

INRIX Data Analysis of Traffic Signal Improvements

Marco Trigueros
COG/TPB Staff

Traffic Signals Subcommittee
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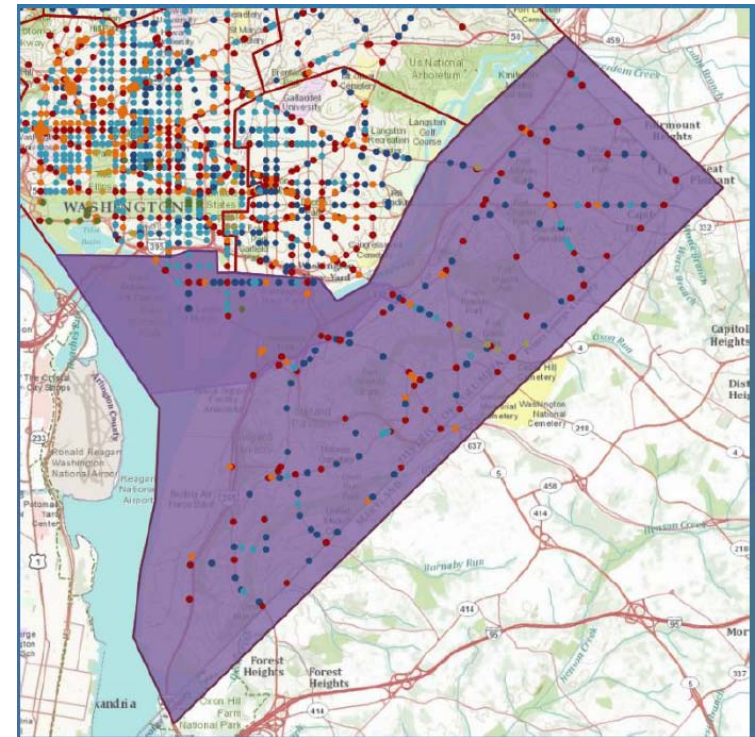
Overview

- Background
- Methodology
- Results
- Caveats
- Discussion



Background

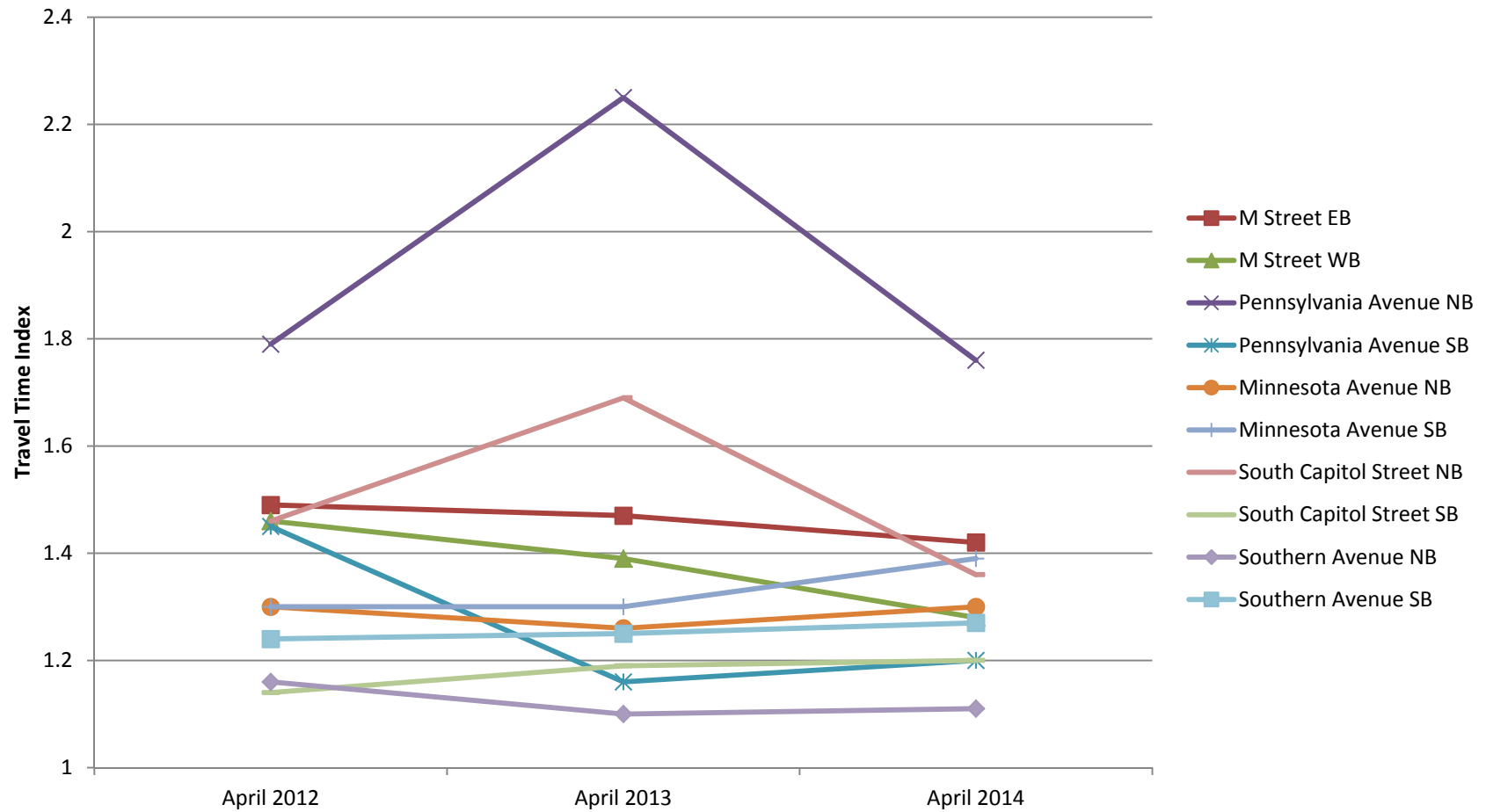
- DDOT presentation on traffic signal optimization
 - SE/SW DC region completed
- Interest in examining the feasibility of using VPP data to evaluate the impacts of traffic signal system improvements



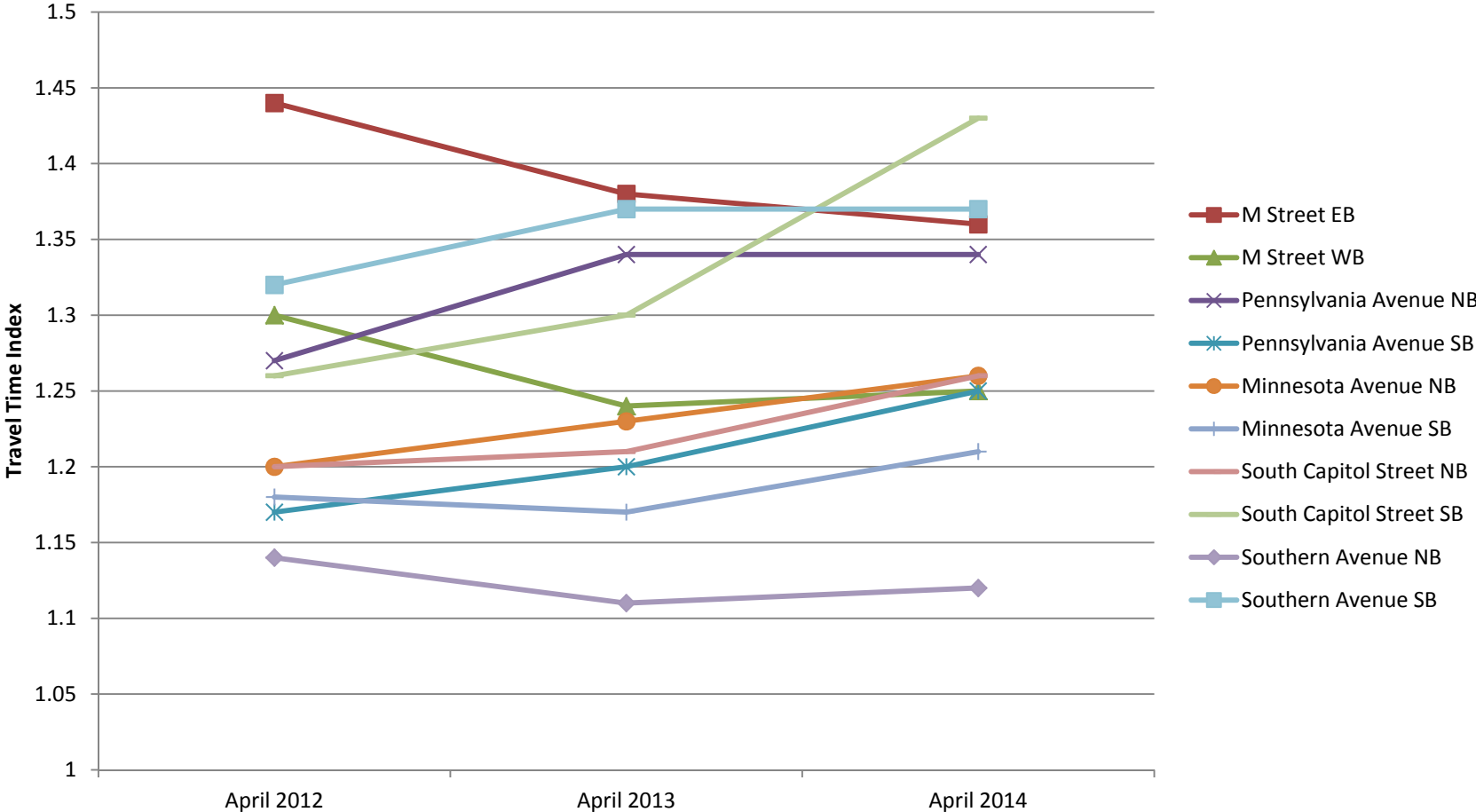
Methodology

- Analysis based on VPP Suite features
 - Roadways limited to those where data is available
 - Limits based on TMCs
 - Use of VPP Suite reports – focused on TTI
- Corridors were analyzed independently
- 2012 and 2013 were used as reference years with 2014 representing new conditions
- Used DDOT's before and after travel times for comparison

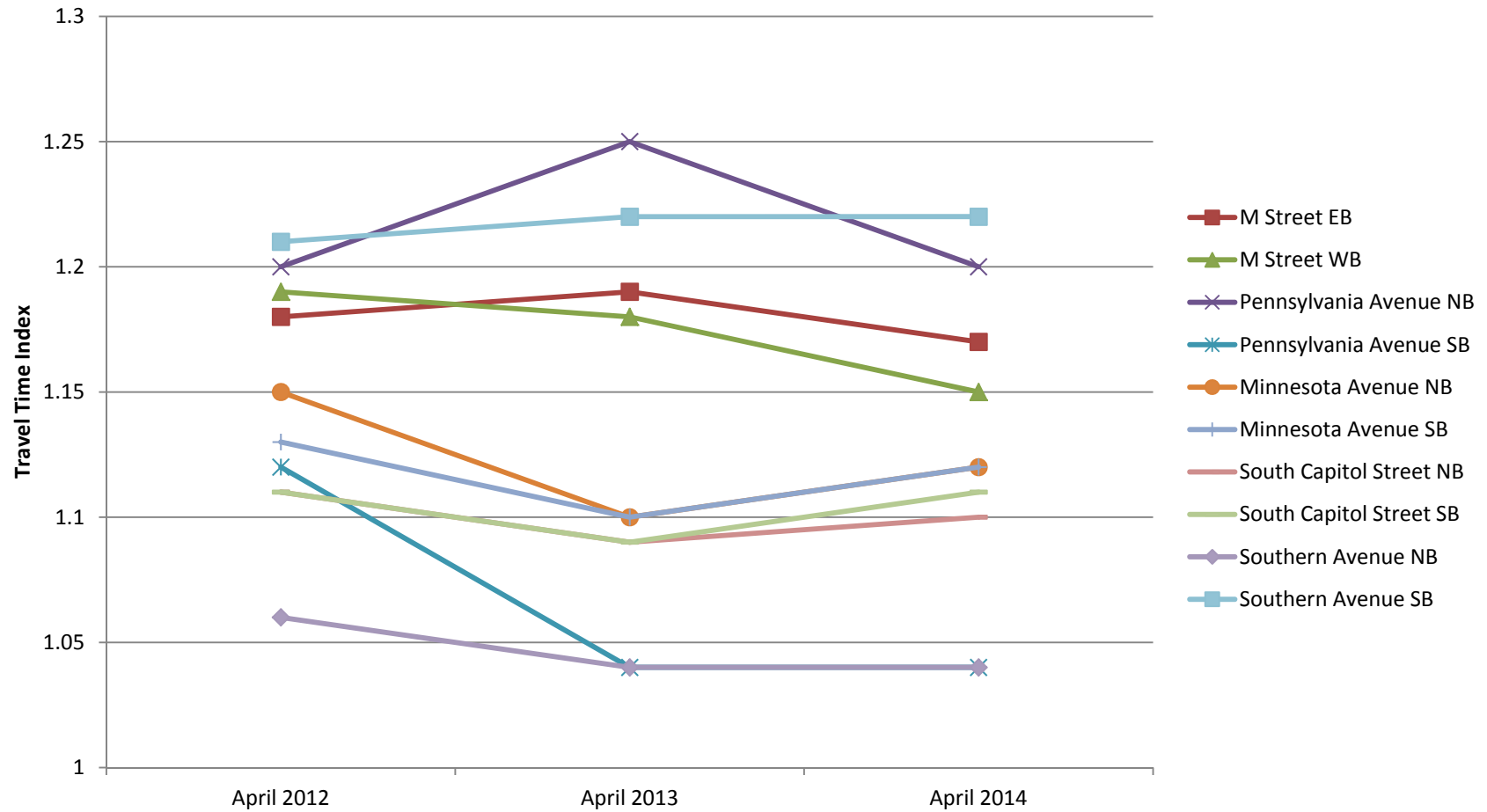
Results – AM Peak



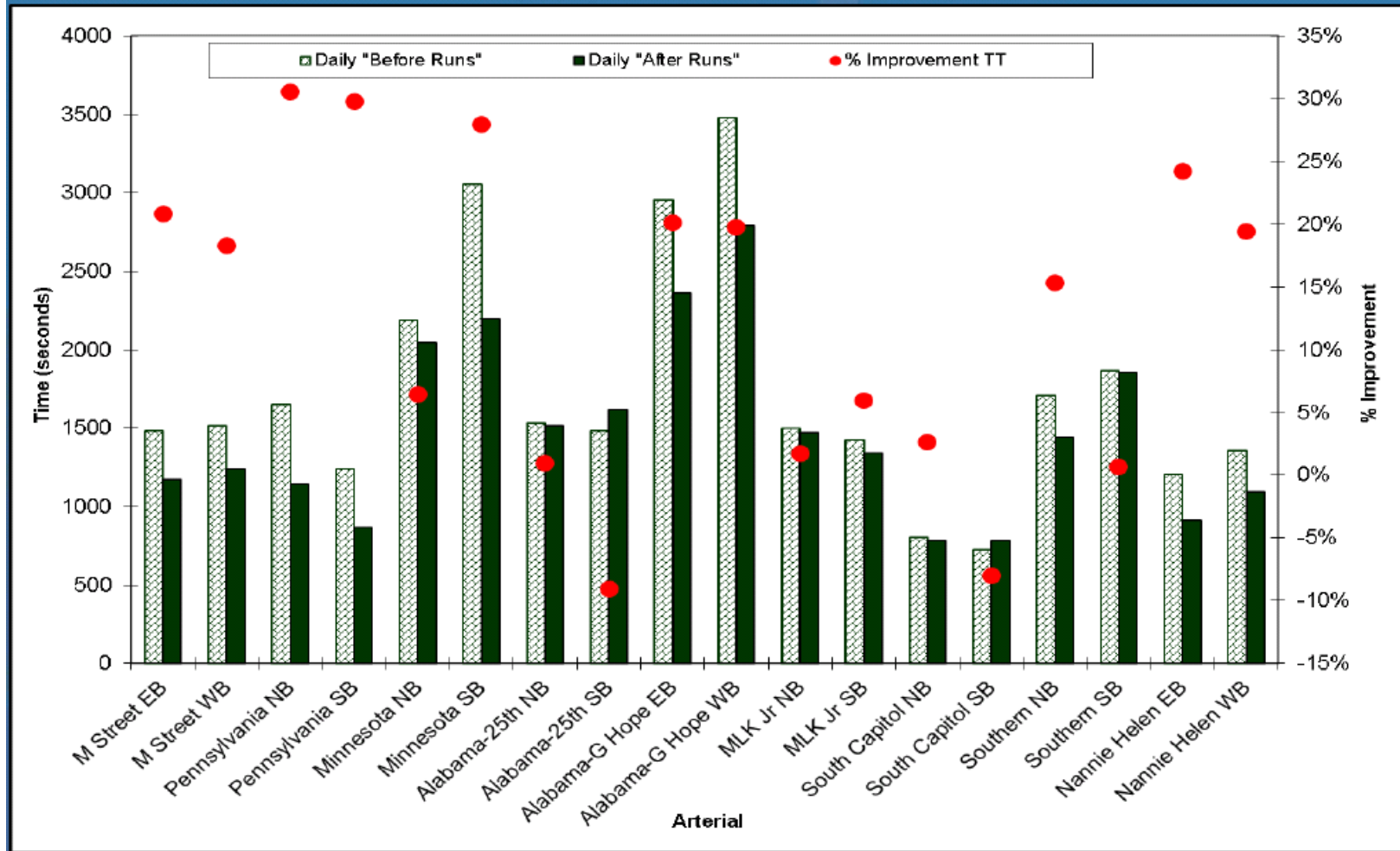
Results – PM Peak



Results – All Time Periods

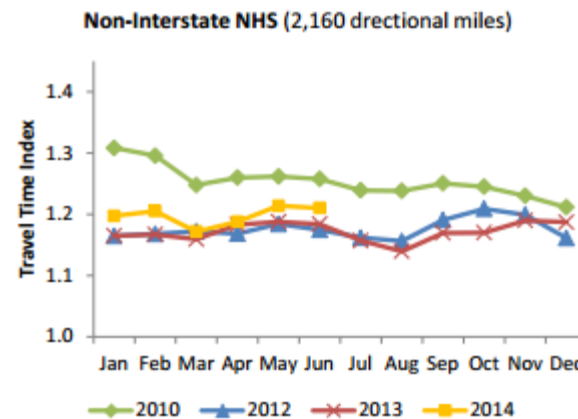
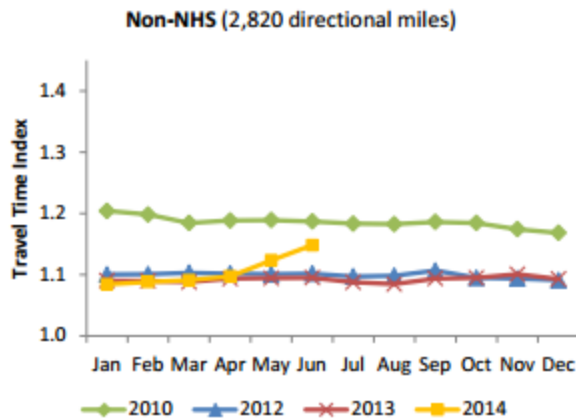


DDOT Analysis



Caveats

- INRIX data issues on arterials with oversaturated conditions
- Limits of corridors are determined by TMCs, and do not reflect actual limits of project
- Impact of project cannot be isolated from regional congestion trends
 - Arterial TTI for peak periods in the region increased from 1.31 to 1.36 between 2012 and 2014
 - TTI for the study corridors increased from 1.28 to 1.30 for peak periods between 2012 and 2014; decreased from 1.14 to 1.13 for all time periods



Discussion

