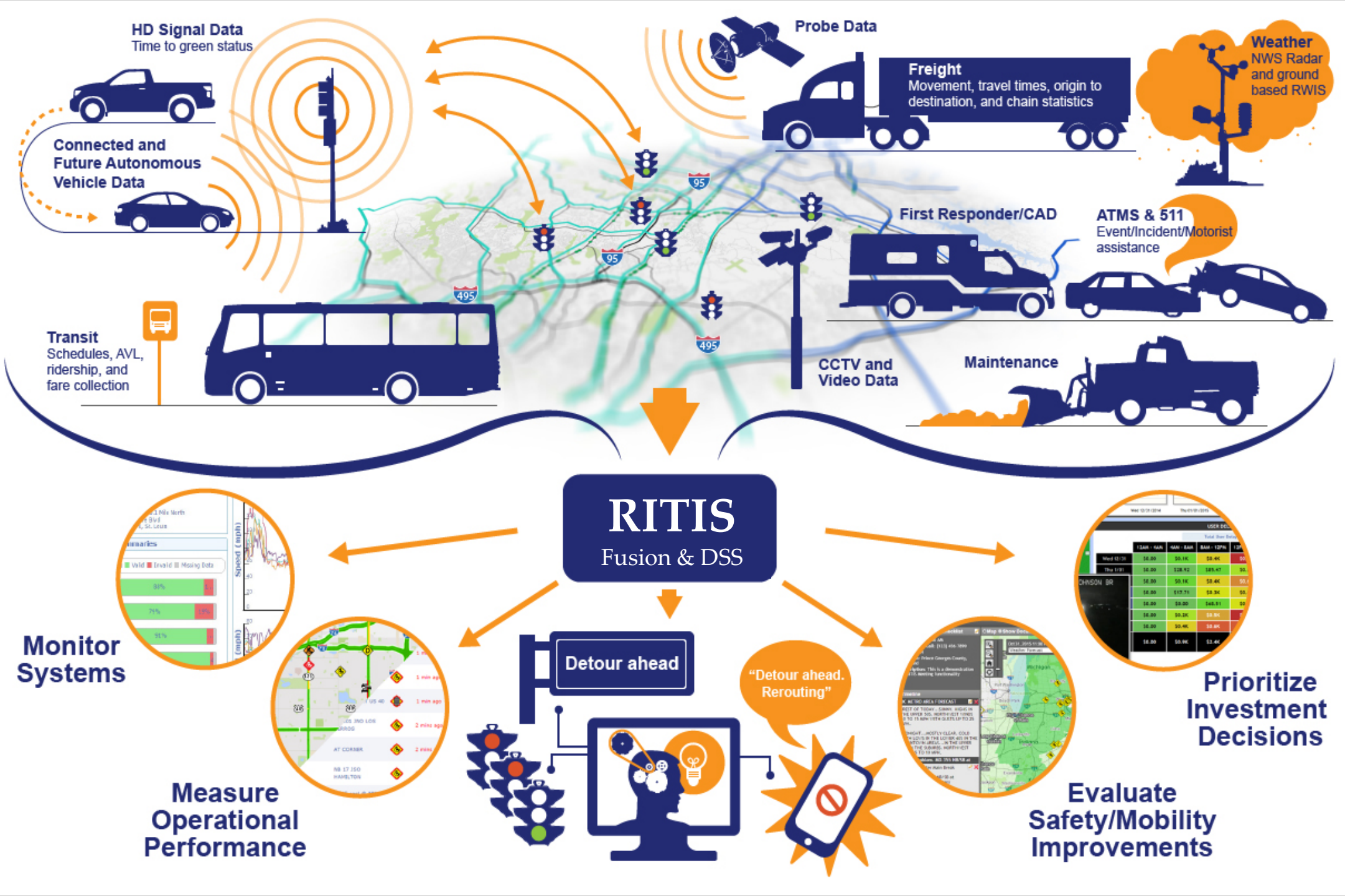
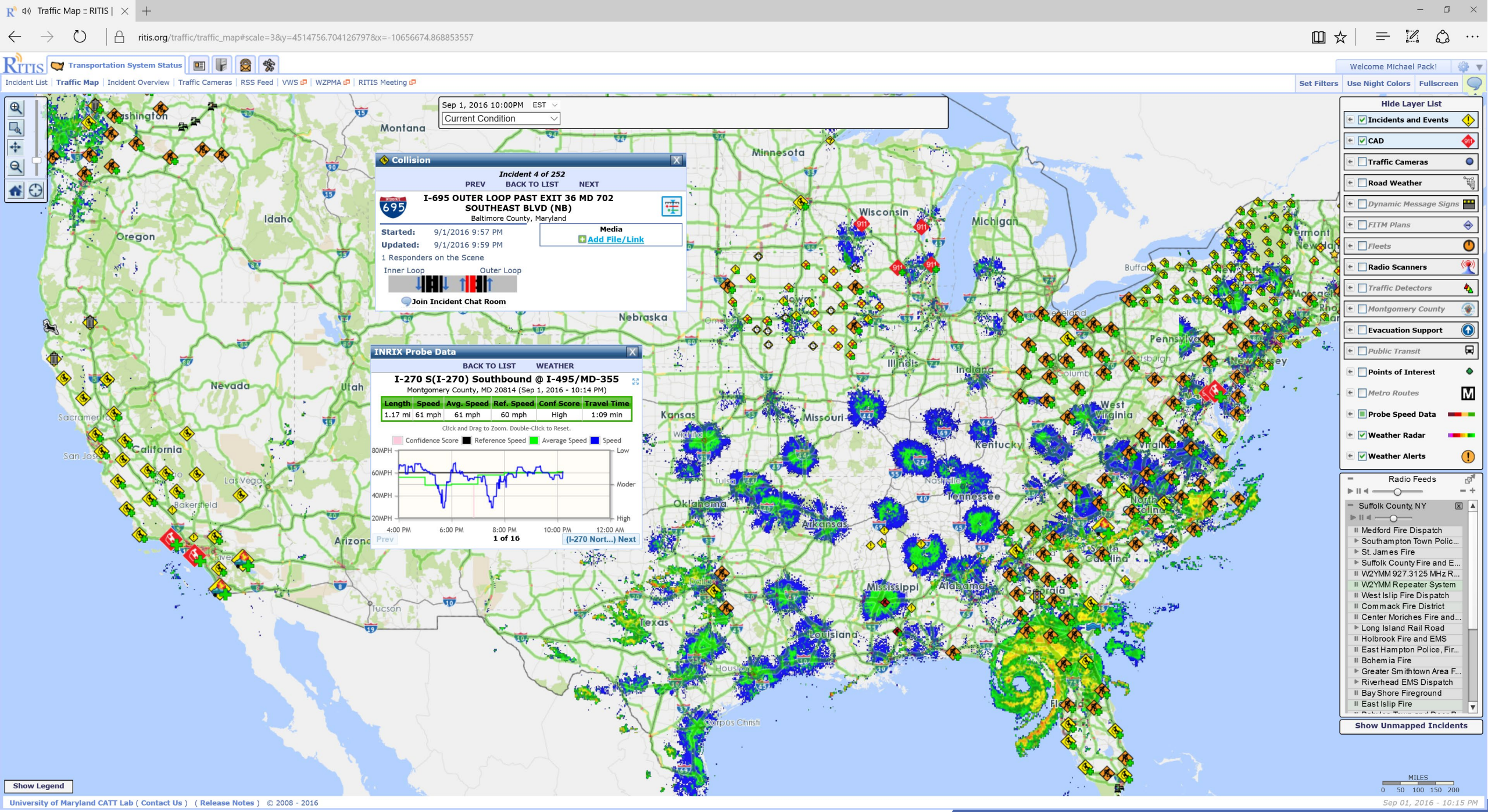
RITIS & TIM Performance Measures

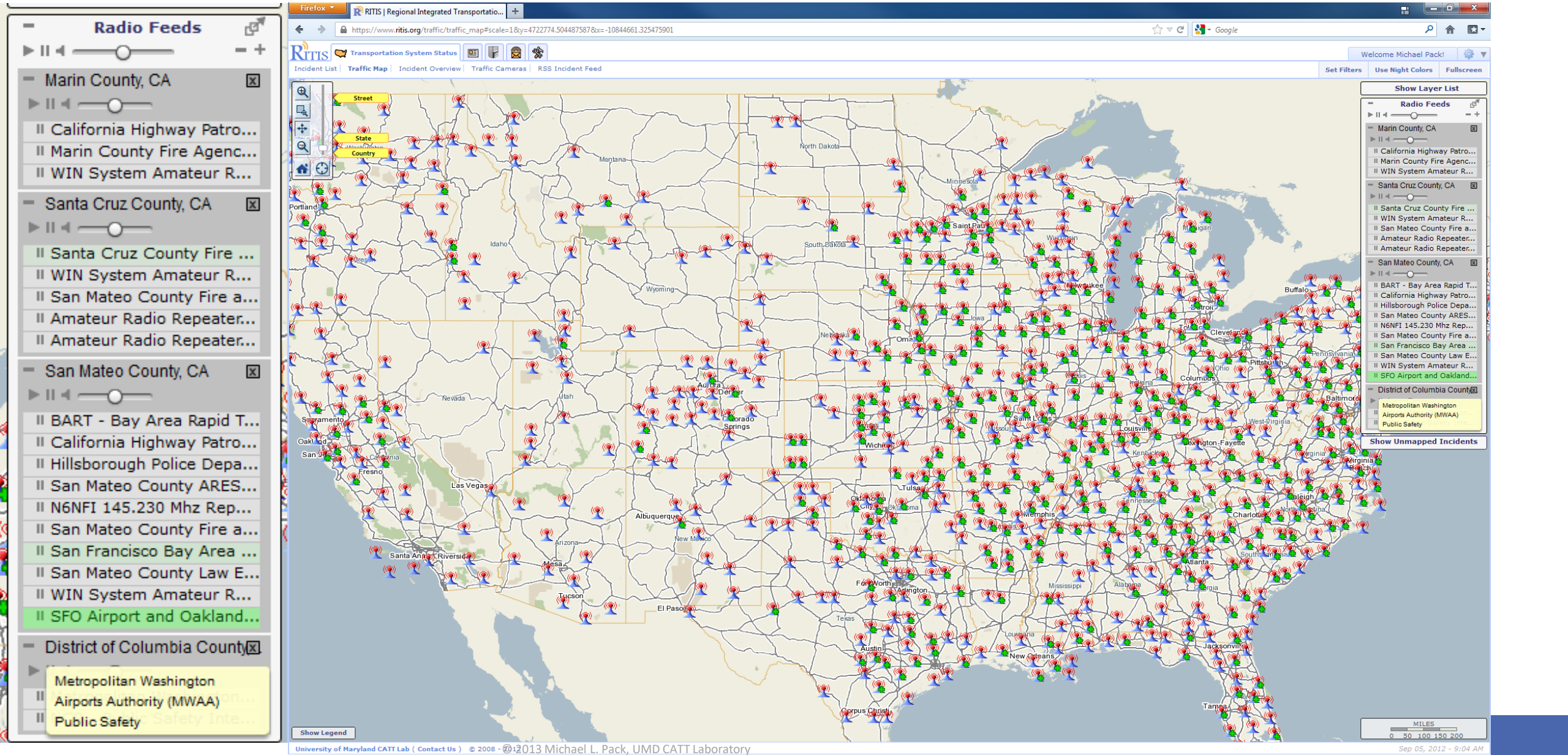
Michael VanDaniker, CATT Laboratory

Enabling agencies through better communication, data-based decision making, advanced insights discovery, and enhanced operations and planning capabilities.


HD Signal Data
Time to green status
Connected and Future Autonomous Vehicle Data
Probe Data
Freight
Movement, travel times, origin to destination, and chain statistics
Weather
NWS Radar and ground based RWIS
First Responder/CAD
ATMS & 511
Event/Incident/Motorist assistance
Transit
Schedules, AVL, ridership, and fare collection
CCTV and Video Data
Maintenance
RITIS
Fusion & DSS
Monitor Systems
Measure Operational Performance
Detour ahead
"Detour ahead. Rerouting"
Evaluate Safety/Mobility Improvements
Prioritize Investment Decisions


Traffic Map :: RITIS |
ritis.org/traffic/traffic_map#scale=3&y=4514756.704126797&x=-10656674.868853557
RITIS
Transportation System Status
Welcome Michael Pack!
Incident List | Traffic Map | Incident Overview | Traffic Cameras | RSS Feed | VWS | WZPMA | RITIS Meeting
Set Filters | Use Night Colors | Fullscreen
Sep 1, 2016 10:00PM EST
Current Condition
Collision
Incident 4 of 252
PREV BACK TO LIST NEXT
I-695 OUTER LOOP PAST EXIT 36 MD 702 SOUTHEAST BLVD (NB)
Baltimore County, Maryland
Started: 9/1/2016 9:57 PM
Updated: 9/1/2016 9:59 PM
1 Responders on the Scene
Inner Loop
Outer Loop
Join Incident Chat Room
Media
Add File/Link
INRIX Probe Data
BACK TO LIST WEATHER
I-270 S(I-270) Southbound @ I-495/MD-355
Montgomery County, MD 20814 (Sep 1, 2016 - 10:14 PM)
Length | Speed | Avg. Speed | Ref. Speed | Conf Score | Travel Time
1.17 mi | 61 mph | 61 mph | 60 mph | High | 1:09 min
Click and Drag to Zoom. Double-Click to Reset.
Confidence Score Reference Speed Average Speed Speed
80MPH 60MPH 40MPH 20MPH
Low Moder High
4:00 PM 6:00 PM 8:00 PM 10:00 PM 12:00 AM
Prev 1 of 16 (I-270 Nort...) Next
Hide Layer List
Incidents and Events
CAD
Traffic Cameras
Road Weather
Dynamic Message Signs
FITM Plans
Fleets
Radio Scanners
Traffic Detectors
Montgomery County
Evacuation Support
Public Transit
Points of Interest
Metro Routes
Probe Speed Data
Weather Radar
Weather Alerts
Radio Feeds
Suffolk County, NY
Medford Fire Dispatch
Southampton Town Polic...
St. James Fire
Suffolk County Fire and E...
W2YMM 927.3125 MHz R...
W2YMM Repeater System
West Islip Fire Dispatch
Commack Fire District
Center Moriches Fire and...
Long Island Rail Road
Holbrook Fire and EMS
East Hampton Police, Fir...
Bohemia Fire
Greater Smithtown Area F...
Riverhead EMS Dispatch
Bay Shore Fireground
East Islip Fire
Show Unmapped Incidents
Show Legend
MILES
0 50 100 150 200
University of Maryland CATT Lab (Contact Us) (Release Notes) © 2008 - 2016
Sep 01, 2016 - 10:15 PM

Radio/Scanners



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CCTV Personal Media Wall

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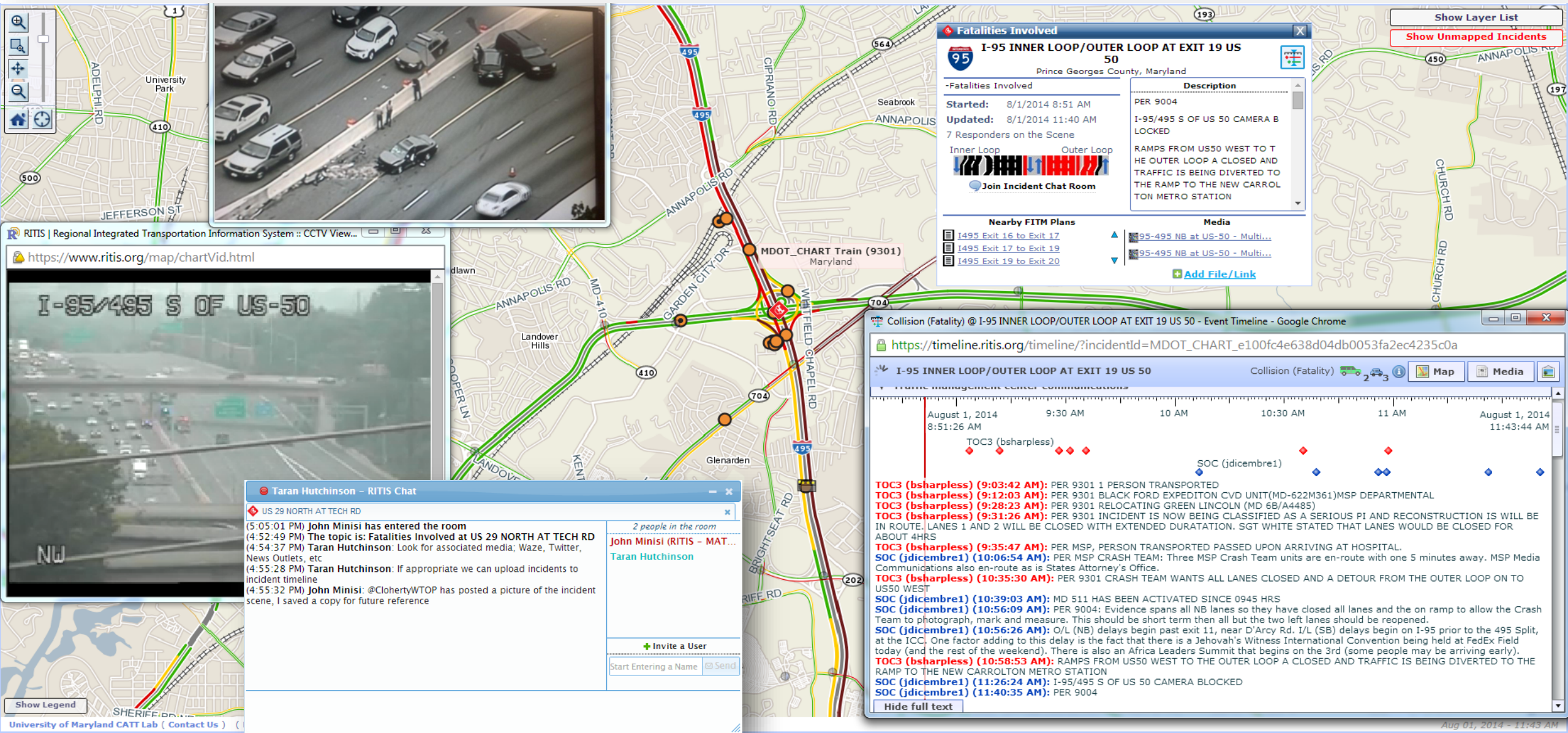
Communicating with colleagues, evaluating detours, and visualizing the location of responders and assets

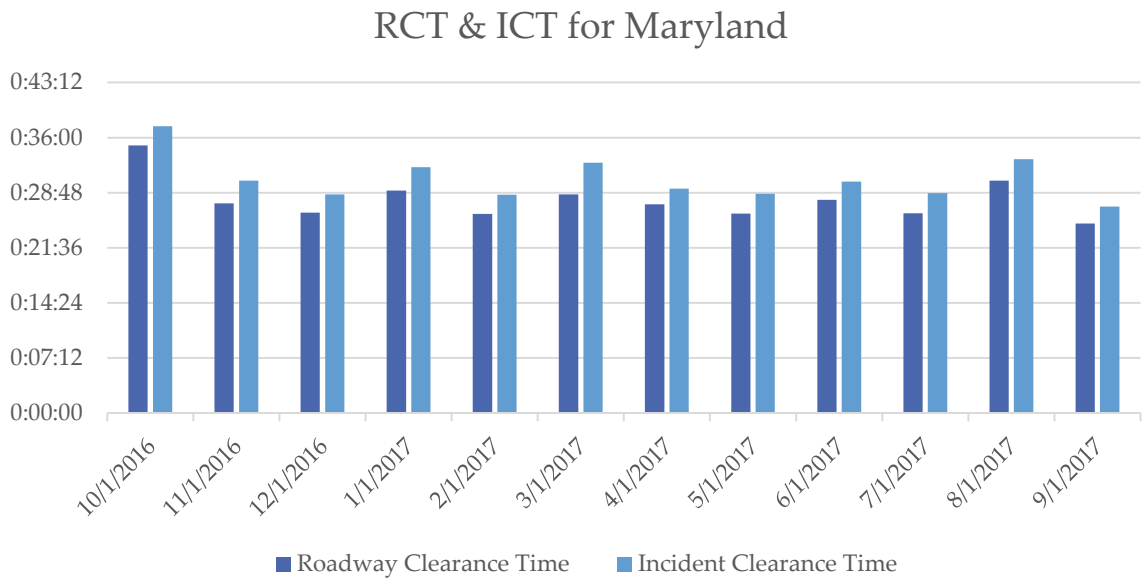


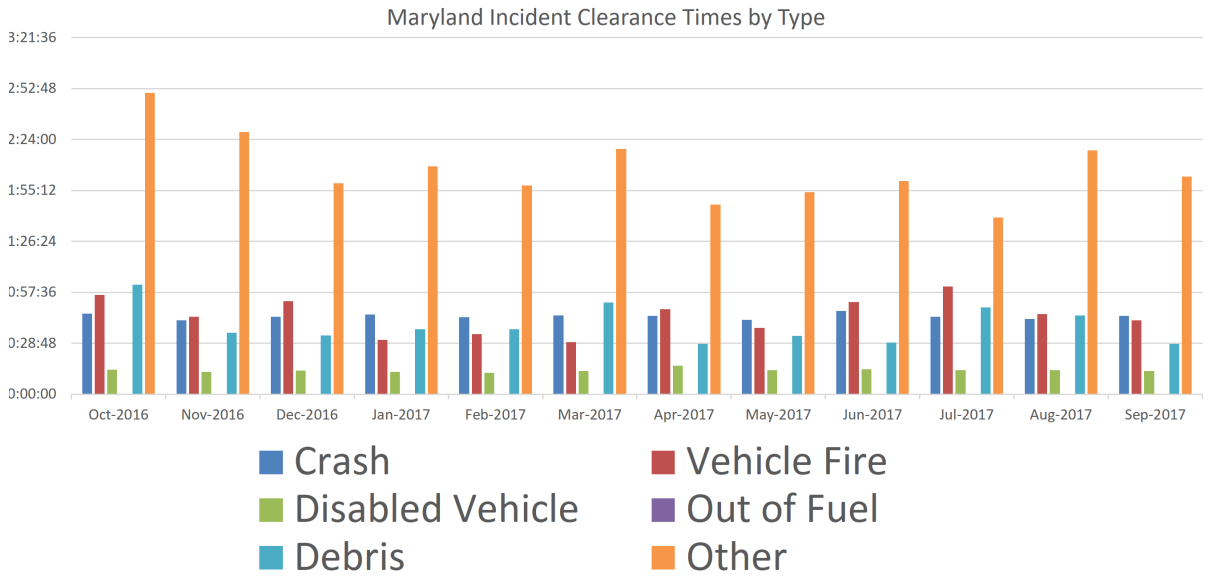
How well are we responding to incidents?

TIM Performance Measures Initiative

Goal

- To provide insights into ***clearance times*** for events in the EDC database.
- Provide as much flexibility as possible for additional analysis and comparison

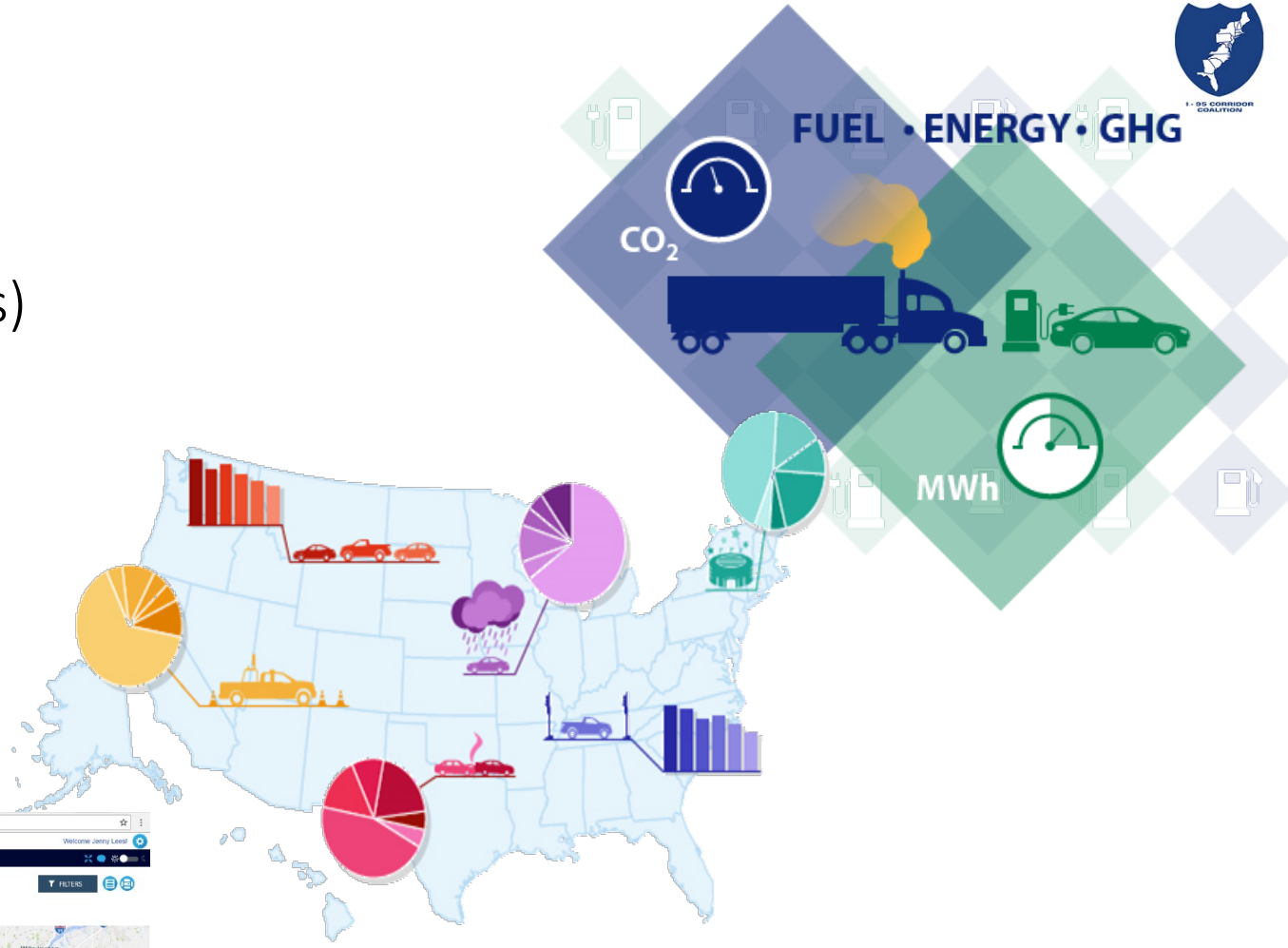


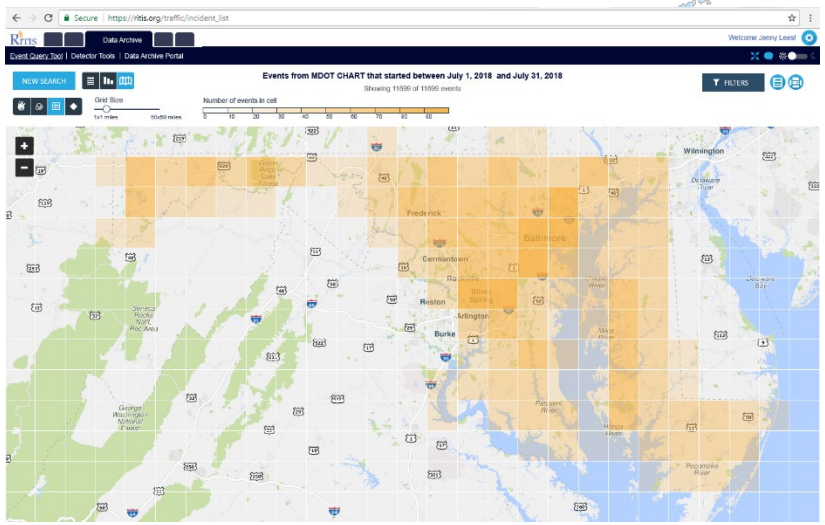


RITIS Event Query Tool Demo

In Development

- TIM Performance Measures Dashboard(s)
- Energy Analytics (DOE funded)
- One-button AARs
- Incident Costs (similar to UDC)
- Causes of Congestion (USDOT BTS)
- And more…





Michael VanDaniker

mvandani@umd.edu

thank you!

I-95 CORRIDOR COALITION

CATT LABORATORY

The Event Query Tool allows you to query for events during a specific time range, for specific agencies, and within specific geographies. If you only want to look at specific event types, the option to query for any number of events by type is also available. After running your query you will get a number of different visualizations to explore the applicable events.

AGENCIES

Search agencies

- [ ] Include all agencies
  - [ ] 511NY (New York and Connecticut Traveller Information)
  - [ ] Austin, TX
  - [ ] Caltrans (California DOT)
  - [ ] DDOT CapTOP (Washington DC DOT)
  - [ ] DelDOT (Delaware DOT)
  - [ ] Dallas/Fort Worth 511
  - [ ] FDOT (Florida State DOT)
  - [ ] GDOT (Georgia State DOT)
  - [ ] Howard County CAD
  - [ ] Iowa DOT
  - [ ] MDOT CHART (Maryland DOT)
  - [ ] MassDOT (Massachusetts DOT)
  - [ ] Michigan DOT
  - [ ] MoDOT (Missouri DOT)
  - [ ] MS TRAFFIC (Mississippi DOT)
  - [ ] NCDOT (North Carolina DOT)
  - [ ] NJDOT (New Jersey DOT)
  - [ ] ODOT (Ohio DOT)
  - [ ] PennDOT (Pennsylvania DOT)
  - [ ] Pennsylvania Turnpike
  - [ ] Prince George's County, Maryland (CAD Center)
  - [ ] Prince George's County, Maryland (TRIP Center)
  - [ ] SCDOT (South Carolina DOT)
  - [ ] TXDOT (Texas State DOT)

- [x] WisDOT CAD (Wisconsin DOT)
- [ ] WMATA (Washington Metropolitan Area Transit Authority)
- [x] WSDOT (Washington State DOT)

EVENT TYPES

Some available event types are based on the agencies you have selected

- [ ] Include all available event types

Standardized Types

Every Day Counts Types

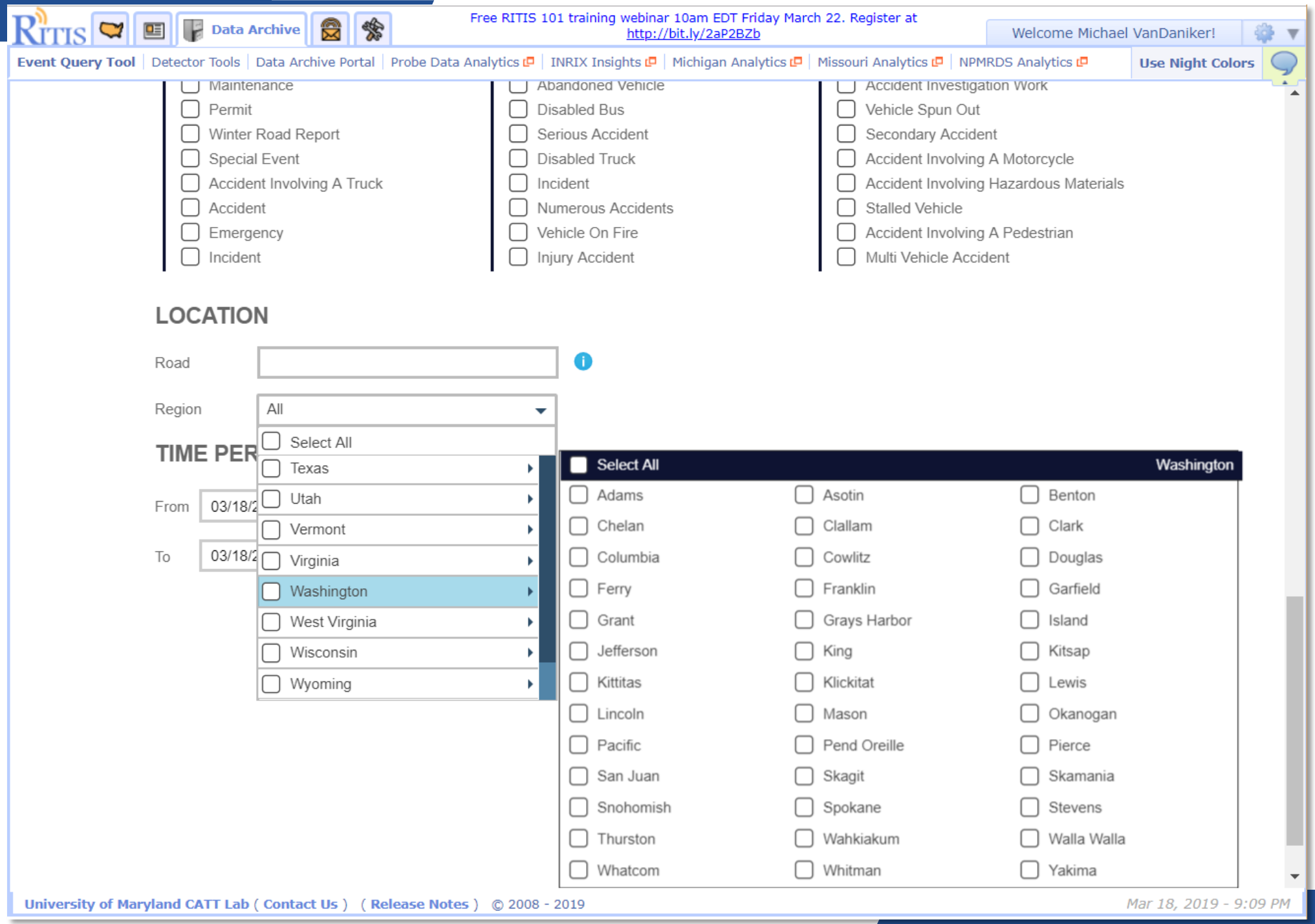
- [ ] Include all types
  - [ ] Crash
  - [ ] Vehicle Fire
  - [ ] Disabled Vehicle
  - [ ] Out Of Fuel
  - [ ] Debris
  - [ ] Other

WSDOT (Washington State DOT) Agency Types

- [ ] Include all types
  - [ ] Maintenance
  - [ ] Collision
  - [ ] Pass Closure
  - [ ] Rocks
  - [ ] Construction
  - [ ] Disabled Vehicle
  - [ ] Flammable Restriction

WisDOT CAD (Wisconsin DOT) Agency Types

- [ ] Include all types
  - [ ] Disabled Vehicle
  - [ ] Construction
  - [ ] Maintenance
  - [ ] Permit
  - [ ] Disabled Semi Trailer
  - [ ] Accident Involving A Bus
  - [ ] Abandoned Vehicle
  - [ ] Disabled Bus
  - [ ] Road Debris
  - [ ] Medical Emergency
  - [ ] Accident Investigation Work
  - [ ] Vehicle Spun Out


RITIS
Data Archive
Free RITIS 101 training webinar 10am EDT Friday March 22. Register at http://bit.ly/2aP2BZb
Welcome Michael VanDaniker!
Event Query Tool | Detector Tools | Data Archive Portal | Probe Data Analytics | INRIX Insights | Michigan Analytics | Missouri Analytics | NPMRDS Analytics
Use Night Colors
Maintenance
Permit
Winter Road Report
Special Event
Accident Involving A Truck
Accident
Emergency
Incident
Abandoned Vehicle
Disabled Bus
Serious Accident
Disabled Truck
Incident
Numerous Accidents
Vehicle On Fire
Injury Accident
Accident Investigation Work
Vehicle Spun Out
Secondary Accident
Accident Involving A Motorcycle
Accident Involving Hazardous Materials
Stalled Vehicle
Accident Involving A Pedestrian
Multi Vehicle Accident
LOCATION
Road
Region
All
Select All
Texas
Utah
Vermont
Virginia
Washington
West Virginia
Wisconsin
Wyoming
TIME PER
From
03/18/2
To
03/18/2
Select All
Washington
Adams
Asotin
Benton
Chelan
Clallam
Clark
Columbia
Cowlitz
Douglas
Ferry
Franklin
Garfield
Grant
Grays Harbor
Island
Jefferson
King
Kitsap
Kittitas
Klickitat
Lewis
Lincoln
Mason
Okanogan
Pacific
Pend Oreille
Pierce
San Juan
Skagit
Skamania
Snohomish
Spokane
Stevens
Thurston
Wahkiakum
Walla Walla
Whatcom
Whitman
Yakima
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- [ ] Special Event
- [ ] Accident Involving A Truck
- [ ] Accident
- [ ] Emergency
- [ ] Incident
- [ ] Disabled Truck
- [ ] Incident
- [ ] Numerous Accidents
- [ ] Vehicle On Fire
- [ ] Injury Accident
- [ ] Accident Involving A Motorcycle
- [ ] Accident Involving Hazardous Materials
- [ ] Stalled Vehicle
- [ ] Accident Involving A Pedestrian
- [ ] Multi Vehicle Accident

LOCATION

Road

Region: All

TIME PERIOD

From: 02/01/2019 00 00

To: 02/22/2019 23 59

February 2019

February 2019

Su	Mo	Tu	We	Th	Fr	Sa
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	1	2

SUBMIT QUERY

NEW SEARCH

Events from MDOT CHART and VDOT that started between February 1, 2019 and February 7, 2019

Showing 6,205 of 6,205 events

AGENCY	STANDA...	AGENCY...	START T...	CLOSED...	LOCATION	OP CEN...	DURATION	OPERAT...	RESPO...	MAX LA...
Type to filte	Type to filte	Type to filte	Type to filte	Type to filte	Type to filte	Type to filte	Type to filte	Type to filte	Type to filte	Type to filte
MDDOT	Disabled Vehicle	Disabled vehicle	2/5/19 2:56 PM -0500	2/5/19 2:57 PM -0500	I-495 OUTER LOOP PRIOR TO EXIT 29 MD	SOC	1 minute		1	
MDDOT	Road Maintenance Operations	Planned roadway closure	2/5/19 9:03 AM -0500	3/10/19 1:38 AM -0500	WORCESTEI COUNTY: MD-528 SOUTH	SOC	32 days 16 hours 34 minutes			1
MDDOT	Disabled Vehicle	Disabled vehicle	2/4/19 2:05 PM -0500	2/4/19 2:10 PM -0500	I-270 NORTH PAST EXIT 6. MD 28 W MONTGOME	SOC	4 minutes		1	
MDDOT	Disabled Vehicle	Disabled vehicle	2/3/19 7:13 AM -0500	2/3/19 7:18 AM -0500	I-95 NORTH (FRENCHTOV RD (I-95 AT JOHN F.	AOC Central	4 minutes		1	
MDDOT	Road Maintenance Operations	Planned roadway closure	2/5/19 9:41 AM -0500	2/5/19 2:50 PM -0500	WASHINGTC COUNTY: I-7 EAST PRIOR TO COUNTY	TOC7	5 hours 9 minutes			2
MDDOT	Road Maintenance Operations	Planned roadway closure	2/7/19 10:54 AM -0500	3/10/19 1:43 AM -0500	US 50 WEST AT MP 34.3 (BAY BRIDGE)LAN	AOC South	30 days 14 hours 49 minutes			1
MDDOT	Road Maintenance Operations	Planned roadway closure	2/5/19 8:49 AM -0500	2/5/19 2:50 PM -0500	MD 103 NOR BETWEEN O MONTGOME RD AND	SOC	6 hours 1 minute			2
MDDOT	Disabled Vehicle	Disabled vehicle	2/6/19 11:41 AM	2/6/19 11:41 AM	I-70 EAST AT MD 97	TOC7	14 seconds		1	

NEW SEARCH

Events from MDOT CHART and VDOT that started between February 1, 2019 and February 7, 2019

Showing 6,205 of 6,205 events

Operation logs for VADOT — Disabled Vehicle — I-66E east @ MM 45.000

Timestamp	Username	Message
02/04/19 08:55 AM		QAQC -DS
02/04/19 08:53 AM		Driver cleared, SSP 969 provided traffic control and went back in service, scene clear, CMS blanked
02/04/19 08:23 AM		Per CCTV, no change in status
02/04/19 07:50 AM		CCTV 0449
02/04/19 07:48 AM		CMS 0421 posted, only one CMS available
02/04/19 07:47 AM		SSP 969 on scene with a disabled vehicle blocking the right lane

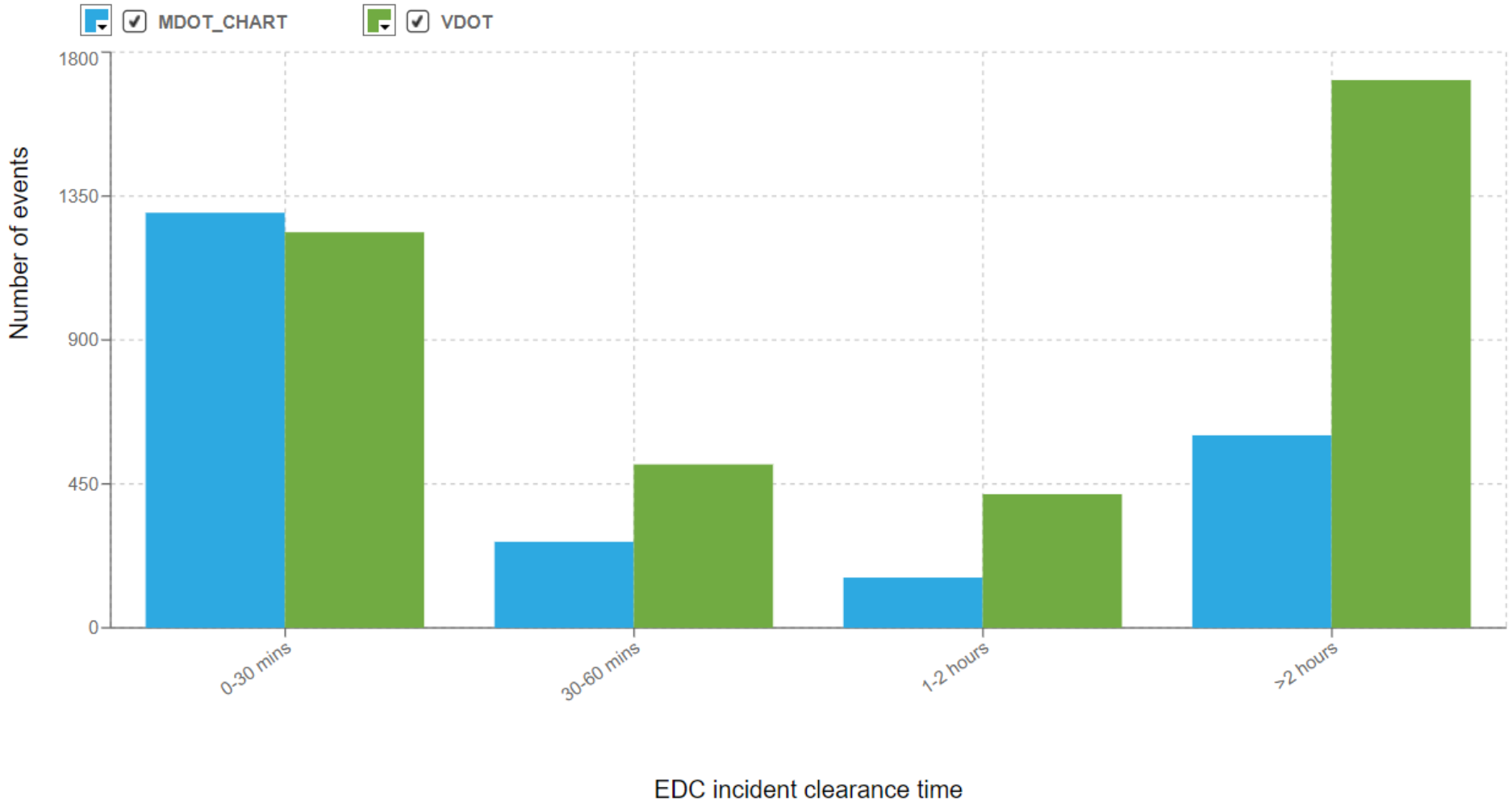
VADOT	Disabled Vehicle	Disabled Vehicle	2/4/19 4:22 PM -0500	2/4/19 5:06 PM -0500	I-395S south @ MM 3.200	Unknown	43 minutes	6		1

NEW SEARCH

Events from MDOT CHART and VDOT that started between February 1, 2019 and February 7, 2019

Showing 6,205 of 6,205 events

Show number of events by: EDC incident clearance time



NEW SEARCH

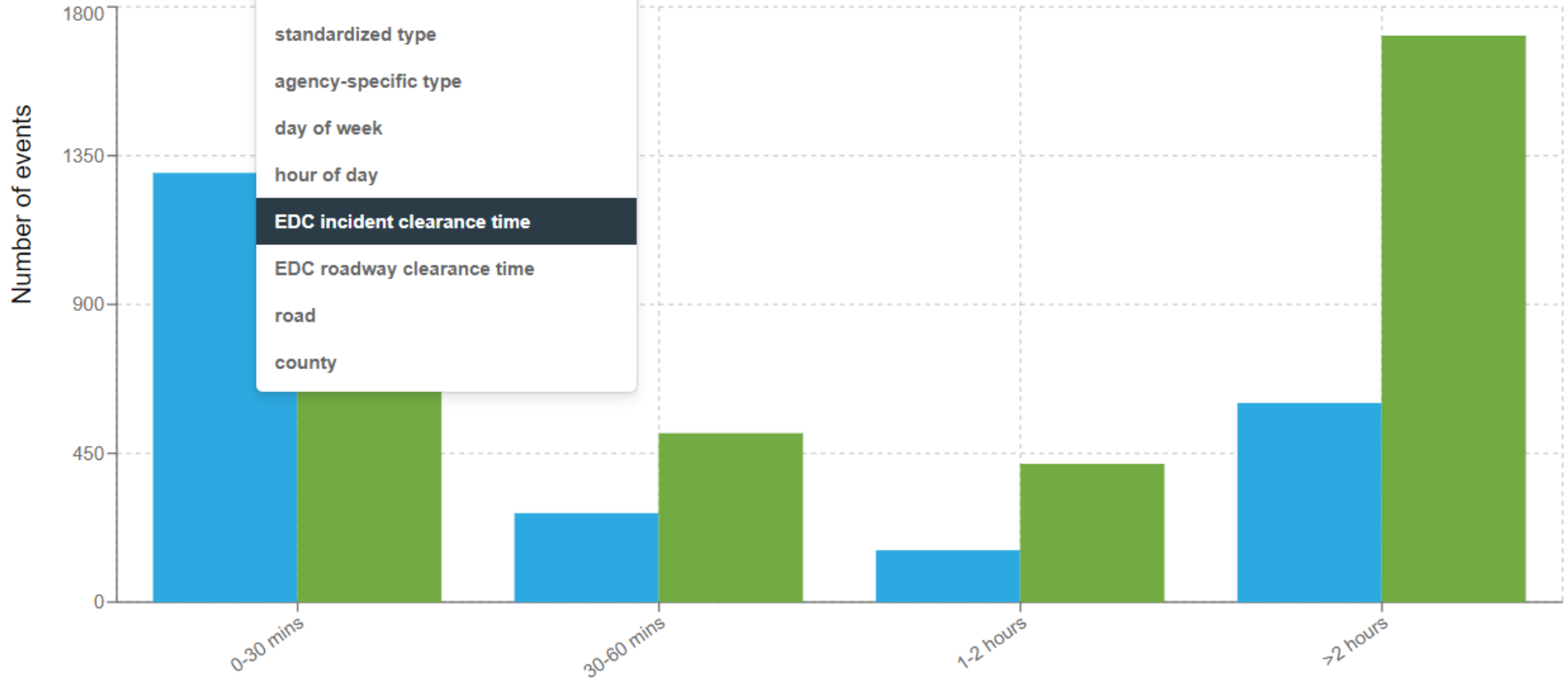
Events from MDOT CHART and VDOT that started between February 1, 2019 and February 7, 2019

Showing 6,205 of 6,205 events

Show number of events by: EDC incident clearance time

- EDC (Every Day Counts) type
- standardized type
- agency-specific type
- day of week
- hour of day
- **EDC incident clearance time**
- EDC roadway clearance time
- road
- county

MDOT_CH



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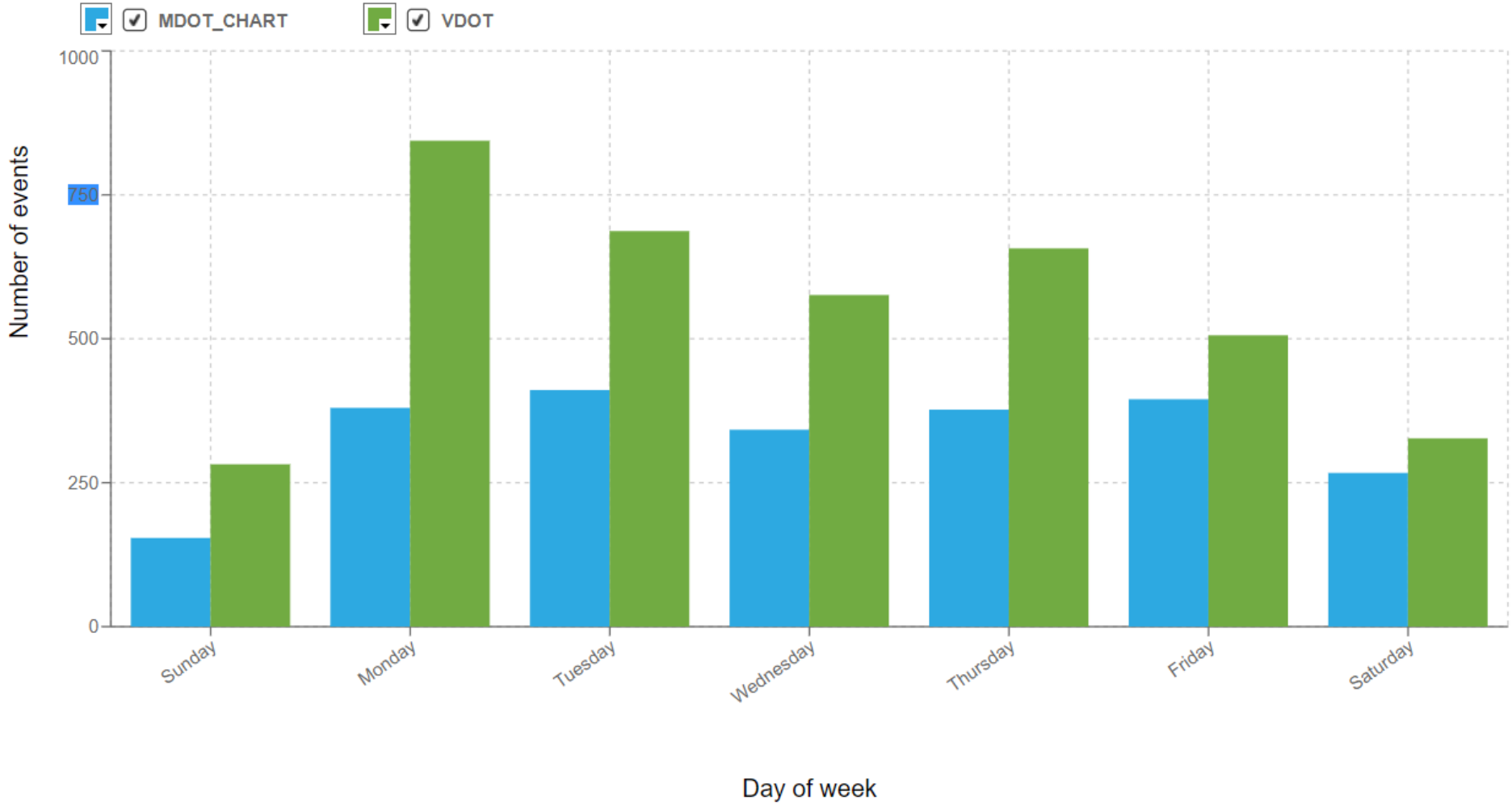
Showing 6,205 of 6,205 events

Show number of events by: day of week



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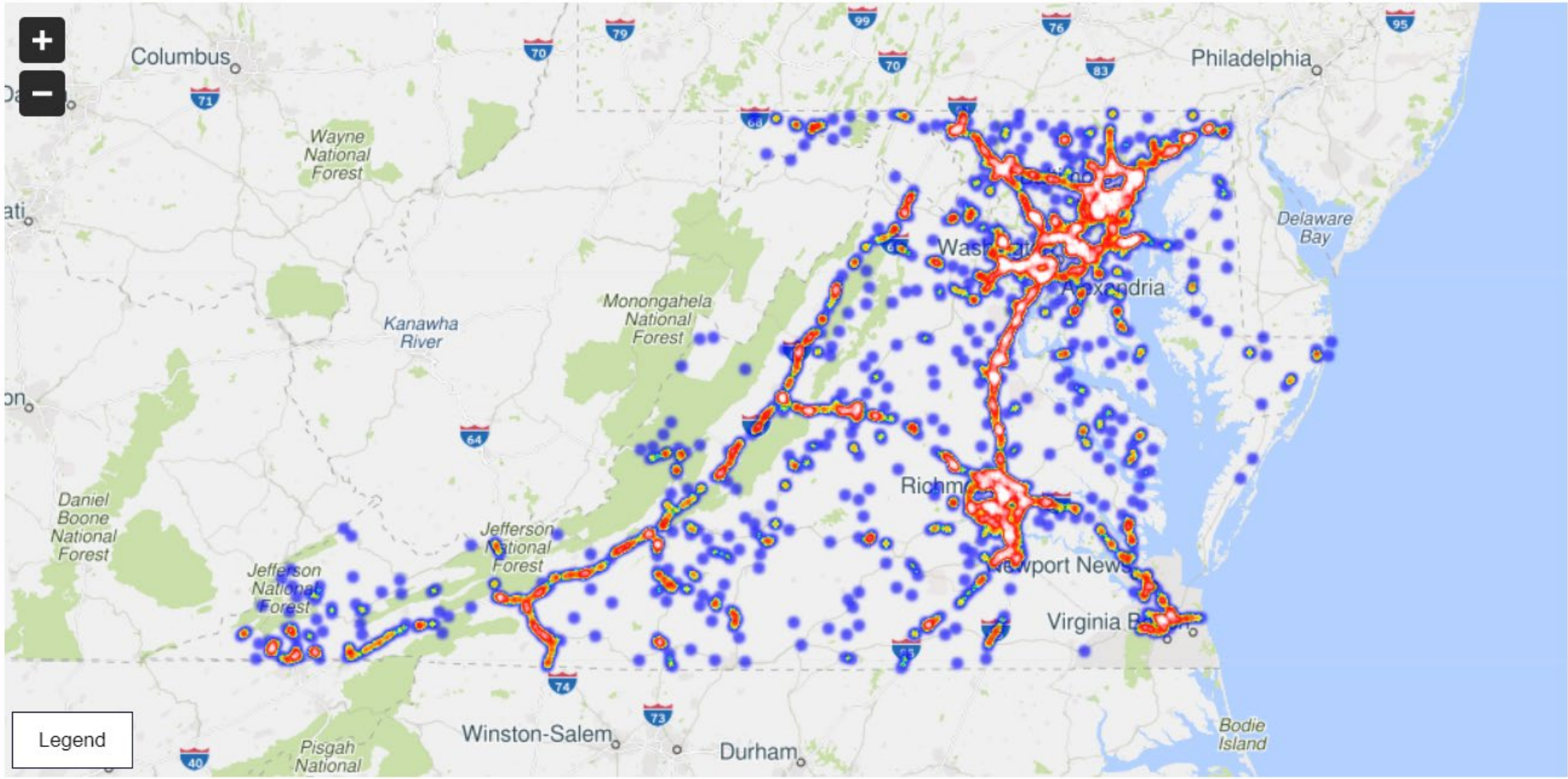
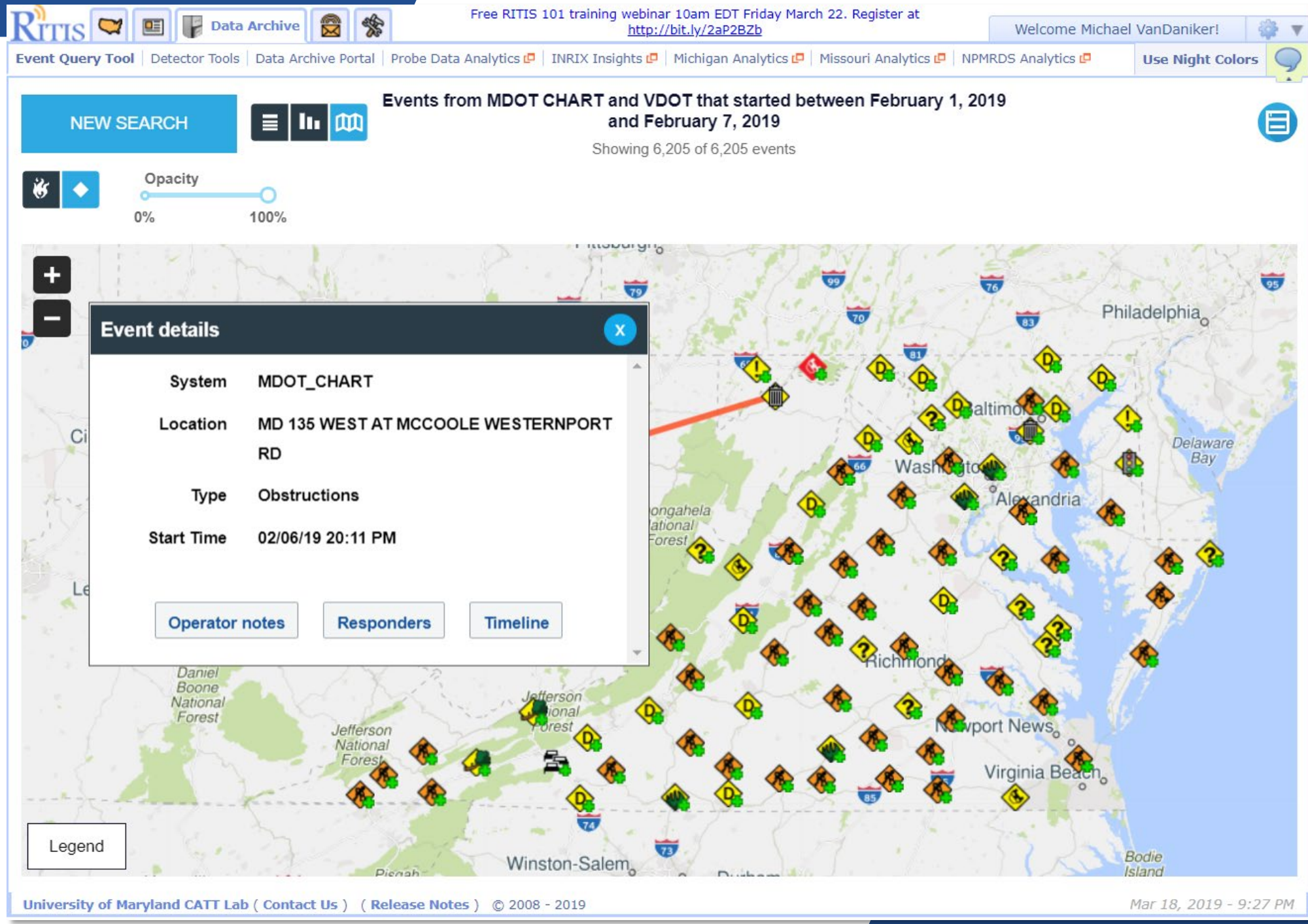
Showing 6,205 of 6,205 events

Opacity
0% 100%

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Events from MDOT CHART and VDOT that started between February 1, 2019 and February 7, 2019
Showing 6,205 of 6,205 events
Opacity
0%
100%
Event details
System MDOT_CHART
Location MD 135 WEST AT MCCOOLE WESTERNPORT RD
Type Obstructions
Start Time 02/06/19 20:11 PM
Operator notes
Responders
Timeline
Philadelphia
Delaware Bay
Alexandria
Richmond
Newport News
Virginia Beach
Winston-Salem
Daniel Boone National Forest
Jefferson National Forest
Legend
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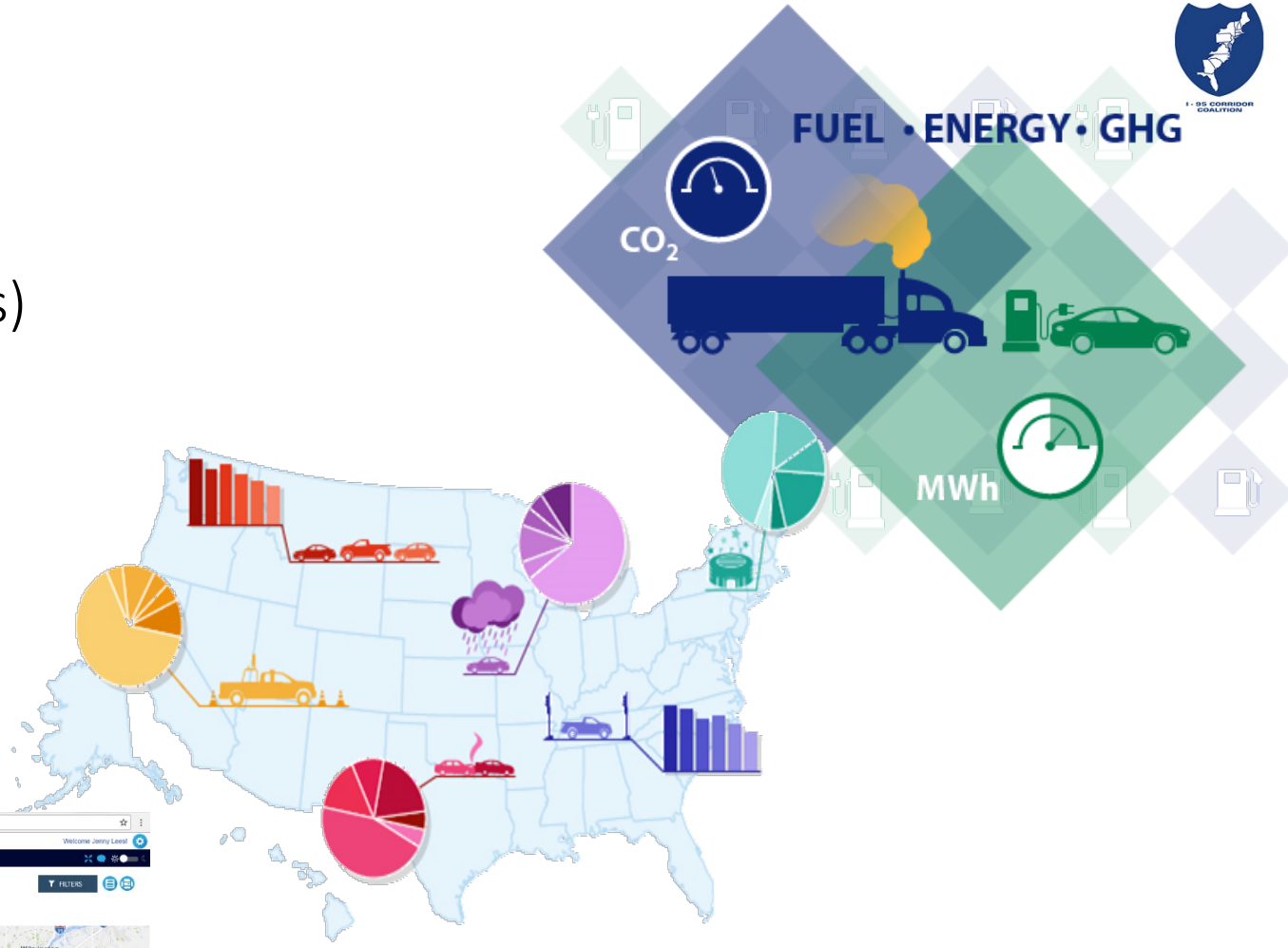

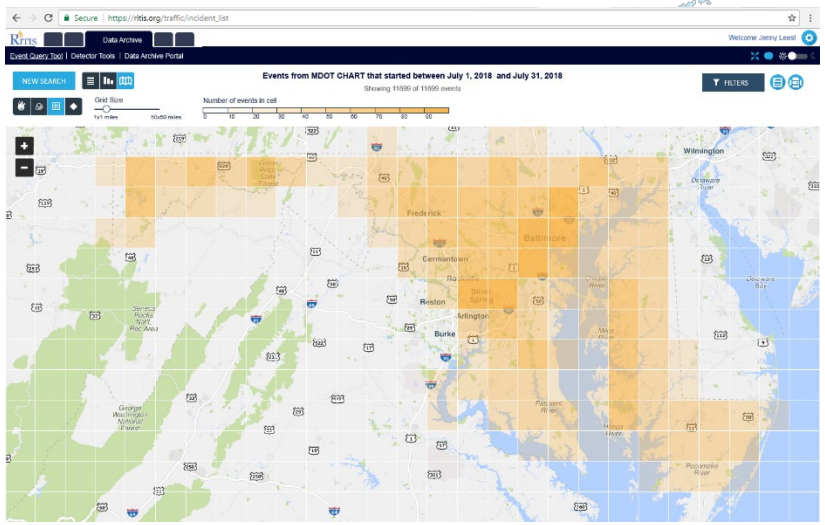

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