

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

MANAGEMENT, OPERATIONS, AND INTELLIGENT TRANSPORTATION SYSTEMS (MOITS) TECHNICAL SUBCOMMITTEE

DATE: Tuesday, May 14, 2013
TIME: 12:30 PM
PLACE: COG, First Floor, Meeting Room 1
CHAIR: Jean Yves Point-du-Jour, Maryland State Highway Administration

Attendance:

Tad Borkowski, Fairfax County Department of Transportation
Ron Burns, Frederick County CDD
Burak Cesme, AECOM
Melissa Chow, WMATA
John Contestabile, Johns Hopkins University Applied Physics Lab
Ed Daniel, Montgomery County Police Department
Craig Franklin, Trichord, Inc.
Warren Henry, Jacobs Engineering/MDSHA
Taran Hutchinson, MATOC
Egua Igbinosun, MDSHA
Greg Jones, Frederick County DPW
Osborne King, DATTA/CHART
Ling Li, VDOT
Amy Tang McElwain, VDOT
Jean Yves Point-du-Jour, MDSHA
Richard Retting, Sam Schwartz Engineering
Tom Scherer, Arlington County DES
William Truong, MATOC
Alex Verzosa, City of Fairfax

Phone:

Eric Marx, PRTC/Omniride
Curt McCullough, City of Fairfax

COG Staff Attendance:

Andrew Meese
Erin Morrow
Wenjing Pu
Betsy Self
Daivamani Sivasailam

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Actions:

Item 1: Welcome and Introductions. Review of Notes from the February 12, 2013 MOITS Meeting and Discussion of Date for Next MOITS Meeting

Participants introduced themselves. Mr. Verzosa announced that this was his last MOITS meeting because he is retiring from the City of Fairfax. Attendees expressed their gratitude for his service to the MOITS subcommittee and he was given a round of applause. Notes from the February meeting were distributed; there were no comments. Potential dates for the next MOITS meeting were discussed due to a conflict on the next regularly scheduled meeting date. July 18th was penciled in as the next meeting date [later changed to August 7].

Item 2: Regional Emergency Support Function #1 (RESF-1) Emergency Transportation Committee Update

Ms. Self provided an update on RESF-1 activities. At this time, two submitted projects have been approved for Training and Exercise Panel (TEP) funding. RESF-1 is working on two projects that were submitted for UASI funding, one for RITIS operations and maintenance, and one for public information operation and maintenance. Those projects have since been combined into one project. The decision on funding is expected to be made in May. Additionally, the meeting that is scheduled for May 16 has been moved. Ms. Self was asked if she could brief the subcommittee on RESF-1 discussions with the exercise and training panel and what might be in the future for transportation training or transportation involvement in other people's training. She responded that RESF-1 has put in for a couple projects and were informed that they passed the first phase.

Mr. Meese told the subcommittee that there is an upcoming senior leaders seminar focusing on cyber-security. There was a comment that ITS systems have a cyber-component and encouraged everyone not to leave ITS out of discussions about cyber-security. Mr. Meese provided an update on the Regional Incident Coordination (RIC) program; the original set-up was now undergoing review/redesign by the Emergency Managers committee.

Item 3: Briefing on Draft Results of a Survey of Traffic Signal Timing in the Region

The Traffic Signals Subcommittee met immediately prior to the MOITS meeting. Ms. Li reported that Eddie Curtis from FHWA was invited to the meeting to discuss adaptive signal control systems and distributed guidance for the deployment of such systems. Two representatives from Anne Arundel County were also present to discuss their experience with implementing an adaptive signal control system in one of their corridors. Mr. Hutchinson was present to discuss RITIS as it relates to the activities of the Traffic Signals Subcommittee. The subcommittee also discussed the traffic signal timing survey in response to a request from a member of the TPB at its January meeting. The last regional update on traffic signal optimization was in 2009. Mr. Sivasailam noted that the practice of traffic signal optimization has changed greatly since the region adopted traffic signal optimization as a transportation emissions reduction measure (TERM) in 2002 when most agencies were using computer-based pre-timing of signals. Now, many agencies are able to monitor

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intersections and make real-time adjustments to signal timing. The Traffic Signals Subcommittee is discussing how to best respond to the TPB request since the request specifically asked how region was addressing the TERM that was adopted in 2002 which set a target for the number of signals. Responding solely to the request as stated with the number/percentage of signals being optimized leaves out the rest of the story about how far the region has come in the area of traffic management. There was a question as to whether the response can take into account the increase in traffic volume between 2002 and present. Mr. Meese responded that what is to be counted is what the owning agency is doing in regards to timing its signals which does not account for traffic volume, weather, technology used, etc. For the presentation to the TPB, Mr. Meese hopes that representatives from owning agencies (such as Ms. Li from VDOT) will be available to elaborate on their signal timing programs.

Item 4: Update on the TPB Task Force on Bus On Shoulder Feasibility in the Washington Metropolitan Region

Mr. Meese referred to a memo from Eric Randall (COG/TPB) as he provided a briefing on the Bus on Shoulder (BOS) Task Force. The last and final meeting of the task force took place on April 17th where the findings for three corridors – I-270, I-66 inside the beltway, and MD 5/US 301 – were discussed. In addition, a benefit-cost analysis model, which was developed as a planning tool for this study, was presented at the meeting. Mr. Meese discussed some of the main results from the study. It was found that there are many challenges for BOS including whether the shoulder is designed to carry the weight of the vehicles, and whether the shoulders have enough clearance for the width of the vehicles. There may be some hot spots in the region that are promising in the short term. In the long term, a BOS system may be costly to implement and would warrant further study. The final report has not yet been released.

One of the attendees commented that he formerly worked for NY DOT which had BOS and he said the number one concern was the safety of motorists in the shoulder with disabled vehicles, especially in the time period just before the shoulder becomes available for buses; he reported there were two fatal collisions in New York. He recommended that any further studies look closely at the planning for the transition time period from non-BOS to BOS operations. Mr. Meese commented that the Task Force had discussed this issue, but it had not featured prominently in the literature and he requested that if there was any additional information that could be provided about the accidents in NY, the Task Force would likely want to see it.

Mr. Point-du-Jour commented that when Maryland allowed BOS on the Beltway, there was video camera coverage of the entire length of the BOS zone and drivers had to call-in prior to moving into the shoulder. There was a comment that the costs of the system were likely underestimated because when many of the highways were built, the federal government would not pay for full-depth shoulders and now they would require excavation and reconstruction for BOS use. Additionally, many shoulders have fiber optic cables or other utilities running underneath them which would also increase the cost of reconstruction. Mr. Meese responded that it was his recollection that the cost estimates intentionally did not assume that the shoulders would be reconstructed, but rather a few years of use would be squeezed out of them in the short term.

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Item 5: Update on MOTIS-Related Climate Change Adaptation Activities

Ms. Morrow referred to a memo as she briefed the subcommittee on MOITS-related climate change adaptation activities. As part of the MOITS item in the UPWP, DTP staff are monitoring local and national practices regarding transportation operational procedures to adapt to climate change effects. The District Department of Transportation has released a preliminary climate change adaptation plan. Climate change adaptation refers to actions to prepare for the changes in climate that are already happening or are forecasted to occur. DDOT has used research from the Federal Highway Administration and the National Cooperative Highway Research program to develop their plan. Most of the 13 action items focused on infrastructure, but there were two that related to MOITS activities. These two items include incorporating climate change adaptation as a criterion in systems planning and coordination with other local and regional agencies regarding extreme weather events. Ms. Morrow also updated the subcommittee on two other projects (not MOITS-related) that COG's Department of Environment Programs is involved with.

There was a comment that climate change adaptation ties in with Critical Infrastructure Protection (CIP) and looking at better resiliency for infrastructure. There may be an opportunity to develop a project for UASI funding for CIP. Another comment was that in the long term, sea level rise is not just a threat to transportation infrastructure and there may be an opportunity to develop project applications related to homeland security for funding. Questions were asked about whether the DDOT plan addressed the impacts of climate change on length of construction periods, impact of longer rainy seasons on infrastructure, and ironically positive impacts of climate change. Ms. Morrow responded that the plan is fairly high level and does not go into great detail on any of the topics. Ms. Morrow commented that the DDOT adaptation plan was the first one completed by any of the jurisdictions that she knew of. Maryland has done work looking at sea level rise. She asked that if any of the attendees knew of any ongoing work on climate change adaptation in their jurisdictions to please contact her. In addition, if there is interest from MOTIS in pursuing work in the area of climate change to contact her.

Item 6: Update on Congestion Management Process (CMP) Activities

Mr. Pu provided an update on the update of the congestion dashboard. There are two reasons for the update to the dashboard. The first was the passage of MAP-21 and the requirement to report on the Interstate Highway System and the National Highway System. The newer version of the dashboard will report performance measures on these facilities and other facilities of importance to the region. The original version of the dashboard only covered freeways and a limited number of arterials in the region. The second reason is the increase in the INRIX coverage with over 5500 directional route miles in the TPB planning area. He showed an example of the new dashboard. The dashboard uses Tableau software which provides more functions for the user than in the previous version of the dashboard. It also allows for sharing of information on social networks. The performance measures for congestion include travel time index, planning time index, and percentage of congested miles. There was discussion about the categorization of roads. The categorization of facilities in the dashboard was designed to align with the requirements of MAP-21. There was a comment as to whether the numbers reported by the states would be the same as the numbers reported in the dashboard. Assuming the same data source and geography, the numbers should be the same; however, those variables are not given. Mr. Pu was asked how these data could help the states meet the reporting requirements. He responded that this was good data and all of the states would be provided with 5-minute data for reporting. He was asked when the dashboard was to be published because once the press sees the data, there will be questions about why congestion is decreasing. Mr. Meese responded that Ron Kirby has been briefed on the data trends. Mr. Meese

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commented that he was pleased that the dashboard is reporting planning time index as it is a new measure geared towards describing what the traveler is experiencing in terms of reliability, unlike most measures which have been historically reported that focus on system performance. A question was asked as to how the information in the dashboard will be compared to the next report released by the Texas Transportation Institute (TTI). Mr. Pu responded that the methodologies are different. He said that TTI's methodology contains assumptions and estimates whereas the analysis he shows is based purely on observed INRIX data. Also, there are different geographic definitions. He noted that his analysis showed a decrease in congestion while TTI shows an increase but he felt that their analysis was not convincing. He also feels that TTI's interpretation of planning time index is incorrect. He does feel that the TTI report is good for national comparisons.

Mr. Sivasailam spoke to a handout on the arterial congestion monitoring program. From 2000 to 2011, the TPB arterial congestion monitoring program relied on GPS data from floating car runs. Each segment was surveyed one day, once every three years. With the recent availability of INRIX data for arterial roads available gratis through the I-95 Corridor Coalition, the program is evolving to utilize that data. The data will allow for all 57 routes to be studied in the same year. In addition, the congestion monitoring program will address the requirements of MAP-21 for performance based planning and programming for congestion reduction and system reliability. The work is expected to be completed by the end of the fiscal year. The results will be incorporated in the FY 2014 CMP Technical Report update.

Item 7: Metropolitan Area Transportation Operations Coordination (MATOC) Program Activities

Mr. Hutchinson reported that there have been discussions on RITIS resiliency, specifically where to have a back-up site for RITIS. Currently all of the RITIS computers are at the University of Maryland which lost power during the derecho. MATOC operations are transitioning to the CATT Center at the University of Maryland by the end of the fiscal year.

Item 8: Live Demo of What's New in the Regional Integrated Transportation Information System

Mr. Hutchinson, assisted by William Truong, provided a demonstration of RITIS on the projection screen. One of the new features is a chat room for communicating about incidents with other RITIS users.

He was asked if there is information for rail other than WMATA. He responded that there was not, but they would love to have it. VRE has data available. Mr. Meese mentioned that there had been two meetings brokered by Mr. Harris discussing the possibility of RITIS having access to available rail data feeds. There was general discussion about information sharing and the possibilities for the expansion of RITIS. It was noted that RITIS training has been conducted for several non-transportation agencies.

Ms. McElwain commented that VDOT has noticed a problem with INRIX reporting historical data on reversible lanes during the time periods when the lanes are not in use. VDOT is working to filter this data out of their reporting. If the data used by RITIS is coming straight from INRIX, this false

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data would be reported. Mr. Hutchinson noted that they are aware of some of the problematic locations.

Item 9: Other Business

There was no other business.

Item 10: Adjourn