



Spotlight 1 Questions – 10 Years of Transit Signal Priority: Lessons Learned in New York City:

Q1: Alan Warde (NYSDOT): What happens when a cross street bus also approaches an intersection at the same time? How are priorities decided?

A: Emad Markarios (NYCDOT): If it's two way, first come first serve, if two TSP corridors intersect, we give priority to only one route.

Q2: Eric Burkman (MBTA): How are the door switches integrated? Is it through the passenger counter or through the bus diagnostic port?

A: Emad Markarios (NYCDOT): Door switches are integrated via CANBUS network and streamed through our CAD-AVL API (previously acquired by tapping into door sensor wiring harness to pick up door actively. When the door opens, it doesn't send request for TSP. When it closes, TSP is ready and will communicate with the transit server. It has no relation to the passenger counter.

Q3: Eric Burkman (MBTA): What kind of indicators to you use to measure TSP effectiveness and how do you calculate the metrics?

A: Emad Markarios (NYCDOT): After Study Evaluation of the applied TSP scenarios for evaluating its effectiveness and potential for modification- TSP "ON" vs TSP "OFF" bus time data and TSP log. For more information, please see *Green Means Go*, which can be viewed [here](#).

Q4: Kawkeb Said (VDOT): Have you noticed negative impacts to a coordinated system resulting from implementation of TSP?

A: Emad Markarios (NYCDOT): No. We're really careful with coordination. We only allow TSP on certain intersections. Not every intersection will apply for TSP. see Q5 below

Q5: Ken Yang (AECOM): Do you have data showing how TSP impacts corridor signals coordination?

A: Emad Markarios (NYCDOT): We do not collect data on TSP impacts coordination on a corridor. However, TSP is designed specifically not to impact corridor coordination. Main Street Green always occurs when expected. TSP is designed to lengthen but never shorten Main Street Green. TSP actions also occur relatively infrequently as we see from NYCDOT L4 reports.

Q6: Howell Li (Purdue University): Do you use virtual check-in/check-out zones or physical sensors (radar, loops, etc.) If you use virtual zones do you encounter any GPS issues around lower Manhattan?

A: Emad Markarios (NYCDOT): Everything is wireless and virtual. We formerly had GPS anomalies due to epoch rollover, but this has been resolved.

Regarding developing a Project Systems Engineering Analysis Report, project documents can be found [here](#).



I-95 Corridor Coalition: TSMO Webinar – Managing Arterials

August 22, 2019

Question and Answer Summary

Spotlight 2 Questions – Arterial Management Toolkit: Experiences from Washington, DC:

Q7: Mark Taylor (UDOT): How did you measure the number of stops for bicycles?

A: Soumya Dey (DDOT): The data collection team rode bicycles down the corridor.

Q8: Sanhita Lahiri (VDOT): Do you remove Events and Holidays from your evaluation data for the travel time pilot? Do you look at seasonality?

A: Soumya Dey (DDOT): Yes, we do remove events and holidays. For before and after analysis we take into account special events, seasonality, etc. to ensure apples to apples comparison. Our before and after studies are planned to occur in the same month the next year (e.g. if the before study is in June, the after study will be in June the next year).

Q9: Mark Taylor (UDOT): Did you say that your three adaptive systems are no longer in use?

A: Soumya Dey (DDOT): We reverted back to pretimed operation. They're still in place but not in use.

Spotlight 3 Questions – Florida's Statewide Arterial Management Program (STAMP):

There were no questions during this section.

Raj Ponnaluri requested we link to the STAMP Action Plan he mentioned during his presentation. That document can be found [here](#).