

Item #5
MOITS, 12/14/2010

Congestion Management Process (CMP) Update

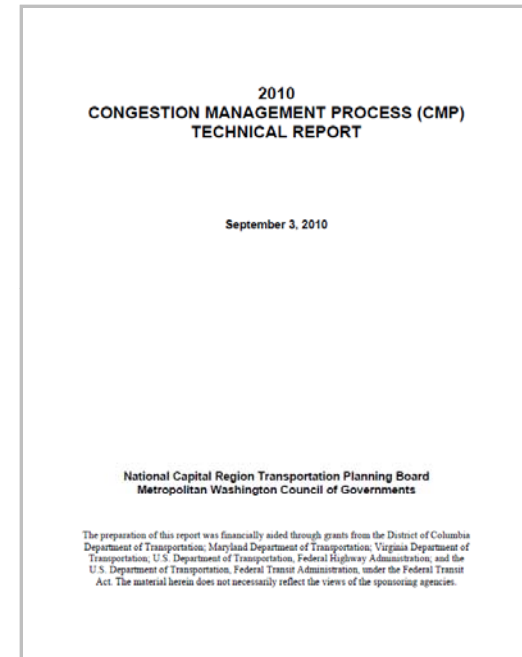
**MOITS Policy Task Force and Technical Subcommittee Meeting
December 14, 2010**

Wenjing Pu

National Capital Region Transportation Planning Board (TPB)
Metropolitan Washington Council of Governments (COG)

What We Have Done since May

- 2010 Congestion Management Process (CMP) Technical Report
 - Finalized at the September 3, 2010 TPB Technical Committee meeting
 - Available online www.mwcog.org/cmp
- Coordination on INRIX data and congestion performance measure analyses
 - Agencies: MWCOG, BMC, SHA, UMD, DVRPC
 - June 15 meeting at MDSHA
 - November 3 meeting at MWCOG



What We Have Done since May (Cont.)

- Outreach presentations
 - June 30, I-95 Vehicle Probe Project (VPP) team webcast
 - Slides available on the I-95 VPP website (see “Highlights” Tab and look for June 30 under section “Project Presentations”)
 - December 2, I-95 Coalition archived data webcast: “The Use of Archive Data for Planning & Operations Performance Measures”
 - Slides available online
<http://i95coalition.org/i95/Committees/TravelInformationServices/tabid/73/Default.aspx> (see “Webcast on Use of Archived Data” Tab)
 - National (Shawn Turner), Regional (Michael Pack) and MPO (Andrew Meese) perspectives

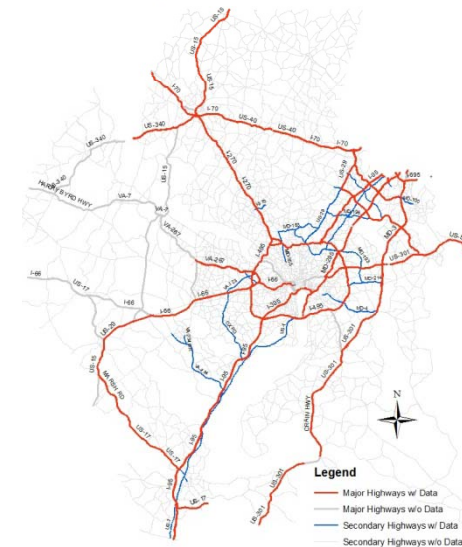


What We Have Done since May (Cont.)

- Provided INRIX speed distributions for air quality analysis (MOVES)
 - After examining the data, COG/TPB opted to stay with the national default speed distributions for now, but may revisit this decision in the future
- Provided INRIX data for TPB travel demand mode (v2.3) validation
 - Validation in progress

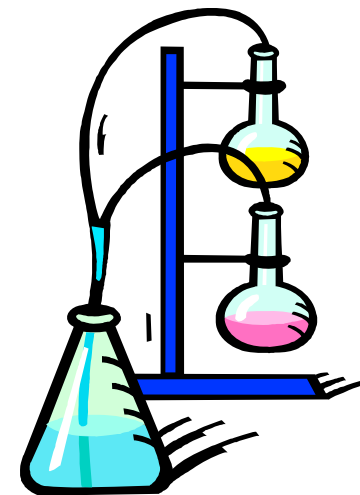


Data Coverage in TPB Model Area as of November 2010



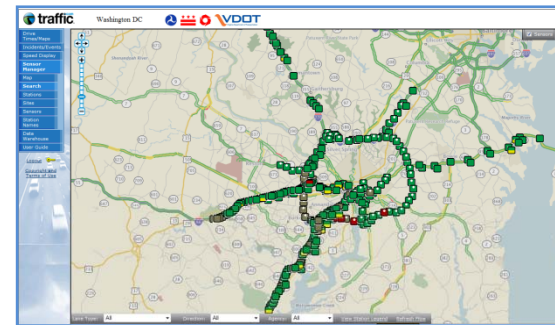
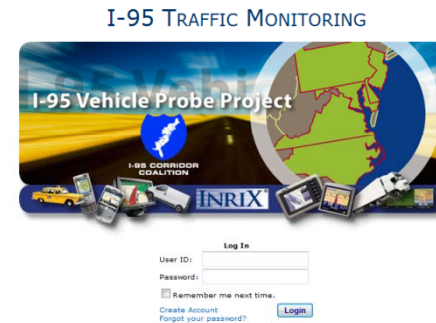
What We Have Done since May (Cont.)

- Summarized our experience in applying INRIX speed data in the TPB's planning processes
 - AMPO's Metros Quarterly newsletter
 - TRB
- Researched on the analytic relationships between travel time reliability measures
 - Coefficient of variation (CV) is a good proxy for a number of reliability measures
 - Median-based buffer index (instead of mean-based) should be used if travel time distribution is heavily skewed



Ongoing Efforts

- Developing more frequently updated congestion report
 - Continued INRIX data downloading and processing
 - Volume data provided by the FWHA Transportation Technology Innovation and Demonstration (TTID) Program
 - Incident data provided by RITIS and TTID, and MATOC actions
 - Transit data provided by “Metro Scorecard”
 - Appropriate format



Ongoing Efforts (Cont.)

- Solving GIS Issues

- Issues

- Some undivided highways are drawn as a single line in GIS, but need two lines for displaying bi-directional performance measures
 - End points of NAVTEQ GIS links may not exactly match the corresponding TMC(s) end points, and will need to be adjusted
 - GIS representation (for displaying bi-directional performance measures) necessitated extensive customization and adjustments

- Solution

- Creating a TMC layer (GIS shape file + attribute table)



Ongoing Efforts (Cont.)

- Comparing INRIX data vs. TPB arterial floating car survey data
 - Comparable routes: 2 in FY 2009, 2 in FY 2010 and 3 in FY 2011
 - INRIX arterial data NOT validated by a third party
- Potential supplementary data acquisition provided by FY 2011 UPWP amendment
 - Pending TPB approval on Dec.15



Future Tasks

- Conduct corridor level travel time reliability analysis
- Compile information for 2012 CMP Technical Report



Congestion Impacts of the November 4 & 5, 2009 Montgomery County, Maryland Traffic Signal Malfunction

