



### What is Available

- **Monitoring Site**
- **Data Feed**  
(real-time access for integration into applications)
- **Data Archive**  
(1-min archive)
- **VPP Suite (Performance Measures) and Archive**  
(real-time & historical tools for operations and planning)



### How it is Used

- **Operations Center**  
(Real-Time Traffic Monitoring)
- **TMC Software Integration**
- **Cross-border Incident & Traffic Monitoring**
- **Travel Times on**
  - Signs
  - Websites
  - 511 IVR
  - Traffic Tile Overlay on 511 Site

# Today's Agenda

- VENDOR PRODUCT UPDATE**
- DATA VALIDATION PROGRAM UPDATE**
- DATASHARING**
- CONTRACTING SCHEDULE FY2020**
- VPP III RFP KICK OFF**

## Marketing

### ✓ Vendor Product Updates – Ancillary Products



- HELP (Highway Emergency Link Platform)*
- Trip Reports*
- XD Segment Traffic Archive Data Downloader*
- National Performance Management Research Data Set (NPMRDS) Extensions*

- HERE Speed Limits on Roadways*
- Split Lane Traffic Reporting at Junctions:*
- HERE HOV Non-Barrier Separated Lanes*
- Hazard Warnings - Directly from Connected Vehicle Sensor Data*
- Automated Road Closure Detection:*
- HERE Reversible Express Lanes:*



Ancillary products can be added to existing long term contracts as well as annual contracts



- Jam Ahead Warnings*
- Winter – related Delays, Dynamic Speed Limit, Roadwork Messaging*
- Jam Tendency Prediction*
- Turn Dependent Jams*
- HOV Land Speed*
- Customized Traffic KPI Dashboard*

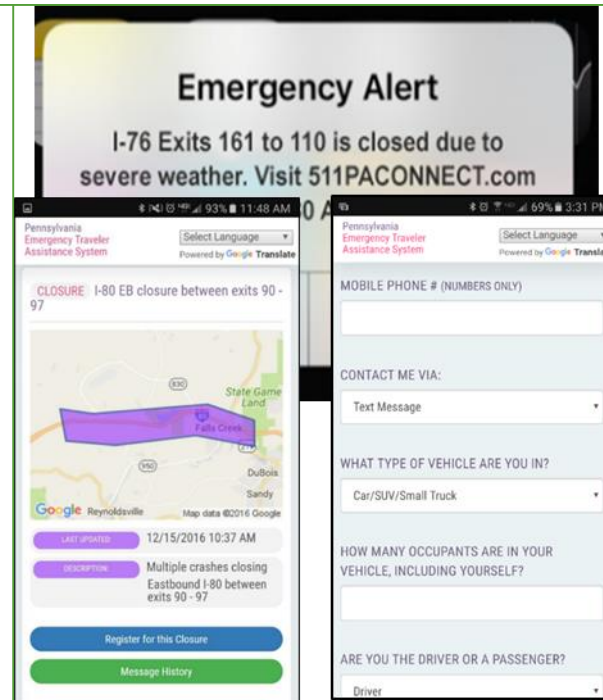
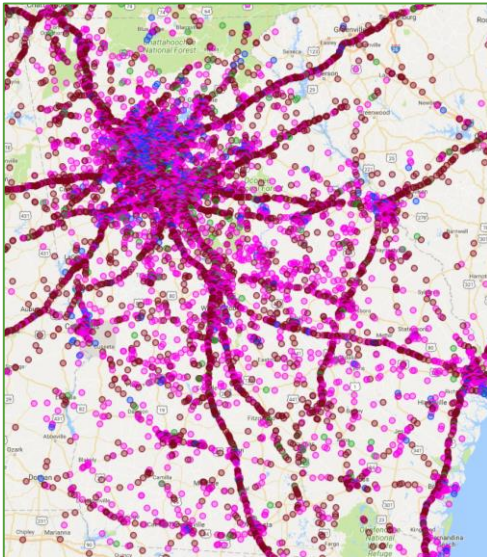
# Marketing

## ✓ New Procurements



### HELP Emergency Communications

#### DVRPC – Trip Reports



#### Tennessee – INRIX & RITIS



PROBE DATA  
ANALYTICS SUITE

A horizontal bar consisting of several colored squares in shades of green, blue, and purple.

Used by PA, NJ, GA  
Newest Addition - Maryland SHA

# VALIDATION

# Technical

## ✓ FY 2020 Validation Update



### New Jersey

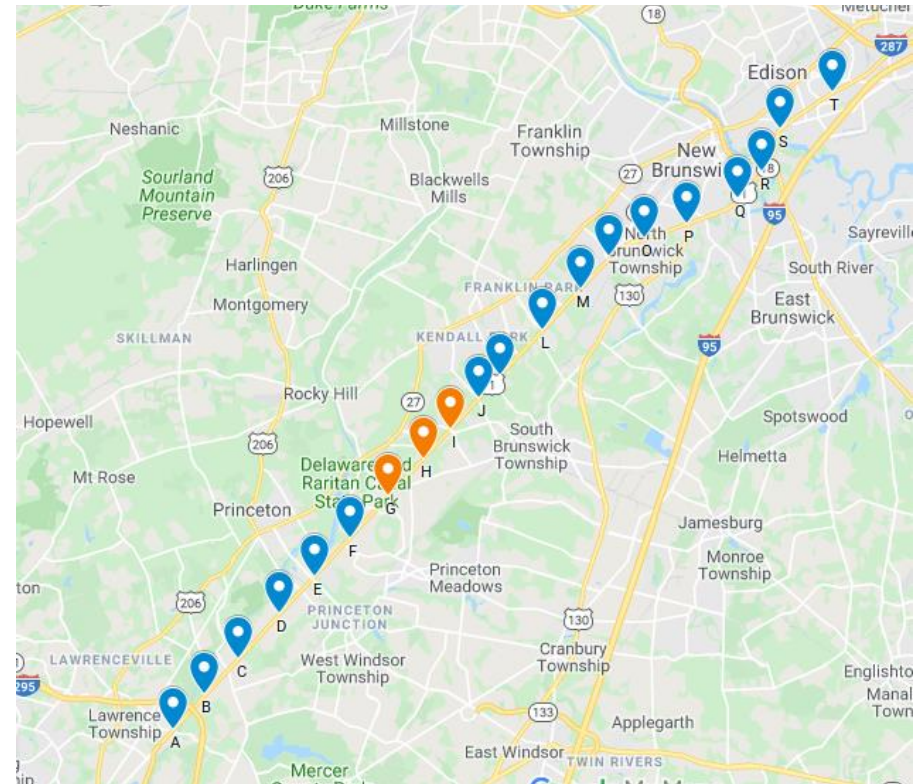
- ✓ Report draft has been submitted
- ✓ Complex traffic flow conditions affected traditional error metrics (added disclaimer)
- ✓ Hard shoulder running did not impact results much

### PA Turnpike

- ✓ Collected reference data in October
- ✓ Currently preparing report

### Massachusetts

- ✓ Freeway deployment planned for December was postponed due to weather
- ✓ New deployment date is January 22



**NJ-15 Sensors (Orange = Hard shoulder running)**

# Technical

## ✓ 3 Types of Validation



### Freeway

- ✓ Emphasis of VPPI
- ✓ Data quality is consistently strong

### Arterial

- ✓ Currently targeting for most recent evaluations
- ✓ Traffic flow is much more complex! (traffic signals, etc.)

### Other

- ✓ Low volume roads
- ✓ HOV lanes, tunnels, other special facilities

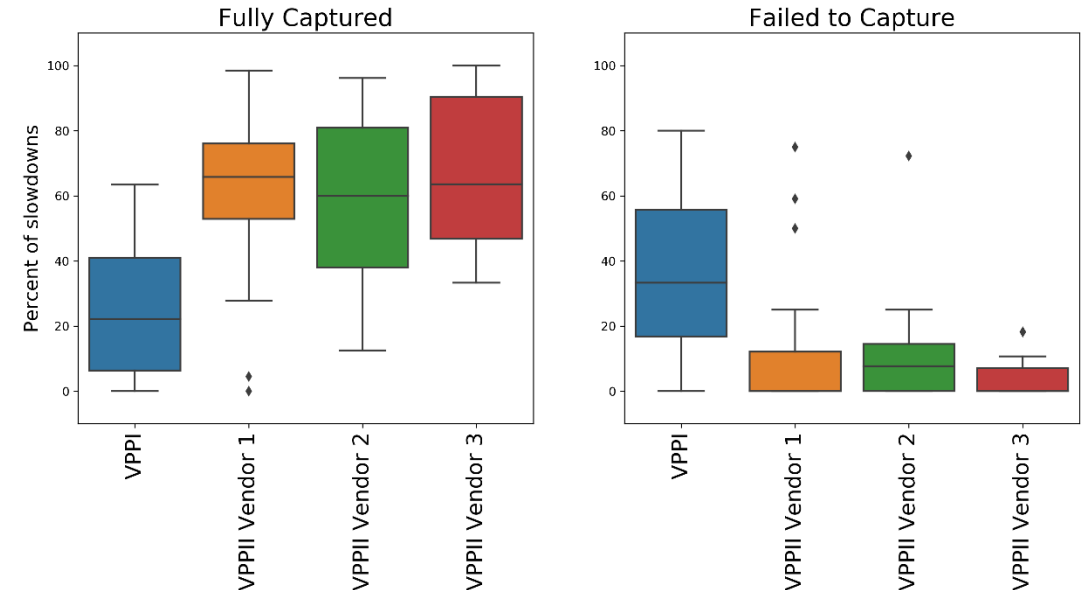


## Technical

### ✓ The Arterial Report: Key Findings



- ✓ All 3 vendors are performing much better on arterials now (VPPII) than in the initial report (VPPI)
- ✓ Within observed traffic conditions (> 20k AADT, 0-3 traffic signals per mile), data quality is:
  - ✓ **NOT** strongly tied to road characteristics any more
  - ✓ Suitable for most planning & ops applications



### But ...

- ✓ Complex flow patterns cannot be captured by VPP data (Is this important? Depends on the application)
- ✓ Case studies do not contain low volume scenarios (< 20k AADT), which likely would require a different approach

[https://i95coalition.org/wp-content/uploads/2015/02/I-95-CC-Validation\\_Arterials\\_Report-Sep2019-Final.pdf?x70560](https://i95coalition.org/wp-content/uploads/2015/02/I-95-CC-Validation_Arterials_Report-Sep2019-Final.pdf?x70560)

## Technical

# ✓ How to Effectively Evaluate Data on Arterials?



## Traditional Analysis

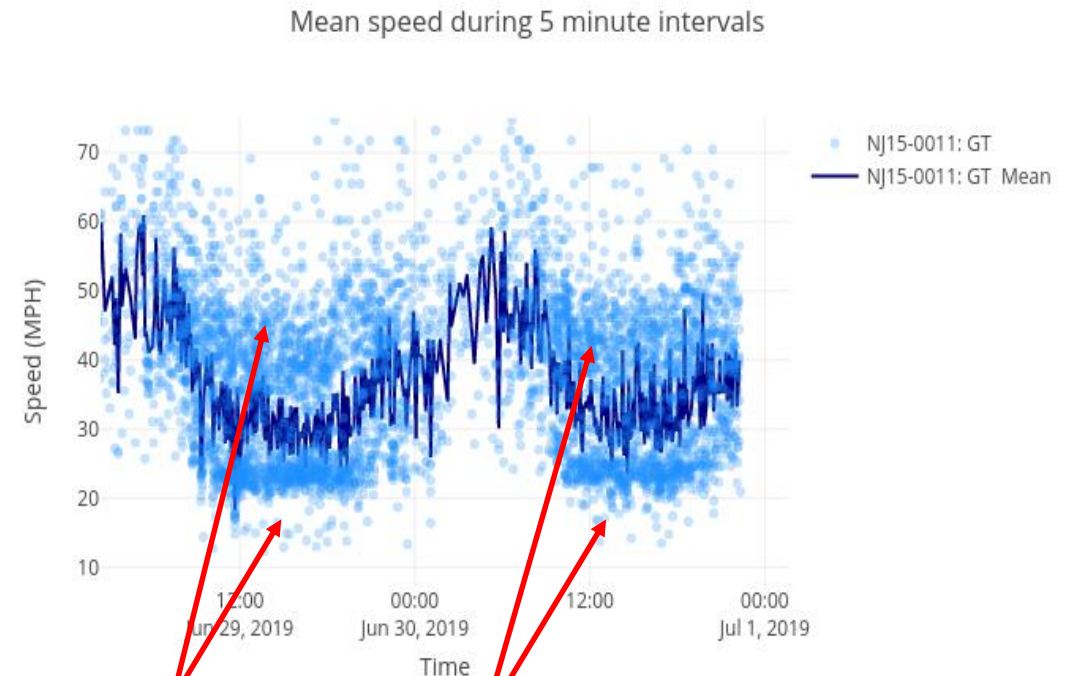
- ✓ Status quo: part of contracts and regular reports
- ✓ Limitations when traffic conditions are complex

## Slowdown Analysis

- ✓ Best way to quantify operational performance on arterials
- ✓ But... manual process → Looking to improve

## Other?

- Context matters! (more nuanced than whether “in spec” )
- How to handle low volume arterials?



*Multiple valid speed modes*



## **Technical**

### **✓ Validation Schedule: Moving to a 2 year plan?**



### **Recommendation:**

- ✓ 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)

### **Benefits:**

- ✓ Makes it more feasible to conduct one-off studies on important topics (e.g., low-volume, HOV, bridges)

**Q: Is there interest in a low-volume study?**

# Technical

## ✓ Report Format



Reports are getting long....

Does all the info need to be in the report?

### Recommendation:

- ✓ Move methodology description to a separate doc on the Coalition site
- ✓ Make reports more like an extended Executive Summary
  - Summarize key findings and interpretations
- ✓ Provide a link to external site that archives graphs, detailed metrics, etc.

### Benefits:

- ✓ Easier to read / interpret
- ✓ More streamlined → quicker to produce

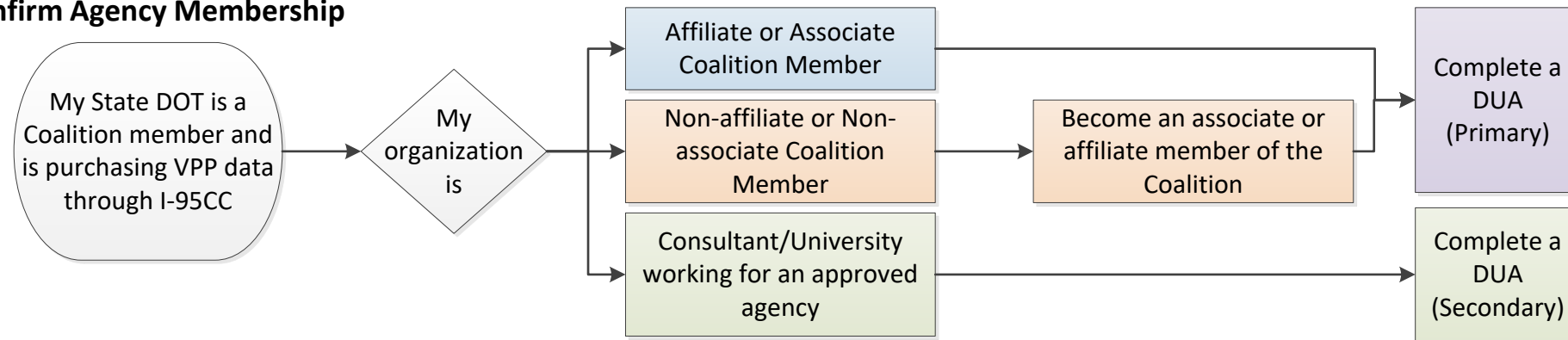
# **DATA SHARING CONTRACTING VPP III**

# Data Use Agreements

## ✓ Process Update



### Step 1 – Confirm Agency Membership



### Step 2 – Completing a Data Use Agreement (DUA)

Please note that State DOTs complete the DUA process only one time.

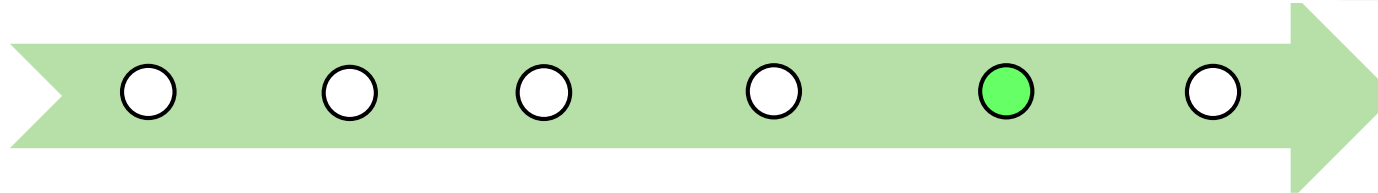
- [Click here if you are a member state, associate or affiliate – Primary DUA](#)
- [Click here if you are a university or sub-contractor/consultant – Secondary DUA](#)
- Completed DUAs for universities and sub-contractor/consultants should be submitted to the VPP State Point of Contact (POC) or to your managing point of contact from your member agency.
- They will review/approve the request and will submit it to Denise Markow for processing.
- It could take up to two weeks for processing of DUAs. The [State POC is available here](#)
- **\*\*For multiple requests from one agency, one DUA agreement can be filled out with an Attachment A filled out for each individual**

*Trip Datasets can be shared*

State Reports of current DUA recipients is in process – due out in two weeks

# FY2021 Contracting

## ✓ Priorities and Timeline



Georgia  
New Jersey  
Rhode Island  
Maryland

1	<b>January</b> (3 wks) Jan 6-31	<b>Or as soon as information is received.</b> Kathy Frankle will reach out to each of you to gather the information she will need to create the updated work plan (data, validation and RITIS modules) - what do you want included in this year's contract?
2	<b>February</b> (1 wk) Feb 3-7	<b>Or earlier</b> Kathy will have the draft MOU/work plan ready to send to you for review and comment. This will include the draft MOU and the Attachment A work plan and any additional documents that may be needed for your state. <b>We are requesting all edits/comments to these documents to be received back to UMD by February 28th</b>
3	<b>March (4 wks)</b> March 2-27	Or as soon as edits are received Kathy Frankle will update the final documents and send to UMD Contracts office (Takeia Bradley) for routing, approval and signature.
4	<b>April – May</b> (6 wks) April 1 – May 15	Or as soon as ready to send UMD Contracts office (Takeia Bradley) will forward to the state for its signature and processing
5	<b>May – June</b> (4 wks) May 15 – June 15	<b>Or as soon as received by the state</b> Kathy Frankle will send to UMD Procurement for the vendor contracts to be activated for each state -
6	<b>July 1, 2020</b>	<b>All annual contracts in place by July 1, 2020.</b>

# VPP RFP Update

- ✓ **Schedule and Process**
- ✓ **Working Group Development**



## Proposed Preliminary Timeline

January 2020	<i>Coalition to announce to members its intent on moving forward with VPP III and to form a steering committee to guide RFP development</i>
Feb-March	<i>Coalition will solicit feedback from vendors and state reps through in person meetings or phone interviews</i>
Mar-May	<i>The Coalition will draft the core of the RFP in the spring summer timeframe</i>
June	<i>The RFP will be submitted to the Steering Committee for review and comment (Focus is on system/data requirements review not contract analysis)</i>
July	<i>An RFI will be issued to all interested vendors – the RFI will contain a copy of the core technical portions of the RFP- for review and question submittal</i>
August	<i>The Coalition will process all information gained from the RFI, conduct stakeholder feedback within Coalition, and externally as needed. Ready the RFP for release Confirm representation on selection committee</i>
Sept-Oct	<i>Issue RFP</i>
Nov –Feb 2021	<i>Evaluation and award of contract</i>
Mar-June 2021	<i>Transition to new VPP III contract (anticipating a period in which both may be in effect during transition) to coincide with the renewal process for existing VPP contracts</i>



## *VPP RFP Update*

- ✓ *Schedule and Process*
- ✓ *Working Group Development*



### **VPP III Probe Data and Ancillary Products**

- Existing Core Data and Expanding Data services
- Travel time and Speed (CORE)\*\*
- Volume estimation (CORE)\*\*
- Ancillary data services such as OD, trajectory data and other tools will be welcomed
- Value-Added products

\*\* Vendors do not necessarily need to provide both speed and volume but VPP III does look to have on contract CORE data services for both

## ***VPP RFP Update***

- ✓ ***Schedule and Process***
- ✓ ***Working Group Development***



### **VPP III Validation Process**

- Focus of travel time/speed validations (less on freeway analysis and more on arterials)
- Creation of a volume validation process
- Option to validate ancillary products (i.e. volume, trip and trajectory data)
- Current travel time and speed validation needs to be streamlined, which entails a different approach to roadway referencing – looking to discuss a standards initiative.

### **VPP III Data Use and Data Sharing**

- DUA to be updated – intent and vision for data sharing will remain unchanged
- Data Licensing terms need to be defined and clearly written (procured by the state or other entity, with the ability to share within the Coalition)
- The intent is to not only include travel time and speed but also to expand to volume estimation and other ancillary products right for data sharing as appropriate.
- Data rights with ancillary products need to be clearly defined if different from overall DUA
- This will include the ability to use data to compare to ground truth devices and other validation studies.

## ***VPP RFP Update***

- ✓ ***Schedule and Process***
- ✓ ***Working Group Development***



## **VPP III Core Template/Timeline (Preliminary/Anticipated)**

- Current VPP expires in 2022 – Coalition goal is to have VPPIII operational by July 1, 2021
- 12 months early- we will terminate VPPII and move to VPPIII as soon as ready

## **VPP III Next Steps**

Step 1: Vendor Meetings at TRB

Step 2: Technical Requirements review

Step 3: Meeting with Procurement

Step 4: Outreach to states to staff the Steering Committee; need commitment from each state to name a representative

# Thank You Questions??

