Memorandum - CONFIDENTIAL

To: Ellen Baer, Hudson Square Connection
From: Samuel Schwartz, PE & Jeff Smithline, PE, PTOE
Date: December 14, 2018
Re: Review of Preliminary Draft Report on Two-Way Tolling at the Verrazano-Narrows Bridge
Project No.: 17-01-2830B

At the request of the Hudson Square Business Improvement District (BID), Sam Schwartz Engineering, DPC (Sam Schwartz) has reviewed the Preliminary Draft Report prepared by WSP for the MTA Triborough Bridge and Tunnel Authority titled Analysis of Potential Traffic and Revenue Impacts of Two-Way Tolling at the Verrazano-Narrows Bridge (VNB), dated August 2018.

It is important to note that we are not able to comment on or validate the methodology or findings because the assumptions, parameters, and criteria that went into their analysis are not listed or described in the report. All we know is they used a “Toll Policy Model (TPM) developed by WSP.” Therefore, our comments in this memo are limited to the findings that are presented and how they compare with our own independent analysis and knowledge of transportation patterns in the NYC region.

We offer the following questions and comments:

1. The total daily traffic assumed diverted by the one-way toll was estimated by Sam Schwartz at 9,000 vehicles per day and by WSP at 7,000 vehicles per day. If we used the 7,000 figure in our analysis, it would not significantly affect our findings that Canal St. and other lower Manhattan streets would see significant relief by restoration of the two-way charge.

2. There is a major difference between the Sam Schwartz memo and the WSP report regarding how traffic affected by two-way tolling is assigned to the three Hudson River Crossings. For westbound (WB) traffic that would be attracted to the VNB with two-way tolling, we estimated 90% would come from the Holland Tunnel (HT) and 10% would come from a combination of the Lincoln Tunnel (LT) and the George Washington Bridge (GWB). WSP estimated that 38% from the HT, 17% from the LT, and 45% from the GWB. We question the 45% from the GWB because of the relatively long distance between the NJ-side of the GWB vs. the NJ side of the VNB/Goethals Bridge corridor, which is at least a 30-min drive from each other on the NJ side. The implications of this are that a higher percentage draw from the HT would show a larger benefit for Canal Street.

Some data that seems to contradict the GWB/LT/HT split cited in the report is that per NYCDOT’s 2016 New York City Bridge Traffic Volumes Report, the Alexander Hamilton Bridge has volumes that are balanced directionally, while the Manhattan Bridge has a significant imbalance (39,600 vehicles per day EB and 45,500 vehicles per day WB). This implies that southern routes (e.g., via the HT) are more affected by the VNB one-way toll
than northern routes (e.g., via the GWB); therefore, southern routes would be more likely to divert back to the VNB in a two-way tolling condition.

3. The report compares overall Vehicle-Miles Traveled (VMT) which hides some of the key benefits of two-way tolling:
   a. The “quality” of the miles. It is more important for safety, air quality, and quality-of-life to lower VMT on local streets where pedestrians, bikes, etc., are present even if it is at the expense of higher VMT on highways and interstates. Therefore, we think the report should break out the VMT comparison to show differences in VMT for limited-access highways vs. arterials and local streets.
   b. A comparison between Vehicle-Hours Traveled (VHT) should also be provided, as VHT accounts for congestion on the roadway and is not just a function of volume and route length. For example, even if traffic is traveling a longer distance (i.e., higher VMT), if congestion and delays are being reduced overall as a system (i.e., lower VHT), the longer distances are less relevant. VHT is a more important measure than VMT.

4. While more motorists may be more likely to travel longer distances and save on tolls when traffic congestion is lower, the diversions projected in the report seem too highly skewed away from the peak periods. We would like to hear a more in-depth explanation of their key statement that “diversions are less likely to happen during the AM and PM peak periods in part … because congestion along alternate routes is greater during these periods, resulting in lower anticipated diversions.”

5. The report indicates that during off-peak hours, EB Canal Street speed would decrease only slightly – up to 0.3 mph – while WB speed would increase up to 0.3 mph. It is not clear how these figures were computed. In our own analysis, we projected a significant improvement westbound (measured in queue length not speed).

6. A $12.3M increase in revenue for the MTA is significant, as toll money can be bonded for capital projects at a factor of 15 times. This means that $12.3M could generate $184.5M for capital projects.