Georgia Department of Transportation

GDOT's ITS and Traffic Management

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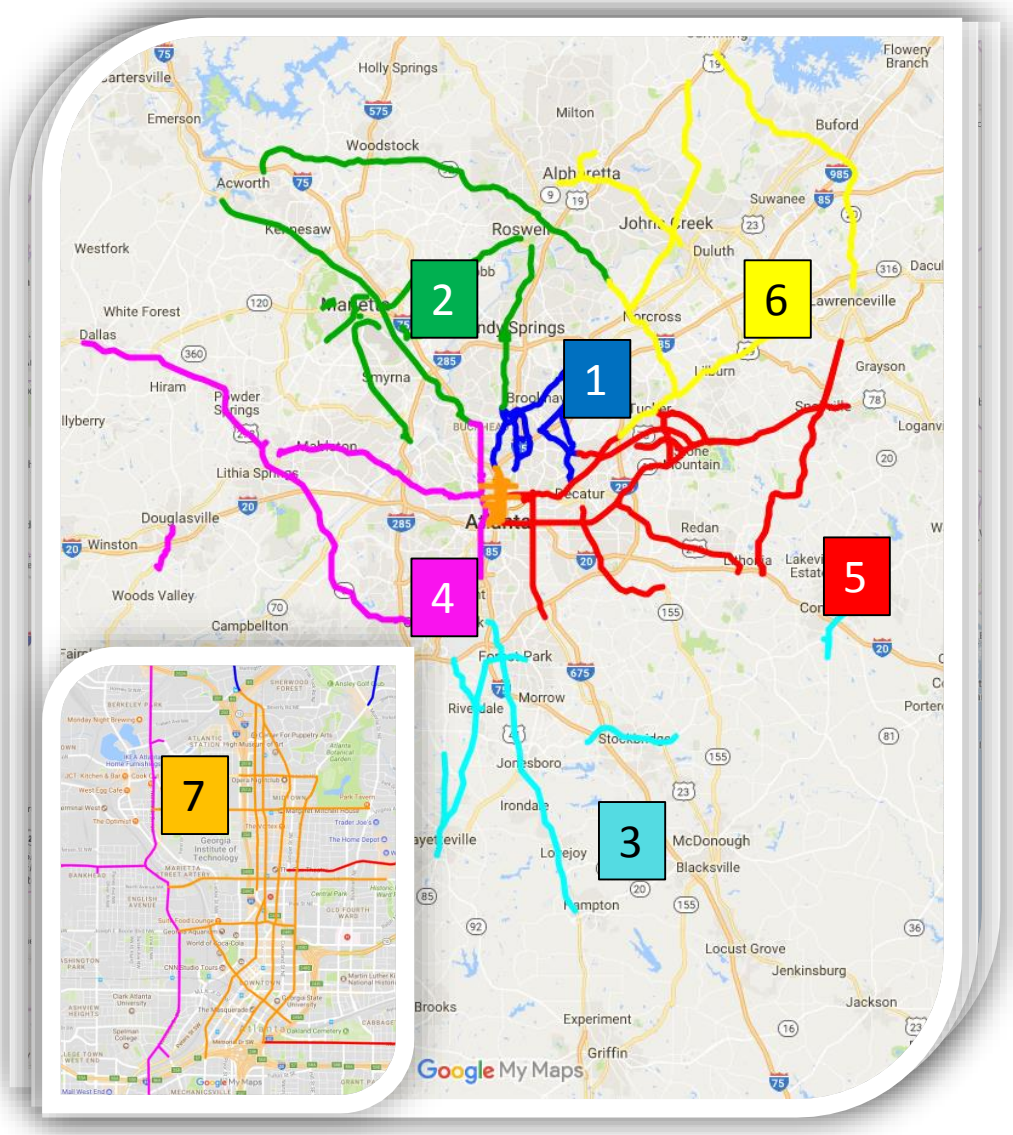
July 18th, 2018

Update

- Statewide Deployment of Signal Software (MaxView/MaxTime)
- Connected Vehicle Technology
  - Fully deployed along SR 141 from SR 9 to I-285 and SR 8 from Midtown to SR 42.
- Regional Traffic Operations Program (RTOP)



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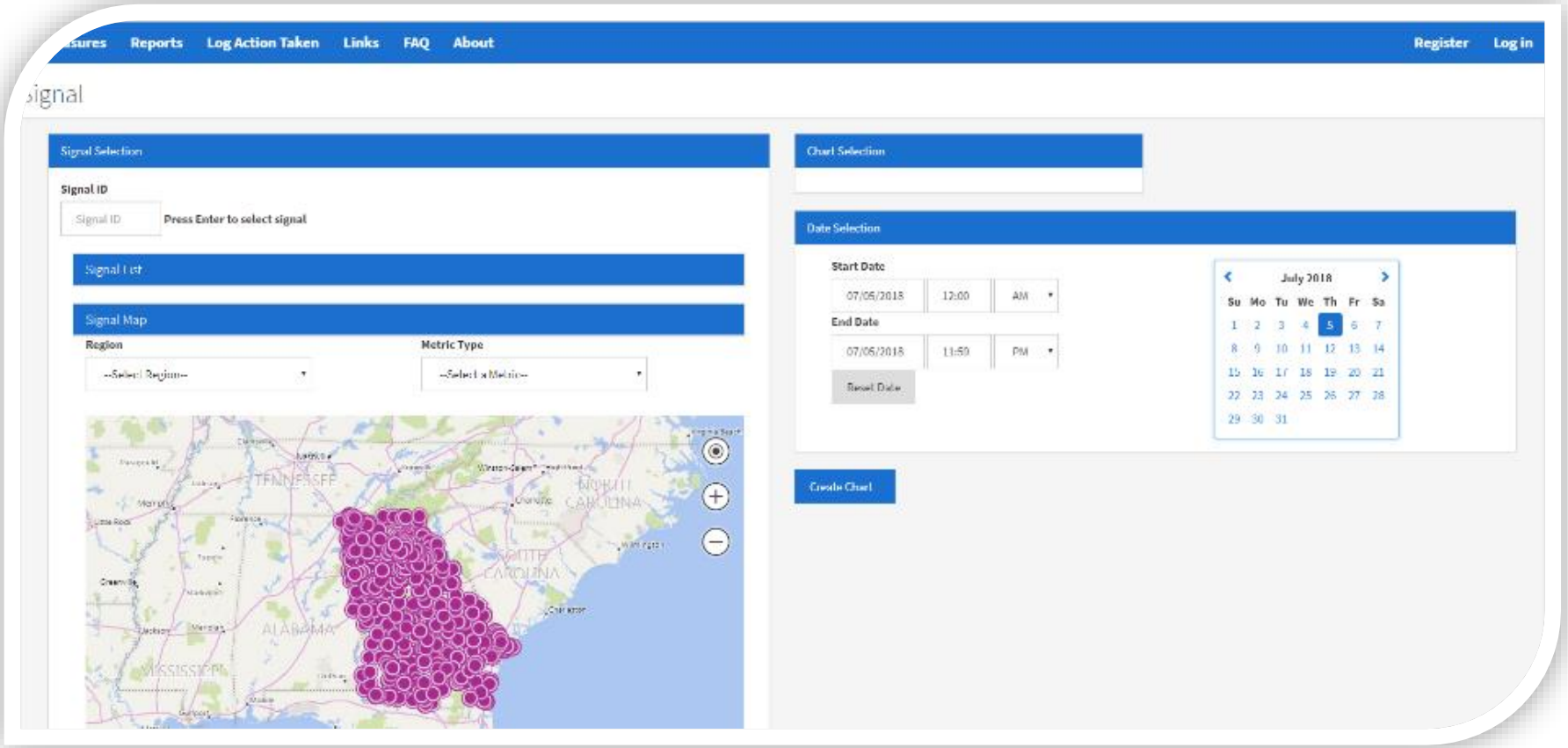
ATSPM

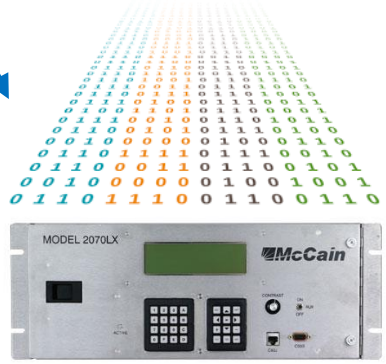
Automated Traffic Signal Performance Measures



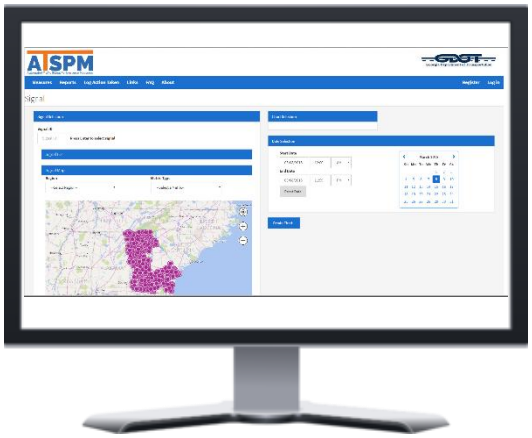
How does this work?

Vehicle Detection

Servers/Data Storage

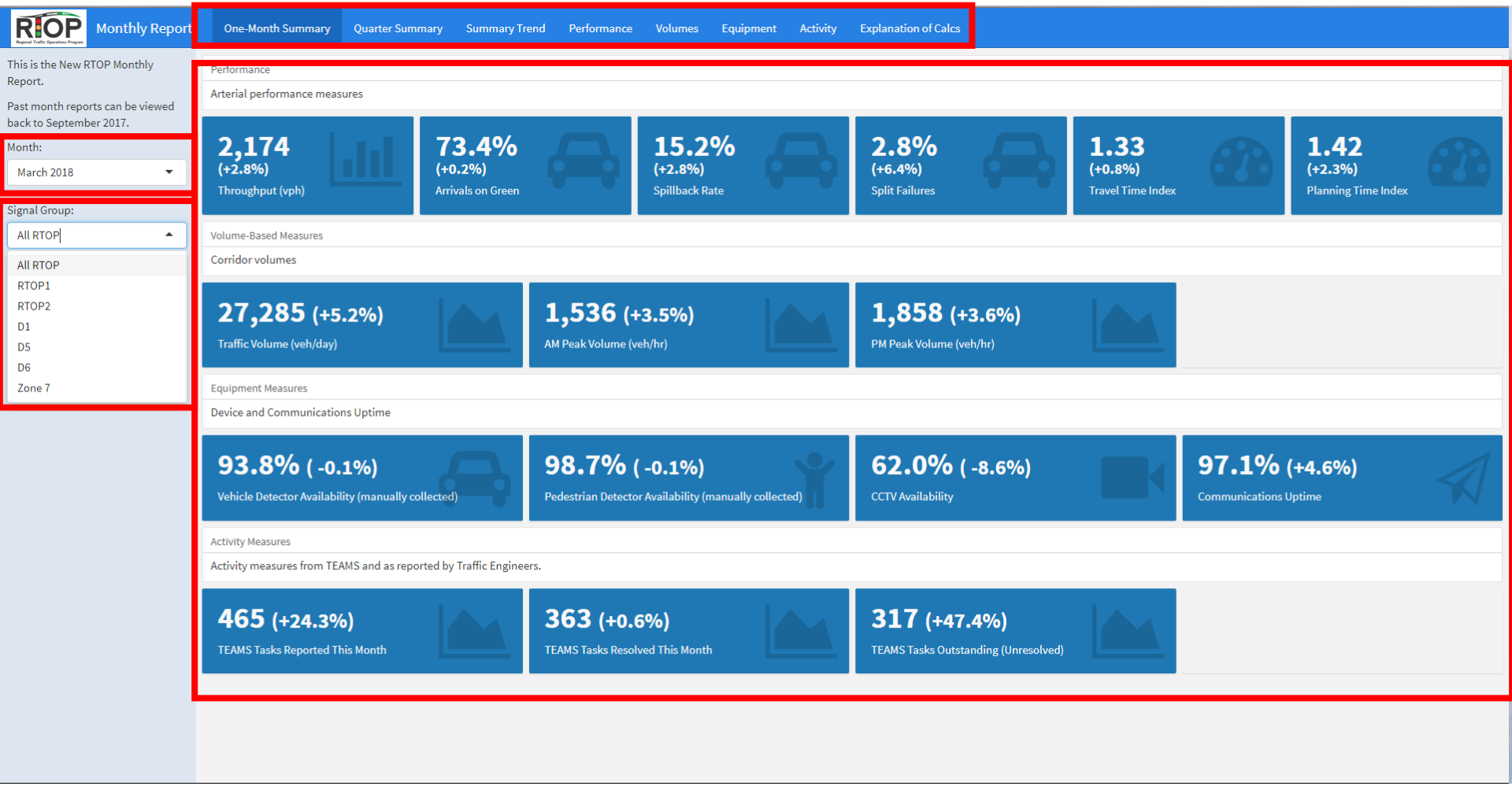


Event Logs/High Resolution Data

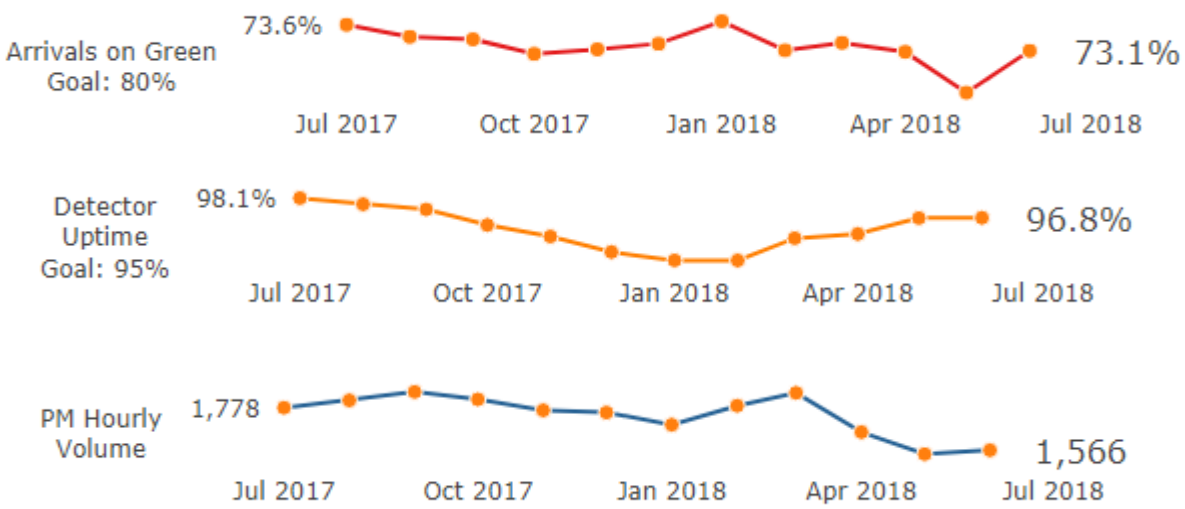


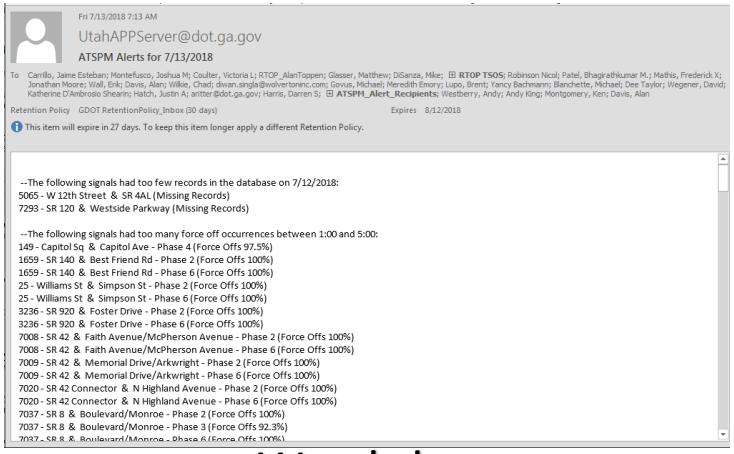
Web Application

Monthly Reporting Tool



Monthly Reporting Tool





Fri 7/13/2018 7:13 AM

UtahAPPServer@dot.ga.gov

ATSPM Alerts for 7/13/2018

To Carrillo, Jaime Esteban; Montefusco, Joshua M; Coulter, Victoria L; RTOP_AlanToppen; Glasser, Matthew; DiSanza, Mike; **RTOP TSOS**; Robinson Nicol; Patel, Bhagirathkumar M.; Mathis, Frederick X; Jonathan Moore; Wall, Erik; Davis, Alan; Wilkie, Chad; diwan.singla@wolvertoninc.com; Govus, Michael; Meredith Emory; Lupo, Brent; Yancy Bachmann; Blanchette, Michael; Dee Taylor; Wegener, David; Katherine D'Ambrosio Shearin; Hatch, Justin A; aritter@dot.ga.gov; Harris, Darren S; **ATSPM_Alert_Recipients**; Westberry, Andy; Andy King; Montgomery, Ken; Davis, Alan

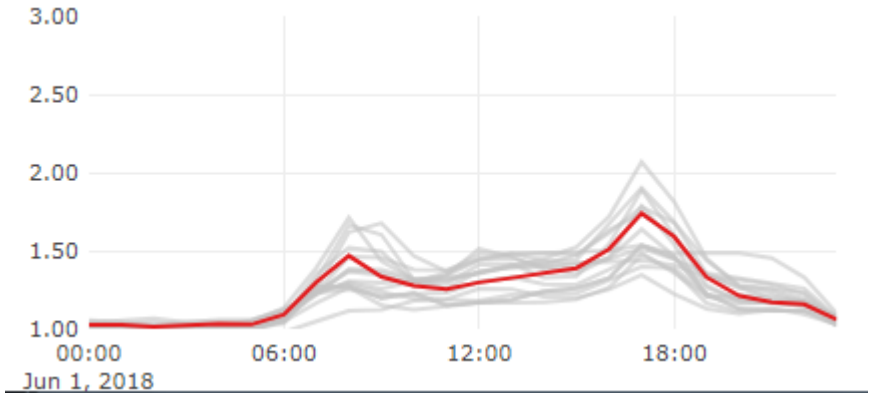
Retention Policy GDOT RetentionPolicy_Inbox (30 days) Expires 8/12/2018

This item will expire in 27 days. To keep this item longer apply a different Retention Policy.

--The following signals had too few records in the database on 7/12/2018:
5065 - W 12th Street & SR 4AL (Missing Records)
7293 - SR 120 & Westside Parkway (Missing Records)

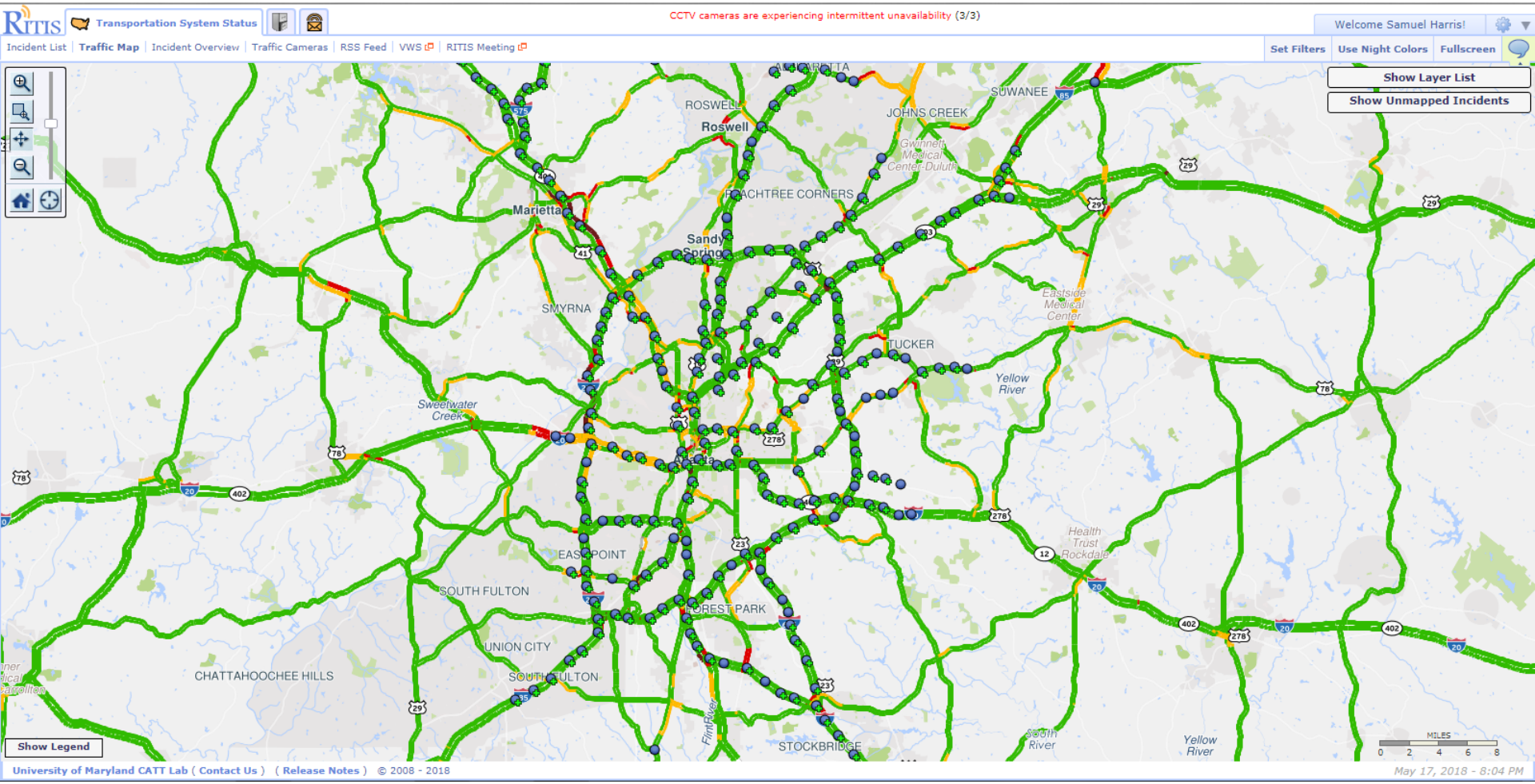
--The following signals had too many force off occurrences between 1:00 and 5:00:
149 - Capitol Sq & Capitol Ave - Phase 4 (Force Offs 97.5%)
1659 - SR 140 & Best Friend Rd - Phase 2 (Force Offs 100%)
1659 - SR 140 & Best Friend Rd - Phase 6 (Force Offs 100%)
25 - Williams St & Simpson St - Phase 2 (Force Offs 100%)
25 - Williams St & Simpson St - Phase 6 (Force Offs 100%)
3236 - SR 920 & Foster Drive - Phase 2 (Force Offs 100%)
3236 - SR 920 & Foster Drive - Phase 6 (Force Offs 100%)
7008 - SR 42 & Faith Avenue/McPherson Avenue - Phase 2 (Force Offs 100%)
7008 - SR 42 & Faith Avenue/McPherson Avenue - Phase 6 (Force Offs 100%)
7009 - SR 42 & Memorial Drive/Arkwright - Phase 2 (Force Offs 100%)
7009 - SR 42 & Memorial Drive/Arkwright - Phase 6 (Force Offs 100%)
7020 - SR 42 Connector & N Highland Avenue - Phase 2 (Force Offs 100%)
7020 - SR 42 Connector & N Highland Avenue - Phase 6 (Force Offs 100%)
7037 - SR 8 & Boulevard/Monroe - Phase 2 (Force Offs 100%)
7037 - SR 8 & Boulevard/Monroe - Phase 3 (Force Offs 92.3%)
7037 - SR 8 & Boulevard/Monroe - Phase 6 (Force Offs 100%)

Watchdog



Travel Time

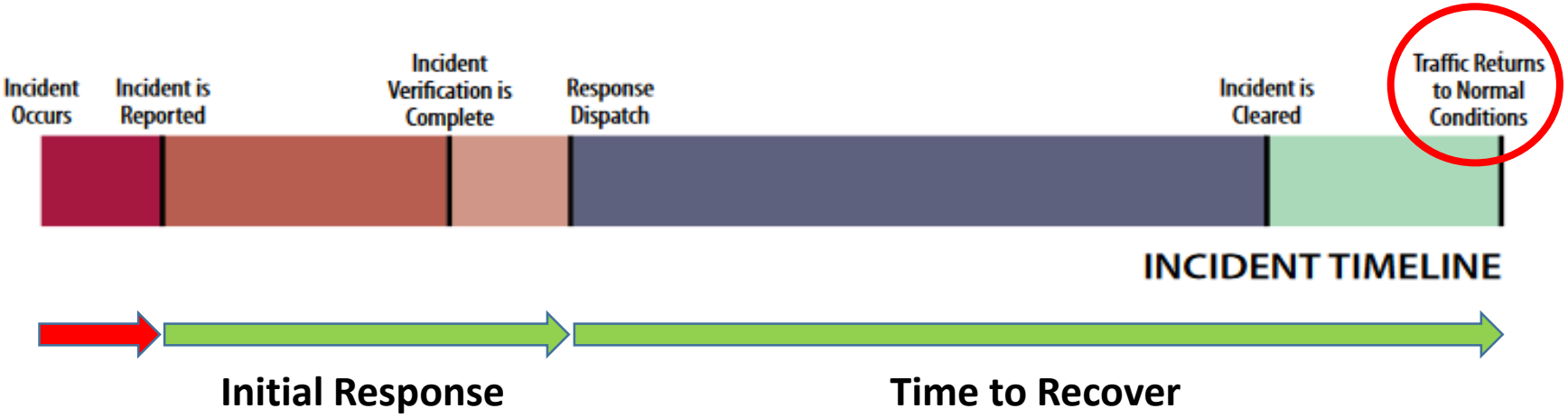
Travel Time Probe Data



Benefits of Automated Reporting

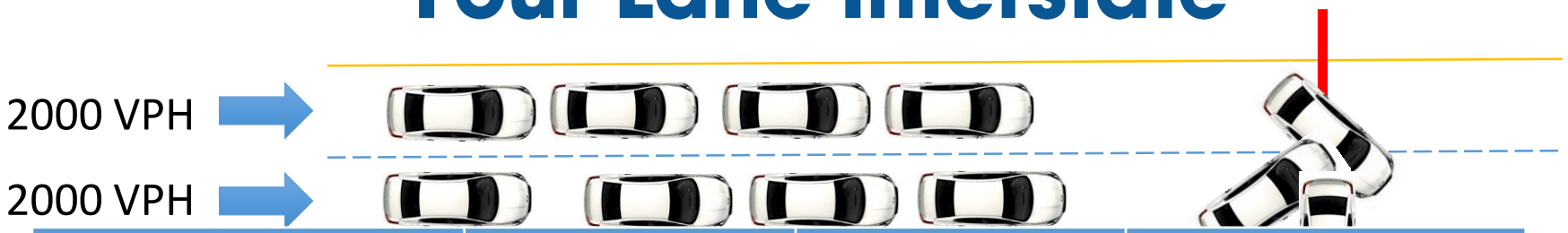
- Reduce cost and time saving
- Accountability
  - Awareness of the system
- Efficiency
  - Focus resources in areas of need
- Easily accessible and to use
- Creates new goals and business practices
- Better customer service
- Statewide approach and interdepartmental collaboration.

Incident Timeline



Incident Occurrence

Four Lane Interstate



	First Hour	Second Hour	Third Hour
First 8,000 cars	$ 180,000	$ 180,000	$ 180,000
Second 8,000 cars		$ 180,000	$ 180,000
Third 8,000 cars			$ 180,000
Hourly Total	**$ 180,000**	**$ 360,000**	**$ 540,000**
		GRAND TOTAL	**$1,080,000**

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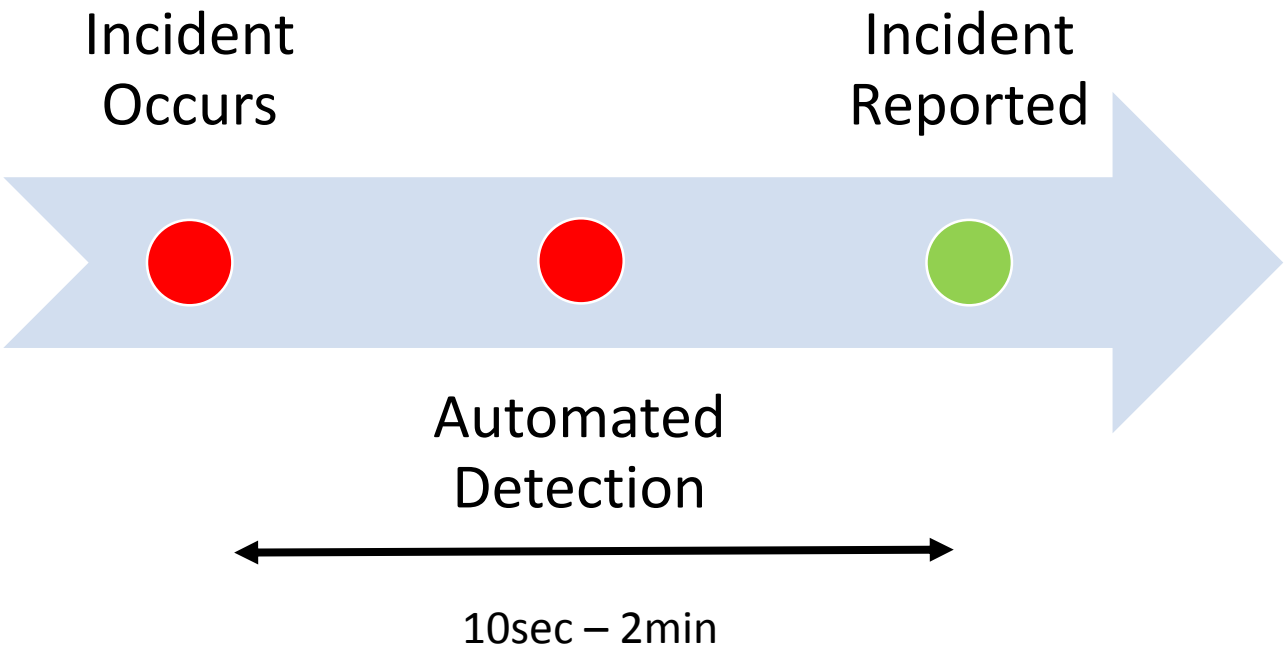
The Facts

2.3% chance of a secondary accident EVERY MINUTE

69% chance in 30 minutes

Every minute the lane is blocked adds 5 minutes to the time that the congestion will remain

Incident Occurrence



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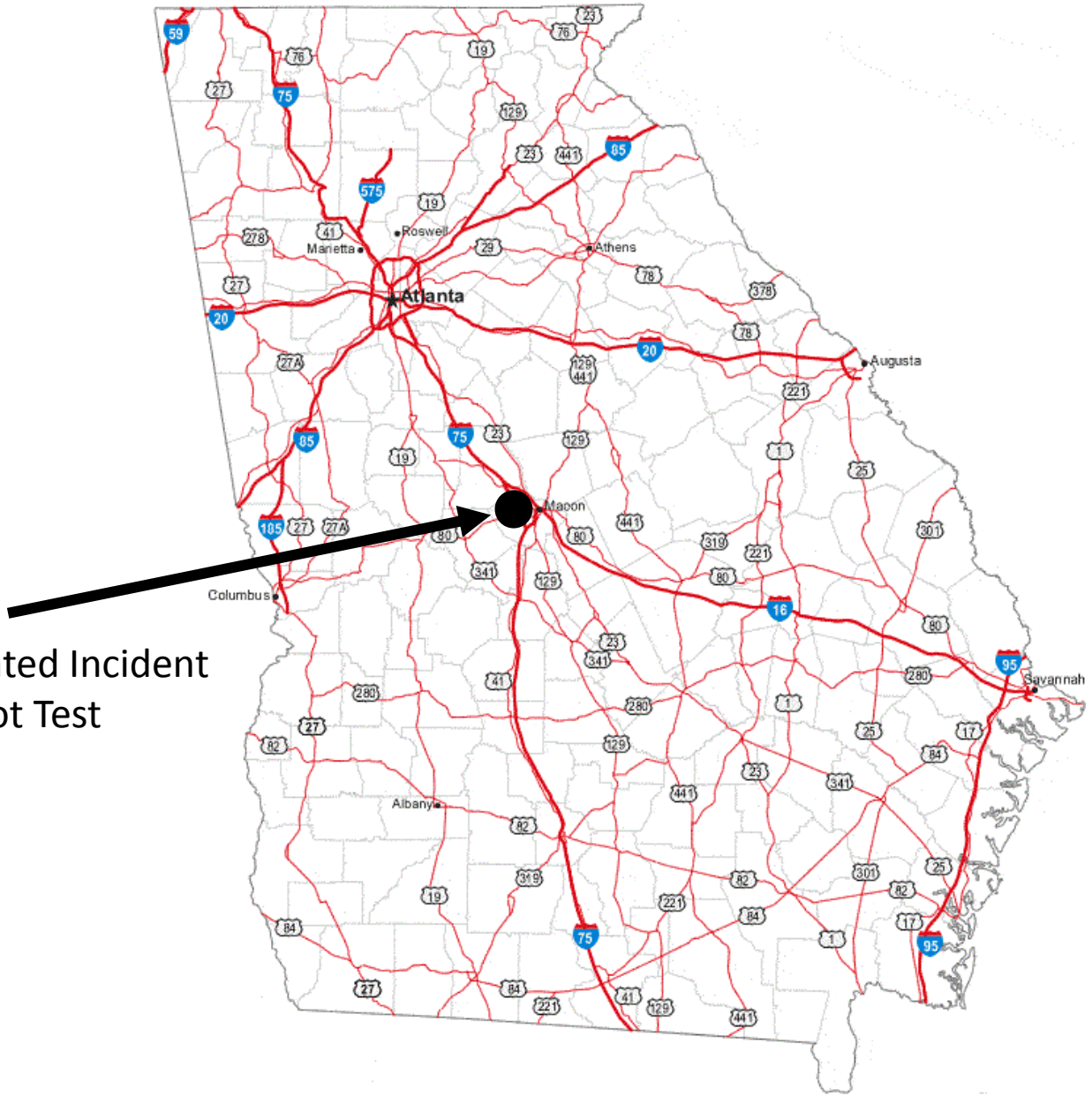
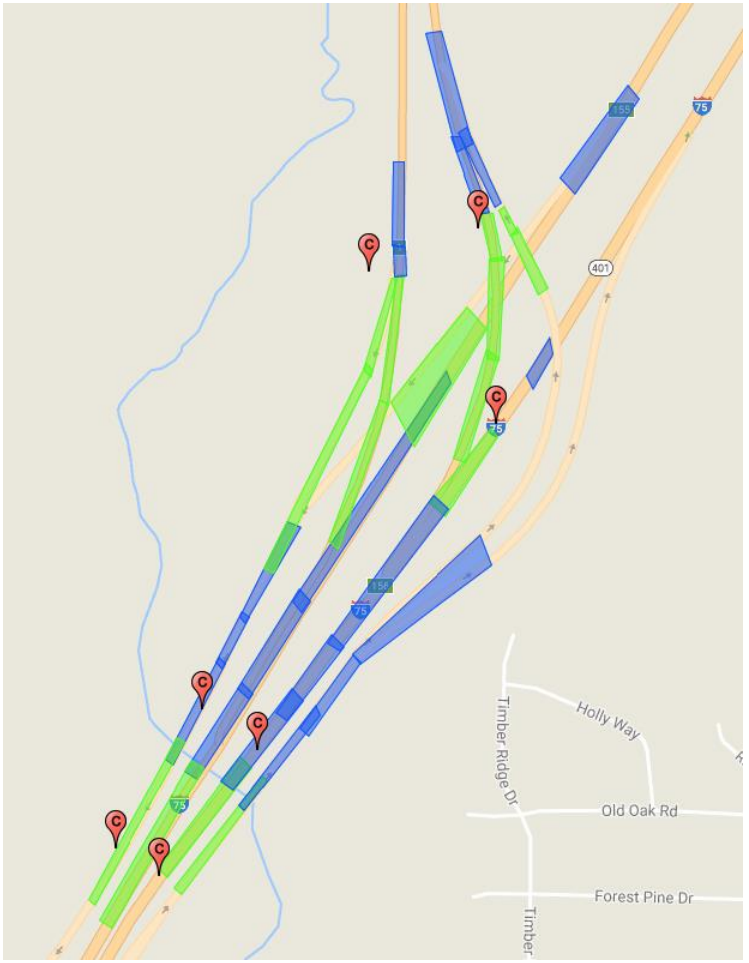


I-475 Automated Incident Detection Pilot Test

I-475 Incident Detection

- Largest continual deployment in the Nation
- 153 Fixed cameras
- 31 upgraded pan-tilt-zoom cameras
- 84 power management devices
- Total cost $1,086,293.25



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How it works

Results

Rural Applications

- Incident detection 6-8 minutes before incident reported by credible source

Current Uses

- Unplanned incident
- Debris in roadway
- Stall
- Wrong way detection
- Pedestrian

Urban Applications

- Incident detection 3-6 minutes before incident reported by credible source

Current Uses

- Unplanned incident
- Debris in roadway
- Left shoulder stall
- Situation Wrong way
- Pedestrian

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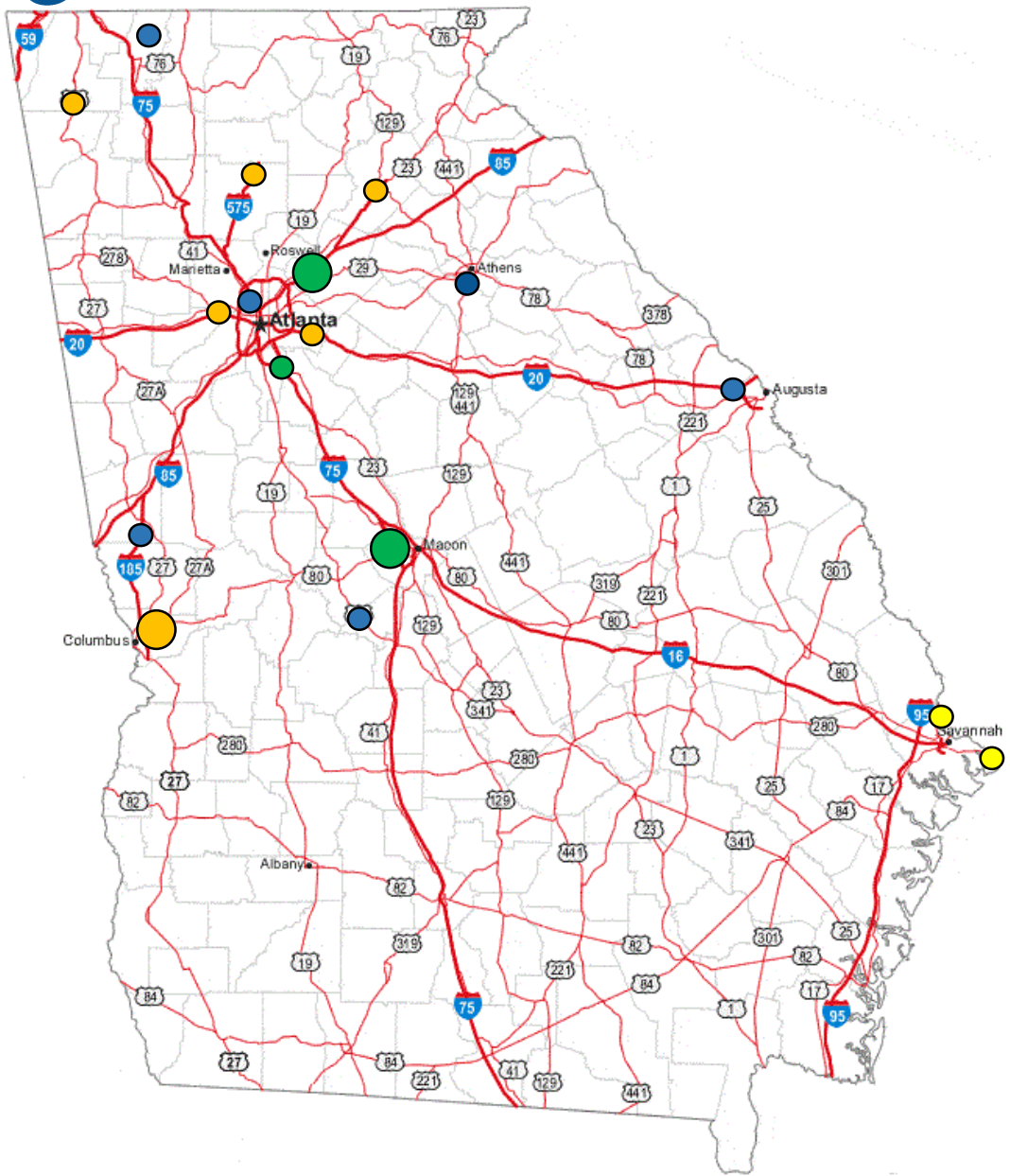
Looking to the Future with ITS



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Questions?

Thanks for your attention.