

MOITS-Related Highlights from the 2013 TRB Annual Meeting

MOITS Policy Task Force and Technical Subcommittee Meeting
February 12, 2013

National Capital Regional Transportation Planning Board (TPB)
Metropolitan Washington Council of Governments (MWCOG)

Staff Participation at the TRB Meeting

- Jan. 23, 2013 memo to the TPB “TPB Staff Participation at the 2013 Transportation Research Board Annual Meeting”
- Attended sessions, workshops, and meetings
- Papers
 - Pu, W. and Meese A. *Using New Data Sources to Meet MAP-21 Requirements for Performance-Based Planning: National Capital Region’s Experience in Monitoring Congestion and Reliability*
 - Pu, W. *Standardized Data Processing: Where We Need It in Mining Private-Sector Probe-Based Traffic Data for Highway Performance Measurement*
 - Morrow, E., Park, J. et al., *Linking Transportation and Land Use Goals Through Scenario Planning: Case Study of Metropolitan Washington Region*

- TRB Regional Transportation Systems Management and Operations Committee and Subcommittees
 - Andrew Meese and Wenjing Pu

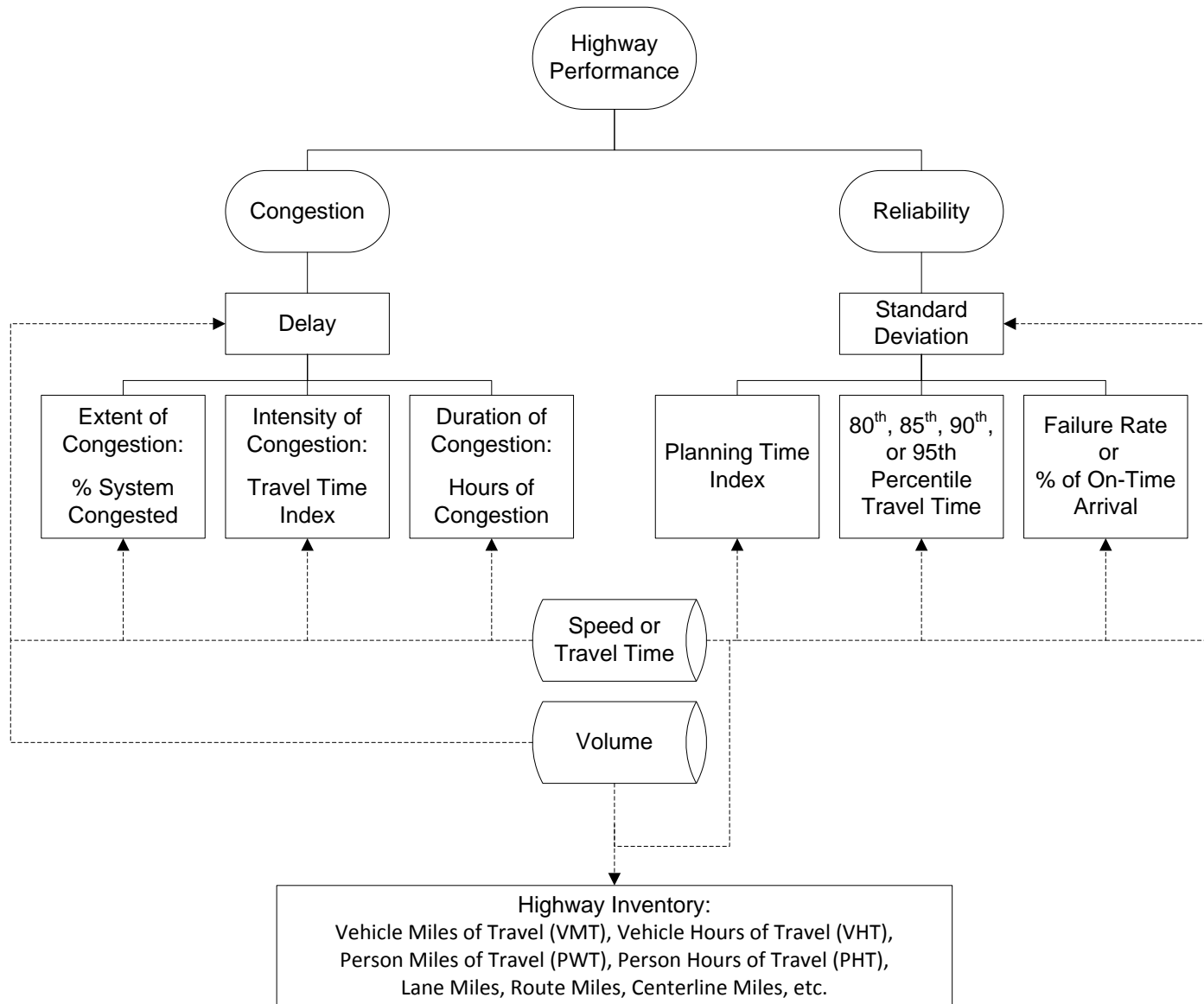
Paper #1

- *Using New Data Sources to Meet MAP-21 Requirements for Performance-Based Planning: National Capital Region's Experience in Monitoring Congestion and Reliability*
– *Wenjing Pu and Andrew Meese*

Objectives of this Paper

- Develop a framework to facilitate the selection of highway congestion and reliability performance measures;
- Share the National Capital Region (NCR) MPO's experience and lessons of using new data sources to monitor congestion and reliability.

Framework of Performance Measures



Paper #2

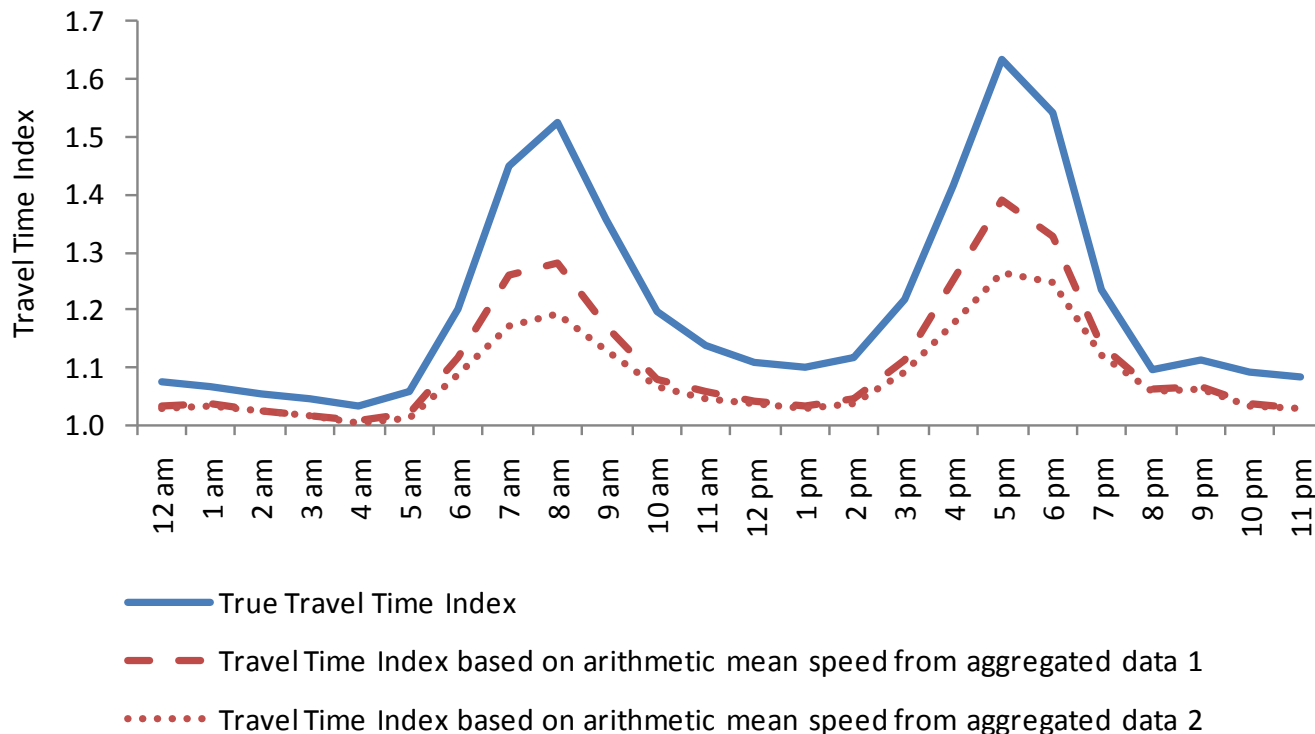
- Standardized Data Processing: *Where We Need It in Mining Private-Sector Probe-Based Traffic Data for Highway Performance Measurement*
 - *Wenjing Pu*

Five Aspects of Standardized Data Processing

- Private-sector probe-based speed is Space Mean Speed
- Impact of segment length
- Impact of data archiving frequency
- Impact of calculation procedure
- Instantaneous vs. experienced travel time

Harmonic Mean should be Used in Aggregating/Averaging INRIX Data

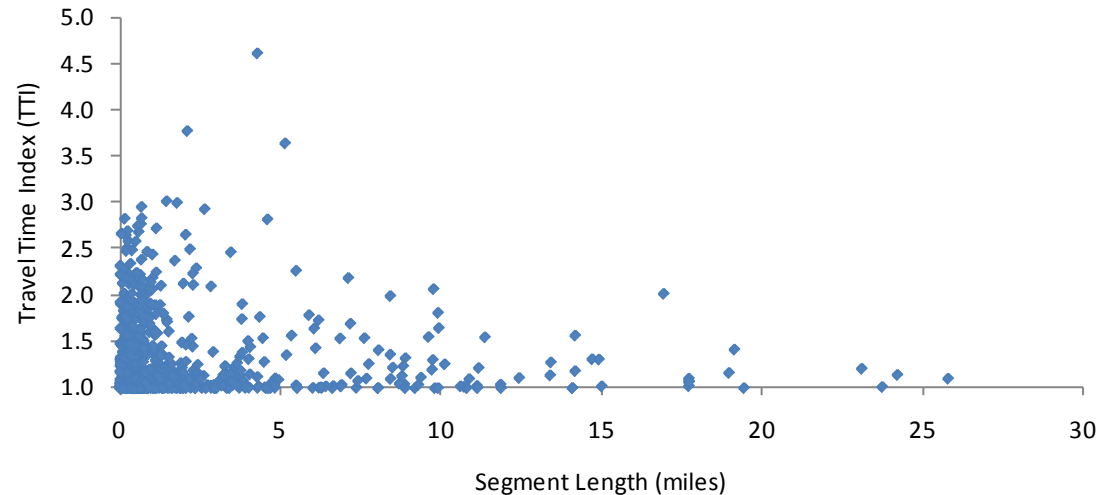
- Otherwise:
 - Inconsistent speed and travel time in aggregated data
 - Varying performance measures based on the same data



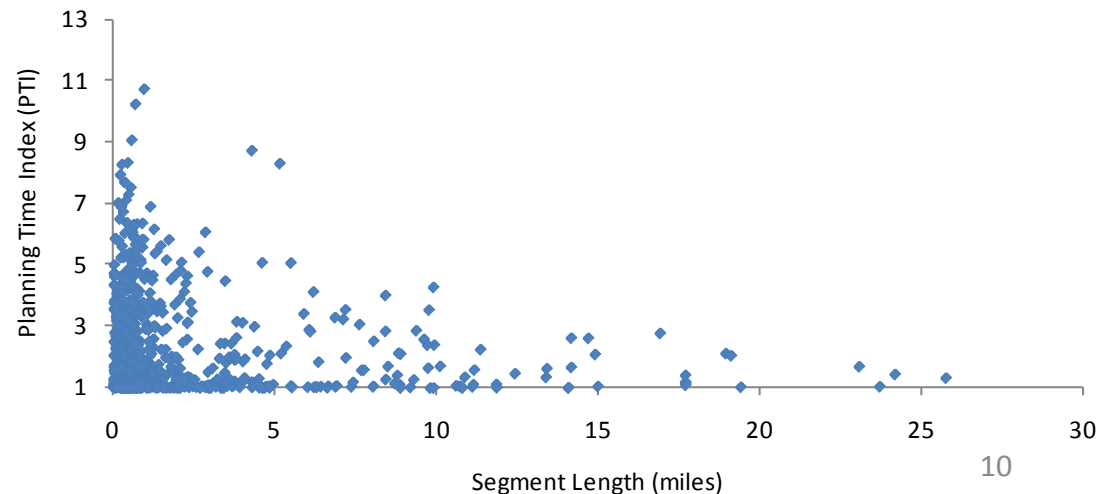
Impact of Segment Length

- The value of Travel Time Index and Planning Time Index tends to decrease as the segment length increases
- Take segment length into consideration when comparing performance
- Use segment length as the weight in calculating regional summary of Travel Time Index and Planning Time Index

a) Travel Time Index (TTI) vs. Segment Length



b) Planning Time Index (PTI) vs. Segment Length



Paper #3

- *Linking Transportation and Land Use Goals Through Scenario Planning: Case Study of Metropolitan Washington Region*
– Erin Morrow, et al.