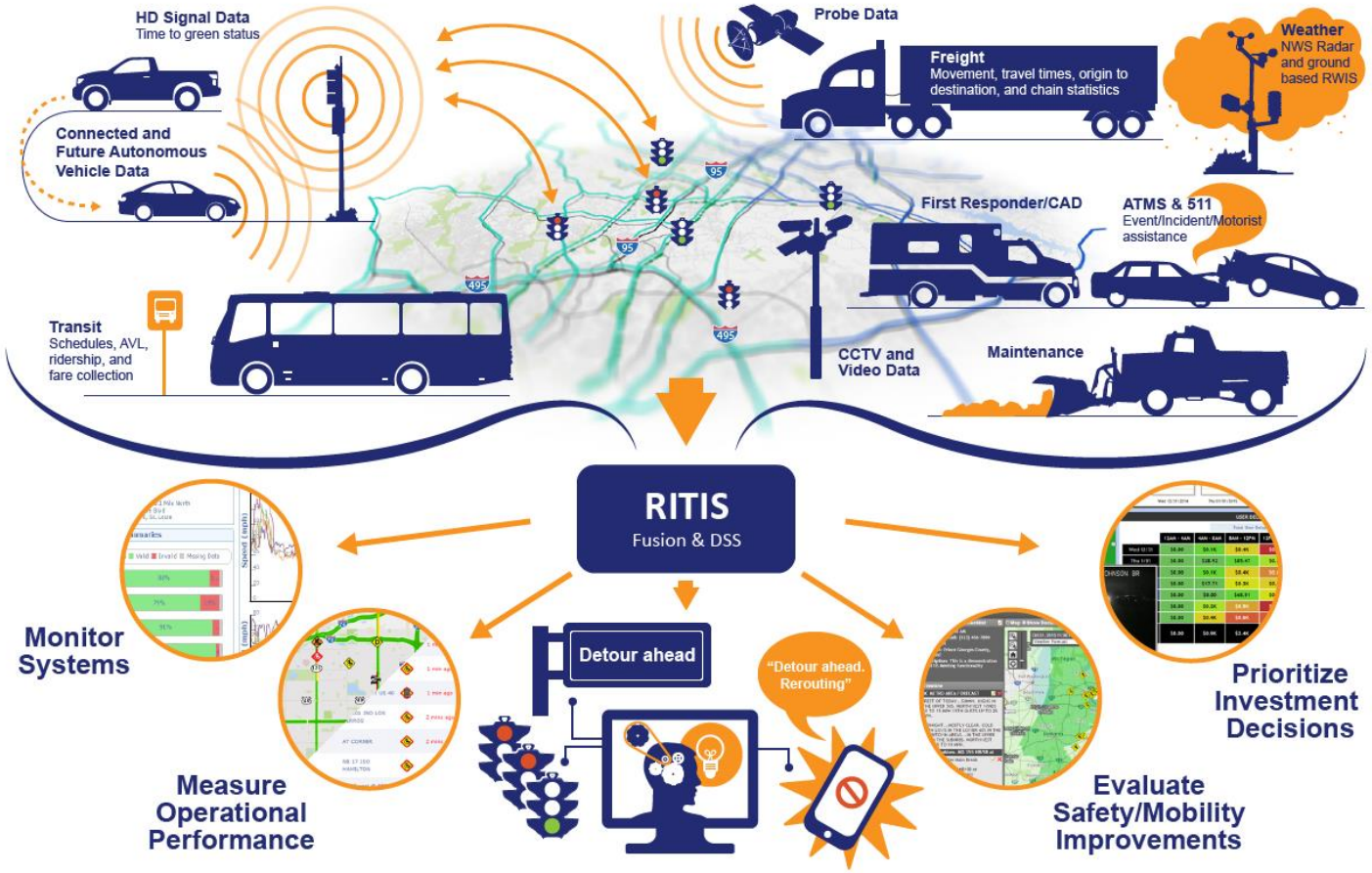
RITIS – New Tools and Features

- PDA – Transportation agencies source for mobility big data analytics.

  Authoritative data driven performance measure insights

Agenda

- Review and demonstrations of new tools and features in RITIS
  - RITIS Traffic Map
    - Road weather layer
    - Congestion only feature in probe speed traffic tiles
  - PDA - Corridor Speed Bins tool
  - PDA – New route selection feature
  - Sharing of Dashboards
- Q&A

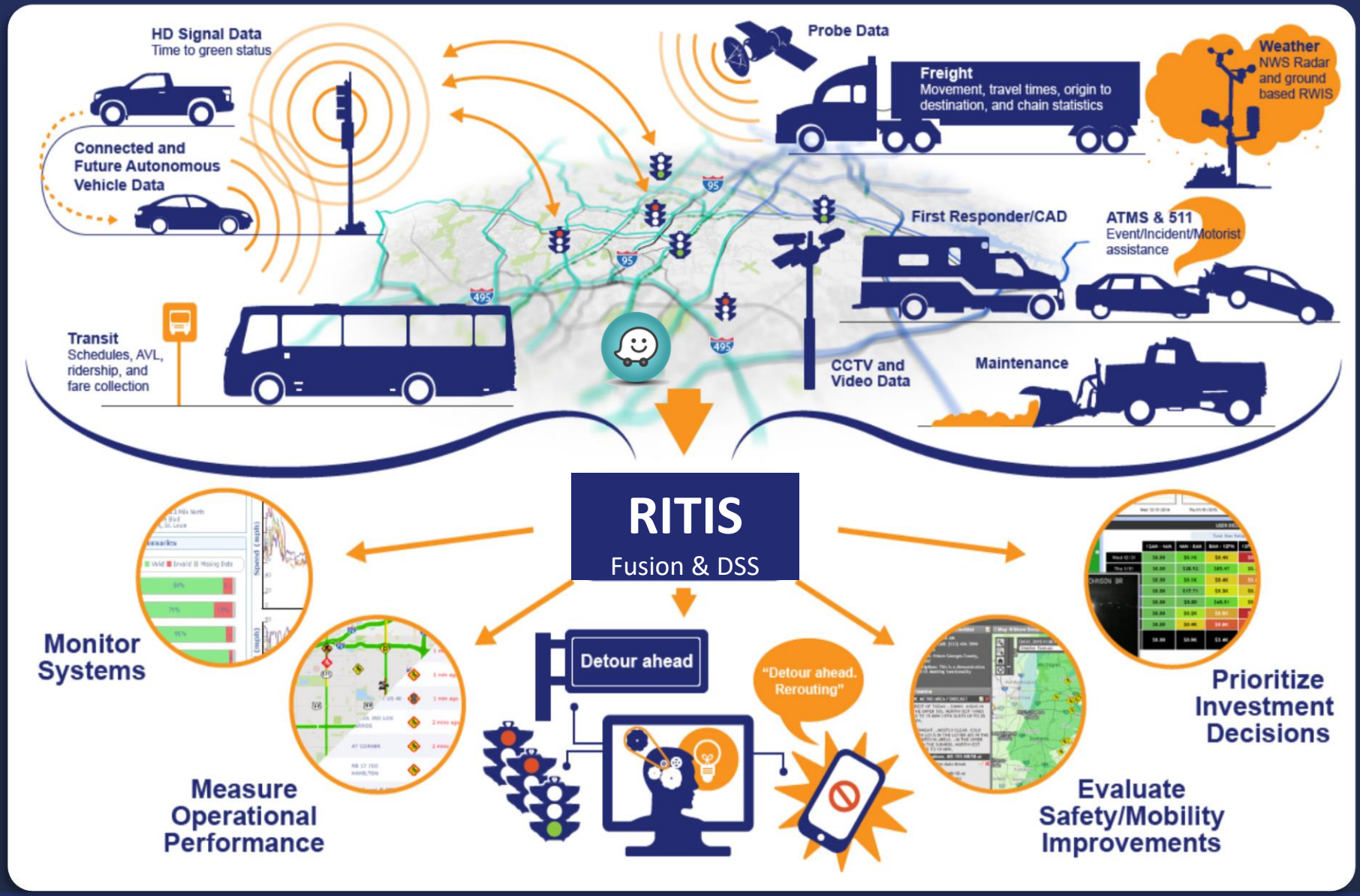


CATT Lab (Who we are)

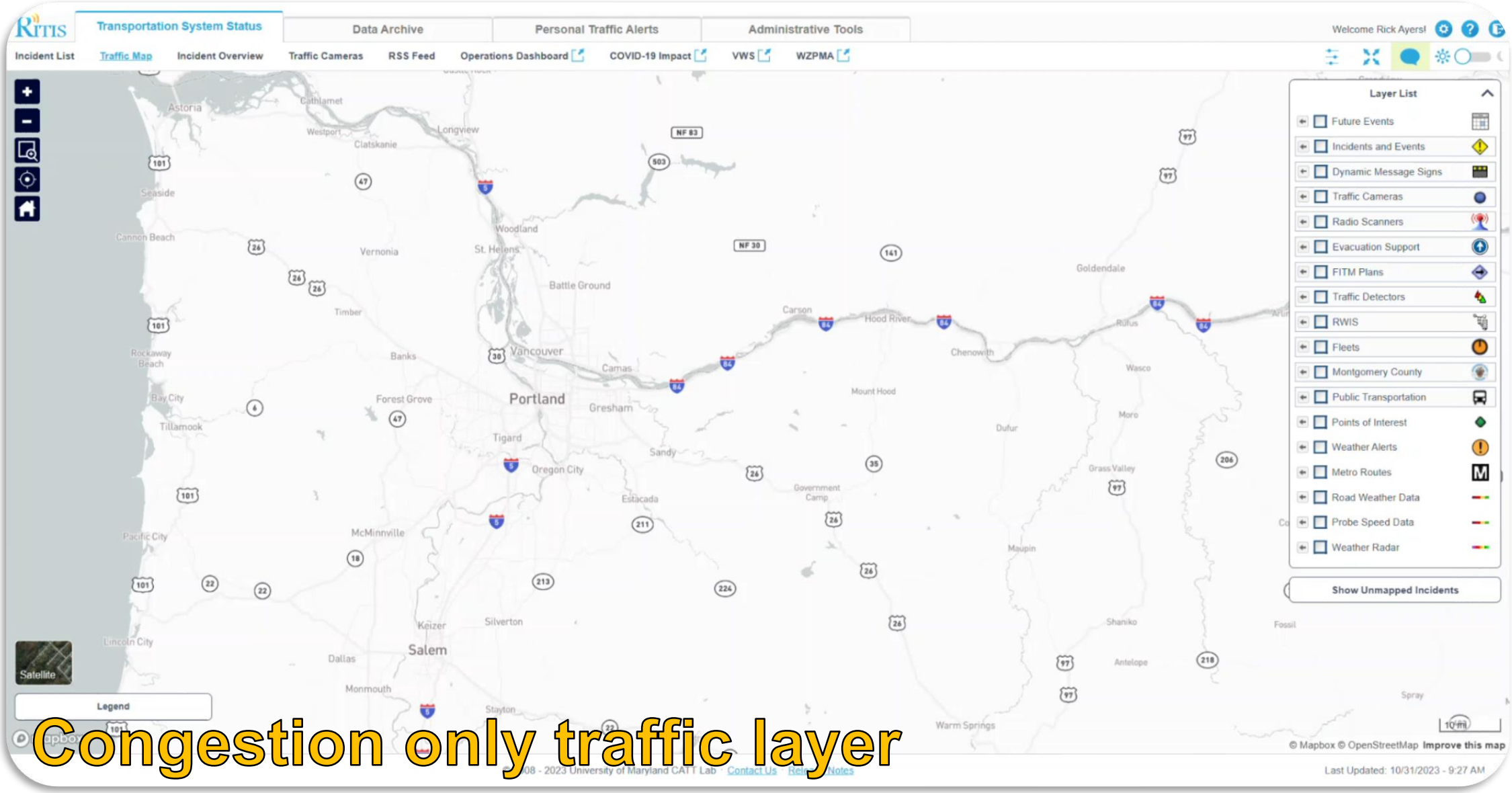
- The CATT Lab operates the world's largest transportation data archive and analytics platform

- We are the industry leader of applied big-data analytics for transportation applications (operations, planning & research)
  - Mobility Big Data Analytics
  - Information/Data Visualization
  - System Integration
  - Performance Management

Regional Integrated Transportation Information System



RITIS Traffic Map – New Tile Layers



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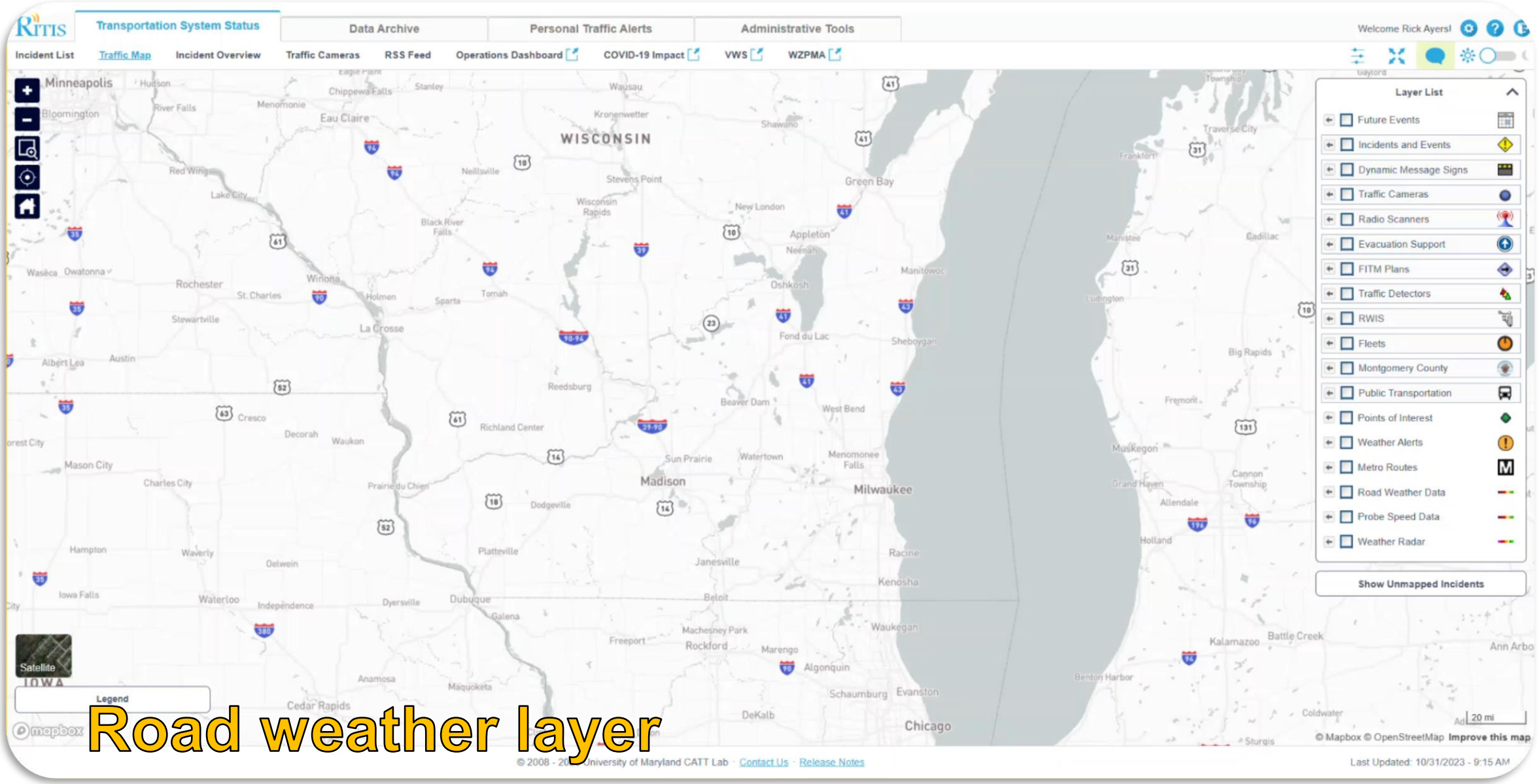


Demonstration

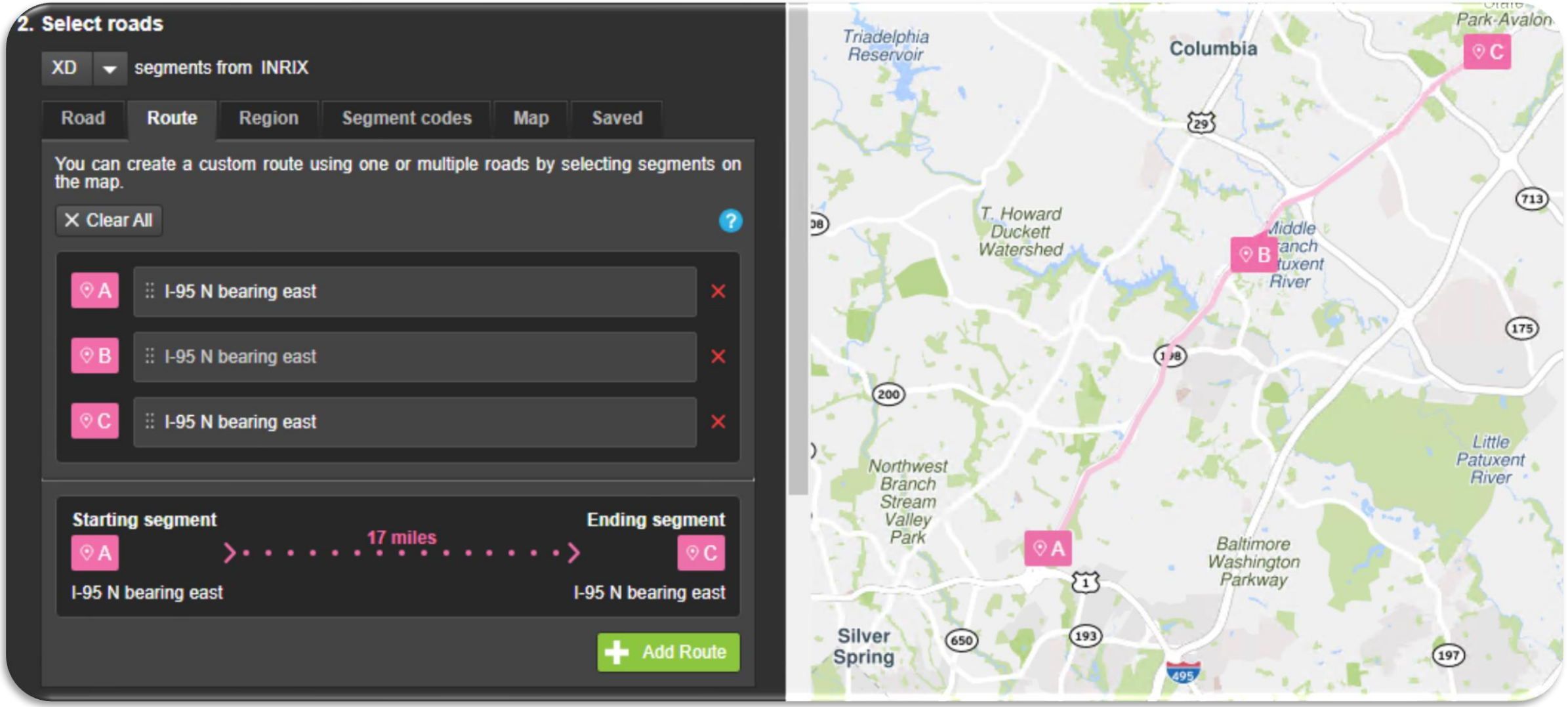
New Tile Layers in Traffic Map

Attendee Polling – Q1

Now that you have seen the new Road Weather Layer in RITIS Traffic Map, do you feel that it would be valuable to click on an individual road segment and get a pop-up with precipitation type and rate values?

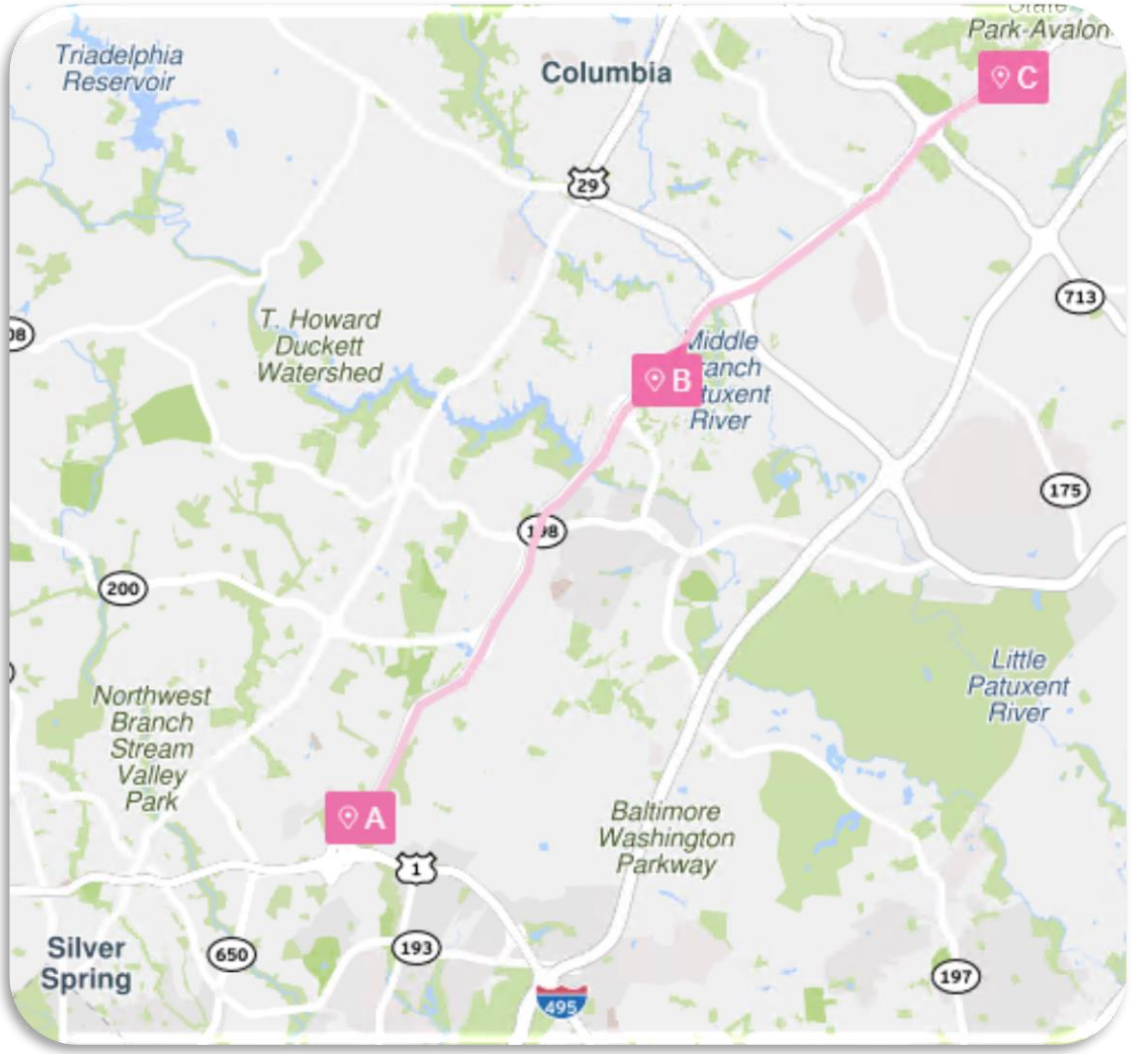
- Yes
- No

PDA – Route Selection Tool



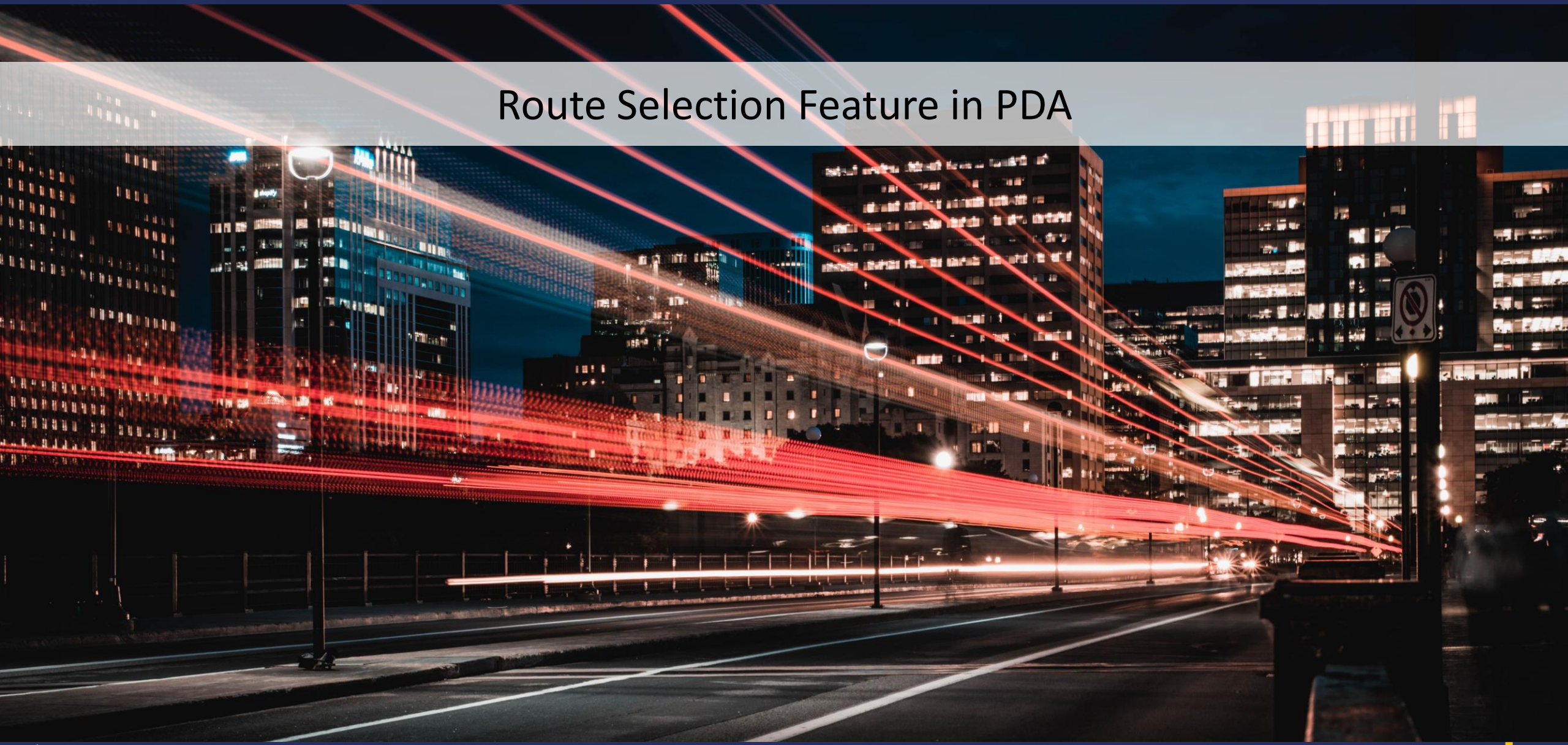
PDA Route Selection Tool - Tips

- Available for XD segments
- Zoom in close!
- Check to see that you're on the correct side of the road
- Note that segment lengths don't always exactly match up at ramps



Demonstration

Route Selection Feature in PDA



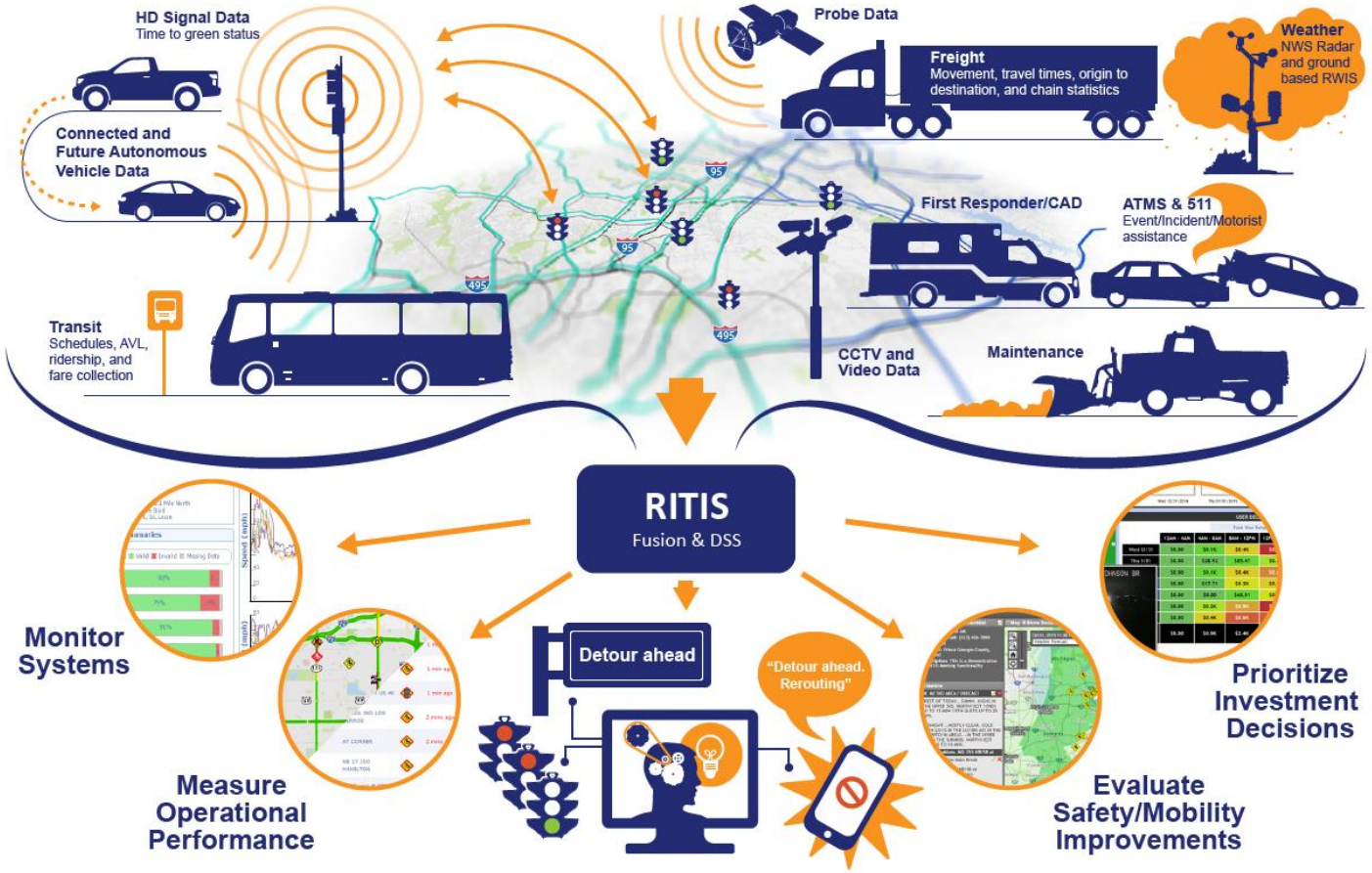
Attendee Polling – Q2

For Probe Data Analytics AND RITIS Traffic Map, do you feel that it would be valuable to have a Geocoding, or Places Search, function incorporated into the mapping tools? Similar to other consumer web mapping applications, the Places Search function would allow you to search by address, intersection, city, county, etc.

- Yes
- No

PDA Corridor Speed Bins Tool – Use Cases

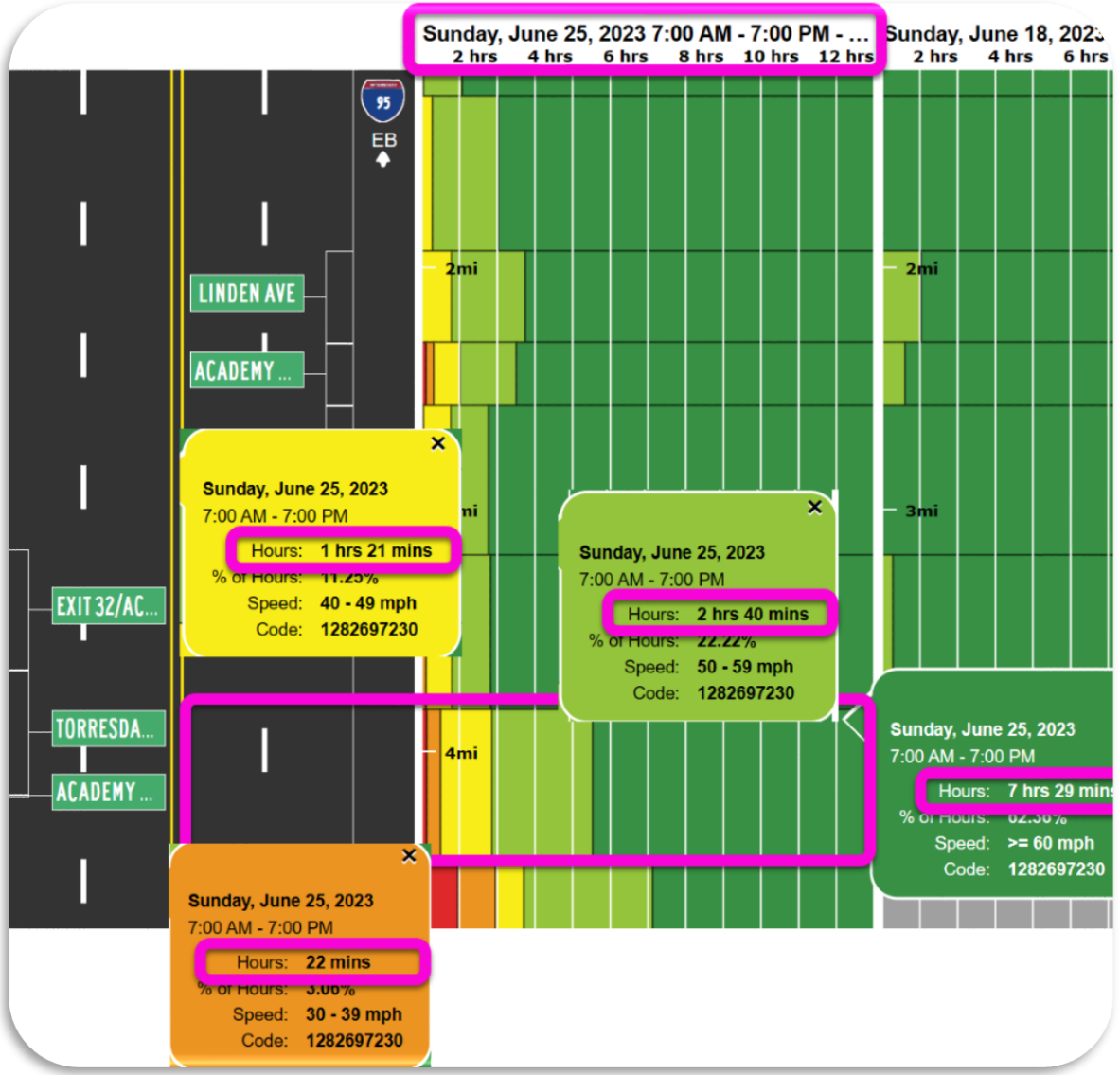
- Quick identification of delay along a corridor
- Identify locations of excessive speed
- Work zone reporting of critical speeds for specific times of the day
- Quantify and group ALL probe speed readings for a selected date and time range
- Deploying location-targeted safety countermeasures



https://ritis.org

RITIS Corridor Speed Bins – Counts all probe readings

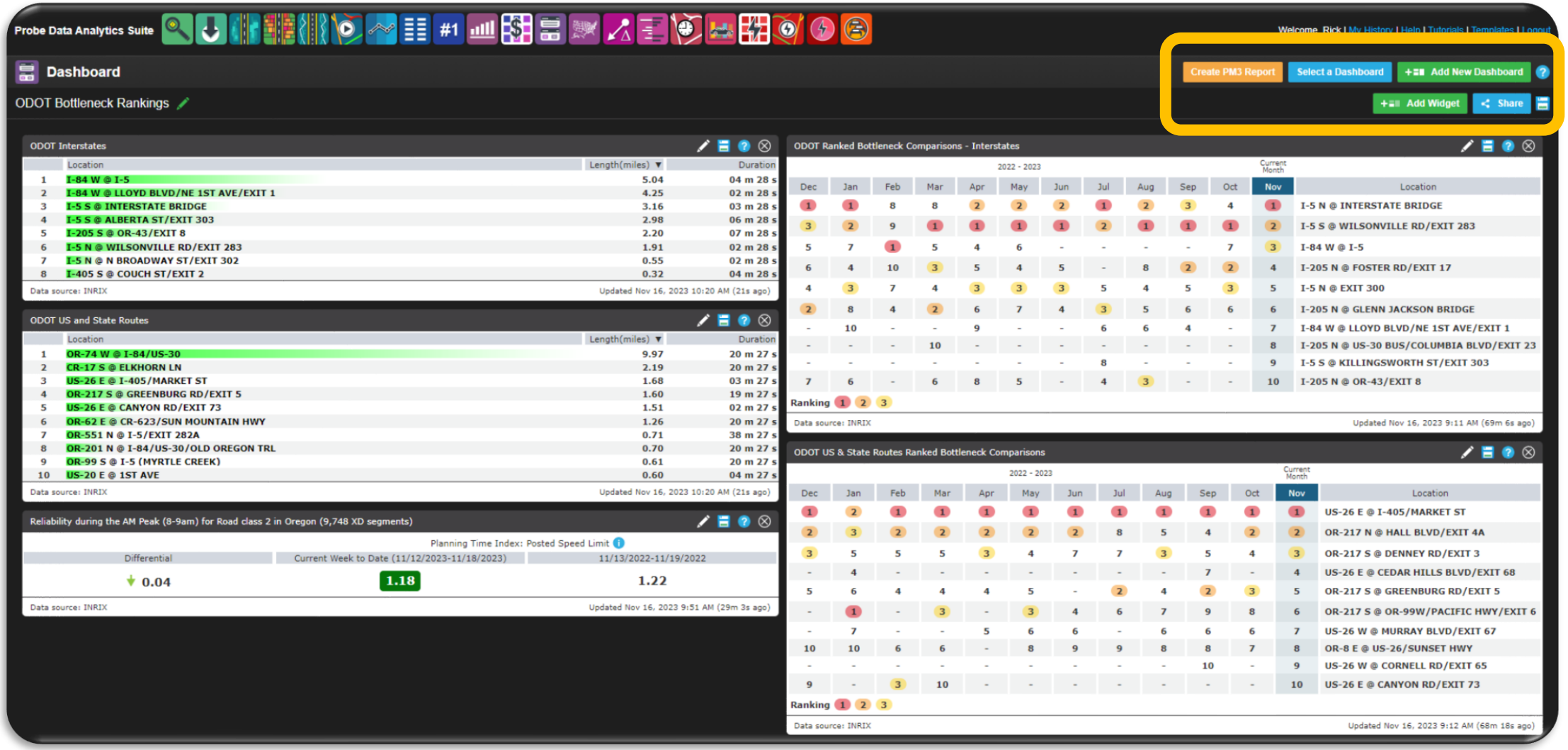
- Roadway segment-based binning
- Binning is for date and time period analyzed
  - ***Example to the right***
  - *7am to 7pm (12 hrs.) x June 25th (1 day) = 12 hrs.*
- Note each bin for **magenta highlighted road segment**
  - *Speed of 30-39 mph = 22 mins.*
  - *Speed of 40-49 mph = 1 hrs. 21 mins.*
  - *Speed of 50-59 mph = 2 hrs. 40 mins.*
  - *Speed >= 60 mph = 7 hrs. 29 mins.*
  - *Total = 11 hrs. 52 mins. (sliver of slower speeds = 8 mins.)*
- Link to the CSB report used for this slide



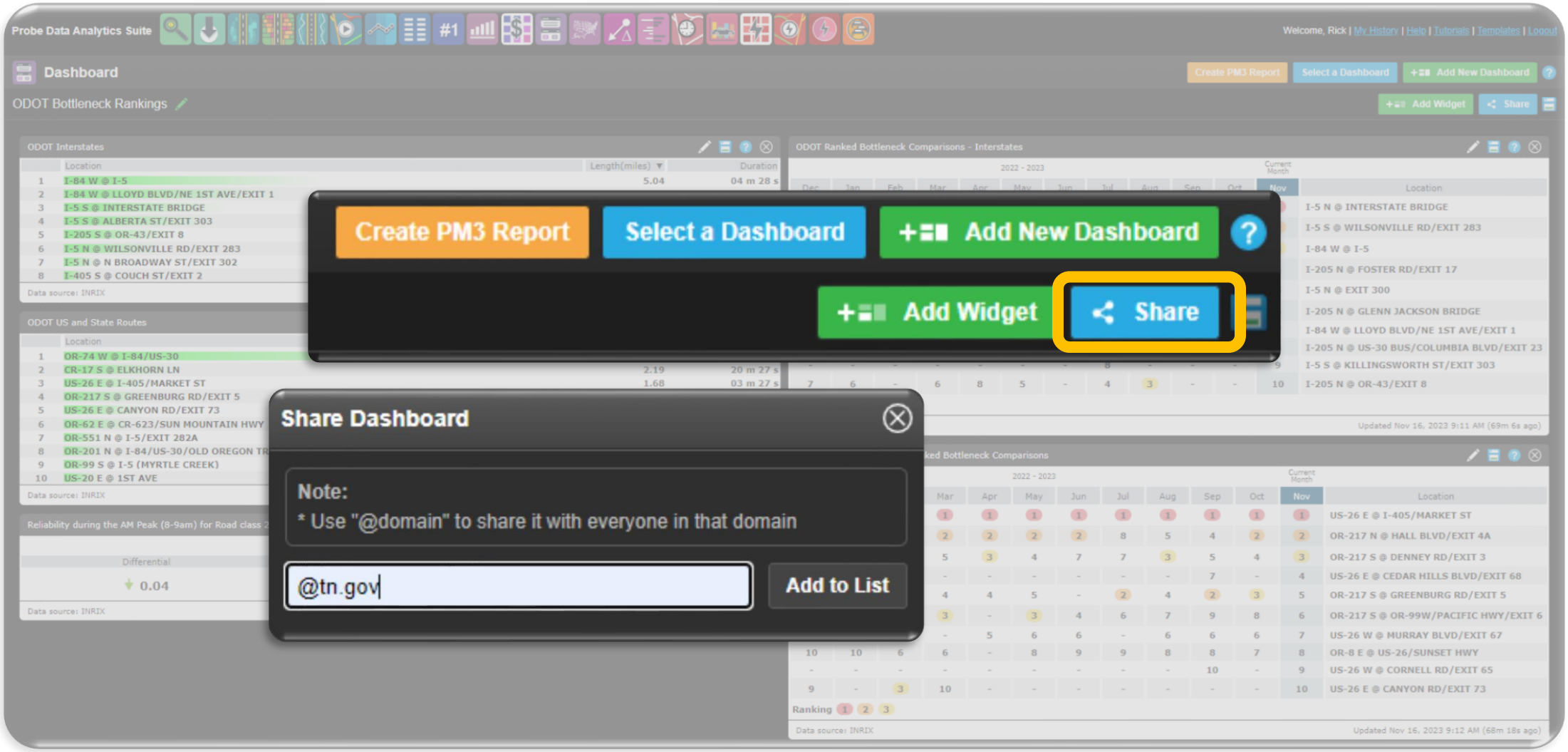
Demonstration

Corridor Speed Bins Tool in PDA

PDA Dashboards – Organization Sharing



PDA Dashboards – Organization Sharing



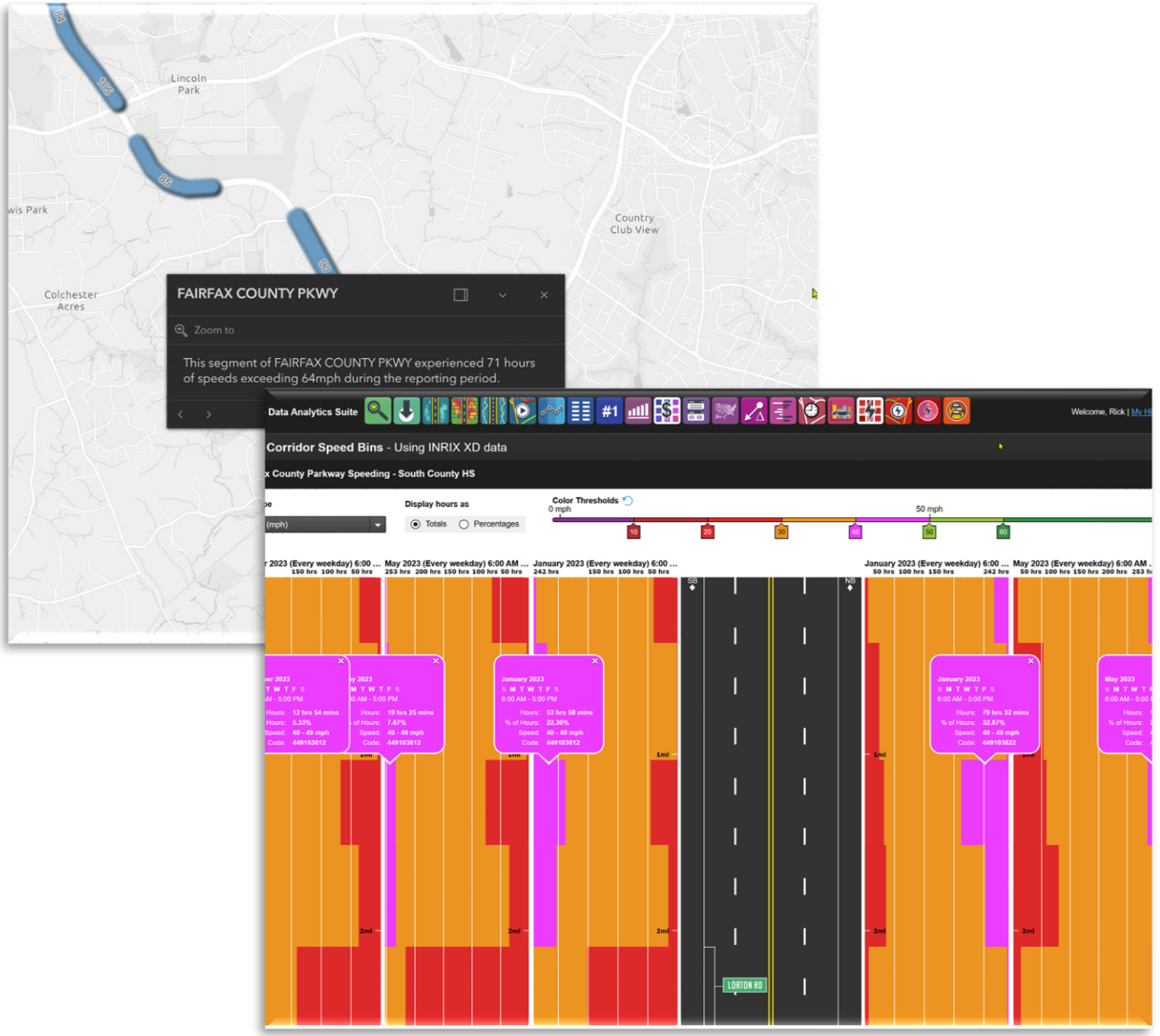
Demonstration

PDA Dashboards – Share Across Your Organization

https://pda.ritis.org/suite/my-dashboard/

Links to Today's PDA Reports and Web Map App

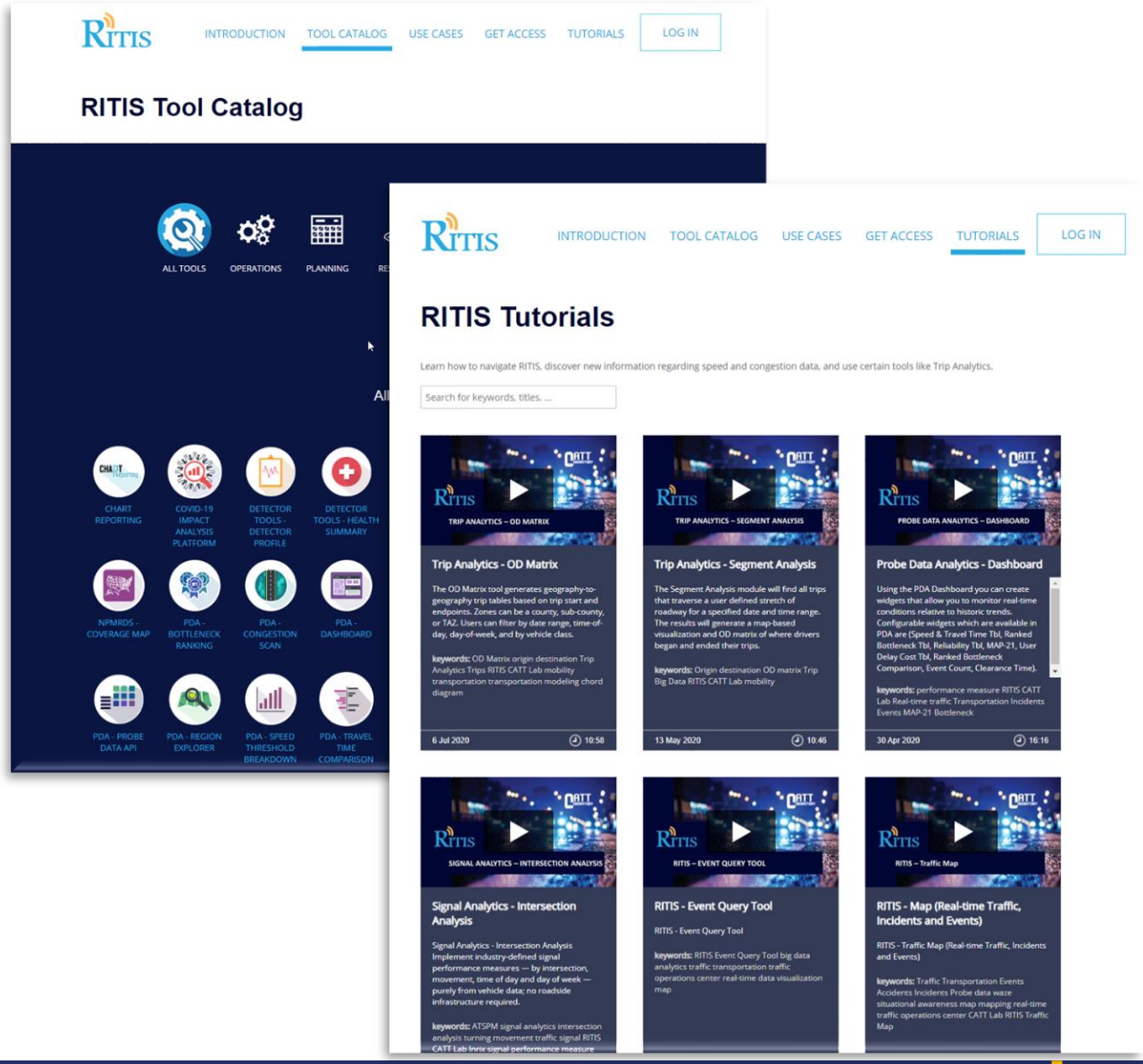
- Speed cameras in school zones Corridor Speed Bins analysis
  - PDA CSB report near South Cnty HS
- County police on-network speed enforcement Corridor Speed Bins analysis
  - PDA CSB report - Fairfax Cnty Pkwy Report
- Corridor Speed Bin report output as seen using ArcGIS Online
  - Fairfax Cnty Pkwy CSB analysis in ArcGIS



RITIS/Probe Data Analytics Resources

- RITIS Tool Catalog
  - https://ritis.org/tools
- RITIS Report Templates Page
  - https://learn.ritis.org/reports
- RITIS Tutorials
  - https://ritis.org/tutorials
- RITIS User Group Meetings

  Hosted by: Eastern Transportation Coalition
  - Previous User Group Meetings
- RITIS Support: support@ritis.org



Q&A

Thanks!

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