Note: Results from polling questions asked during this web meeting are at the bottom of the document.

Using RITIS to Assess the Benefits of ITS Deployments in Louisiana

Q: **Harun Rashid (Northern Virginia Transportation Authority):** For Stephen's before-after study for ITS projects, how were the COVID-19 impacts considered as travel demands were drastically low in 2020 and 2021 as compared to 2019?

A: Stephen Mensah (Stantec): That was a challenge. I looked at traffic counts and how much they changed to make any hypotheses about the corridor and what potentially happened. The traffic counts remain almost identical north of the traffic circle, but there was a drop on the south side. I expected the south side to see a significant improvement but that didn't show in the analysis at all, except for the buffer times. These counts also are not permanent count stations. This is data that probably had been simulated using other nearby counts. The precision may not be as much as we want. It's a good question to ask and try to address all these outcomes.

Q: **Murad Al Qurishee (Nashville DOT):** Which specific measures can RITIS help us with to address how COVID-19 impacted the travel demand?

A: Michael Pack (University of Maryland CATT Lab): If an agency has integrated its volume sensor data into RITIS, then that is a good place to start, assuming the agency does a good job of maintaining and calibrating those sensors. The Trip Analytics products do an excellent job of showing trends in increasing and decreasing demand along with changes in trip distance, where people choose to travel, etc. But Trip Analytics requires additional data from a 3rd party like INRIX, Wejo*, etc. The PDA Suite will show where congestion is increasing or decreasing, but this is based purely on speed data.

Q: **Kelly Wells (North Carolina DOT):** Which speed data vendor does this analysis use?

A: Julius Codjoe: INRIX.

Q: **Kelly Wells (North Carolina DOT):** Did you use XD granularity or TMC level?

A: Stephen Mensah (Stantec): XD data.

Q: **Jesse Buerk (DVRPC):** Do you know anything about that area that maybe helps you understand the cause of the congestion breakdown? It looked like maybe there were more crashes in the after condition.

A: Stephen Mensah (Stantec): I just went straight with the data. I didn't filter out any days that involve crashes. We did this project because this corridor was noted for congestion-related incidents. We wanted to be able to quickly detect any incidents and help with the management by roadway safety patrols. If I had time and could go back I could pick days, isolate similar traffic patterns on days with and without incident, isolate specific strategies that we use to manage the incident, etc., and determine impacts by those strata. This was just something to demonstrate what we can do with the tool. Going

forward, I think we'll be much more robust in our analysis and try to account for all these other factors.

A: Julius Codjoe (Louisiana Transportation Research Center): This is very much a preliminary analysis. We had no way of knowing whether our departments were working to benefit the taxpayer - at least now we have a way of quantifying those benefits and showing them to the public, letting them know that this was a good investment. Going forward this is something that we expect to do a lot more.

Before and After Ribbon-cutting: Documentation of Demand Shift and Travel Time Improvements for a New Freeway Link

Q: **Patrick Zilliacus (MWCOG):** Greg, can I capture this by the time of day - maybe on an hour-by-hour basis?

A: Greg Jordan (University of Maryland CATT Lab): The filters allow you to pick whatever time scale you want, including hour-by-hour.

Q: **Han Zheng (Arcadis):** It seems like only Route Map provides trip counts by vehicle type. Is it possible to include this level of detail for another report type such as OD Matrix or Zone Map? Right now, if I open the result as OD Matrix or Zone Map, it only provides the total counts of selected vehicle types. So, if I need to get truck and passenger car ODs, I had to run a separate analysis.

A: Greg Jordan (University of Maryland CATT Lab): You need to run the reports multiple ways right now to get that information. It's important to understand that - at least in this in this database - there is no attempt to balance the number of samples by vehicle class. They give you all the trucks and all the cars that they have in the data set. They're not changing those numbers to make them mode-balanced. It's up to the analyst to take sample counts and then decide what an appropriate expansion factor is. These are not volumes.

Q: **Han Zheng (Arcadis):** Another question/issue I had with the Route Map is that it seems like if the temporal filter is too long (i.e. 4 hours), a lot of routes are trips crossing the study area polygon more than once. Ideally, for OD Matrix development purposes, I think if one trip crosses the study area twice discretely, it should be considered as two trips and counted twice in the OD Matrix. This is especially a problem near transit hubs and schools where there are a lot of dropping-off trips. Have the Trip Analytics team considered improving that?

A: Michael Pack (University of Maryland CATT Lab): I don't disagree with you. Right now, we are bound by how each data provider (INRIX, NHTS, Wejo*, etc.) defines a trip - which usually includes some sort of fixed definition for dwell times. Let's talk offline about how we might be able to implement what you're requesting. Maybe that includes an option to include/exclude those types of trips or a way to flag them. There are lots of potential options.

PDA Suite Performance Reporting Working Group Update

Q: **James Li (MWCOG):** I was wondering where we could access the Holiday Travel Forecast.

A: John Allen (University of Maryland CATT Lab): You can access it here - https://learn.ritis.org/reports

RITIS Product Enhancement Working Group with RITIS Updates

Q: **Grant Shirts (Regional Transportation Commission of Southern Nevada):** Are congestion causes updates only available to full RITIS members?
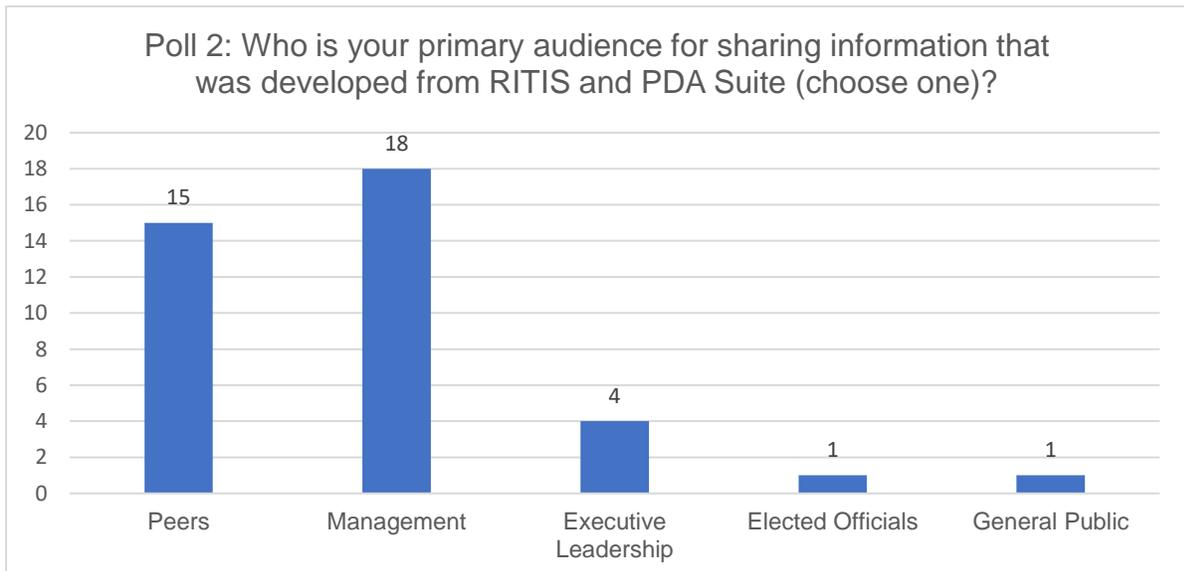
A: Michael Pack (University of Maryland CATT Lab): Yes. There is a free version of the cause of congestion tool which is available. You can find that here: https://congestion-causes.ritis.org/

That is what the Bureau of Transportation Statistics funded. It looks at calendar year 2019 data at state-level and county-level data month-to-month. The deep dive congestion causes tool, which we were just showing is part of the probe data analytics suite. If you're a probe data analytics suite user who is also providing us with your agency's incident and event data because you're a full member, then that becomes available to you as well. We can help you figure out how close your agency is to getting to that point.
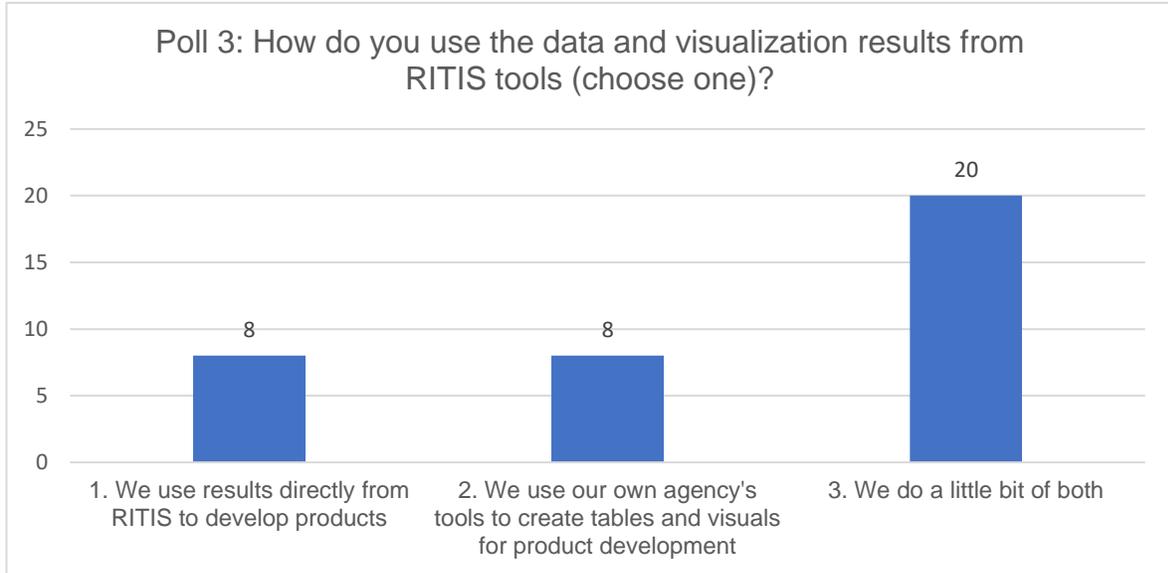
Poll 1: What types of presentations/topics would you like to hear about during these meetings?

How to use RITIS data effectively in traffic modeling calibration/validation.	Truck parking, Freight oriented capital project
Presentation of performance, including before and after, associated with MPO Congestion Management Programs.	Topics that relate to regional transportation planning, e.g. travel pattern analysis with OD data
Using RITIS for nonroad and specific types of heavy-duty vehicles (motorhomes, cement trucks)	Accuracy of data and how it can feed into different aspects of microsimulation modeling. Specifically, O-D routing on smaller corridors. Or scaling volumes for traffic use
Practical use cases of the data. This includes details regarding implementation.	no specific ideas at this time, but appreciate other use cases to understand what we could do better
Conflation techniques	conflating Wejo* data
Traffic monitoring	use cases RITIS challenges and ways around it
Energy and emissions applications	Unique use cases of RITIS. For instance, how to use RITIS for safety evaluations, before/after studies.
May not be possible now but dealing with official and non-official holidays would be great.	More ITS applications for state DOTS
Transit and active mode analysis	Transportation Operations
Traffic count and road segment setup	New features and agency use cases.

Poll 2: Who is your primary audience for sharing information that was developed from RITIS and PDA Suite (choose one)?

Audience	Count
Peers	15
Management	18
Executive Leadership	4
Elected Officials	1
General Public	1

Poll 3: How do you use the data and visualization results from RITIS tools (choose one)?

The bar chart shows three options with the following values:

- 1. We use results directly from RITIS to develop products: 8
- 2. We use our own agency's tools to create tables and visuals for product development: 8
- 3. We do a little bit of both: 20

Poll 4 - What kinds of things are you currently doing with RITIS - Planning/Ops, presentations, project/funding justification, etc.- that you'd be willing to share at a future meeting?

Planning	Putting more cameras on main roadways.
Looking at the impact of adding freeway capacity at a notoriously bad bottleneck.	We primarily utilize the Performance Chart tool in the PDA suite, to compare travel speeds in major corridors in Northern Virginia, current conditions compared to pre-covid conditions.
using XD speed data for project level before/after analysis	

*Since the date of the meeting, Wejo Group Ltd is no longer in business