Vehicle Probe Project

Project Team Status Update
December 5, 2013
Meeting Requests

**All Participants**

- Hold questions until the end of each presentation

- Give your name and agency before asking your question (at least the first time)

- Keep your phone muted until asking a question or speaking (press *6 to mute/unmute individual phone lines)

- Do not place call “on hold” as your hold music may be heard by the group

**Additional Webcast & Audio Information**

- Call **302-331-1646** for difficulties with the web or audio application.
# Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Speaker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Introductions and Welcome</td>
<td>George Schoener</td>
</tr>
<tr>
<td>2 Coalition Activity Update</td>
<td>George Schoener</td>
</tr>
<tr>
<td>3 Contract Issues</td>
<td>Kathy Frankle</td>
</tr>
<tr>
<td>4 INRIX Update</td>
<td>Rick Schuman</td>
</tr>
<tr>
<td>5 Data Validation Effort</td>
<td>Stan Young</td>
</tr>
<tr>
<td>6 National Performance Management Research Data Sets - A First Look at the NPMRDS for Maryland</td>
<td>Stan Young</td>
</tr>
<tr>
<td>7 VPP Suite Tools and Enhancements</td>
<td>Michael Pack</td>
</tr>
<tr>
<td>8 VPP Suite User Group</td>
<td>Karen Jehanian</td>
</tr>
<tr>
<td>9 Pilot Study (NJDOT/NJTPA) to test AASHTO’s PM methodologies</td>
<td>John Allen, NJDOT &amp; Keith Miller, NJTPA</td>
</tr>
<tr>
<td>10 Partners Using Archived Operations Data Group</td>
<td>Zoe Neaderland</td>
</tr>
<tr>
<td>11 Enhanced Performance Measures – State/MPO Outreach</td>
<td>George Schoener</td>
</tr>
<tr>
<td>12 Agency Updates on VPP/VPP Suite</td>
<td>All</td>
</tr>
<tr>
<td>13 Communications Update</td>
<td>All</td>
</tr>
</tbody>
</table>
Coalition Activity Update

George Schoener
I-95 Corridor Coalition

• National Performance Management Research Data Sets (NPMRDS)
• Summary of VPP Projects
NPMRDS

• The Coalition is reviewing the NPMRDS

• Stan Young will provide some detail on a data set from Maryland

• The Coalition is preparing a summary of the various data set attributes for both the NPMRDS and the VPP archived data

• Plan to have this summary to the VPP Team this month
# Summary of VPP Projects

<table>
<thead>
<tr>
<th>#</th>
<th>Project Name</th>
<th>Project Lead</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>MCOM 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Data Archiving, Access and Analysis Tool Expansion</td>
<td>Michael</td>
<td>Only partially related to VPP.</td>
</tr>
<tr>
<td>2</td>
<td>Achieving Quality Travel Time/Speed on Arterials</td>
<td>Stan</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Traffic Message Channel Codes: Impact and Use with the Coalition</td>
<td>Stan</td>
<td>Some info included in VPP re-compete.</td>
</tr>
<tr>
<td>4</td>
<td>Integrating Real-Time Volume Data</td>
<td>Stan</td>
<td>Combining with VPP re-compete.</td>
</tr>
<tr>
<td>5</td>
<td>Travel Time On-Line Course</td>
<td>Kathy</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>EPM - Task 1 - VPP Users Group - Enhancements to VPP Suite</td>
<td>George</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>EPM - Task 2 – Assist agencies in developing a core set of “shared” PMs</td>
<td>George</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>EPM - Task 3 – MPO Outreach</td>
<td>George</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>MCOM 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Performance Monitoring, Coordination, Planning for Map-21</td>
<td>Michael</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Work Zone Monitoring</td>
<td>Michael</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Optimal Traffic Monitoring Strategies with Probe and Sensor Data</td>
<td>Stan</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Real-Time Volume and Origin/Destination Data, Visualization &amp; Analysis</td>
<td>Stan</td>
<td></td>
</tr>
</tbody>
</table>
Contract Issues

Kathy Frankle
University of Maryland

- Funding and Contract Information
- DUA Status
- VPP Re-compete Process
Funding and Contract Info

• Funding the Coalition received for the VPP from MCOM2 has been processed.
• Received pooled fund monies.
• Any contract questions, please contact Kathy
Complete list of agencies and consultants with executed DUAs is available here on the Coalition website:
- updated monthly
- 79 members
- 49 consultants
VPP Re-Bid Process

- First Strawman RFP – May 22nd
- Establish Committee – Initiated July, 8 2013
- Draft RFP, Committee Meeting – July, 25 2013
- RFI to industry, Meeting to discuss – August 2013
- Finalize RFP, last minute details – October 2013

- Issue RFP – November 18, 2013
  - RFP Deadline – January 8, 2013
  - Evaluation and Award/s – January/February 2014
  - Pre-production data – April 2014
  - Go Live – July 2014
INRIX Update

Rick Schuman
INRIX

• Project Statistics
• Map Update Status
• Monitoring Site Survey
Project Statistics

• Availability (99% Contract Requirement)
  – October 2013: 99.95%
  – Year to Date: 99.86%
  – Project to Date: 99.89%

• Users (as of 11/14/13)
  – Monitoring Site – 801 (6 added since last call)
  – Data Feed – 46 (same as last call)
  – Archive requests – 1188 since launch
    • 2 between October 27 and November 14
Data Validation Effort

Stan Young
University of Maryland

• Data Validation Status and Schedule
• Arterial Validation
# Status and Schedule

<table>
<thead>
<tr>
<th>Month and Year</th>
<th>State</th>
<th>Ground Truth Data Collection</th>
<th>Status</th>
<th>Emphasis</th>
<th>Reported</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apr-13</td>
<td>NC</td>
<td>Apr 30 - May 13</td>
<td>Processed</td>
<td>arterials</td>
<td>Presented 8/20 to NC</td>
</tr>
<tr>
<td>May-13</td>
<td>GA</td>
<td>May 20-30</td>
<td>Published</td>
<td>freeway</td>
<td>Presented 9/25 VPP PTM</td>
</tr>
<tr>
<td>Jul-13</td>
<td>MD</td>
<td>July 5 - 15</td>
<td>Processed</td>
<td>arterials</td>
<td></td>
</tr>
<tr>
<td>Sep-13</td>
<td>NJ-1</td>
<td>Sep 10 - 24</td>
<td>Processed</td>
<td>arterials</td>
<td></td>
</tr>
<tr>
<td>Nov-13</td>
<td>NJ-2</td>
<td>Nov 5 - 19</td>
<td>Data Received</td>
<td>arterials</td>
<td></td>
</tr>
<tr>
<td>Dec-13</td>
<td>PA</td>
<td>Dec 3 - 17</td>
<td>In Field</td>
<td>arterials</td>
<td></td>
</tr>
<tr>
<td>Jan-13</td>
<td>VA</td>
<td>Jan 2013</td>
<td></td>
<td>arterials</td>
<td></td>
</tr>
</tbody>
</table>

- Four arterial data collections complete (MD, NJ, and NC)
- Sensors currently in Philadelphia area
- Arterial results to be compiled
- Need additional locations into 2014
## Arterial Data Analysis

<table>
<thead>
<tr>
<th>State</th>
<th>Data Collection</th>
<th>Roadway</th>
<th>Lanes per Direction</th>
<th>Signal Density</th>
<th>VPP Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>MD</td>
<td>Jul-13</td>
<td>MD-355 (Rockville Pike)</td>
<td>3</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>MD</td>
<td></td>
<td>MD-586 (Veirs Mill Road)</td>
<td>3</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td>Septemper 2013</td>
<td>US-1</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td></td>
<td>NJ-42</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td></td>
<td>US-130</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td>Nov-13</td>
<td>NJ-38</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NJ</td>
<td></td>
<td>NJ-73</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td>Dec-13</td>
<td>US-1</td>
<td>3</td>
<td>3 local express</td>
<td></td>
</tr>
<tr>
<td>PA</td>
<td></td>
<td>US-322</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
National Performance Management Research Data Sets
A First Look at the NPMRDS for Maryland

Stan Young
University of Maryland
Available Data

- Interstate highways - since October 2011
- NHS data - since July 2013
- All 50 states and DC
- Data size: 38.4 GB (compressed)
  - For all Freeway data, and 3 months of NHS
- Expecting monthly data: 5 – 6 GB (compressed)
- FTP client required for downloading
Data Characteristics

- Data is delivered in two sets of tables
  - Set 1: travel time information
  - Set 2: Traffic Message Channel (TMC) codes

- Data Elements
  - TMC / Date / Epoch (5 minute interval)
  - Travel Time for ...
    - Passenger vehicles
    - Freight vehicles
    - Combined passenger and freight
Caveats

• “No data modeling, blending or smoothing is applied to ensure that only raw observed values are included in this data set.”

• If no data in 5 min period, no record exists

• Speed must be calculated based on length of TMC

• No other metrics (confidence, historical or freeflow)
Issues with TMC Codes

• NPMRDS combines internal and external TMC, using the label of the internal TMC
• Only one lat/lon coordinate provided
  – Not begin or end, but somewhere within TMC
  – Same lat/lon position for NB and SB
• Length mismatch with VPP TMC codes
  – How standard are TMC codes?
• Shape file provided for mapping, conflation
Future Direction

• Compare NPMRDS, VPP and Bluetooth using validation data
  – Calculate speeds for NPMRDS data
  – Find closest/corresponding VPP TMC segments
  – Contrast reported speeds during congestion events from all three sources
VPP Suite
Tools and Enhancements

Michael Pack
University of Maryland – CATT Lab
VPP Suite User Group

Karen Jehanian
KMJ Consulting

• Recent Webcast
• Follow-up Survey Results
VPP Suite User Group Meeting

- VPP Suite User Group Meeting
  - Held on October 15, 2013 via webcast
  - 25 persons participated 14 representing agencies including RIDOT, NJDOT, PennDOT, VDOT, NCDOT, SCDOT, GDOT, WSDOT, BMC, MWCOG, RRPDC (Richmond), FHWA & AASHTO
  - Presentation posted on Coalition website & link sent to participants/group members
  - Follow up survey of the group members was requested.
VPP Suite User Group Survey

• **Follow up Survey (5 questions)**

  – **Purpose:** To give the agencies an opportunity to note any new enhancements that might be of assistance but not overburden them with completing an entirely new survey.

  – **Use:** As guidance for the Coalition & developers for future planning.

  – **Sent to all VPP Suite User Group members and webcast attendees.**
VPP Suite User Group Survey Findings
(1 of 2)

- **Seven** responses from the following agencies (NJDOT; PennDOT; DVRPC (2); BMC; VDOT; and, NCDOT).

- **Question #1** – All respondents agreed that the projects on the current list are still relevant.

- **Question #2** - *Which Tier 2 or Tier 3 enhancement projects would you like advanced (if funding permits)?*
  - Mile Marker Linking – 6 votes
  - County/Metro Area Selections – 4 votes
  - Bottleneck Treemaps – 3 votes
  - Bottleneck Ranking Date Extensions, Data Quality Visualizations, Saved Queries – 2 votes each
VPP Suite User Group Survey Findings

(2 of 2)

• **Question #3** – *Which of the Tier 2 or Tier 3 enhancement projects are not as important to your agency and/or the I-95 Corridor Coalition?*
  
  – Data Quality Visualizations – 2 votes
  
  – Fuel Consumption and Saved Queries – 2 vote each

• **Question #4** – *What other future tools/enhancements would help your agency and/or I-95 Corridor Coalition?*
  
  – Incorporate all Partner's Shared Measures
  
  – Incorporate MAP-21 Performance Measures
  
  – Ability to create Regional Speed/Travel Time Maps

• **Recommendations**
  
  – Stay on the current path
Pilot Study to test AASHTO’s PM methodologies

John Allen
New Jersey Department of Transportation

Keith Miller
North Jersey Transportation Planning Authority

www.I95Coalition.org
New Jersey Department of Transportation

MAP-21
Moving Ahead for Progress in the 21st Century

New Jersey Pilot Study
Testing Potential MAP-21 System Performance Measures
A Report Out to the VPP Team

December 5, 2013
The SCOPM Task Force recommended Annual Hours of Delay (AHD) and a Reliability Index ($RI_{80}$) as national-level (system) performance measures.

At the NJ MAP-21 Performance Measure Committee kick-off meeting, concerns were raised about the SCOPM’s approach, such as:
- Data availability/data management
- Level of effort
- NHS coverage (800 mi of urban principal arterials recently added to NJ)
- Usability of results in “telling the story” (e.g.; project effectiveness)

It was agreed to do a pilot corridor* “test” using the proposed methodologies to help address these concerns.

A Scope of Work was created and the Study has been initiated.

Preliminary results have been summarized.

The entire effort is being documented.

(* - two corridors, an Interstate and a non-interstate NHS, were subsequently chosen for evaluation)
Pilot Study Test Corridors

Interstate; rural to urban; portion with local & express lanes; toll & free

- Entire length – 67.8 miles
- Divided into 4 sub-corridors:
  - PA border to I-287 (30.8 miles)
  - I-287 to GSP (22.6 miles)
  - GSP to NJ Tpk (5.4 miles)
  - NJ Tpk to Holland Tunnel (9.0 miles)

NHS freeway & arterial; limited access & traffic signals; urban, commercial, semi-rural

- Entire length – 45.3 miles
- Divided into 4 sub-corridors:
  - NJ 138 to GSP (14.3 miles)
  - GSP to US 9 (16.1 miles)
  - US 9 to NJTPK (9.5 miles)
  - NJTPK to Hoes Lane (5.4 miles)

NJDOT and the North Jersey Transportation Planning Authority (NJTPA – a New Jersey MPO) partnered on the Scope of Work details for the Pilot Study, and are currently collaborating during the technical analysis phase of the effort.
Pilot Study Focus Areas

- Ensure measures can be calculated with available data
- Test alternate formulations & thresholds for delay and reliability
- Test aggregation methods
- Get a sense of the range of values, and what the values are telling us
- Research data automation methods
- Develop a Summary Report, with particular emphasis on the procedures, results, “lessons learned” and recommendations
Annual Hours of Delay (AHD) PRELIMINARY RESULTS

- Person-Hours of Delay/mile
  - Hourly Person Volume x Travel Time above threshold
  - Person Volume = Vehicle Volume x AVO_{Subcorr} + Bus Passengers
  - Over all days

- Varying Threshold Travel Time Creates Different AHD Results
  - Free-flow travel time
  - Maximum “throughput” travel time (85% of posted speed)
  - Additional thresholds not shown
    - Yearly median
    - Day/Hour median
    - “Acceptable” travel time

December 5, 2013
**Annual Hours of Delay (AHD) PRELIMINARY RESULTS**

- **Varying Threshold Travel Time…**
  - Free-flow travel time
  - Median travel time (over entire year)
  - Median travel time (for each day of week and hour of day)
  - Maximum “throughput” (at 85% posted speed)
  - At “acceptable” speeds (based on area type and time of day)

  …has resulted in different outcomes

- Each Threshold option has unique policy implications

<table>
<thead>
<tr>
<th>Sub-corridor</th>
<th>Miles (Both Dir.)</th>
<th>Free-flow</th>
<th>Yearly Median</th>
<th>Day/Hr Median</th>
<th>Max “Throughput”</th>
<th>“Accept” Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>18A</td>
<td>17.6</td>
<td>2,270</td>
<td>1,040</td>
<td>201</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>18B</td>
<td>32.7</td>
<td>187</td>
<td>162</td>
<td>136</td>
<td>67</td>
<td>94</td>
</tr>
<tr>
<td>18C</td>
<td>17.9</td>
<td>55,600</td>
<td>36,300</td>
<td>6,720</td>
<td>30,700</td>
<td>21,400</td>
</tr>
<tr>
<td>18D</td>
<td>8.2</td>
<td>72,200</td>
<td>64,100</td>
<td>12,900</td>
<td>47,700</td>
<td>34,700</td>
</tr>
<tr>
<td>78A</td>
<td>61.4</td>
<td>8,430</td>
<td>8,250</td>
<td>5,820</td>
<td>2,250</td>
<td>5,540</td>
</tr>
<tr>
<td>78B</td>
<td>54.6</td>
<td>7,420</td>
<td>6,960</td>
<td>5,550</td>
<td>2,570</td>
<td>784</td>
</tr>
<tr>
<td>78C</td>
<td>21.4</td>
<td>48,100</td>
<td>30,300</td>
<td>23,000</td>
<td>33,300</td>
<td>2,650</td>
</tr>
<tr>
<td>78D</td>
<td>18.2</td>
<td>124,000</td>
<td>94,100</td>
<td>26,900</td>
<td>104,000</td>
<td>54,400</td>
</tr>
</tbody>
</table>
Annual Hours of Delay (AHD) PRELIMINARY RESULTS

- Using all hourly data instead of an hourly data for a calculated “average week” increases the amount of delay
  - Comparing average to threshold is different than comparing individual values to threshold
  - 2012 was a leap year and thus had 366 days vs. 52x7 = 364 days
  - Calculation does take a bit longer
  - Makes comparisons across years somewhat tricky (leap years, “extra” days fall on different days of the week)

<table>
<thead>
<tr>
<th>Sub-corridor</th>
<th>Miles (Both Dir.)</th>
<th>Calculation Variations (free-flow threshold)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average Week</td>
</tr>
<tr>
<td>18A</td>
<td>17.6</td>
<td>2,270</td>
</tr>
<tr>
<td>18B</td>
<td>32.7</td>
<td>187</td>
</tr>
<tr>
<td>18C</td>
<td>17.9</td>
<td>55,600</td>
</tr>
<tr>
<td>18D</td>
<td>8.2</td>
<td>72,200</td>
</tr>
<tr>
<td>78A</td>
<td>61.4</td>
<td>8,430</td>
</tr>
<tr>
<td>78B</td>
<td>54.6</td>
<td>7,420</td>
</tr>
<tr>
<td>78C</td>
<td>21.4</td>
<td>48,100</td>
</tr>
<tr>
<td>78D</td>
<td>18.2</td>
<td>124,000</td>
</tr>
</tbody>
</table>
Reliability Index ($RI_{80}$) PRELIMINARY RESULTS

- Used AASHTO methodology
  - (Maximum 5-minute $TT_{80}$) Threshold $TT$
  - Over all days

- Varying Threshold Travel Time Creates Different $RI_{80}$ Results
  - Free-flow travel time
  - Maximum “throughput” travel time (85% of posted speed)

Highly variable indices in this segment

Legend
- $RI_{80}$ (Freeflow Threshold)
  - 0.956 - 1.05
  - 1.05 - 1.50
  - 1.50 - 2.50
  - 2.50 - 7.53

Legend
- $RI_{80}$ (Maximum Thruput)
  - 0.81 - 1.05
  - 1.05 - 1.50
  - 1.50 - 2.50
  - 2.50 - 8.13

December 5, 2013
Reliability Index ($RI_{80}$) PRELIMINARY RESULTS

Max $TT_{80} = 4.19$ min (7:50AM)
Free-flow $TT = 0.56$ min
Annual Median $TT = 0.59$ min
$RI_{80} = 7.1$ or 7.5

Maximum unreliability is not at the same time as maximum travel time
Reliability Index (Max TT80/TT50) PRELIMINARY RESULTS

Legend
Max TT80/TT50
1.03 - 1.33
1.33 - 1.75
1.75 - 2.50
2.50 - 4.82

Draft – Subject to Change

December 5, 2013
Challenges/Concerns/Considerations

- Huge volumes of data
- Manual conflation of TMCs (for volumes) tedious and time-consuming
  - Hopefully a one-time process
- Missing hourly volumes by day of week, especially weekends
  - Currently assuming average weekday hourly volumes apply to all 7 days
- For NJ, lacking traffic volume data in NJCMS for 128 miles of the enhanced NHS (need to find out coverage of INRIX and HERE (Nokia/NAVTEQ data))
- Adjusting average vehicle occupancy with transit ridership is problematic
  - Tedious process to use GTFS tables to get number of NJ TRANSIT buses on each TMC during each hour for weekday and weekends
  - Applying typical peak/off-peak loading factors to get number of passengers
  - Missing private and university bus data
- Determining how to “aggregate up” TMCs for “telling the story”, particularly for reliability
Potential Next Steps

- Look at multiple years to see “useful” changes in PMs occur (time/scale)
- Test corridors/years where there have been recently completed projects (“telling the story” re: project effectiveness)
- Have other States and MPOs run through similar tests (varying levels of resources, tools, etc.)
- Consider more critical thinking re: “agency-determined threshold travel times”
- Develop analytical tools to automate the processes and create summary output (tables, graphs, visualizations)
Partners Using Archived Operations Data Group

Zoe Neaderland
Delaware Valley Regional Planning Commission (DVRPC)
Use of Elevator Speech Brochure Template
Partners Using Operations Data for Planning

December 5, 2013
• Partners agreed on a few shared measures

• DVRPC, with guidance, used them in an elevator speech brochure and distributed a template for others to use

• At least three agencies are using it...are others?
  – South Jersey Transportation Planning Organization (SJTPO)
  – Baltimore Metropolitan Council (BMC)
  – New Jersey Department of Transportation (NJDOT)
What Can We Do? DRAFT

Decision-Makers
We can no longer just build our way out of congestion. Transportation investments must be spent on maintaining the existing system and improving operations to reduce congestion. When possible, find dedicated, additional funding for transportation.

Planners, Engineers, and Other Partners
• Consider operations strategies, such as Safety Service Patrol, incident management task forces, traffic signal coordination, and intersection improvements.
• Incorporate Transportation Demand Management (TDM), for example, by making it more desirable to live near jobs and more convenient to walk, bicycle, and take transit; we need to address demand as well as supply of transportation.
• In addition to reducing congestion, review other ways to help freight move reliably.

All of Us
• Check conditions before departing to consider mode (such as taking transit), route, and least-congested time to travel if you have flexibility.
• Don’t cause crashes—drive safely.
• Learn about and participate in transportation planning and funding decisions.

Trip Planning
on the Philadelphia-Atlantic City Corridor
DRAFT

Inside:
New tools and what you can do to reduce congestion

Managing congestion is hard in the 21st century—insufficient funding and ever-increasing traffic pose a challenge to providing an efficient transportation system for all. Fortunately, we now have a new generation of analytic tools, enhanced strategies, and better cooperation among organizations.

What’s the best route to take?

How long will the trip be if there’s traffic?

Everyday Resources
NJ 511 - www.511nj.org
Hang up! Just drive! - www.njsaferoads.com
NJ Pedestrian Safety - www.nj.gov/lps/hta/pedestrian.html

SOUTH JERSEY TRANSPORTATION PLANNING ORGANIZATION
sjtpo.org
Approaching Atlantic City, travelling eastbound:

- **Rt. 30**
  - Free-flow speed: *45 mph*
  - Congested speed: *37 mph*
  - Delay for one-hour 14 min

- **AC Expy**
  - Free-flow speed: *73 mph*
  - Congested speed: *65 mph*
  - Delay for one-hour 9 min

- **Rt. 40/322**
  - Free-flow speed: *38 mph*
  - Congested speed: *28 mph*
  - Delay for one-hour 22 min

US 40/322 is the most congested route to Atlantic City. Consider alternative routes, such as the Atlantic City Expressway.

Source: I-95 Corridor Coalition Vehicle Probe Project, i95coalition.org

Data from summer of 2013. Free-flow speed is defined as the 85th percentile speed, congested speed is the 15th percentile speed.
Updates & Contacts

- **SJTPO:** Provide comments to David Heller: dheller@sjtpo.org

- **BMC:** Goal is to have version ready in March; work on the brochure may lead to a working group for the corridor. Contact Ed Stylc – estylc@baltometro.org

- **NJDOT:** Getting underway. Contact John Allen - John.Allen@dot.state.nj.us

- **DVRPC:** Still distributing; goal is for multiple agencies to have used measures so we can pool knowledge to provide helpful comments when MAP-21 proposed rule-making comes out on these measures. Contact Zoe Neaderland – zneaderland@dvrpc.org
Enhanced Performance Measures
– State/MPO Outreach

Michael Pack
University of Maryland – CATT Lab
State/MPO Outreach Status

• Scheduled State/MPO Outreach Meetings
  – Connecticut – August 19, 2013
  – Rhode Island – September 19, 2013
  – South Carolina – October 2, 2013
  – Massachusetts – November 14, 2013

• Planning for MPO Outreach Meetings
  – Richmond MPO & Virginia DOT
Agency Updates on VPP and VPP Suite use

All Agencies are welcome to participate

Karen Jehanian, facilitator
Communications Update

Karen Jehanian
KMJ Consulting
## Information Provided to Project Team

<table>
<thead>
<tr>
<th>DOCUMENT</th>
<th>DATE POSTED</th>
<th>LOCATION ON WEBSITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Validation Report – Georgia – August 2013</td>
<td>October 10, 2013</td>
<td>Vehicle Probe “Feature” page and VPP “Data Validation” tab</td>
</tr>
<tr>
<td>September 25, 2013 VPP Team Webcast – Presentation and Meeting Minutes</td>
<td>October 10, 2013</td>
<td>Vehicle Probe “Feature” page and VPP “Project Presentations” tab</td>
</tr>
<tr>
<td>November 14, 2013 TISPTC Meeting – Agenda, Presentation, Agency Updates, and Meeting Participants</td>
<td>November 22, 2013</td>
<td>Travel Info PTC page (far right column under “Latest Meeting Minutes”)</td>
</tr>
<tr>
<td>List of Agencies with Executed Data Use Agreements</td>
<td>November 26, 2013</td>
<td>Vehicle Probe “Feature” page and VPP “Contract Documents” tab</td>
</tr>
</tbody>
</table>

**Note:** Emails were sent to VPP Team members when these documents were posted.
# Upcoming Coalition & VPP Meetings

<table>
<thead>
<tr>
<th>Meeting/Webcast</th>
<th>Proposed Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TISPTC webcast on Travel Information Sponsorship</td>
<td>January 2014 (tentative)</td>
</tr>
<tr>
<td>TISPTC webcast to review Coalition Work Plan process</td>
<td>February 2014 (tentative)</td>
</tr>
<tr>
<td>VPP Team Webcast</td>
<td>February 2014 (tentative)</td>
</tr>
<tr>
<td>TISPTC Meeting/Webcast (DVRPC, Phila, PA)</td>
<td>Late March/Early April 2014 (tentative)</td>
</tr>
</tbody>
</table>
Contact Information

George Schoener, I-95 Corridor Coalition
Work: 703-389-9281
Email: geschoener@comcast.net

Karen Jehanian, KMJ Consulting, Inc.
Work: 610-228-0211
Email: kjehanian@kmjinc.com
Thank You