION**

Speed: **0 mph**

Heading: **Northbound**

**SUBWAY OR METRO: WMATA\_RA...**

Updated 10/30/20 1:20PM

Next Stop: **LANDOVER METRO STATION**

Previous Stop: **CHEVERLY METRO STATION**

Route: **Orange Metrorail Line**

Direction: **Outbound To NEW CARROLLTON**

Speed: **0 mph**

Heading: **Eastbound**

**BUS: WMATA\_BUS\_3245**

Vehicles 2 of 2

PREV BACK TO LIST NEXT

Updated 10/30/20 1:20PM

Next Stop: **NA**

Previous Stop: **BLADENBURG RD NE + QUEENS CHAPEL RD NE**

Route: **B2 BLADENBURG ROAD-ANACOSTIA**

Direction: **Inbound To SOUTH To ANACOSTIA STATION**

Speed: **0 mph**

Heading: **Northbound**

**SUBWAY OR METRO: WMATA\_RA...**

Updated 10/30/20 1:20PM

Next Stop: **MCLEAN METRO STATION**

Previous Stop: **EAST FALLS CHURCH METRO STATION**

Route: **Silver Metrorail Line**

Direction: **Inbound To WIEHLE RESTON EAST**

Speed: **0 mph**

Heading: **Westbound**

**SUBWAY OR METRO: WMATA\_RA...**

Updated 10/30/20 1:20PM

Next Stop: **L'ENFANT PLAZA METRO STATION**

Previous Stop: **PENTAGON METRO STATION**

Route: **Yellow Metrorail Line**

Direction: **Outbound To GREENBELT**

Speed: **0 mph**

Heading: **Northbound**

**BUS: WMATA\_BUS\_3164**

Updated 10/30/20 1:20PM

Next Stop: **LINCOLNIA RD + BRECKENRIDGE PL**

Previous Stop: **LINCOLNIA RD + QUANTRELL AVE**

Route: **7A LINCOLNIA-NORTH FAIRLINGTON**

Direction: **Inbound To NORTH To PENTAGON VIA PENTAGON CITY**

Speed: **0 mph**

Heading: **Westbound**

**BUS: WMATA\_BUS\_3197**

Updated 10/30/20 1:20PM

Next Stop: **SHIRLINGTON RD + FOUR MILE RUN DR**

Previous Stop: **SHIRLINGTON TRANSIT CENTER + BUS BAY D**

Route: **23A MCLEAN-CRYSTAL CITY**

Direction: **Outbound To WEST To TYSONS CORNER**

Speed: **9 mph**

Heading: **Westbound**

**BUS: WMATA\_BUS\_7177**

Updated 10/30/20 1:20PM

Next Stop: **NA**

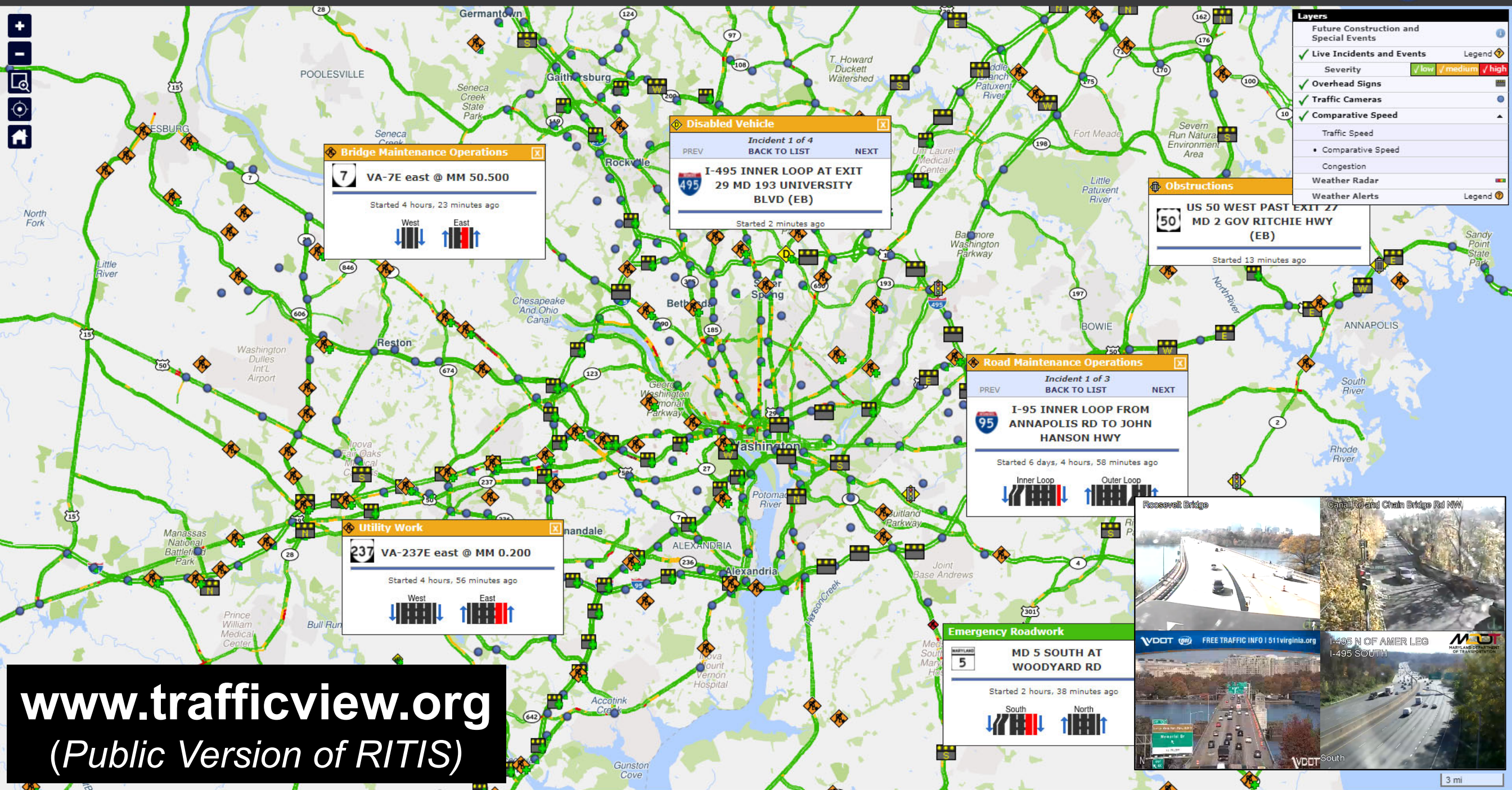
Previous Stop: **NAYLOR RD STATION + BUS BAY F**

Route: **36 PENNSYLVANIA AVENUE**

Direction: **Inbound To EAST To NAYLOR RD STATION**

Speed: **20 mph**

Heading: **Northbound**



**Bridge Maintenance Operations**

**7 VA-7E east @ MM 50.500**

Started 4 hours, 23 minutes ago

West East

**Disabled Vehicle**

Incident 1 of 4

BACK TO LIST NEXT

**I-495 INNER LOOP AT EXIT 29 MD 193 UNIVERSITY BLVD (EB)**

Started 2 minutes ago

**Obstructions**

**50 US 50 WEST PAST EXIT 27 MD 2 GOV RITCHIE HWY (EB)**

Started 13 minutes ago

**Road Maintenance Operations**

Incident 1 of 3

BACK TO LIST NEXT

**I-95 INNER LOOP FROM ANNAPOLIS RD TO JOHN HANSON HWY**

Started 6 days, 4 hours, 58 minutes ago

Inner Loop Outer Loop

**Utility Work**

**237 VA-237E east @ MM 0.200**

Started 4 hours, 56 minutes ago

West East

**Emergency Roadwork**

**5 MD 5 SOUTH AT WOODYARD RD**

Started 2 hours, 38 minutes ago

South North

**Camera List**

**Roosevelt Bridge**

**Canal Rd and Chain Bridge Rd NW**

**I-495 N OF AMER LEG I-495 SOUTH**

VDOT FREE TRAFFIC INFO | 511.virginia.org

MD MARYLAND DEPARTMENT OF TRANSPORTATION

[www.trafficview.org](http://www.trafficview.org)  
(Public Version of RITIS)