



VPP Market Place State Bi-Annual Web Call

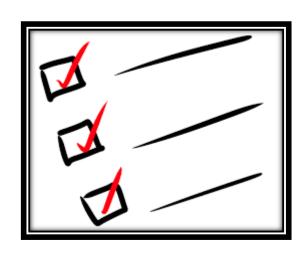
August 19, 2020

Connecting for Solutions



Today's Agenda

- Data Products
- ☐ Validation Program Update
- ☐ FY2021 Contracting
- ☐ Data Use Agreement Update
- ☐ Volume Trend Data Licenses
- □ New Website
- ☐ CITE Pooled Fund





Vendor Product Updates



Ancillary products can be added as pre-negotiated fees, discounted from list price to existing long term contracts as well as annual contracts

Real-Time Options Safety Applications

Dangerous Slowdowns Real-Time API

Delivers safety-focused alerts to agencies to augment current data or as a cost-effective option for rural states not involved presently in VPP.

Commercial Vehicle Safety Alerts

Delivers warnings direct to truckers when heading towards slow/stopped traffic on highways and/or other agency-created safety information.

Highway Emergency Link Platform

Off-the-shelf emergency alerting service that establishes two-way communication with those stranded in trapped queues due to incidents, weather, etc.

Historical Options Performance Management Applications

Trip Analytics and Datasets

Offers reduced price access to various trip-level data options to support freight and transportation planning.

Signal Analytics

Enables focused analysis of signal networks, as granular as the intersection level.

Volume Profiles

Provides direct access to dataset that powers volume-weighted analyses. 15-min bins, total vehicle counts provided for every XD segment

Volume Archive Study Support

Cost-effective combination of Trip Dataset and XD Segment Archive to power UMD CATT process to create highly detailed and accurate volume archive for agencies.

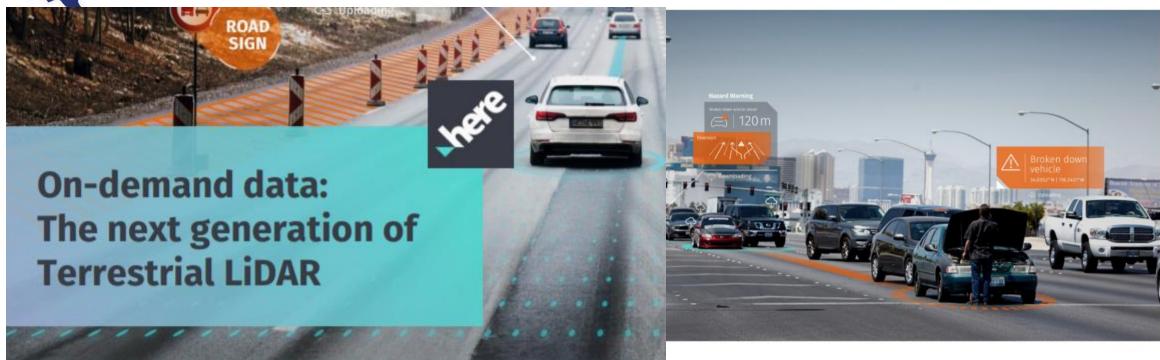
- State/County TMC Location Referencing Network Shapefile
- XD Segment Traffic Archive

Provides the option for access to XD archives.



Vendor Product Updates



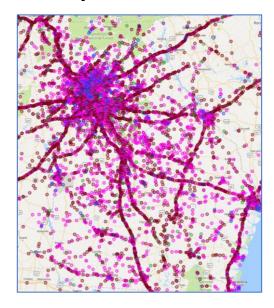


HERE Hazard Warnings is a cloud-based service derived from rich vehicle sensor data to create a depiction of road conditions in real-time. The service delivers targeted alerts to drivers traveling through areas affected by a road hazard, distributed via connected infotainment systems or through the vehicle's ADAS functions. Low-latency hazard information is delivered in just seconds. The service relies on data from vehicle sensors such as wipers, SRS airbag, ABS events and more to create the following types of warnings:



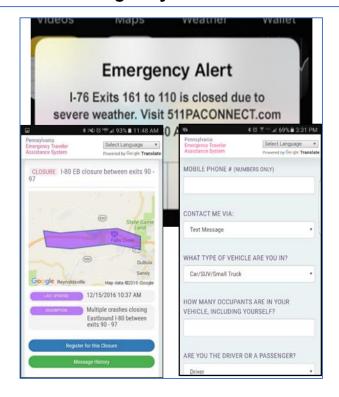
New Procurements

Rhode Island DOA/DOT – Trip Analytics and Datasets



August 2020

HELP Emergency Communications



Subscribers: PA, NJ, GA, Maryland SHA

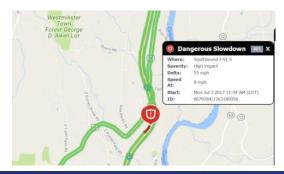
Tennessee - INRIX & RITIS







Tennessee – Dangerous Slowdowns



Vehicle Probe Project: HERE, INRIX and TomTom Data Validation

Report for Massachusetts (#01) Freeway Validation

Data Collection: January – February 2020

Report Date: May 2020



Validation

Validation Program Status Update

- ✓ April and July Quarterly Report Updates
- ✓ Massachusetts Final Report
- ✓ Maryland Validation Status
- ✓ New Addition Vermont Validation Status
- ✓ Fall Schedule

Validation Schedule & Philosophy

Recap from last meeting

- ✓ Move to a 2-year cycle for state validations
- √ 4 reports per year
 - ✓ 3 regular validations guaranteed (e.g., Freeway / Arterial)
 - ✓ 1 optional special study in place of a regular validation (e.g., low-volume study)

Impact

- ✓ More feasible to conduct one-off studies on important topics (e.g., special facilities)
- ✓ More guidance from states about validation direction (will be formalized further in VPPIII)

Goal: Continue to benchmark probe data quality in locations / scenarios that are useful for members



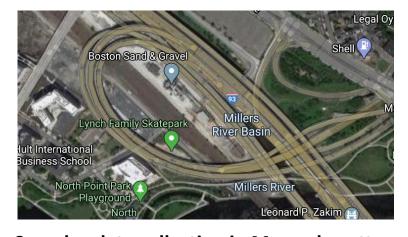
Validation Status Update

Massachusetts (previous)

- ✓ I-93 (SB), I-90 (EB) into Boston
 - ✓ Complex freeway, highly congested
- ✓ Difficult deployment
 - Multiple jurisdictions, no/limited shoulder, traffic
- ✓ Report finalized and published on ETC website
 - Data quality strong for all 3 vendors
- ✓ Conducted internal study to benchmark re-id tech

Maryland (current)

- ✓ MD-30 (near PA border), US-40/US-11 (Hagerstown)
 - Locations among top priorities by MDOT-SHA
- ✓ **Low volume** emphasis
- ✓ Collected reference data in July, will analyze soon



Complex data collection in Massachusetts



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Fall 2020 Planning

Vermont (new addition)

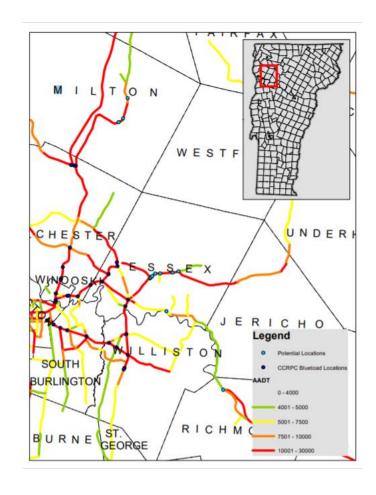
- ✓ Deployment planned for September/October
- ✓ **Low volume** emphasis

North Carolina is next in line (late fall)

✓ Will begin outreach soon

Ideas for future studies:

- ✓ Special facilities (e.g., tunnels, HOV lanes)
- ✓ Vendor segmentation (e.g., TMC, XD/ sub-TMC)





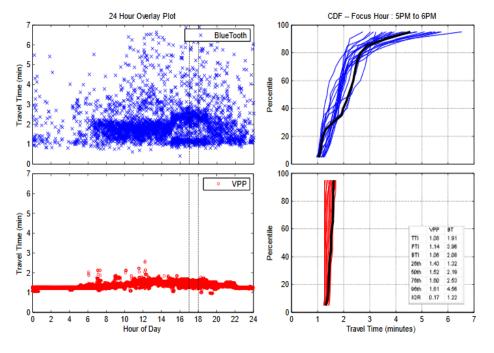
Current/upcoming low volume studies

Low-volume emphasis based on feedback from Coalition members

- ✓ Few (if any) case studies < 20k AADT in VPPII
 - Maryland: 10-15k AADT, Vermont: ~10k AADT
- ✓ **Key challenge**: hard to characterize ground truth
 - E.g., 10k AADT → only ~2 samples per 5 min

How to validate low-volume data?

- ✓ Point-in-time (operations)
 - Adapt traditional analysis (15-min bins)
- ✓ Repeatable Patterns (historical/planning)
 - Revive time-of-day distribution analysis



Ongoing Efforts

Develop geo-referencing method for use in VPPIII

- ✓ Primary validation resource drain is conflation between 3 different vendor basemaps and validation segmentations
- ✓ Currently we informally offer vendors the opportunity to report data directly on our validation segmentation (we discussed last year)
- ✓ VPPIII will standardize these requirements
 - Describe segment / point locations primarily in terms of latitude, longitudes, and headings

Streamline report format and validation data access

- ✓ Move methodology descriptions to a separate doc and distill reports to core findings and interpretation
- ✓ Provide a link to external site that archives graphs, detailed metrics, etc.

Status: Currently updating methodology documentation to prepare for VPPIII → expect later this year



Contracting

- ☐ Challenges remain with finalizing contracting on time
- We need to start even earlier to meet a July 1 deadline for FY2022
- AG comments greatly slow the process
- □ Procurement Amendments must follow State Agreements

Process:

- 1. State Agreements are finalized
- 2. State accounts are set up in the UMD system (KFS)
- 3. Upon receipt of KFS numbers, requests can then be sent to procurement

Jan 2020 Initial Outreach Mar 2020 State Contracts May 2021
State
Contracts

July 2021 New

Contracts

Feb 2020 State Contracts

April 2020 State Contracts

Procurement Starts

June 2021



Contracting

States	Status	Vendor	Optional Products
Massachusetts**	Completed	INRIX	Trip Reports RITIS Optional Products
Rhode Island**	Completed	INRIX	Traffic Analytics and Datasets RITIS Optional Products
New Jersey**	In process	INRIX	HELP RITIS Optional Products
PennDOT	In process	INRIX	HELP
PA TPK	Completed	INRIX	HELP
Maryland**	In Process	INRIX HERE TomTom	HELP
Virginia**	In Process	INRIX	
North Carolina	In Process	HERE	
Georgia	Completed	HERE	HERE Traffic Services (included) Traffic Analytics (included) HERE Location Platform and Software (included) HELP
Tennessee**	Completed	INRIX	Dangerous Slowdowns

^{**}XD Segment Traffic Archive Data Downloader (included)



Data Use Agreements

Primary State DUA's

10 all-in state agencies

Affiliate Agencies

104 agencies

Consultant and Universities

202 personnel from firms and schools

Changes/Updates:

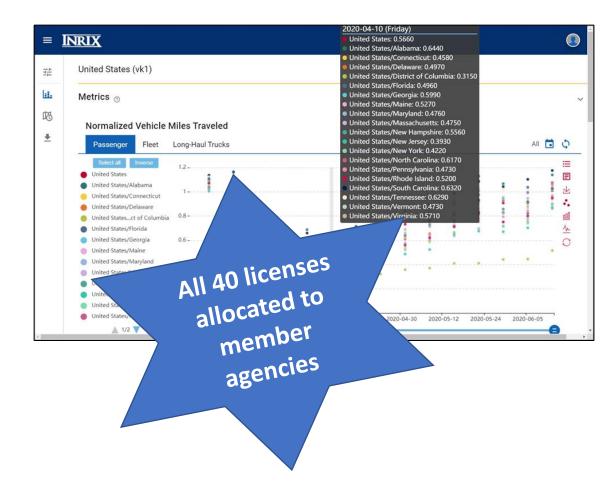
- ☐ Multiple Users can be appended to the same DUA
- ☐ Undergoing review of current consultant DUA's
- ☐ Automating submission process (like Ops Academy)
- ☐ Updated Quick Start sheet with DUA Instructions in process

DUA Information		DUA Holder Information			
			DCA Holder Information		
Date rec'd signed DUA	Expires	Notes	Organization Name	Last Name	First Name
Consultants					
3/30/2020	6/30/2020		ICF Incorporated, L.L.C. (Baltimore Metro Council)	Dhuri	Sunil
11/27/2019			AMT (DDOT)	Narooienezhad	Shiva
7/7/2020	2/10/2021		Four Square Intergrated ITP (DDOT)	Roberts	Jamie
8/8/2019	3/1/2021		Kimley Horn Associate (DDOT)	Tong	Jiaxin
3/17/2016	12/31/2020		University of DC (DDOT)	Yu	Yao
12/2/2019	12/31/2021		Carnegie Mellon University (DOE)	Clark	Patty
9/26/2017		DUA updated	AECOM (GDOT)	Dwayne	Tedder
7/22/2020	7/31/2024		AECOM_Global Users (GDOT)	Ale Mohammadi	Mojtaba
7/22/2020	7/31/2024		secondary contact	Alexander	Ту
7/22/2020	7/31/2024		secondary contact	Anderson	James
7/22/2020	7/31/2024		secondary contact	Andrews	William
7/22/2020	7/31/2024		secondary contact	Babihuga	Donna
7/22/2020	7/31/2024		secondary contact	Berg	William
1722/2020	775272024		Secondary contact	Dong	TVIIII GIIII
7/22/2020	7/31/2024		secondary contact	Brachmi	Rhiz
7/22/2020	7/31/2024		secondary contact	Krishnan	Anagha
7/22/2020	7/31/2024		secondary contact	Coleman	Jonathan
7/22/2020	7/31/2024		secondary contact	DeVos	Todd
7/22/2020	7/31/2024		secondary contact	DiSanza	Michael
7/22/2020	7/31/2024		secondary contact	Dorminey	Madison
7/22/2020	7/31/2024		secondary contact	Evans	Wade
7/22/2020	7/31/2024		secondary contact	Fox	Kiesha
7/22/2020	7/31/2024		secondary contact	Ganesan	Sharma
7/22/2020	7/31/2024		secondary contact	Graham	Mia
7/22/2020	7/31/2024		secondary contact	Green	Matthew
7/22/2020	7/31/2024		secondary contact	Huffman	Kyle
7/22/2020	7/31/2024		secondary contact	Hurt	Travis
7/22/2020	7/31/2024		secondary contact	lp .	Spencer
				7	
7/22/2020	7/31/2024		secondary contact	Johnson	Catherine
7/22/2020	7/31/2024		secondary contact	Joseph	Stefon
7/22/2020	7/31/2024		secondary contact	Lee	Warren
7/22/2020	7/31/2024		secondary contact	Legg	Jeff
7/22/2020	7/31/2024		secondary contact	Liguori	Cole
7/22/2020	7/31/2024		secondary contact	Марр	Jamie
7/22/2020	7/31/2024		secondary contact	Martin	
					Dwight
7/22/2020	7/31/2024		secondary contact	Mohler	Scott
7/22/2020	7/31/2024		secondary contact	Montigny	Pete
7/22/2020	7/31/2024		secondary contact	Murata	Kai
7/22/2020	7/31/2024		secondary contact	Nastasi	Sarah
7/22/2020	7/31/2024		secondary contact	Pike	lan
7/22/2020	7/31/2024		secondary contact	Price	Geoffrey
7/22/2020	7/31/2024		secondary contact	Queen	Carly



Volume Trend Data Licenses

- Procured by the Coalition for Member States
- Free access to INRIX Trip Trends
 Dashboard with indices for VMT,
 Trip Counts, Trip Durations
- User training was scheduled
- Seasonality adjustments will be implemented in July





VPPII RFP △
 VPPII Amendment 2 △
 VPPII Amendment 3 △
 State Coverage Table △

August 19, 2020

New Website- www.tetcoalition.org

Contract Docs & Coverage Info

Data Validation

Reference Docs and Presentations

Contract Documents & Coverage Information: includes contracting documents and data use agreement template.

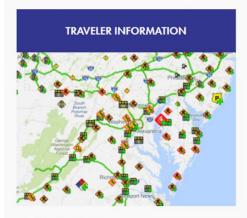
VPPII (from 7/2014 to present)

• VPP DUA – Primary 4

• VPP DUA – Secondary 4



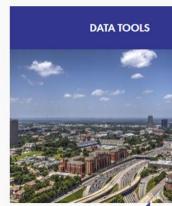
TRANSPORTATION SYSTEMS MANAGEMENT AND OPERATIONS



- I-95 Live Traffic
- 511 Traveler Information
- Traveler Information Apps
- Commercial Vehicle Operations Online Portal



- Events
- Webinars
- Operations Academy



- VPP Marketplace
- RITIS & PDA Suite



CITE Training

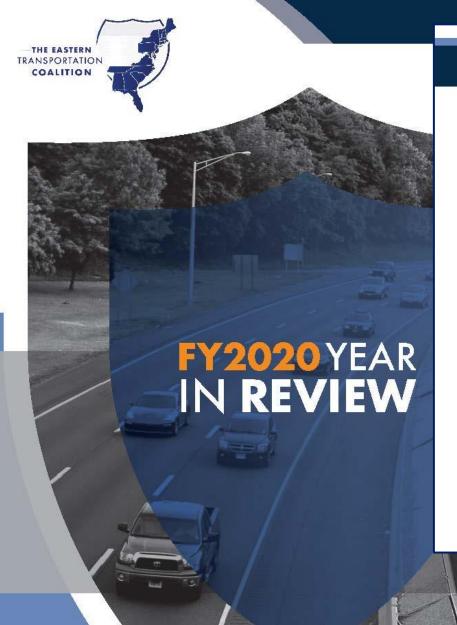


For more information contact Mai Quynh Le (mqle@i95coalition.org)



CITE SELF-STUDY COURSES - Coalition Subsidized for Members

- •Data Archiving and Analytics for Planning, Operations, and Safety
- Database Management System Essentials
- Deploying ITS: Strategic Planning and Implementation
- Fundamentals of Transportation Management
- Improving Highway Safety with ITS
- ITS Awareness
- National ITS Architecture Fundamentals
- Network Design and Deployment Considerations for TSMO Managers and Professionals
- •OPM01: Introduction to Operations Performance Measures and Management
- •OPM02: Nuts and Bolts of Operations Performance Measurement
- OPM03: Operations Performance Management
- Pavement Marking
- Project Management for High Tech Systems
- Systems Engineering for Advanced Transportation Projects
- Systems Engineering Fundamentals
- Telecommunications and Networking Fundamentals
- Traffic Signal Operations
- Transportation Cyber Security
- Travel Time: Vehicle Probe Data





COALITION WORKING GROUPS

The Coalition manages Working Groups to focus on topic areas of interest.

CONNECTED & AUTOMATED VEHICLE REGIONAL WORKING GROUPS

The Coalition's CAV program is structured around three working groups: New England, Mid-Allantic, and Southeast regions. These smaller groups meet quarterly (in-person once per year) to share updates, focus on mutual areas of interest, and pursue opportunities at a regional scale. For example, the New England CAV group was recently awarded funding through the New England Transportation Consortium to conduct a connected and automated vehicle legal and regulatory assessment.







HIGHWAY OPERATIONS GROUPS

Highway Operations Group (HOG) forums are conducted in five regional areas (New England, Tri-State, Delaware Valley, Potomac, and Southern). Member agencies meet in person to discuss challenges and identify operational strategies that extend within a state, across jurisdictional boundaries, and often across state lines. HOGs are unique in that they bring together policy, planning, operations, maintenance, and first responder personnel for discussions on how to improve TSMO strategies and program.



8

Find the report on the website www.tetcoalition.org



ALITION WORKING GROUPS

LING VIOLATION
ORCEMENT AND RECIPROCITY
ER) WORKING GROUP



pers of the TVER Working Group include tolling ritles, state DOTs, and DMVs from throughout the tion region. Initially convened to advance tolling ocity agreements among Corridor states to support of the state tolls, the focus of the group nee expanded with the mission of helping member cies increase revenue by improving toll collection ads. The group is working toward this goal with four strategies: exploring opportunities for regional smart payment options, collaborating with DMVs and AAMVA, advancing violation enforcement reciprocity agreements, and increasing awareness of toll payment options and reduction of toll violations for motor carriers. The TVER Working Group convenes 2-3 times per year to focus on relevant topics. During FY2020, the workshops concentrated on addressing heavy toll violators, and toll collection methods to make it easier for customers to pay. For each event a white paper was prepared to provide context and background, and member agencies shared insights, lessons learned, and identified opportunities for progress through collaboration.

TRUCK PARKING WORKING GROUP

The Truck Parking working group is comprised of Coalition agency members including from planning, operations and maintenance who are working on various activities related to addressing truck parking needs. Coalition hosted webinars/conference calls are held on a periodic basis, combining presentations on truck parking activities with "roundtable" information exchange among states to provide updates on upcoming or current truck parking studies, experiences with truck parking information technologies or capacity projects underway as well as bringing members insight into new approaches in the public and private sector to address capacity needs.



YEAR IN REVIEW 9

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Questions •



Thank You!

VPP RFP Overview Meeting starts at 3 pm − 1 hour overview session

- ☐ Products
- ☐ Validation Program
- ☐ Data Use and Sharing
- ☐ RFP Timeline