The Eastern Transportation Coalition
Transportation Data Marketplace – Technical Advisory Committee Web Meeting
July 14, 2022

Agenda:

	Topic	Speaker
1	Results of Final VPPII Validation: PA – Work zones and tunnels	Zach Vander Laan, UMD CATT
2	Volume Accuracy Literature Review	Stan Young, The Eastern Transportation Coalition (TETC)
3	Product/Vendor Briefing Material	Mike Fontaine, Virginia Transportation Research Council, Virginia DOT
4	Results of Initial Volume Accuracy Tests	Zach Vander Laan, UMD CATT
5	Plans for First State-Specific Volume Validation – North Carolina	Stan Young, The Eastern Transportation Coalition (TETC)
6	Next Steps: Update on Targets and Priorities – TAC Feedback	Mike Fontaine, Virginia Transportation Research Council, Virginia DOT

Agencies Represented during Meeting

Massachusetts DOT	Tennessee DOT
New York DOT	University of Kentucky (Kentucky Transportation Center)
North Carolina DOT	Vermont AOT
Pennsylvania DOT	Virginia DOT
State of Rhode Island - Division Planning	

Action Items:

	Action	Responsible Party
1	Provide Zoe Neaderland (Vermont AOT) with a written update from FHWA on NHTS	Mike Fontaine (Virginia DOT)
2	Provide feedback on the Traffic Volume Validation – Literature Review and Recommendations tech memo by July 29, 2022 (document sent on 7/15/2022)	TAC members
3	Provide feedback on the Coalition's new special project fund (info sent on 7/20/2022)	TAC members

Results of Initial Volume Accuracy Run

Q: **Simona Babiceanu (Virginia DOT):** When you deploy these detectors at the MD location, do those locations have classification data to see if they're undercounting certain types of vehicles?

A: Zach Vander Laan (University of Maryland CATT): We have class data from the ATR, but the RADAR sensor did not classify it.

Q: Mike Fontaine (Virginia DOT): Do we have lane-by-lane data? I'm wondering if it may be something like mounting height leading to undercounting for the RADAR system.

A: Zach Vander Laan (University of Maryland CATT): That data does not appear to be available from the Maryland DOT-SHA website, but may be available from HQ, but need to inquire. The RADAR data does provide lane-by-lane data.

Q: **Kent Taylor (North Carolina DOT):** Were you using a single RADAR head at the I-70 location?

A: Zach Vander Laan (University of Maryland CATT): I believe so, but I did not deploy the unit. It's a Houston RADAR sensor.

A: Stan Young (The Eastern Transportation Coalition): We wanted to mount more than one position, but had to conform to the opportunity of where a pole was available. To my knowledge, it was a single head.

C: Kent Taylor (North Carolina DOT): We get better quality data if we put a head counting each direction. It's something to think about in the future.

Quarterly Targets/Pace/Next Steps

Q: **Zoe Neaderland (Vermont AOT):** About OD data, does anyone understand how it is the same or different than the next-gen travel highway survey (NHTS)?

A: Stan Young (The Eastern Transportation Coalition): Greg Jordan from UMD CATT Lab is working with the NHTS team. The Maryland Transportation Institute (MTI) at UMD is working on the Next-GEN NHTS (these are the same people as the Future Mobility Labs start-up). There is an opportunity for much more granularity in Next-GEN. We're working with Denise Markow (The Eastern Transportation Coalition) to determine the right person at FHWA or MTI to help us understand this.

Q: Zoe Neaderland (Vermont AOT): Is NHTS more focused on trip type and OD data guesses at trip type?

A: Mike Fontaine (Virginia DOT): We had an update from FHWA on NHTS for my TRB committee. I can send you the written document they gave me with contact points. For the passenger trips, they're imputing passenger demographics, mode, and purpose using algorithms. Patrick Zhang at FHWA is the contact point.

Q: **Zoe Neaderland (Vermont AOT):** The data seems good for volumes because there's a 5% penetration rate of the traffic stream. At what level is the penetration rate acceptable?

A: Stan Young (The Eastern Transportation Coalition): For freeways, 5% is more than adequate. If you're asking the question "what penetration rate do I need to support X application" – it comes down to the number of data points. If you can get 5-7 probe vehicles per five-minute period, that should give you excellent data for travel time. That's easy to obtain on freeways but difficult to obtain on rural roads. For volume, we need to be at 15 observations per 5 five-minute epochs. We need higher densities for volume fidelity than travel time fidelity. Vendors in the past guarded their penetration rates but they're more open about it now.

Q: **Zoe Neaderland (Vermont AOT):** It sounds like some of the IIJA bill grant opportunities could be used to pay for this data. Is anyone on the call pursuing that?

A: Stan Young (The Eastern Transportation Coalition): There's a SMART grant opportunity (more akin to ITS opportunities) coming out. USDOT is standing up against ARPA-I to target transportation infrastructure. There are opportunities to apply as a Coalition (multiple states contributing).

The Coalition is putting forward a special project fund – there's discussion at the executive level. What would your interests be? I'm interested in real-time volume feeds. Another may be conflation and the creation of "the ultimate georeferencing engine" that can convert any vendor's map segmentation to any format more useful by states.

Q: Mike Fontaine (Virginia DOT): How firm of a funding commitment are we looking for? Are we just looking for topics? How binding of a commitment is this – it may take time to secure funds.

A: Stan Young (The Eastern Transportation Coalition): We're already at a point of interest in these topics. The executive level is looking for direction on which to take priority. There's an ad hoc list that hasn't had any formal vetting, so we'd like to have some folks review and provide feedback. I don't think there's a commitment for funding, just prioritizing certain initiatives over others.

A: Mike Fontaine (Virginia DOT): I like the geospatial project. We've had conversations on how to snap weather data to travel time data to crash data – integrating them all via some geospatial fusion tool would be tremendously helpful.