National Capital Region Transportation Planning Board
777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

Meeting Notes

TRAFFIC SIGNALS SUBCOMMITTEE OF THE MANAGEMENT, OPERATIONS, AND INTELLIGENT TRANSPORTATION SYSTEMS (MOITS) TECHNICAL SUBCOMMITTEE MEETING

DATE: Wednesday, August 7, 2013

TIME: 10:30 AM

PLACE: COG, First Floor, Meeting Rooms 4/5

CHAIR: Ling Li, Virginia Department of Transportation

Attendance:

Harvey Alexander, DDOT
Ling Li, VDOT
Curt McCullough, City of Fairfax (by phone)
Ben Myrick, MDSHA
Piotr Rachtan, MDSHA
Jim Rhine, Prince George's County DPWT
Amit Sidhaye, Arlington County
William Truong, MATOC

COG Staff Attendance:
Andrew Meese
Eric Randall
Daivamani Sivasailam
Marco Trigueros

1. **Welcome and Introductions**

Participants introduced themselves.

a. Review of Notes from the May 14, 2013 Traffic Signals Subcommittee Meeting

Meeting notes were approved without further comment.

2. **Discussion on Traffic Signal Power Back-Up Systems in the Region**

Mr. Meese discussed the background that resulted in the recommendation of regular traffic signal power back-up surveys by the COG Incident Management and Response (IMR) Oversight

Committee. During the life of the IMR Committee, it had been agreed to provide updates every six months. However, the IMR Committee has sunset and the survey may not be necessary biannually anymore; the suggestion of reporting instead on a yearly basis was well received by the Subcommittee. Mr. Rhine noted the timeliness of the results is important when reporting less frequently. The time frame was set to distribute surveys in July with results being reported by early September in time for jurisdictions to prepare for the winter season. Mr. Sivasailam noted funding available through the US Department of Homeland Security to develop new systems along key routes (for original costs, not maintenance). Arlington County, City of Alexandria, and Prince George's County were interested in learning more about the available grants – committee members should contact Mr. Sivasailam for more information.

Action Item: Develop survey for signal power backup status as of June 30, 2013.

3. Revised Summary of Results of the Regional Survey on Traffic Signal Timing/Optimization

Mr. Meese described the background of the signal timing/optimization surveys arising from the interest expressed by the TPB and as previously done in the context of air quality conformity Transportation Emissions Reduction Measures known as "TERMs". Two memos were distributed: one detailing the results of the survey and a draft memo prepared for the TPB. Mr. Sivasailam went through the raw results memorandum that explained the survey and results. Some of the challenges presented by the regional focus of the survey:

- Need to determine which jurisdictions should be counted – military bases/facilities were excluded given that roads within bases are not open to public use (previously the survey had one but not all military facilities).
- Determining how jurisdictions are counting the signals – ownership vs. maintenance – and avoiding overlooking or double-counting signals (e.g. City of Rockville has signals operated by the city, the county, and the state).

Mr. Meese went over the draft memo addressed to the TPB, asking for feedback and corrections from the Subcommittee. He mentioned that although the percentage of optimized signals has decreased since 2009, the goal of 55% set in 2002 has been achieved and that the memo should be updated to note this. Mr. Myrick specified that the Maryland SHA is not planning to re-time all its signals, as noted in the memo, only the clearance intervals are being recalculated. The bullet was removed from the memo. The bullet declaring that VDOT pursues an aggressive optimization and active management program will also be removed.

Ms. Ling wanted to emphasize VDOT's aggressive active signal management to address non-recurring congestion. It was determined that this could be highlighted at the TPB as a presentation. The concepts of recurring vs. non-recurring congestion will be added to the background section of the memo.

Mr. Rhine suggested that the link between optimization and maintenance should be highlighted in the memo to highlight another challenge in the optimization/active management process. Fixing

failing detectors (i.e. loops, cameras, communications equipment) is necessary for the optimization effort and requires additional funding.

Mr. Randall suggested that the link between adherence to speed limits and progression be raised. The link between traffic signal optimization and pedestrians was also discussed.

4. Update on Traffic Signal-Related Activities under the Regional TIGER Grant

Mr. Randall went through this presentation on the TIGER bus project.

Ms. Ling questioned why VDOT is not listed as an implementing organization although VDOT routes and signals are included in the project. Mr. Randall noted that VDOT though involved is not a primary recipient agency of the grant, but rather is working through WMATA; the implementing organizations are tasked with working with their partner agencies, but MWCOG will not be interfering with the implementing agencies' organizational and procurement processes. In the case of the Route 7 project, WMATA will be the implementing agency. To a question about whether traffic cameras are included in the Route 7 corridor project, Mr. Randall replied that the technology has not yet been selected.

Mr. Myrick noted that SHA would maintain any equipment inside the cabinet but would not want to manage any communications or other equipment that would be outside the cabinet.

To a question posed by Mr. Meese, Mr. Randall noted that any signal implications to the planned queue jumps would be worked out once it was determined which projects would be pursued in Maryland (all queue jumps in the TIGER project were in Maryland, none in D.C. or Virginia.

Mr. Meese followed up with a question on how to proceed on the challenges presented in slide 8 – how and when TSP will operate and if there should be regional consistency. Once the equipment manufacturer is defined, the architecture will be developed. Eric Toombs, of WMATA, will take the lead in coordinating with regional agencies to define some of those parameters and develop the architecture as the projects are implemented. It was suggested that he should be invited to future Subcommittee meetings.

5. Jurisdictional Roundtable

Prince George's County: County has had 100% battery back-up for some time, but installation records are lacking. Some of the batteries have started to fail. Under current procedure, each cell is load tested and charged to ensure battery functionality; installation date is being documented. Funding for replacements will be an issue. Similarly, LED bulbs may need to be replaced in the near future and there is no clear record of installation and replacement dates.

DDOT: Department has been focusing on the 11th St Bridge Project. H Street and Anacostia line streetcars are under construction. TSP will be implemented along these corridors. Citywide detector project has finalized: 130 detectors were recently installed throughout the District.

MATOC: Expect to be starting renovations in the new College Park office.

Arlington: Completed the phase 2 fiber project, bringing an additional 100 intersections into the fiber optic connection network for a total of 62-70% of the county's signals connected via fiber optics. Testing pilot project for intersection with Ethernet enabled UPS that can be monitored remotely. Bluetooth technology used for VMS on US 50 – travel time to county/state line displayed. Similar project on Lee Avenue and Columbia Pike currently under construction.

MDSHA: Mr. Myrick took the opportunity to pose questions to other agencies:

- Is anybody making field adjustments to timing through cameras or is it solely done in the field? Arlington and VDOT do both. Prince George's County has camera coverage, but not used to doing it remotely.
- With active management, are you reacting to major events or monitoring for minor adjustments? DDOT noted responding to user comments and proactively monitoring during major events. Prince George's County, VDOT, and Arlington County noted they do not have the staff to be monitoring regularly. DDOT noted that their standard procedure is to check every camera at regular intervals. City of Fairfax monitors traffic cameras in search of disabled vehicles and other issues and actively manages signals through the monitoring.

City of Fairfax: The City has an ongoing signal optimization project to update all signals. Their battery back-up phase 2 project will add power back-up to 14 intersections. They are adding an additional 7 traffic cameras to allow for a total of 95% coverage of arterials. There are ongoing signal upgrades at 4 intersections as well as some

VDOT: VDOT is expanding ITS strategies from exclusively freeways to arterials – adding cameras at critical intersections to monitor traffic signals. They are extending traffic control center hours to weekend (9AM to 6PM) during the summer to address I-95 traffic – weekend hours may continue past the summer. It is also open whenever there is major construction. New VDOT standard on clearance time has been developed - based on national ITE standards to be released soon.

6. **Other Business**

Next meeting scheduled for September 11 in the morning in Room 3.

7. 12:10 PM **Adjournment of the Traffic Signals Subcommittee Meeting**

This meeting was immediately following by the meeting of the MOITS Technical Subcommittee.