



PROBE DATA ANALYTICS SUITE

u s e r g r o u p

Web Meeting – April 25, 2019



Webinar & Audio Information

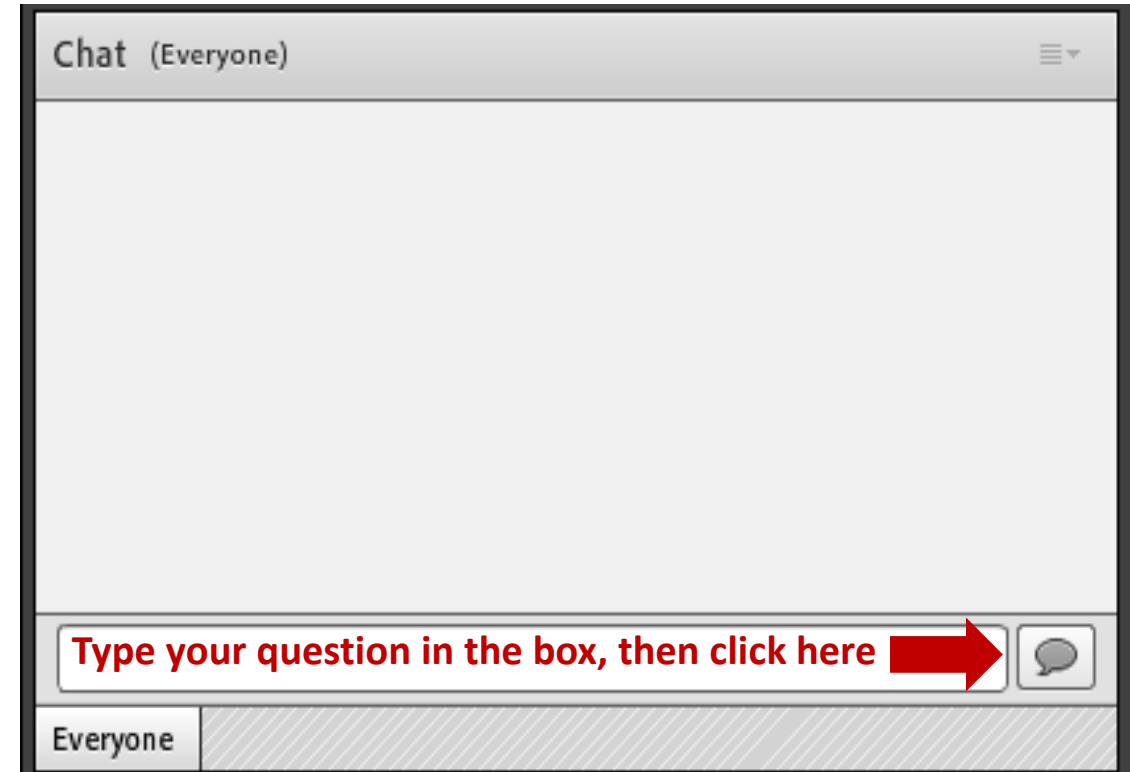
- The call-in phone number is: **x-xxx-xxxx & enter xxxxxxxx# at the prompt**
- **Participants will be in “Listen Only” mode throughout the webinar**
- Please press *0 to speak to an operator for questions regarding audio
- Please call Justin Ferri at xxx-xxx-xxxx for difficulties with the web or audio application
- This webinar will be recorded
- Presentations will be posted to the I-95 Corridor Coalition website. Participants will receive a link to the presentations after they are posted.



Asking Questions



- Please pose your questions using the **chat box**
- Questions will be monitored then answered by the speakers either at the end of the presentation or at the end of the webinar



Welcome



Kelly Wells, North Carolina Department of Transportation
User Group Co-chair

Participants

Agency			
A&P Consulting	DVRPC	Missouri DOT	Sabra & Associates
AECOM	FHWA	Montgomery County Planning Commission	SJTPO
AEM	Florida DOT	MWCOG	SPC
APCTE	Georgia DOT	New Jersey DOT	Tennessee DOT
Atlanta Regional Commission, GA	HNTB	New Jersey Turnpike Authority	Transcom
Baltimore Metropolitan Council	INRIX	New York City DOT	UMD CATT Lab
Capital Area MPO (Raleigh, NC)	Lehigh Valley Planning Commission	New York State Thruway Authority	University of Vermont Transportation Research Center
CATT Lab	Manatee County	NJTPA	University of Virginia
Chittenden County Regional Planning Commission	Maricopa Association of Governments	North Carolina DOT	VHB
City of Charlotte, NC	Maryland DOT – SHA	NVTA	Virginia DOT
Connecticut DOT	Maryland Transportation Authority	Pennsylvania DOT	Wolverton, Inc.
Dad & Associates LLC	MetroPlan Orlando	Richmond Regional Planning District Commission, VA	WRA
DCHC MPO	Michigan DOT	RK&K	I-95 Corridor Coalition
District DOT	Mobility Tech	Rockingham Planning Commission	

Welcome



Welcome / Introductions

Kelly Wells, NCDOT & User Group Co-chair



Holiday Travel Forecasting

Matt Glasser, PE, Georgia DOT



RITIS Applications for Measuring Performance in Downtown Washington DC

Paul Silberman, PE, PTOE, Sabra & Associates
for District DOT

RITIS Applications for the MDOT SHA - US 50 Study

Josh Coulson, Sabra & Associates
for Maryland DOT

Working Group Updates

Mark Franz, PhD, UMD CATT Laboratory

RITIS and PDA Suite Features – What's New & What's Coming

Michael Pack, UMD CATT Laboratory

Agency Input Session – questions, comments.....

All

Wrap Up

Kelly Wells, NCDOT & User Group Co-chair

Introductions



Matt Glasser, PE
Georgia DOT
*Regional Traffic
Operation Program
Manager*



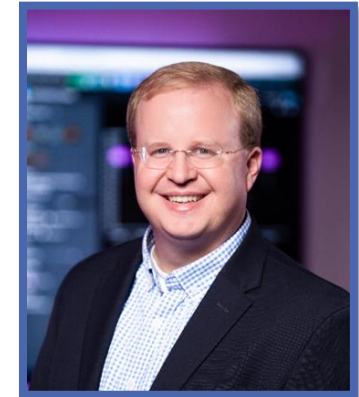
Paul Silberman, PE, PTOE
District DOT
(Sabra & Associates)
*Practice Leader
Transportation Planning*



Josh Coulson
Maryland DOT
(Sabra & Associates)
Transportation Engineer



Mark Franz, PhD
UMD CATT Lab
*Lead Transportation
Analyst*



Michael Pack
UMD CATT Lab
Director

Coalition Update – Recent Events

RECENT

- ✓ I-95 CC Strategic Planning Sessions for Intermodal & TSMO – March 6, 2019
- ✓ Summit on Traveler Information Strategies during Emergency Operations – March 7, 2019
- ✓ UAS Programs Webinar - Agency Presentations from Massachusetts & Delaware – March 21, 2019
- ✓ Drone Peer Exchange (NE Highway Operations) - UAS – I have one . . . now what do I use it for? – April 11, 2019
- ✓ I-95 Corridor Coalition Steering Committee Meeting – April 18, 2019
- ✓ Intermodal Freight Webinar – April 23, 2019



In the spotlight...

Holiday Travel Forecasting

Matt Glasser, PE

Georgia Department of Transportation
Regional Traffic Operation Program Manager





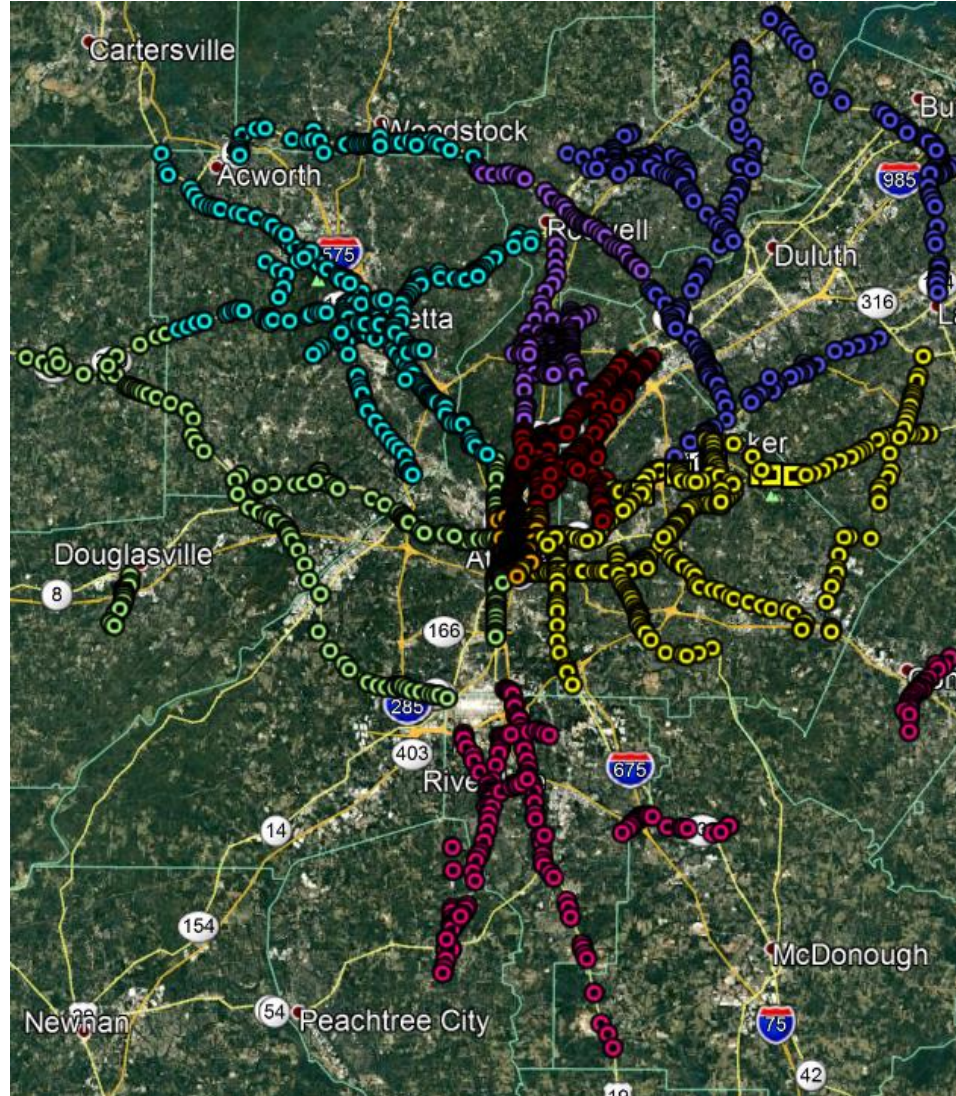
Holiday Travel Forecasting

Matt Glasser, PE – GDOT

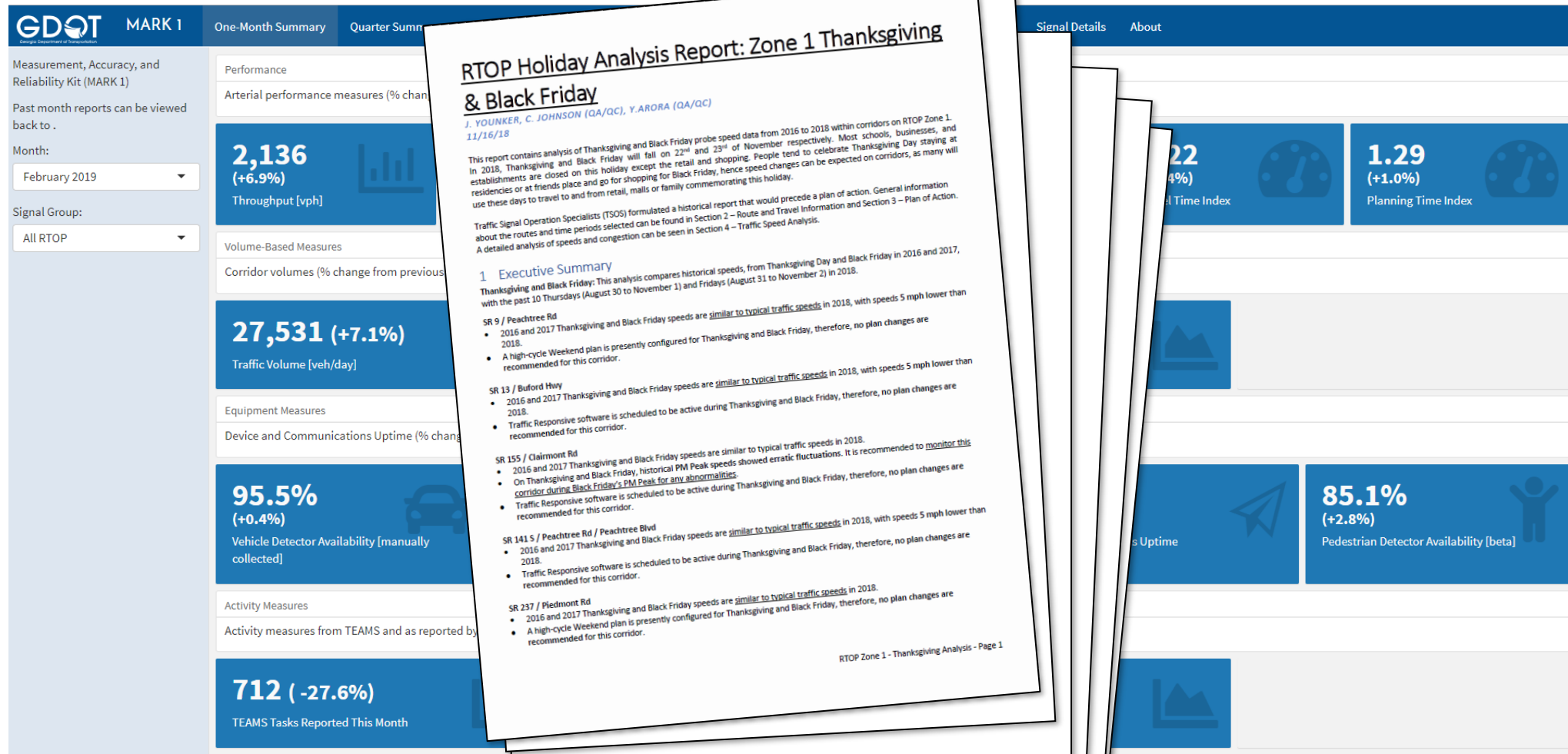
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<div> <div>Heavy traffic and worse than normal</div> <div>Heavy traffic but better than normal</div> <div>Average Traffic</div> <div>Light traffic</div> </div>					



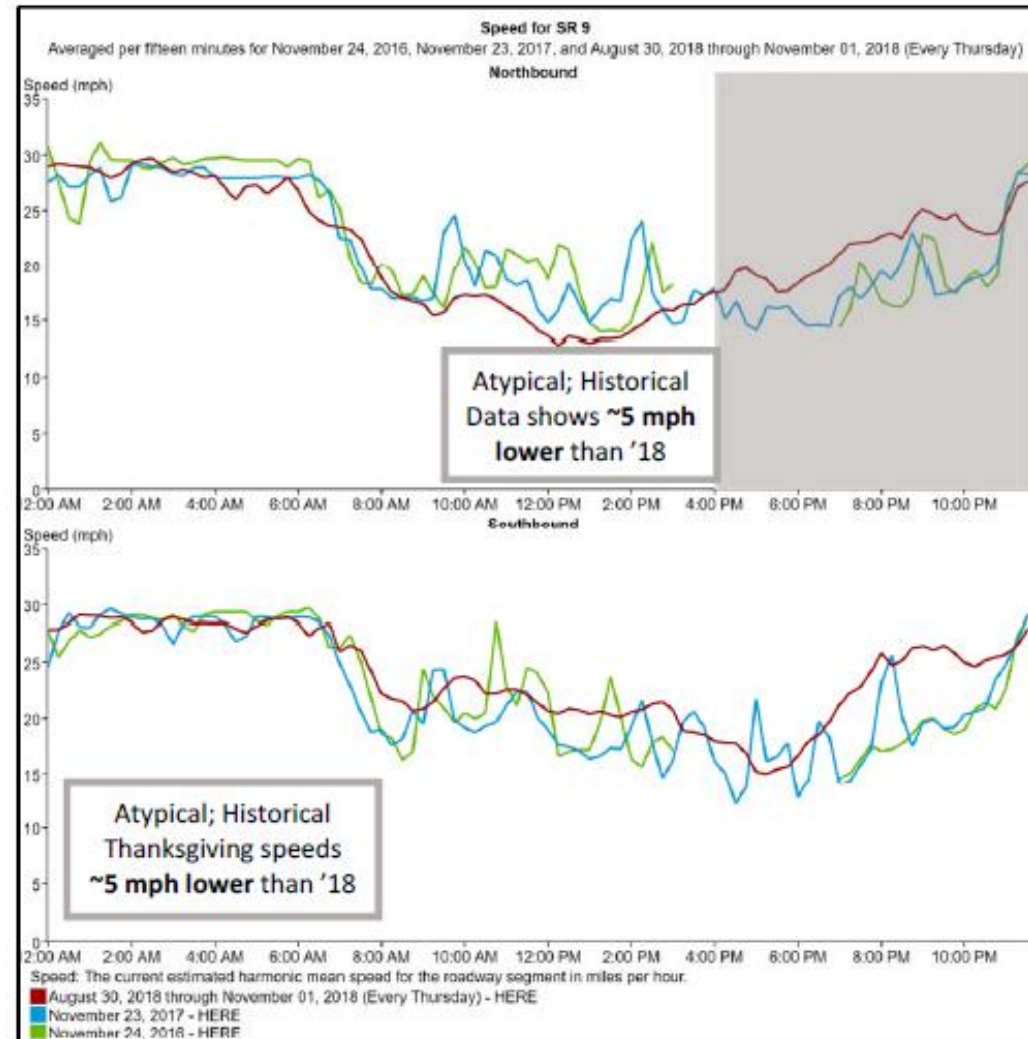
Metro Atlanta



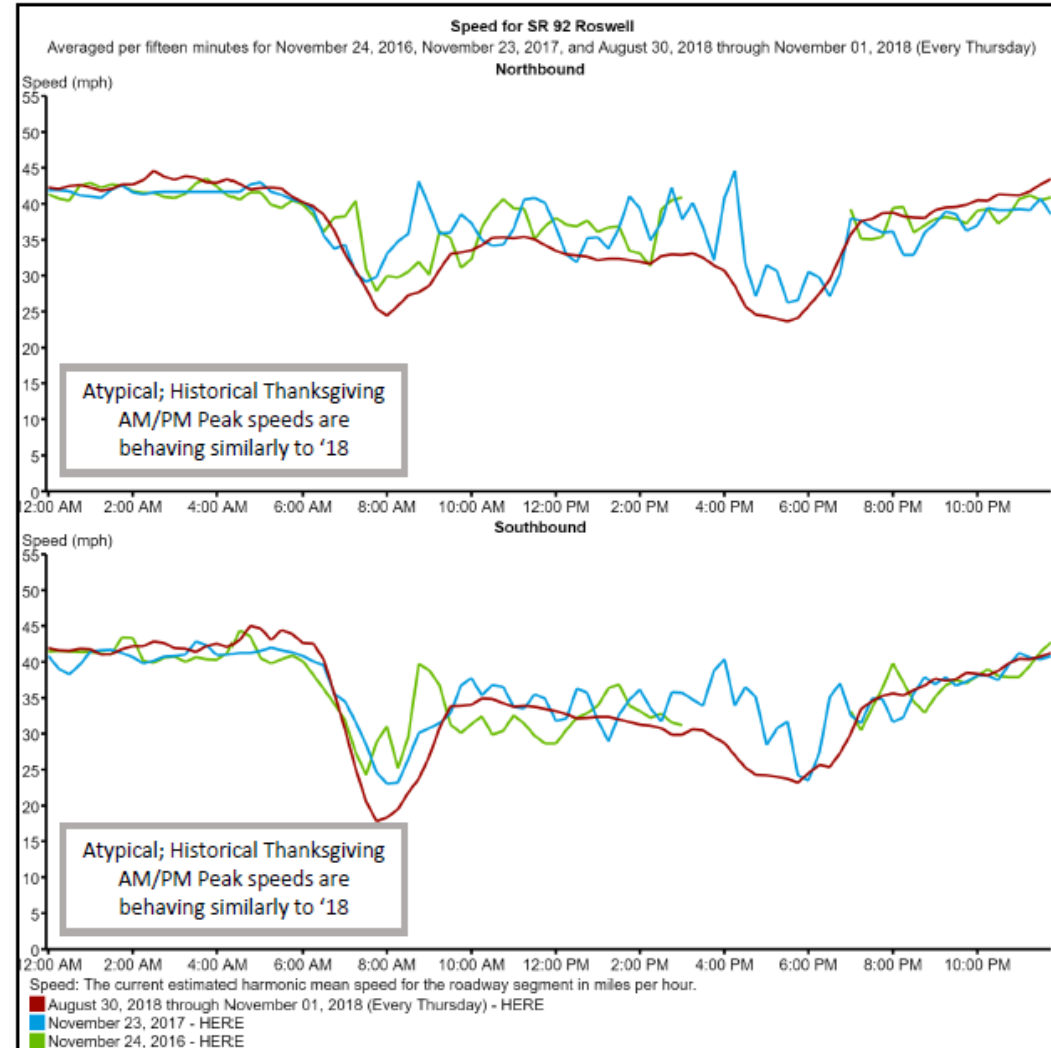
Operations Analysis



Operations Analysis



Operations Analysis

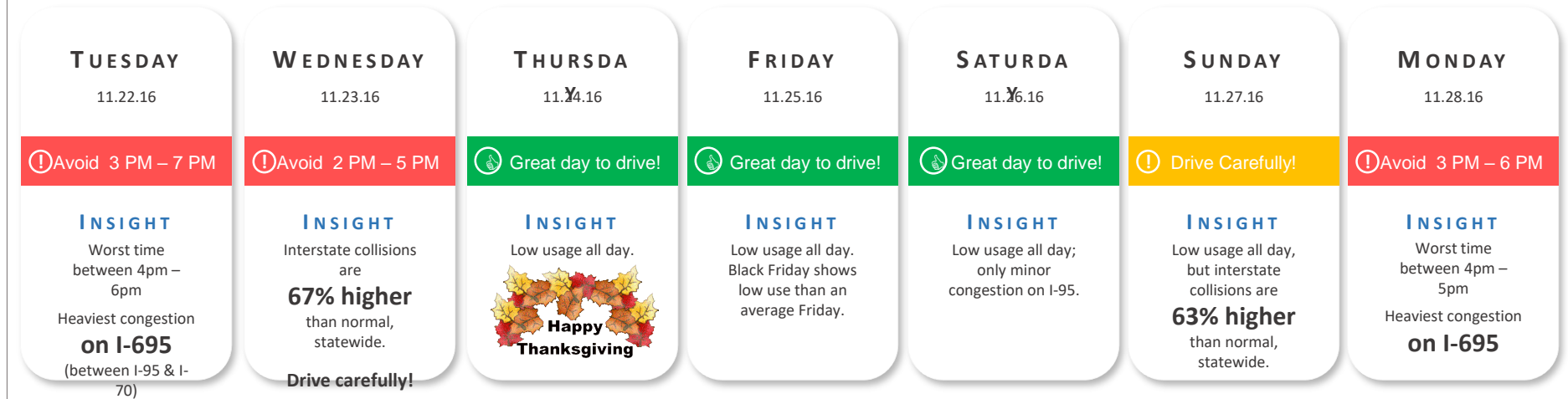


Communicating the Analysis

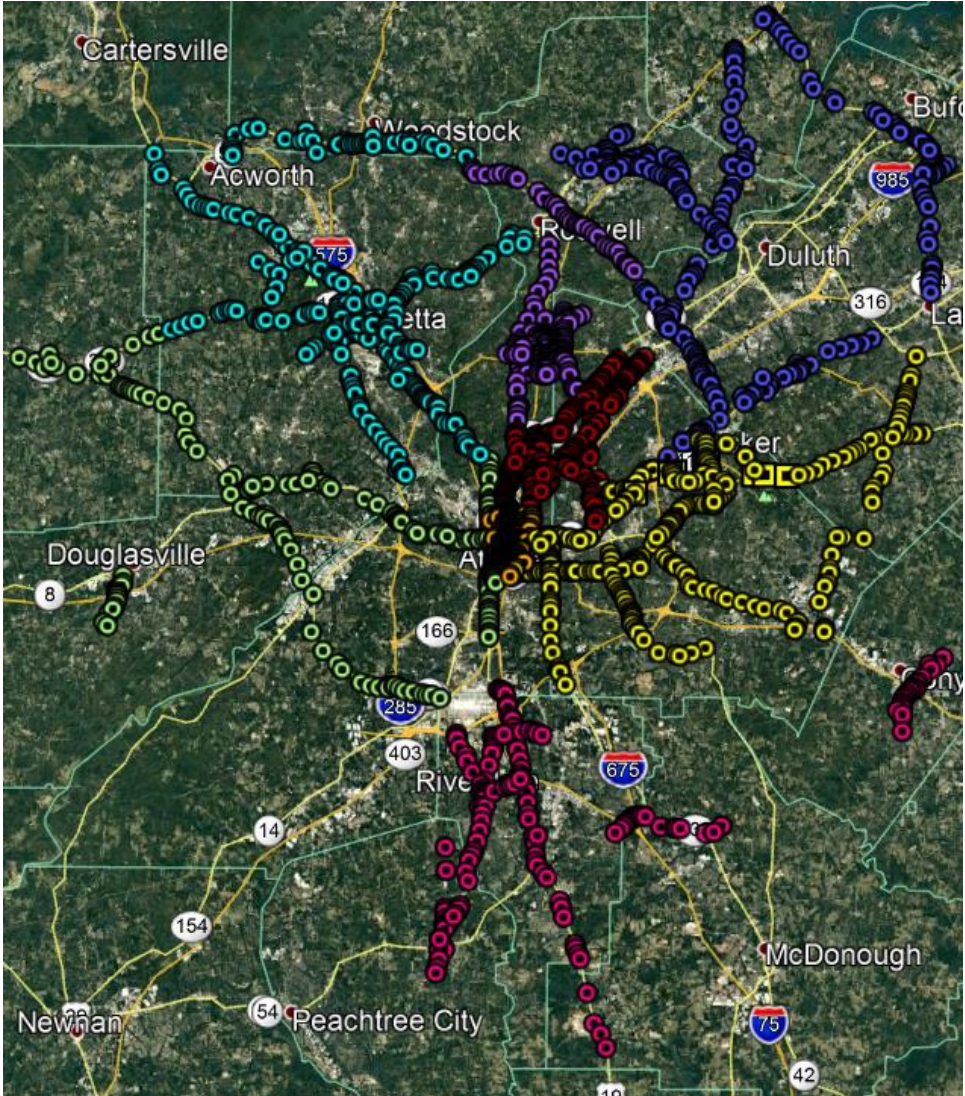
Thanksgiving Week 2016

Interstate Travel Forecast for the Baltimore Region, MD
(Based upon an evaluation of Thanksgiving week in 2015)

"Thanksgiving holiday travel is expected to increase from 2015 by 3 percent in Maryland, according to AAA Mid-Atlantic. That's 31,000 more Marylanders on the road from Wednesday, November 23, through Sunday, November 27."



Metro Atlanta





Travel Forecast

TUESDAY 11/20/2018	WEDNESDAY 11/21/2018	THURSDAY 11/22/2018	FRIDAY 11/23/2018	SATURDAY 11/24/2018	SUNDAY 11/25/2018
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THANKSGIVING WEEK 2018

Travel Forecast for Downtown

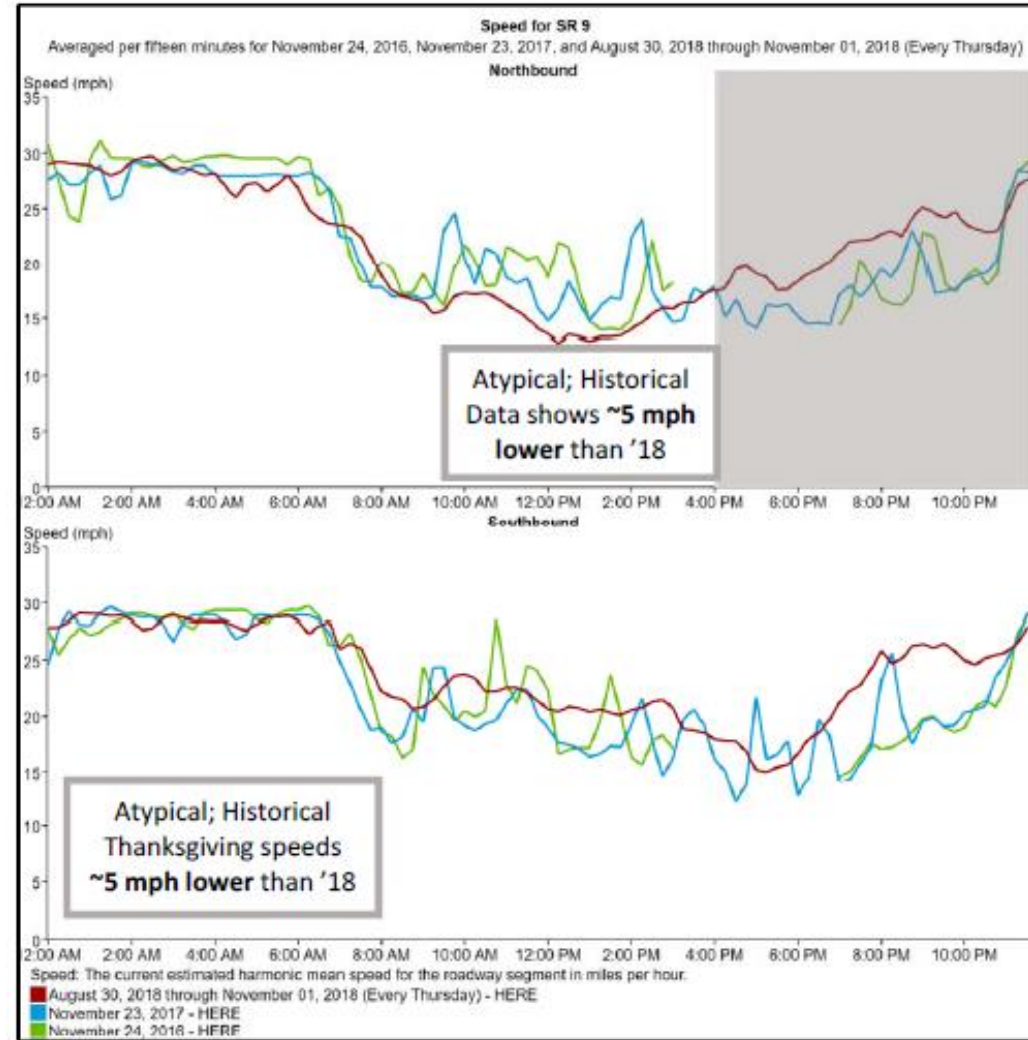
(Based upon an evaluation of Thanksgiving weeks in 2016 and 2017)

TUESDAY 11/20/2018	WEDNESDAY 11/21/2018	THURSDAY 11/22/2018	FRIDAY 11/23/2018	SATURDAY 11/24/2018	SUNDAY 11/25/2018
AVOID 5PM - 7PM	AVOID 3PM - 4PM	AVOID 4PM - 7PM	AVOID 7PM - 9PM	AVOID 2PM - 3PM	AVOID 3PM - 8PM
TRAVEL INSIGHT Congestion: 5%-10% increase Speeds: 30%-35% decrease	TRAVEL INSIGHT Congestion: 0%-5% increase Speeds: 25%-30% decrease	TRAVEL INSIGHT → Worst travel time of the week ← Congestion: 0%-5% increase Speeds: 40%-45% decrease  HAPPY THANKSGIVING!	TRAVEL INSIGHT Congestion: 5%-10% increase Speeds: 25%-30% decrease  HAPPY BLACK FRIDAY!	TRAVEL INSIGHT Higher usage Congestion: 0%-5% increase Speeds: 20%-25% decrease	TRAVEL INSIGHT Higher usage Congestion: 5%-10% increase Speeds: 20%-25% decrease

 Heavy Traffic and worse than normal	 Heavy traffic but better than normal	 Average Traffic	 Light traffic
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Heavy Traffic and worse than normal	Heavy traffic but better than normal	Average Traffic	Light traffic		

Performance Charts



Trend Analysis

Use **Trend Map** for dynamically assessing congestion patterns occurring during the week:

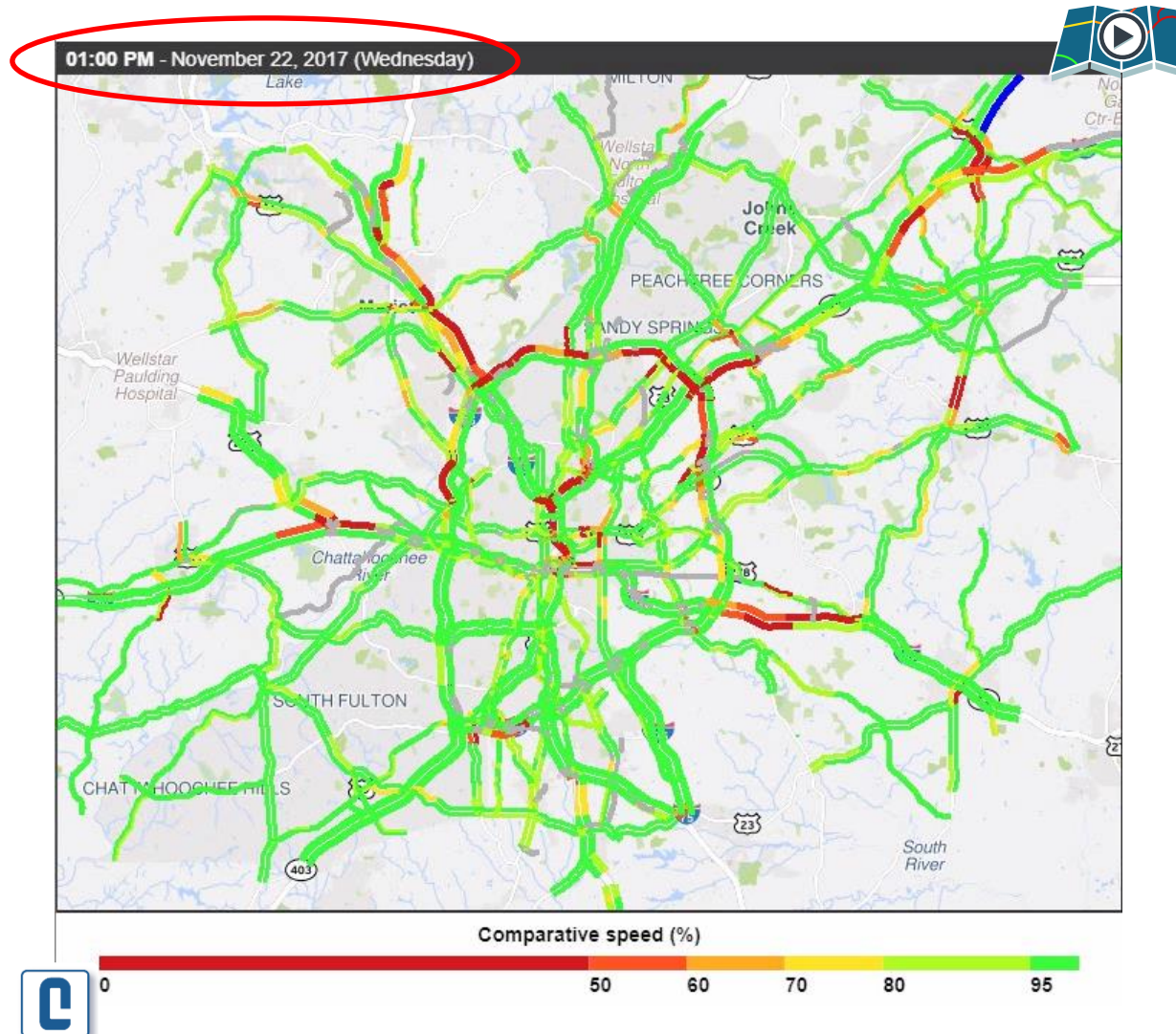
- 1) On the **Trend Map** query page, first select your geography and road type, as appropriate
- 2) Create your desired time periods to analyze
- 3) Select your data source
- 4) Choose a data granularity

The screenshot displays the 'Trend Map' query interface, which is organized into four main sections:

- 1. Select roads:** Includes a 'TMC' dropdown, a 'segments from' dropdown set to 'HERE', and tabs for 'Road', 'Region', 'Segment codes', 'Map', and 'Saved'. A search bar labeled 'Search in Georgia...' is also present.
- 2. Select one or more time periods to analyze:** Features tabs for 'Day(s)', 'Month(s)', and 'Year'. It shows a date range from '04/04/2019' to '04/04/2019'. Below this, there are radio buttons for 'Create a single time period for this range' (selected) and 'Create a time period for each day within this range'. A checkbox for 'Limit to specific days of the week' is also visible. A green '+ Add time period' button is at the bottom right of this section.
- 3. Select data sources:** A list of checkboxes for various data sources, including 'HERE', 'INRIX', and several 'NPMRDS from INRIX' and 'NPMRDS from HERE' options for different vehicle types (Passenger vehicles, Trucks and passenger vehicles, Trucks). Each option has a help icon (?).
- 4. Select granularity:** A list of radio buttons for time intervals: '1 minute', '5 minutes', '10 minutes', '15 minutes', and '1 hour'.

A small map icon with a play button is located at the top left of the interface, and a blue 'e' logo is in the bottom right corner.

Trend Analysis



Spreading the Word

NaviGator511
@511Georgia

GDOT released traffic forecasts for metro Atlanta that recommend the worst to best times to travel over the Thanksgiving holiday. The forecasts are based on an analysis of traffic patterns in seven parts of the metro Atlanta area during the Thanksgiving holiday in 2016 and 2017.

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1:13 PM - 20 Nov 2018

AJC f t p r e m

By the time families sit down for turkey on Thursday, volume on Atlanta freeways should be light. Downtown is the exception,

WSB-TV @wsbtv

Traveling for Thanksgiving? Here's how GDOT is helping ease Thanksgiving Day traffic
[2wsb.tv/2QhKRwp](https://www.wsb-tv.com/news/2wsb-tv/2QhKRwp) @AudreyWSBTv is LIVE inside their Traffic Management Center on Channel 2 at 6:51 a.m.



0:36 677 views

3:02 AM - 21 Nov 2018

Questions?

Smart Signals along SR 141/Peachtree Road

In May of 2017, the Regional Traffic Operations Program, or RTOP, implemented the Traffic Responsive System along Peachtree Road (from I-285 to Colonial Dr.) to improve traffic flow. Here are the results:



SPEED CHANGE

35% improvement in southbound
AM average speed

17% improvement in northbound
PM average speed

2-5mph improvement in
average daily speed

\$141,104
in monthly delay
cost savings



Total daily congestion time
decreased by almost **3hrs**

5%
reduction in
weekday travel
time

Project Details:

23 intersections

5 miles long

64,000 vehicles/day

In the spotlight...

RITIS Applications for Measuring Performance in Downtown Washington DC

Paul Silberman, PE, PTOE

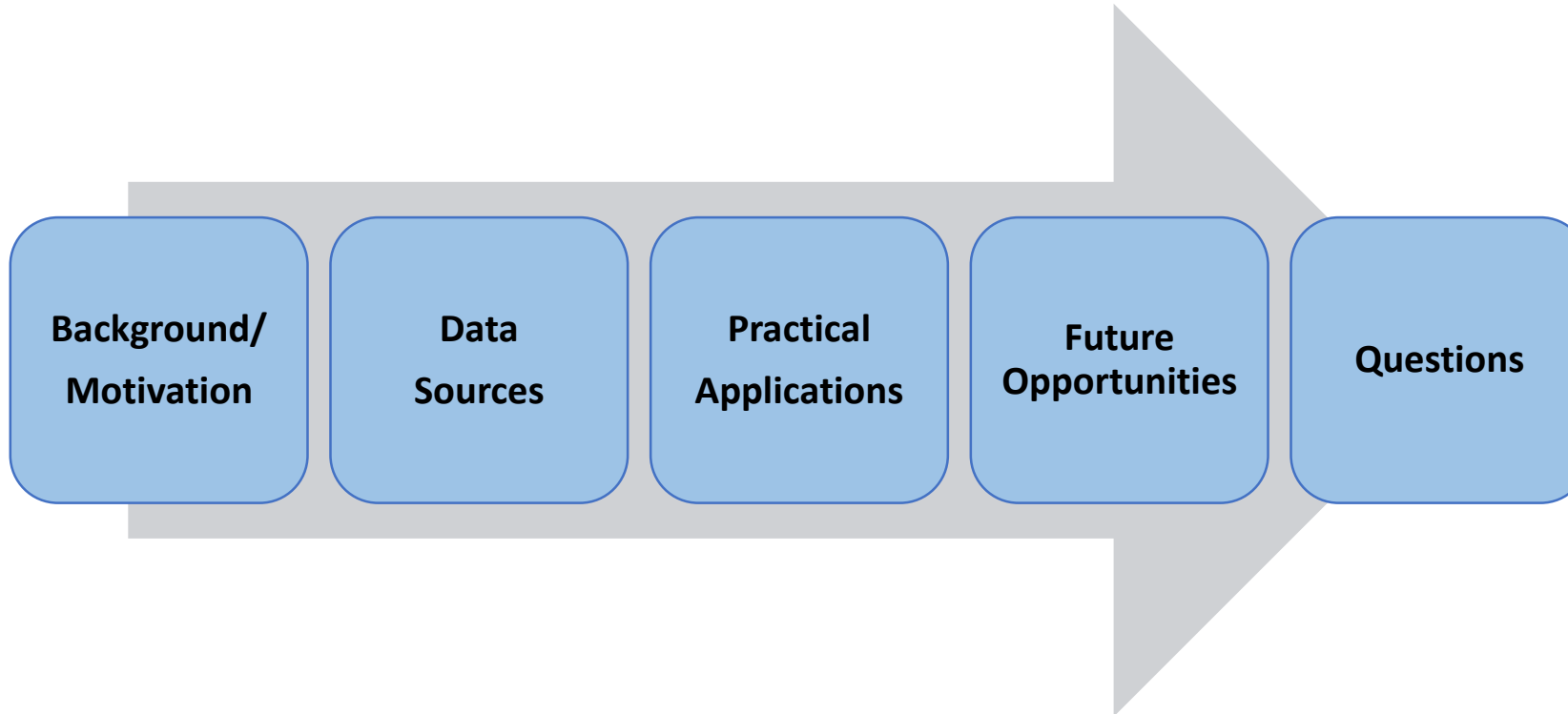
Practice Leader Transportation Planning
Sabra & Associates, Inc.
For DDOT



RITIS Applications for Measuring Performance in Downtown Washington DC

I-95 Corridor Coalition Quarterly RITIS and Probe Data Analytics Suite
User Group Meeting
February 14, 2019

Agenda



Background



Citywide Signal Optimization

- › How do we evaluate benefits for all roadway users?

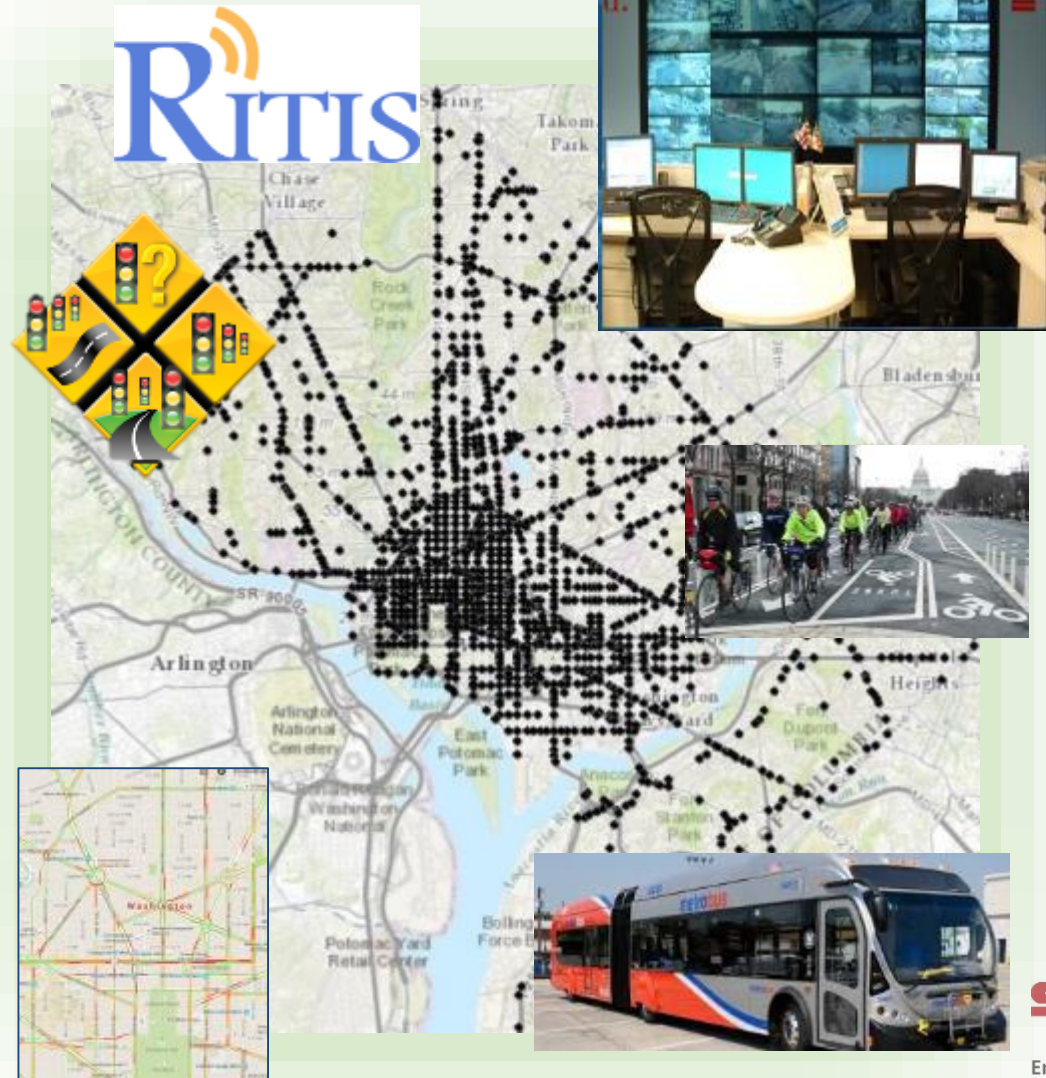
Major Special Events

- › How to predict, mitigate and monitor?



Motivation

- › What data is available?
- › How are we using it?
- › What have we learned along the way?
- › Where do we go from here?



Data Sources

› RITIS

- Live System Status
- Historical Data/PDA Suite

› WMATA AVL

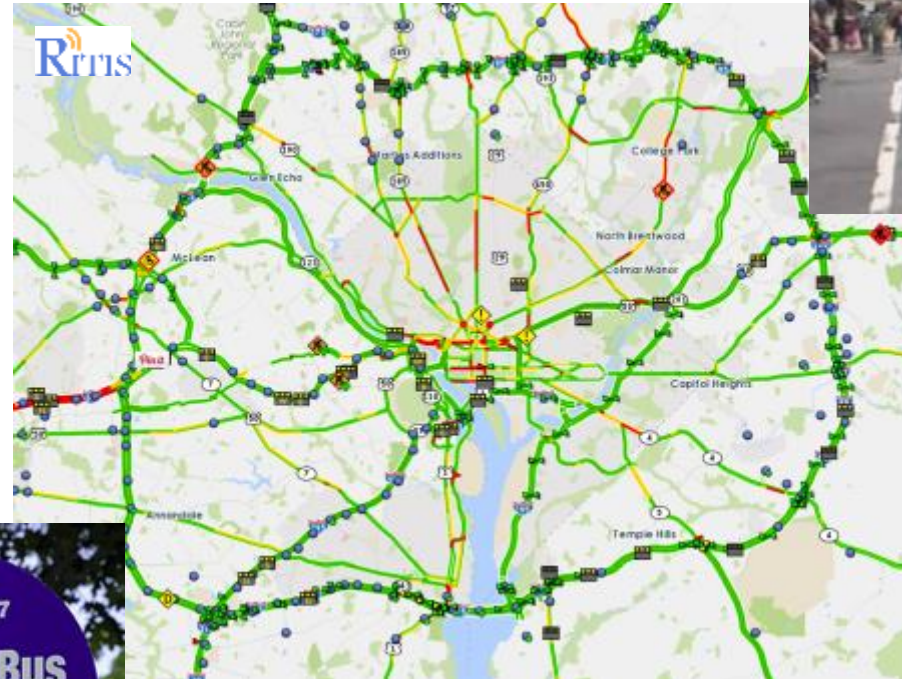
› Google Traffic

- Live/Typical
- Waze

› Floating Car/GPS

› Bicycle Travel Time

› CCTV



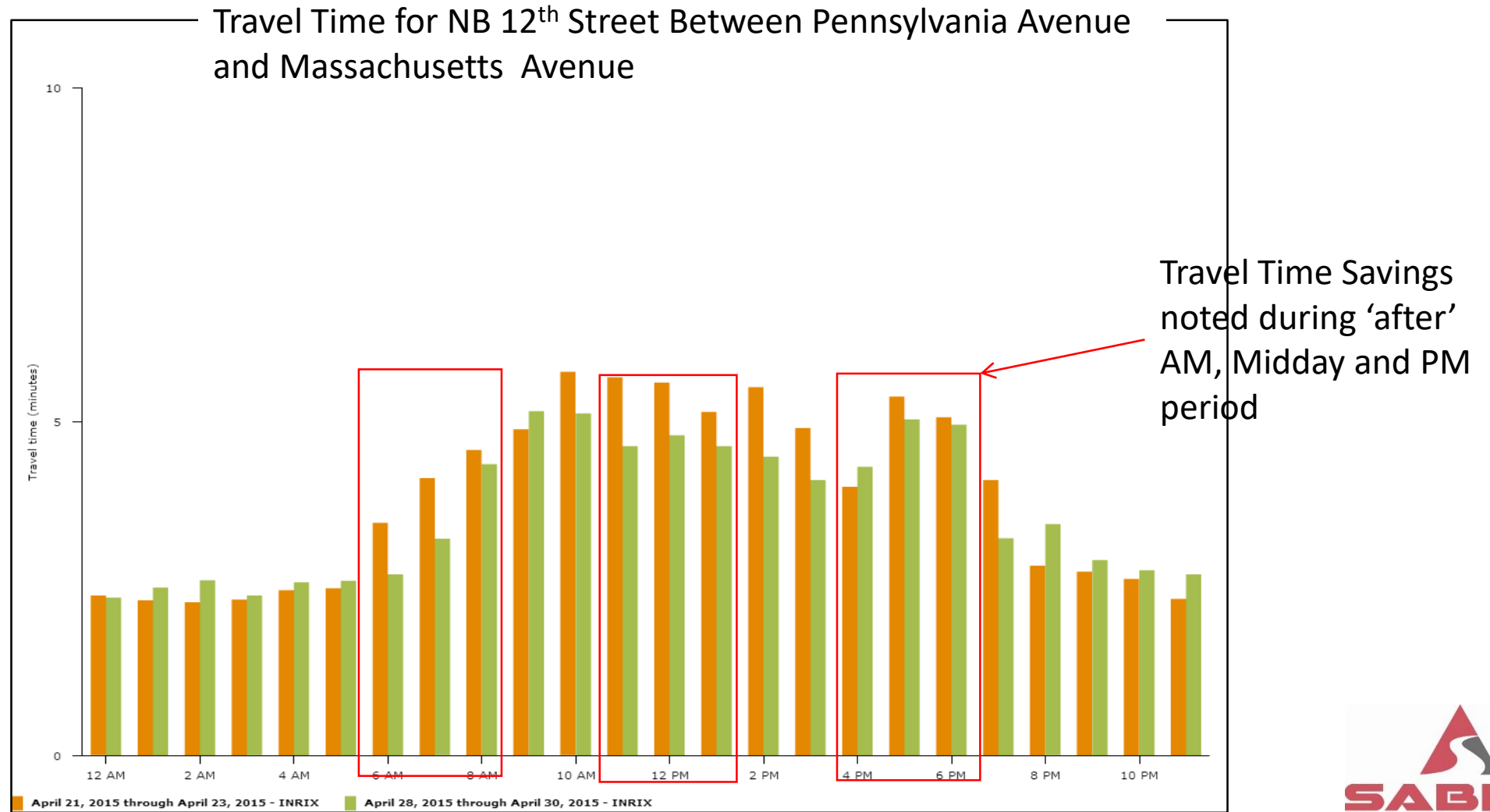
Practical Applications

Downtown Optimization

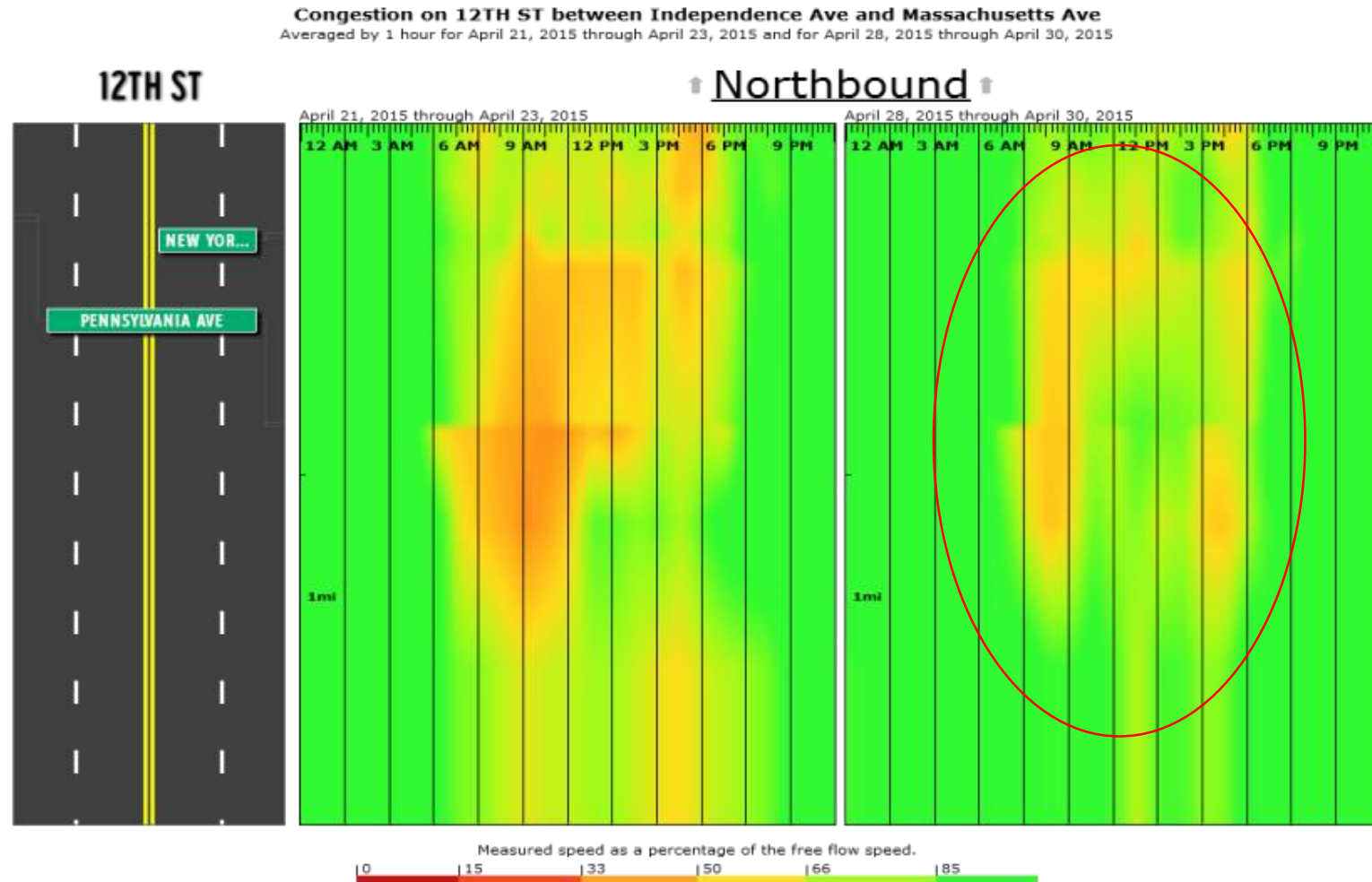
- › 600+ Signal Grid Network
- › Overnight Implementation
- › Cars, Buses, Peds, Bikes
 - 49 Travel Time Routes
 - 40+ Bus Routes
 - 1,500+ Signalized Crosswalks
 - 7,000+ Cycle Trips per Day



Downtown Results – VPP Travel Time



Downtown Results – VPP Congestion



Significantly reduced queuing and increased speeds noted during 'after' AM, Midday and PM period

Downtown Results – User Costs

PDA Suite User Cost Tool

- › Aggregate performance data and user value-of-time
- › Estimates user cost associated with congestion

US 1 (Rhode Island Ave)	User Delay Costs
Average Day Before	\$41,797
Average Day After	\$32,116
Daily Savings	\$9,681
Annual Savings	\$2,420,250

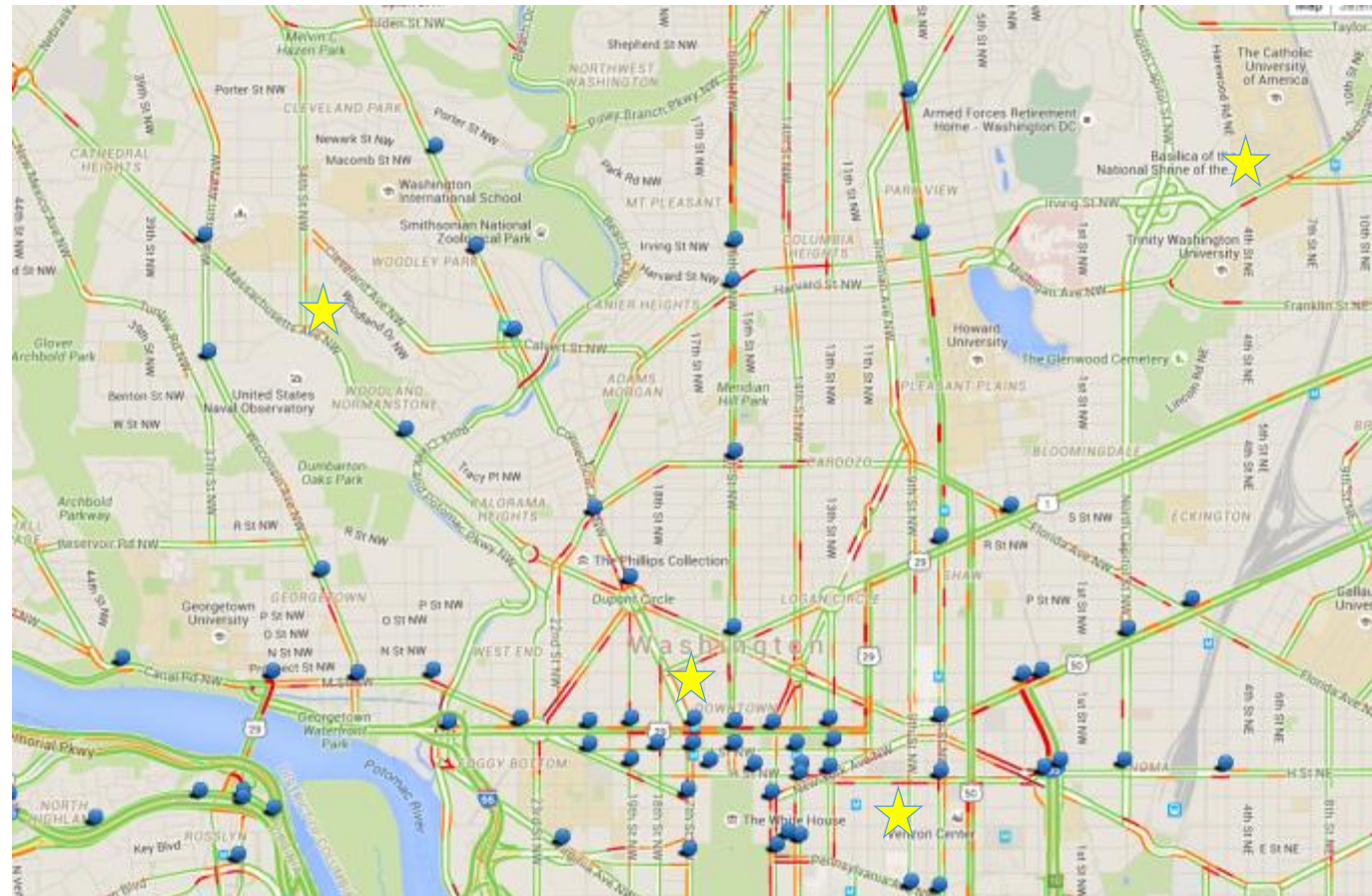
Papal Visit

- › Traffic analysis of potential impacts
- › Development of mitigation measures
- › Real-time traffic monitoring and management



Papal Visit

CCTV + Live Traffic Data Monitoring



CCTV

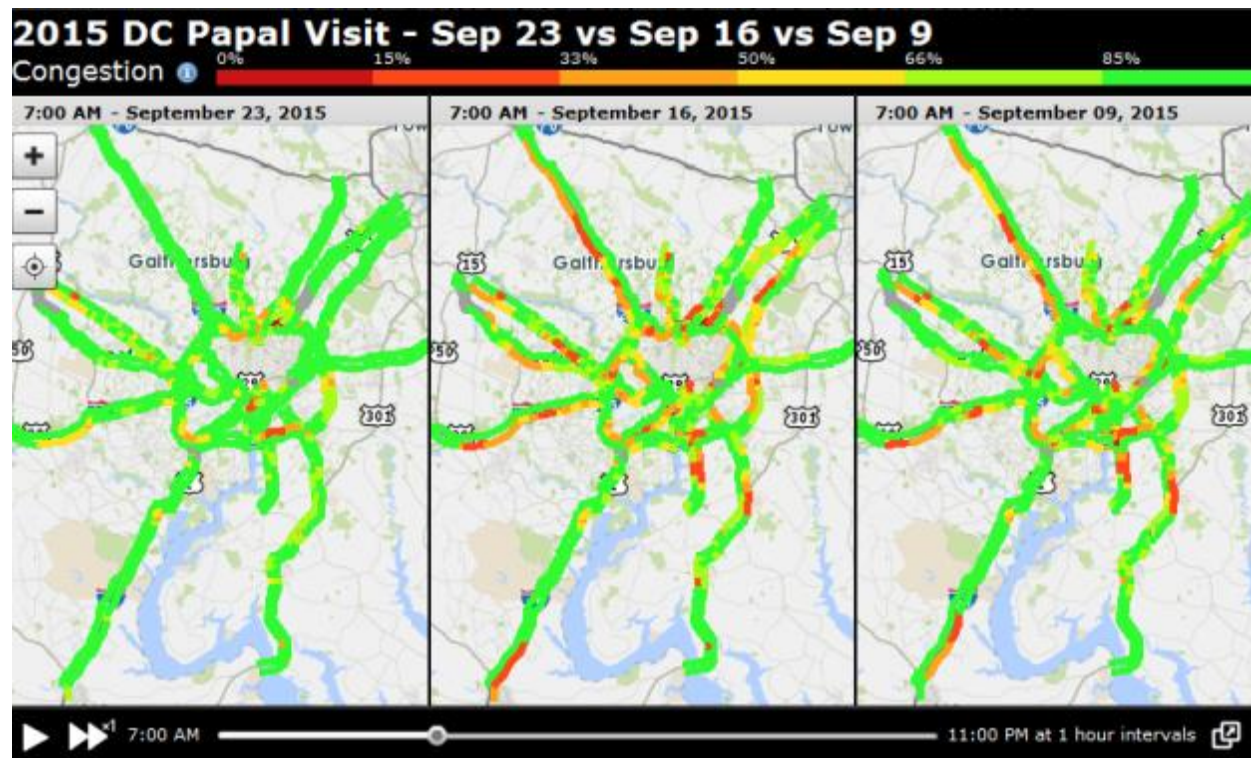


On-
Street
Traffic
Observa
tion



Papal Visit

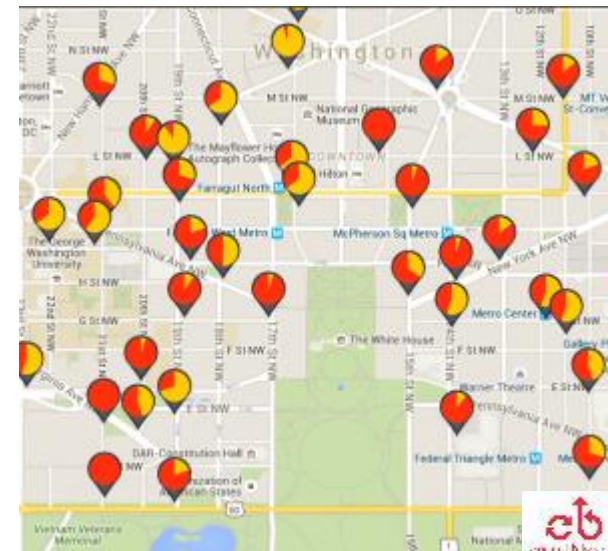
RITIS Comparison Tweeted by MATOC



MATOC Alerts @MATOC · Sep 24
Compare yesterday's congestion with the previous two Weds goo.gl/FqajSF #dctrffic #mdtraffic #vattraffic

Where do we go from here?

- › Heavier reliance on PDA Suite travel time data for analysis
- › Sensys/WiFi travel time data
- › Field-collected travel time data for validation and immediate results
- › Heavier use of Transit AVL data for TSP and Signal Optimization evaluation
- › Leverage available Bike data from bike-share services
- › Pedestrians? Crowdsourced GPS?



d.

Questions?

In the spotlight...

RITIS APPLICATIONS FOR THE MDOT SHA - US 50 STUDY

Josh Coulson

Transportation Engineer
Sabra & Associates
For Maryland DOT



RITIS Applications for the MDOT SHA - US 50 Study

I-95 Corridor Coalition Quarterly RITIS and Probe Data Analytics Suite

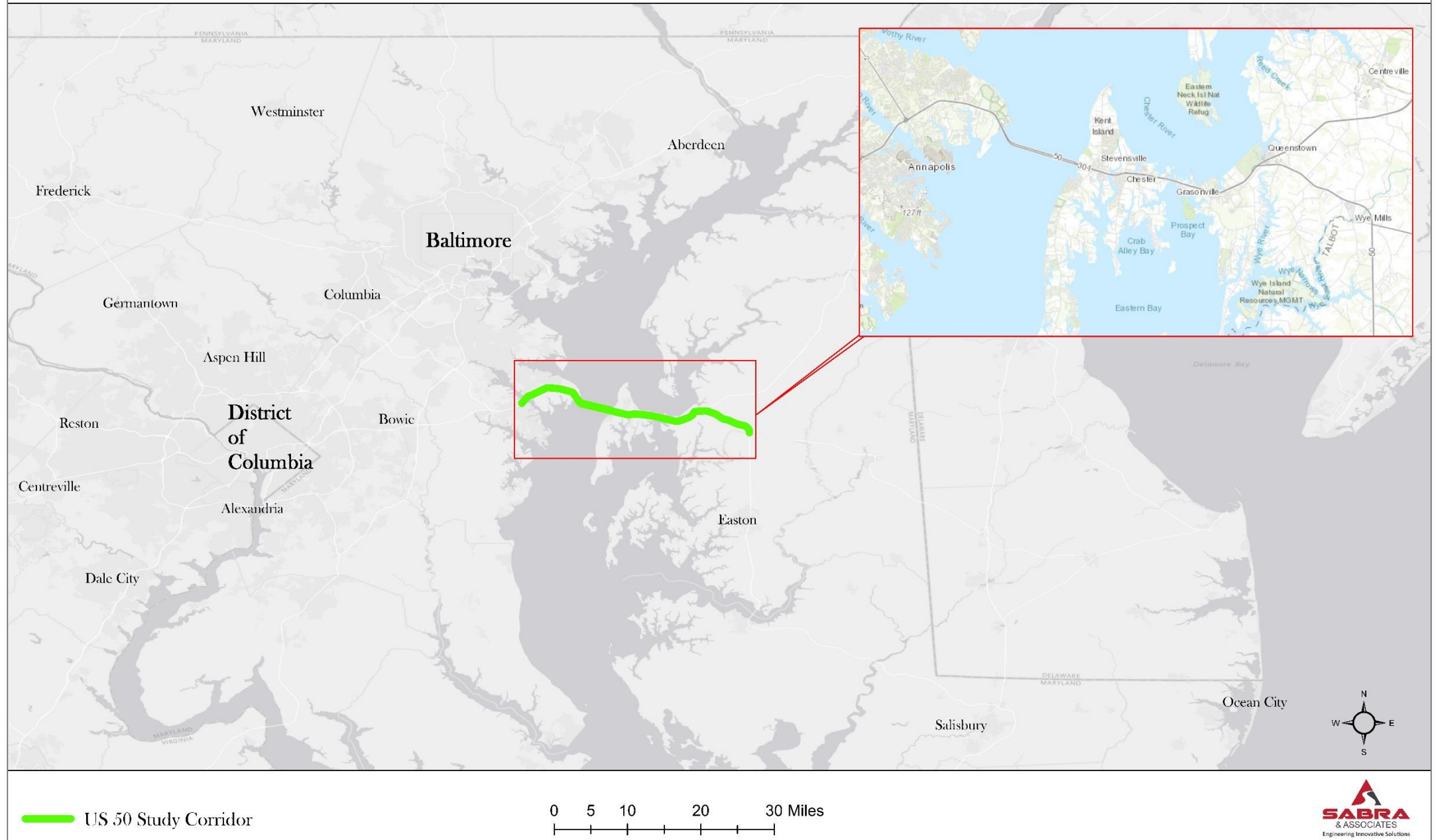
User Group Meeting

February 14, 2019

Agenda

- › Background
- › Challenges
- › Choosing a “Typical Day”
- › Model Calibration Results

US 50 Modeling Project



Project Background

Background

- › Westbound US 50 experiences significant congestion on summer Sundays as vacationers head home from beach destinations along the Eastern Shore.

Study Limits

- › US 50 corridor from MD 404 to Severn River (30 miles)

Study Period

- › Summer Sundays
- › Six hour peak period (1:00PM to 7:00PM) of westbound congestion

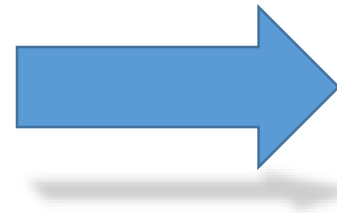
Project Purpose

- › Code and calibrate an existing conditions VISSIM model to be used for future alternative analysis

Challenges

Traffic Incidents:

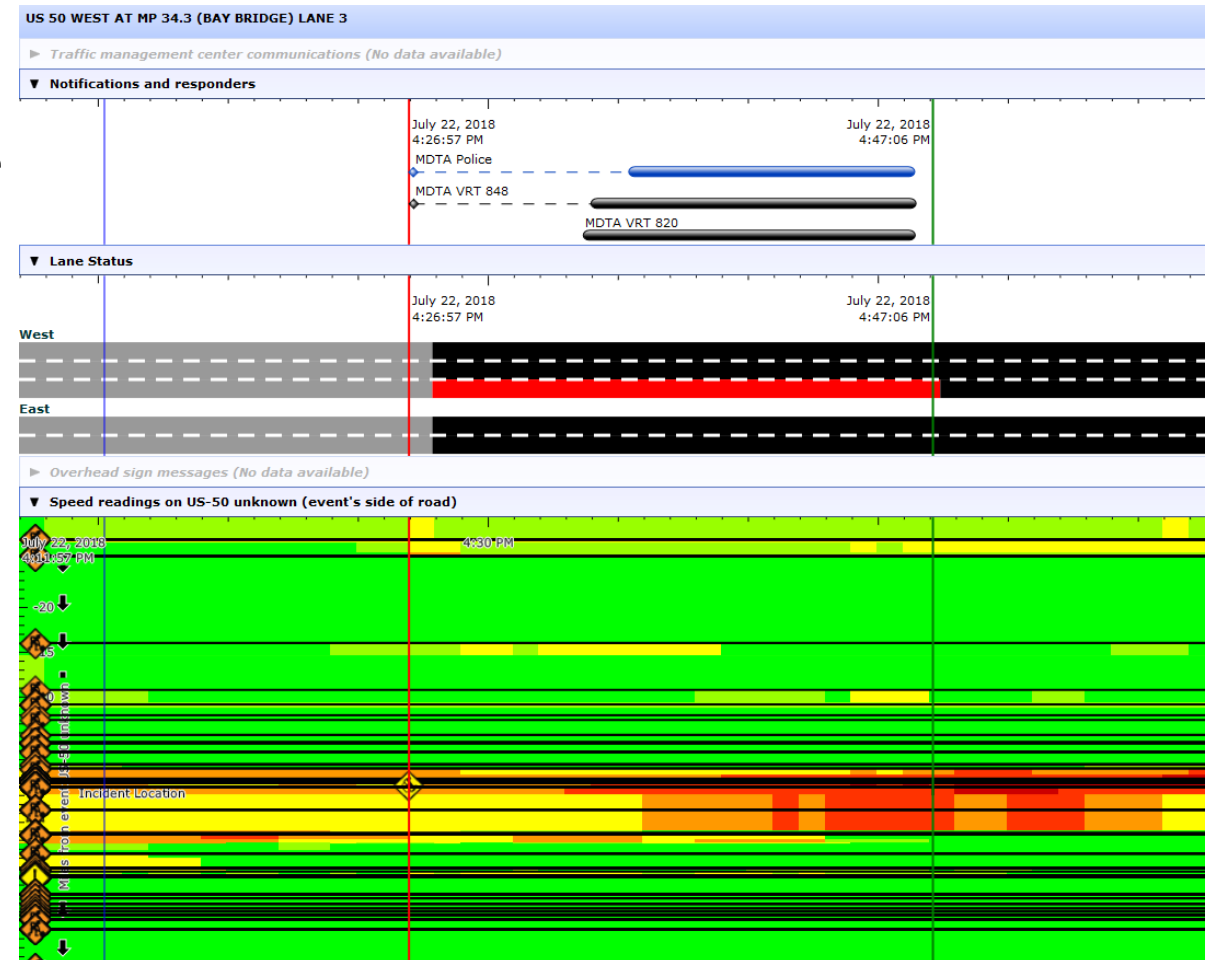
- › Frequently occur at some point along the corridor during the six hour peak period
- › Create temporary bottlenecks impacting vehicular throughput and speeds along the length of the corridor
- › Induce diversions onto parallel routes affecting traffic count data



Make finding typical conditions to serve as a calibration target difficult

Choosing a “Typical Day”

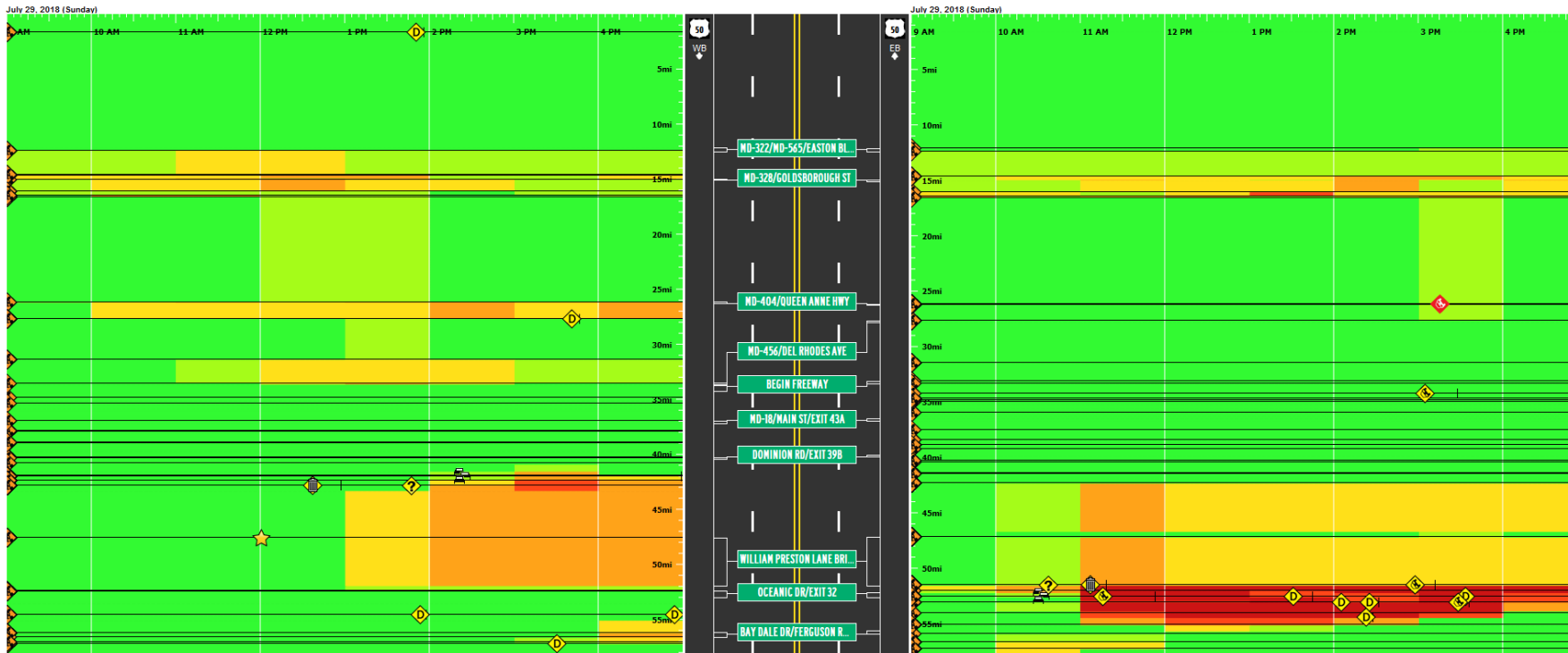
Incident information on RITIS provided by MDOT’s Coordinated Highway Action Response Team (CHART) was critical in understanding where and how particular incidents and the resulting congestion impacted the corridor and our data.



Choosing a “Typical Day”

For each of the summer Sundays:

- › Compiled peak period INRIX speed data
- › Noted count data collected and major traffic incidents



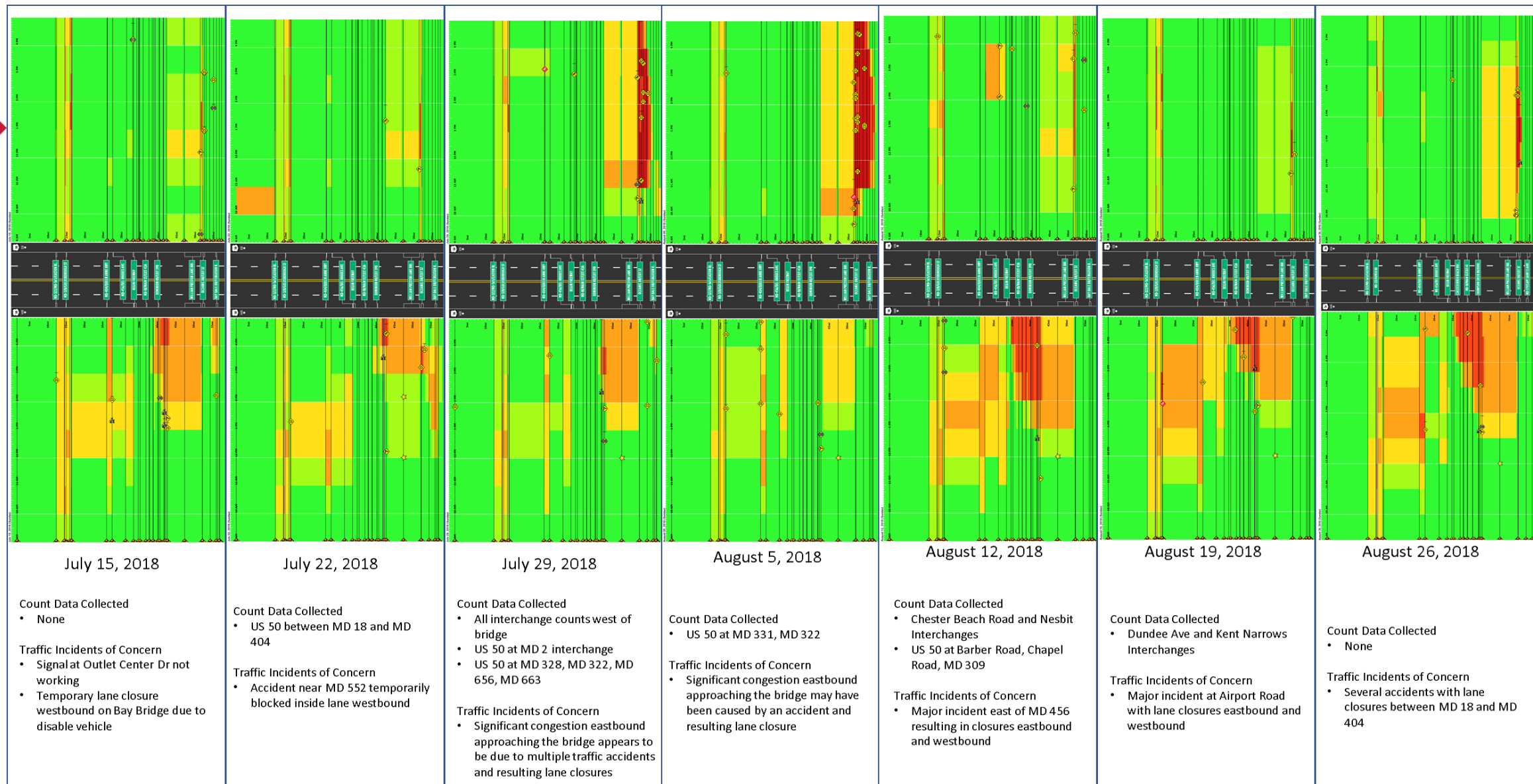
July 29, 2018

Count Data Collected

- All interchange counts west of bridge
- US 50 at MD 2 Interchange
- US 50 at MD 328, MD 322, MD 656, MD 663

Traffic Incidents of Concern

- Significant congestion eastbound approaching the bridge appears to be due to multiple traffic accidents and resulting lane closures



Choosing a “Typical Day”

Methodology

1. The corridor was divided into 5 segments with INRIX travel time data and volume data from UMD sensors selected for evaluation
2. The mean and standard deviations of the speed and volume data was calculated by segment and hour for each of the Sunday peak periods
3. A point system was developed with 1 point and 2 points assigned to days with a particular location and hour within one or half of the standard deviation, respectively.

Statistical analyses of speed data from INRIX and volume data from University of Maryland (UMD) sensors determined July 15th represented the most “typical day” to be used as a calibration target.

Volume Points						
Time	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
9:00	6	1	6	6	2	6
10:00	6	3	6	6	3	5
11:00	6	2	5	4	6	4
12:00	8	1	6	5	5	1
1:00	7	6	5	4	5	1
2:00	4	5	4	7	5	6
3:00	5	1	7	2	8	4
4:00	8	2	5	5	8	3
5:00	8	1	4	6	7	7
6:00	4	1	9	5	7	7
Total	62	23	57	50	56	44

Travel Time Points						
Time	15-Jul	22-Jul	29-Jul	5-Aug	12-Aug	19-Aug
9:00	0	8	6	8	8	2
10:00	8	3	0	3	6	8
11:00	4	2	3	4	5	9
12:00	7	3	4	4	3	6
1:00	10	4	6	4	2	4
2:00	10	4	8	4	4	6
3:00	9	4	6	6	3	3
4:00	3	3	7	4	4	4
5:00	4	9	7	2	5	5
6:00	7	7	5	6	4	7
Total	62	47	52	45	44	54

Model Calibration Results

US 50 Westbound - Summer Sunday Peak Period

Segment		INRIX						VISSIM - Uncalibrated					
		1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
1	MD 404 to MD 213												
2	MD 213 to MD 456												
3	MD 456 to US 301 merge												
4	US 301 merge to Hess Rd												
5	Hess Rd to Chester River Beach Rd												
6	Chester River Beach Rd to Kent Narrows Rd												
7	Kent Narrows Rd to Piney Narrows Rd												
8	Piney Narrows Rd to Dominion Rd												
9	Dominion Rd to Shopping Center												
10	Shopping Center to MD 8												
11	MD 8 to west of Bay Bridge												
12	West of Bay Bridge to Oceanic Drive												
13	Oceanic Drive to Whitehall Rd												
14	Whitehall Rd to Bay Dale Dr												
15	Bay Dale Dr to Severn River Bridge												
Segment		INRIX						VISSIM - Calibrated					
		1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM
1	MD 404 to MD 213												
2	MD 213 to MD 456												
3	MD 456 to US 301 merge												
4	US 301 merge to Hess Rd												
5	Hess Rd to Chester River Beach Rd												
6	Chester River Beach Rd to Kent Narrows Rd												
7	Kent Narrows Rd to Piney Narrows Rd												
8	Piney Narrows Rd to Dominion Rd												
9	Dominion Rd to Shopping Center												
10	Shopping Center to MD 8												
11	MD 8 to west of Bay Bridge												
12	West of Bay Bridge to Oceanic Drive												
13	Oceanic Drive to Whitehall Rd												
14	Whitehall Rd to Bay Dale Dr												
15	Bay Dale Dr to Severn River Bridge												

Speed (mph)



Questions?

Working Groups Updates

Mark Franz, PhD
UMD CATT Laboratory
Lead Transportation Analyst

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Recent Working Groups Meetings

O-D/Trajectory Analytics February 13th

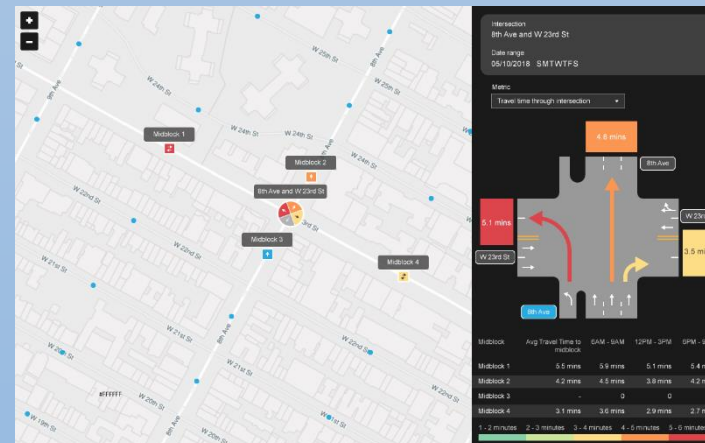
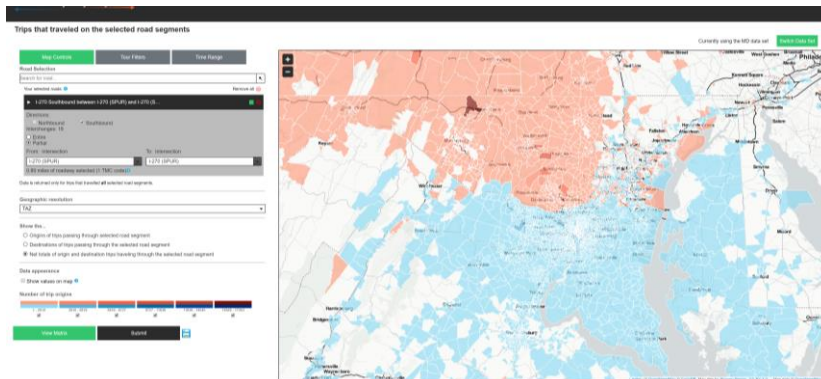
DOTs	MPOs	Consultants
<ul style="list-style-type: none"> New Jersey D.C. Pennsylvania Maryland South Carolina North Carolina Virginia New York 	<ul style="list-style-type: none"> MWCOG DVRPC Durham-Chapel Hill-Carrboro 	<ul style="list-style-type: none"> VHB RK&K AECOM (for FDOT)
	Feds	Academia
	<ul style="list-style-type: none"> FHWA NREL 	<ul style="list-style-type: none"> UMD CATT Lab Texas A&M Transportation Institute
	Cities	
	<ul style="list-style-type: none"> Charlotte, NC 	

Signal Performance Measures February 26th

DOTs	MPOs	Consultants
<ul style="list-style-type: none"> New Jersey Maryland Virginia New York Georgia 	<ul style="list-style-type: none"> BMC Connecticut Metro COG 	<ul style="list-style-type: none"> VHB RK&K AECOM (for FDOT)
	Feds	Academia
	<ul style="list-style-type: none"> FHWA NREL 	<ul style="list-style-type: none"> UMD CATT Lab Texas A&M Transportation Institute
	Cities	
	<ul style="list-style-type: none"> Charlotte, NC 	

Enhanced Work Zone Analytics February 28th

DOTs
<ul style="list-style-type: none"> Virginia New York





&

PROBE DATA ANALYTICS SUITE



What's new & what's coming

Michael Pack
UMD CATT Laboratory
Director



RITIS Recent Deployments

- Every Day Counts TIM PM Tool – Now LIVE @ <https://www.ritis.org/archive/incident>

Additional filters

GEOGRAPHY

EVENT TYPES
Available event types are based on the agencies you have selected.

☐ Include all available event types

DDOT CapTOP (Washington DC DOT)

Standardized Types **Agency Types**

☐ Include all standardized types

- ☐ Collision
- ☐ Congestion Due to Closure
- ☐ Disabled Vehicle
- ☐ Fire
- ☐ Flood
- ☐ Hazard Material Spill
- ☐ Incident
- ☐ Obstructions
- ☐ Road Maintenance Operations
- ☐ Traffic Signal Not Working
- ☐ Vehicle On Fire

MDOT CHART (Maryland DOT)

Standardized Types **Agency Types**

☐ Include all standardized types

- ☐ Alert
- ☐ Animal Struck
- ☐ Bridge Maintenance Operations
- ☐ Collision
- ☐ Congestion
- ☐ Congestion Due to Closure
- ☐ Construction Work
- ☐ Delays
- ☐ Disabled Vehicle
- ☐ Disabled Vehicle In Roadway
- ☐ Driving Wrong Way
- ☐ Emergency Roadwork
- ☐ Fair
- ☐ Fallen Tree
- ☐ Fire
- ☐ Flood
- ☐ Foggy Conditions
- ☐ Incidents
- ☐ Injuries Involved
- ☐ Medical Emergency
- ☐ Obstructions
- ☐ Obstructions Due To Animal In Roadway
- ☐ Overgrown Plants
- ☐ Paving Operations
- ☐ Police At Scene
- ☐ Road Construction
- ☐ Road Maintenance Operations
- ☐ Road Marking Operations
- ☐ Roadwork
- ☐ Special Event
- ☐ Sporting Event
- ☐ Traffic Congestion
- ☐ Traffic Signal Not Working
- ☐ Unknown
- ☐ Utility Work
- ☐ Vehicle Fire
- ☐ Water Main Work
- ☐ Weather Condition

DURATION

SUBMIT QUERY

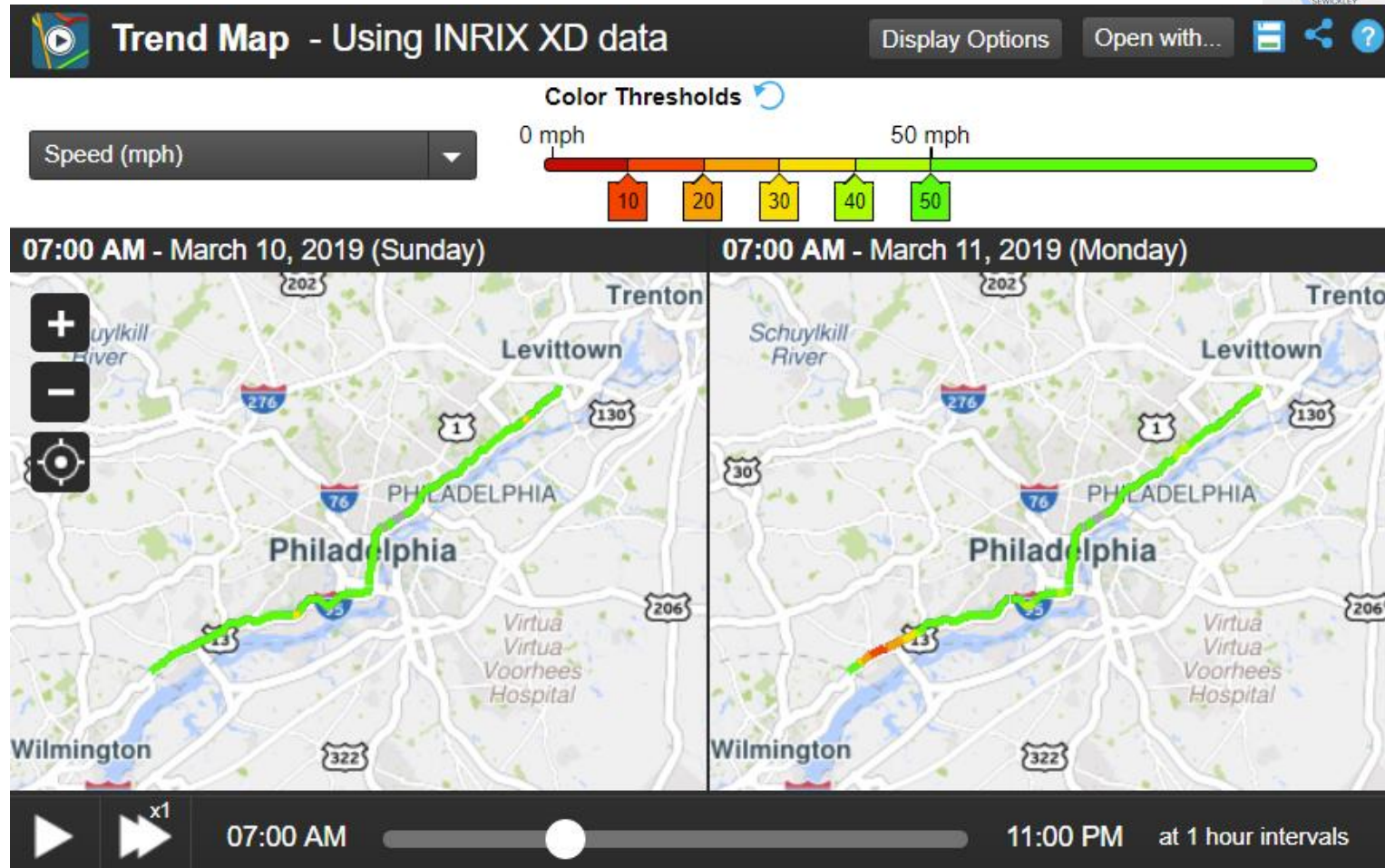
Events from MDOT CHART that started on July 2, 2018
(Showing 400 of 400 events)

AGENCY	STANDARDIZED TYPE	AGENCY-SPECIFIC TYPE	LOCATION	OP CENTER	TIME OPENED	TIME CLOSED
MDOT	Incident	Incident	I-495 SOUTH PRIOR TO EXIT 4 MD 205	SOC	07/02/18 03:55 PM	07/02/18 03:55 PM
MDOT	Incident	Incident	I-495 INNER LOOP PAST EXIT 13 MD 221	SOC	07/02/18 05:11 PM	07/02/18 05:11 PM
MDOT	Road Maintenance Operations	Planned roadway closure	I-495 NORTH AT MP 54.8 (PORT MCHENE	SOC	07/02/18 07:46 PM	07/02/18 07:46 PM
MDOT	Incident	Incident	MD 205 AT OLDE MILL RUN WEEKDAY T	SOC	07/02/18 06:00 AM	07/02/18 06:00 AM
MDOT	Incident	Incident	I-495 NORTH PAST EXIT 64A MD 43 WHIT	SOC	07/02/18 03:42 PM	07/02/18 03:42 PM
MDOT	Incident	Incident	I-495 NORTH PAST EXIT 64 I-495 BALTIM	SOC	07/02/18 04:18 PM	07/02/18 04:18 PM
MDOT	Obstructions	Incident	I-495 INNER LOOP AT EXIT 32A US 1 B	AOC Central	07/02/18 09:55 AM	07/02/18 09:55 AM
MDOT	Road Maintenance Operations	Planned roadway closure	MD 205 EASTWEST TOLL RATES WEE...	SOC	07/02/18 09:00 AM	07/02/18 09:00 AM
MDOT	Disabled Vehicle	Disabled Vehicle	US 50 BAY BRIDGE (EAST CONGESTION)	SOC	07/02/18 07:53 AM	07/02/18 07:53 AM
MDOT	Disabled Vehicle	Disabled Vehicle	I-270 NORTH AT MP 27	SOC	07/02/18 06:25 AM	07/02/18 06:25 AM
MDOT	Disabled Vehicle	Disabled Vehicle	HOWARD COUNTY MD-175 EASTWES...	SOC	07/02/18 08:06 PM	07/02/18 08:06 PM
MDOT	Alert	Alert	WORCESTER COUNTY US-113 NORTH...	AOC Central	07/02/18 08:30 AM	07/02/18 08:30 AM
MDOT	Disabled Vehicle	Disabled Vehicle	I-495 NORTH PAST EXIT 56 KEITH AVE 56	SOC	07/02/18 07:18 AM	07/02/18 07:18 AM
MDOT	Special Event	Special Event	I-497 NORTH AT EXIT 7 MD 32 (NB)	SOC	07/02/18 06:52 PM	07/02/18 06:52 PM
MDOT	Obstructions	Obstructions	I-497 NORTH PRIOR TO WELLSHAM AVE	SOC	07/02/18 07:33 AM	07/02/18 07:33 AM
MDOT	Disabled Vehicle	Disabled Vehicle	I-495 SOUTH AT EXIT 10A-B US 1 CATON	AOC Central	07/02/18 07:00 PM	07/02/18 07:00 PM
MDOT	Collision	Collision	I-495 OUTER LOOP PAST EXIT 205-A MD	SOC	07/02/18 07:35 PM	07/02/18 07:35 PM
MDOT	Disabled Vehicle	Disabled Vehicle	I-495 SOUTH PRIOR TO EXIT 205 MD 212	SOC	07/02/18 07:04 AM	07/02/18 07:04 AM
MDOT	Alert	Alert	US 50 EAST AT CHURCH RD	SOC	07/02/18 09:05 PM	07/02/18 09:05 PM
MDOT	Incident	Incident	MD 205 EAST PAST EXIT 10A-B I-95 EB	SOC	07/02/18 04:36 PM	07/02/18 04:36 PM
MDOT	Disabled Vehicle	Disabled Vehicle	I-495 INNER LOOP AT MP 48.2 (TOLL PL	SOC	07/02/18 04:10 PM	07/02/18 04:10 PM
MDOT	Obstructions	Obstructions	I-495 NORTH AT EXIT 61 US 40 PULASKI	AOC Central	07/02/18 06:09 PM	07/02/18 06:09 PM
MDOT	Obstructions	Obstructions	MD 450 SOUTH PAST THOMAS DR	SOC	07/02/18 04:44 PM	07/02/18 04:44 PM
MDOT	Disabled Vehicle	Disabled Vehicle	I-495 INNER LOOP AT I-795	TOCA	07/02/18 12:40 PM	07/02/18 12:40 PM



RITIS Recent Deployments

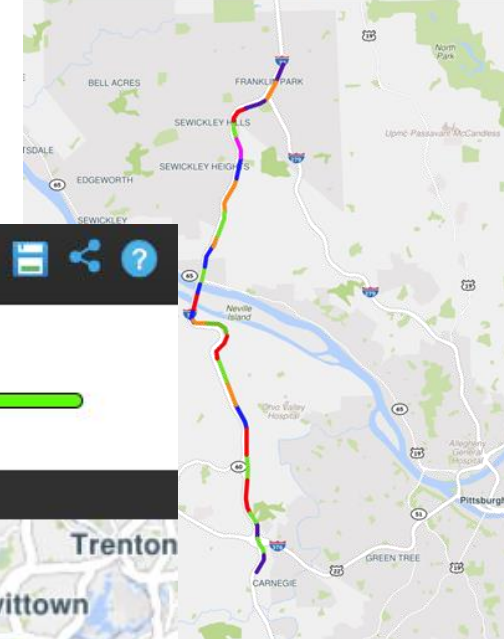
- INRIX XD data on TrendMaps



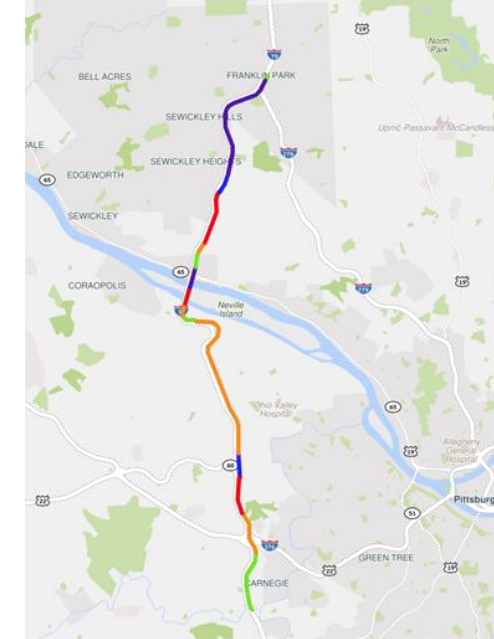
SB I-79 from Carnegie to Franklin Park, PA



29 XD Segments
Ave XD Length: 0.51 miles



16 TMC Segments
Ave TMC Length: 0.95 miles



RITIS Recent Deployments

- **Travel Time Comparison**
- In the Travel Time Comparison tool, we've added a [video tutorial](#), and increased the minimum chart height for better visibility on smaller displays.
- **Travel Time Delta Ranking**
- In the Travel Time Delta Ranking tool, we've added a [video tutorial](#), and made these improvements:
 - We've resolved an issue when multiple time ranges were selected for each day but only the latest range was analyzed.
 - We've added more detailed tooltips, axis labels, and trend filters to the slope chart.
 - The value for speed limit travel time now weights segments by length.
 - When exporting data to Excel, column headers now include units for IQR and median.
 - We've fixed a crash for some queries on roads for which we have no data.

RITIS Recent Deployments

- **Road Search**

- When performing a partial road selection, the dropdown list of intersections now reflects the direction of traffic flow, reversing the prior order.
- When performing a partial road selection using XDs, we now provide (START OF ROAD) and (END OF ROAD) options so you can select segments beyond the range of available intersections.
- We've updated the list of XD road classes to match the INRIX v18.2 basemap update, with numeric values 0 through 4.

- **Dashboard**

- On the MAP-21 map widget, we've restored the ability to filter segments based on performance.
- In the Ranked Bottleneck Comparison widget, we've fixed an issue where bottleneck descriptions were sometimes empty. We also fixed an issue where headers and footers in saved screenshots were difficult to read in some image viewers.

RITIS Recent Deployments

- **Massive Data Downloader**

- We've resolved an issue that intermittently caused download requests to remain in a pending state.
- We've added the is_primary column to the TMC Identification file for NPMRDS INRIX downloads.

- **Trend Map**

- Trend Map now displays brief events that begin and end within a single granularity interval. For example, in a Trend Map with 1 hour granularity, an event that begins at 3:15pm and ends at 3:45pm would previously not be shown but will now be included during the 3:00pm to 4:00pm interval.

- **Performance Summaries**

- Performance Summaries now correctly filters results by selected days of the week.

- **Region Explorer**

- When multiple data sources are selected, the probe readings layer now correctly uses lower-priority data sources when data for the first source is unavailable.

Work in Progress

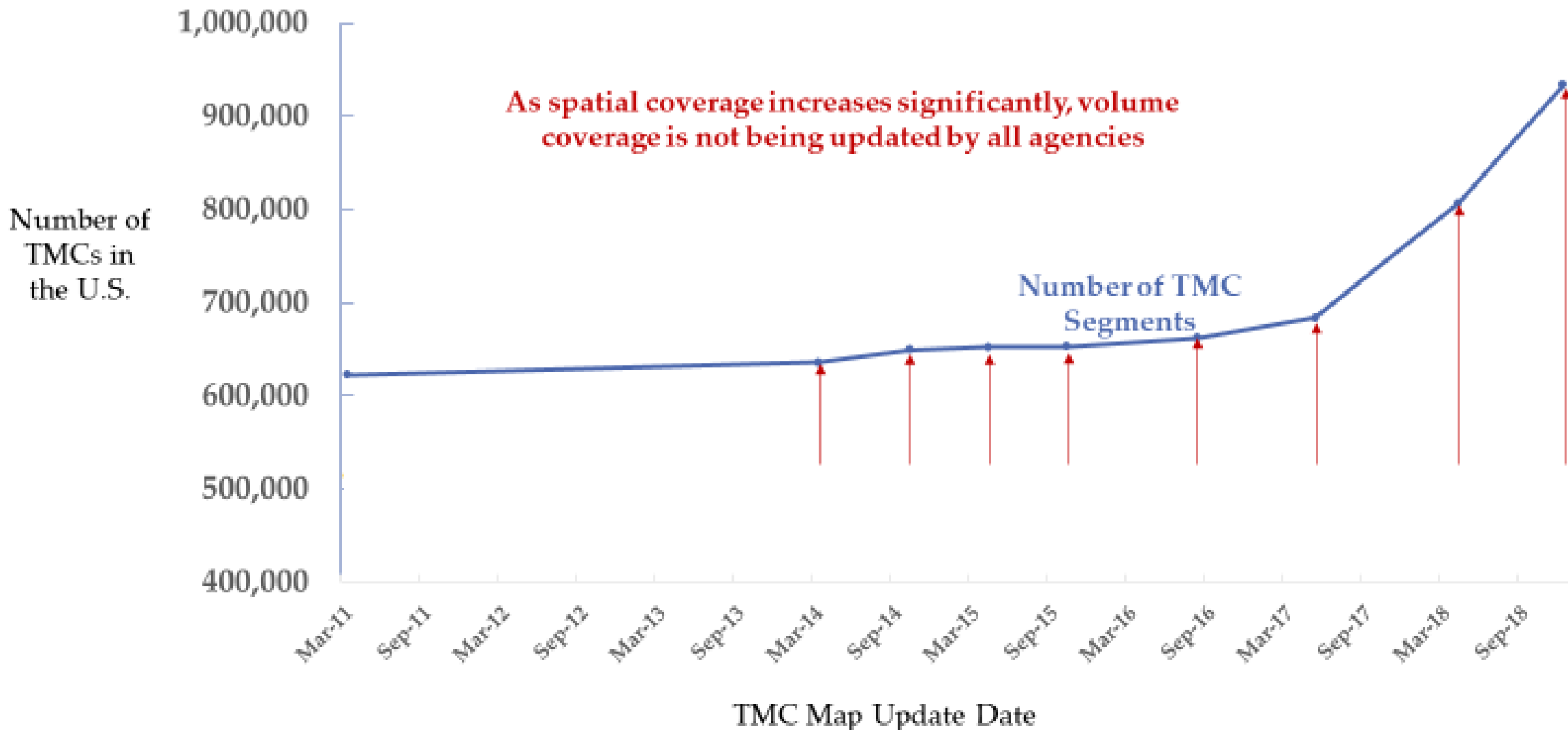
- EDC TIM Additional Work
- AARs added to Incident Logs
- Bottleneck Ranking Modernization (Flash migration)
- Detector Analytics Modernization (Flash migration)
- Dashboard Widgets
 - Reliability
 - Incidents & Event Comparisons
- MAP-21 / NPMRDS Enhancements



PROBE DATA ANALYTICS SUITE



Important Update on Volume Data (slide 2)



Your Input is Needed!

- All features and functionality are driven by state/mpo users.
- You are welcome to join any of our User Groups / Working Groups / Listening Sessions to brainstorm/define these new features and functionality.
- You can also type your comments to us today either in the chat box below, or with an email to support@ritis.org

“What’s on your mind?”



“We’re here to help!”

Agency Input Session



“What’s on your mind?”

Wrap Up



Kelly Wells, North Carolina Department of Transportation
User Group Co-chair

Questions?

Please contact:

I-95 Corridor Coalition – Denise Markow 301.789.9088 or dmarkow@i95coalition.org

RITIS or PDA Suite – Michael Pack at PackML@umd.edu

RITIS Technical Support – support@ritis.org

PDA Suite Technical Support – pda-support@ritis.org

Logistics – Joanna Reagle 610.228.0760 or jreagle@kmjinc.com

thank
you!

