National Capital Region Transportation Planning Board

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Meeting Notes

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

DATE: Tuesday, March 11, 2014

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 DOT

Melissa Chow - WMATA

Armand Ciccarelli – Appian Strategic Advisors (by phone)

Craig Franklin – Trichord, Inc.

Warren Henry – Jacobs Engineering/MDSHA (by phone)

Deborah Matherly – Louis Berger Group (by phone)

Alvin Marquess – Jacobs Engineering (by phone)

Jean-Yves Point-du-Jour - MDSHA

Tom Scherer – Arlington County

Jose Thommana – DDOT

William Truong – MATOC (by phone)

COG/TPB Staff

Debbie Leigh

Andrew Meese

Erin Morrow

Wenjing Pu

Jon Schermann

Daivamani Sivasailam

Marco Trigueros

C. Patrick Zilliacus

1. Welcome, Introductions, and Review of Notes

The participants introduced themselves. Mr. Meese introduced new TPB staff member Jon Schermann who specializes in freight planning but will also be working with MOITS.

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Meeting summaries from both the January 7th meeting and the February 11th conference call were distributed. There were no comments at the meeting. Any comments can be sent to Mr. Meese.

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

Mr. Sivasailam reported that RESF-1 has been very busy lately with the UASI cycle. The region has approximately \$45-\$50 million in grants available. RESF-1 originally submitted six proposals but subsequently withdrew one. One of the proposals is for power back-up for traffic signals concentrating on Alexandria, Arlington, Prince George's County, the town of Herndon and likely VDOT. RITIS has three proposals: one for TrafficView, one to develop a simulation tool for evacuation planning (The main purpose of the tool is for training exercises for personnel evacuation. In May, date TBA, there will be a whole-day training exercise for evacuation planning), and one for evacuation trailers. There was a proposal for radio communication between the three state DOTs that was withdrawn. They may come back next year with a proposal. There was also a VDOT application for work on their evacuation plan.

Mr. Sivasailam noted that these proposals are not only reviewed by RESF-1. RESF-1 reviewed all of them and they recommended that they go forward. There are multiple areas of committees which are of some level of interest or experience in that area which also reviewed the applications. The project selection will be done by an administrative agent.

A question was asked if all of the area traffic operation centers (TOCs) communicate with MATOC as a link. Mr. Meese answered yes. The nature of this discussion is resiliency for communications. If the internet goes down or if the cell phone systems are overburdened, what are our backup communication means in these severe emergencies? There are various protocols in place but we are revisiting the question of resiliency for updates. In the decade of the 2000's, there was a reliance on push-to-talk systems like Nextel Those are mostly fading away based on industry uses. So they are looking at both the technology and the operating procedures for how to deal with that.

Mr. Sivasailam noted that there is an application that came from outside of RESF-1 from WMATA to develop a DC station evacuation plan.

Mr. Meese asked was there a discussion in RESF-1 about some future joint meeting or workshop with multiple committees to talk about strategic planning and project development especially with MATOC. Mr. Sivasailam commented that the MATOC operations committee and transit task force as well as the information systems could bring in RESF-1 when they have their one day meetings because there is a lot of overlap. RESF-1 has a special interest in the technology and then the architectural field. Mr. Sivasailam stated the MATOC committees usually rotate their meetings. One committee meets each

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month. Mr. Meese stated that there probably needs to be a special event to talk about this particular issue about how to bring people together to talk about strategy.

He also commented that Homeland Security is a functional area in this region. They have their own strategic plan and they decide ownership. They are judging their work in various RESFs against that strategic plan and maybe we would be more aware of what they may be looking at and whether there are any synergies between what we might be doing in ITS or ITS architecture.

Mr. Point-du-Jour noted another topic of discussion is the fact that on 9/11 all communication systems failed to keep up with demand and he thinks that we need to find a way to have a system that is reliable and allow for communication between the state TOCs. Mr. Sivasailam noted that the region has a strategic communication plan including voice and data over radio, not cell phone, which falls under the UASI umbrella where fire and police chiefs are the leads.

Mr. Point-du-Jour noted that Maryland has some fiber updates but not to the extent that they have fiber optics. Mr. Sivasailam noted that within RITIS, there is a way to communicate about incidents, but right now it is open to all RITIS users. CATT Lab is working to develop a separate chat forum for TOCs to use. Mr. Meese noted that during these bigger events MATOC is compiling information and putting out hourly reports which will probably be helpful in these kinds of situations because with spotty communications, is may be that not everybody can be on the horn at the same time.

Mr. Sivasailam was asked about the application for the evacuation trailers. He stated that it was not from RITIS, but rather MD SHA as the primary applicant along with VDOT and DDOT. It was his understanding that the application is for trailers pre-packed with supplies such as cones and portable signs to be placed strategically around the region.

3. Update on Development of the 2014 Congestion Management Process (CMP) Technical Report

a. Compilation of Information on the Region's CMP Strategies and Overall Development of the 2014 CMP Technical Report

Staff were working on the 2014 Congestion Management Process Technical Report. Ms. Morrow reminded the committee that in January she sent out a request for MOITS committee members to review some of the TDM and operational strategies in the 2012 report and provide updates for the 2014 report. So far only PRTC, Frederick County and Maryland SHA have responded. There is still time for agencies or jurisdictions that have undertaken some new strategies in the past few years to provide input for the report. Staff plan to bring this committee a draft report next month and that will be another opportunity to review the draft and provide feedback before report finalized by the end of the fiscal year.

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b. Congestion Data Compilation and Analysis

Mr. Pu was working on the congestion data compilation and analysis for the CMP Technical Report. Under MAP-21, we are now required to report congestion on interstate system as well as the non-interstate National Highway System (NHS). In previous CMP work, we only categorized highways as either freeways or arterials. He presented his updated analysis that showed that congestion in 2013 was a little bit better than 2012. This trend was reported earlier in a Washington Post article which used INRIX data and showed that the region used to rank number one in congestion, but it has dropped to number ten. He speculated that this may be due to reduced federal spending over the past two years. The next big component of the data analysis that Mr. Pu expects to focus on is a corridor specific analysis because that is more customer friendly for travelers. He expects that staff should finish the data analysis and the major document write up by sometime in April.

Mr. Pu also reported the status of the National Performance Management Research Data Set (NPMRDS). COG Executive Director Chuck Bean has signed the data user agreement and in the following two to three weeks staff should be able to download the data from HERE, the company providing the data. He does not anticipate including any results from the NPMRDS set in this year's technical report. It is his understanding that the NPMRDS data is inconsistent with the INRIX data. Mr. Sivasailam pointed out that one of the benefits of the NPMRDS is that it reports heavy-duty truck data separately which is beneficial for freight planning and he agreed that staff would need to look at the data to make sure that it makes sense. Mr. Pu commented that he heard that the truck sample was too sparse. He also heard in an FHWA-sponsored webinar, that starting in February 2014, the sample size was doubled and so from February on, we may see more valuable truck information. That could be useful for Mr. Schermann because MAP-21 requires reporting on freight movement on interstates.

Mr. Meese noted that we are mandated as an MPO to do a CMP and actually this is a very interesting juncture that we are at now because we are anticipating the publication soon of new regulations coming out of the MAP-21 legislation that address MPO activities in general, and specifically performance measurement and target setting. These are all new things that were in MAP-21, and so this is definitely the dawning of the era of a lot of focus on these things that we are looking at right here. Our access to these data sets, our approach, and our analysis is really going to become much more prominent especially when we understand what performance measures the feds will designate as to the ones they want to adhere to and what targets will be set by the states and MPOs. Hopefully the NPMRDS will help us out, but since we are in an area that has access to the I-95 Corridor Coalition purchase of the INRIX data set, it is probably not as revolutionary for us as it might be to other parts of the country. He also noted that that he does not understand specifically the relationship between some of the legacy requirements in the CMP and the new requirements coming out of MAP-21, but he feels that they are reasonably consistent and he is not expecting any problems. It was noted that out of the seven national goals in MAP-21, two of them, congestion and system reliability, will be addressed in the CMP Technical Report.

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4. Review of the First Draft of the National Capital Region Congestion Report for Traffic Conditions in the 4th Ouarter, 2013

Mr. Pu provided a draft report for the committee to review. Due to staff changes, the last quarterly congestion report for the region was produced for the fourth quarter of 2011. Staff is reinitiating that effort and looking to produce a more technically simplified version of the report using the VPP Suite developed by the University of Maryland's CATT Lab. The VPP Suite has seen a lot of improvements and advancements recently and Mr. Pu feels that it is a good tool for developing performance measures for the National Capital Region Congestion Report. He asked for feedback from the committee on the draft report. The report contains a regional summary of congestion, a list of the top ten bottlenecks, congestion maps, and a "spotlight" section where one interesting traffic reliability issue related to an event or incident would be chosen for closer study. In the draft report for the fourth quarter of 2013, the plan is to look at the federal government shutdown. That analysis is still in progress. Until the MAP-21 performance measures have been finalized, the analysis for the NCR Congestion Report will continue to use guidance from federal agencies such as FHWA and organizations such as AASHTO.

Mr. Sivasailam commented that he likes the VPP Suite because CATT Lab is constantly adding new features such as animation. Mr. Meese commented that CATT Lab has been very responsive to TPB staff when contacted about questions or concerns.

Mr. Pu was asked if there would be anything in the congestion report regarding transit. He responded that he is working to get some information for the CMP Technical Report. For this quarter congestion report, if there are data available, it can be included. Mr. Meese stated that the performance measurement system that MAP-21 envisions includes transit and he thinks that the various committees that are responsible for that are looking into what needs to be reported. He does not see it being a feature of the quarterly report.

Mr. Franklin suggested keeping the congestion maps in the report because they appeal to a broader audience whereas the spiral maps can provide information to a technical audience. Mr. Pu responded the he would like to have more highways in the congestion maps but he cannot due to limitations of the VPP Suite. Lastly, he thanked Mr. Zilliacus for his work on the draft quarterly report.

5. **Brief Updates**

a. Freeway Congestion Monitoring Program

Mr. Sivasailam told the committee that the deadline has passed for the RFP issued for TPB's triennial independent freeway congestion monitoring which is part of the FY 2014 UPWP. In the past, a contractor did an aerial survey where they fly a plane and collect data. The technical selection committee reviewed the proposals and they met yesterday and made a recommendation which will go to COG's Executive Director. The data collection will be

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done this fiscal year and the data and analysis will be done in the summer/fall timeframe. So by late fall we will be able to put something in the report on the status of freeway congestion in the region and bottlenecks independent of the VPP Suite/INRIX data. One of the requirements in the RFP is to compare the aerial survey data with the INRIX data. Mr. Meese emphasized that we as an institution have continued the idea that we would have more than one data source.

b. Regional ITS Architecture

Mr. Sivasailam said that staff are looking at the ITS Architecture of Maryland SHA, VDOT, and DDOT and they are in different stages. Maryland SHA is starting to do theirs right now. VDOT (Chris Francis) in the Richmond office used to be very active with that and they have had staff changes since he left. The regional ITS architecture will be living document because we will not have final reports from all three states at one time. We hope to bring a draft report to this committee next month and by the end of this fiscal year we will have a document. Mr. Sivasailam said that he has not yet found a good point person at WMATA. Ms. Chow said that she would try to think of someone. Mr. Meese stated that what we have done in the most recent years is take our draft materials and then provide it to somebody at WMATA who can say yes this sounds right or maybe you need to change this. He added that he thinks we should be taking a look at any impacts of these RESF-1 discussions on the architecture and make sure they reflect the problem.

Mr. Point-du-Jour asked if any of the local governments are involved in developing their own ITS architecture. Mr. Sivasailam responded that the state architecture does identify stakeholders and projects that are in in the local jurisdictions. Mr. Scherer added that the state architecture gives local governments a box which is called local interface to the state, but the state architecture is pretty much state stuff. Arlington has its own architecture. They were trying to talk the state into including it, but the state responded that it is probably too granular at that point to be included in the state architecture. He thinks that local jurisdictions will have to have their own architecture at some point. But they did say that from federal purposes having the box along state architecture would not be good enough. He does not know what happens after MAP-21comes out and they are asked for more detail. Mr. Sivasailam added that FTA and FHWA have differences in how they handle the architecture.

c. Traffic Incident Management (TIM) Activities

The DDOT TIM workshop scheduled for March 3rd and 4th were postponed due to snow and will be rescheduled sometime in the future.

d. Federal Section 1201/Real-Time System Management Information

There was no update for this item.

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6. Update/Briefing on Proposed MAP-21 Regulations

Mr. Trigueros said that he did not have much to report on this item because the MAP-21 guidance on safety measures that was supposed to be released in February was delayed by snow days and was just released that morning, so he had not had a chance to fully review the guidance. Since this is the first guidance on performance measurement from MAP-21 it might be of interest even if one is not specifically interested in the topic of safety. Between now and July all of the guidance is supposed to be published. There will be a 60 or 90 day comment period for each.

Mr. Trigueros was asked if safety is the only one to be released at this time. He responded that safety is the first and only one and it was only officially posted that day. There has been guidance posted before but not in the performance measures target setting. Mr. Trigueros stated that pavement and bridges is scheduled to be released on May 27th and system performance (which is the most relevant to MOITS) on July 1st. Safety has four performance measures – overall fatalities and serious injuries, and fatalities and serious injuries per VMT. Mr. Sivasailam asked if there was a distinction in reporting NHS and non-NHS facilities like there is in CMP. Mr. Trigueros stated that he did not think there was, but there is a possibility of looking into functional class. Mr. Sivasailam asked if the states and MPOs set their own goals. Mr. Trigueros responded that they do and they should be consistent. There was a question about how "serious injuries" are defined and reported. Mr. Meese stated that the number of injuries has been shared with TPB in the past, but not broken down whether it is serious or is not. In addition, there are actually definitional differences among the jurisdictions on the definition of a fatal crash, let alone serious injuries. He assumes we will be able to come to some consensus in order to do our reporting. We are a three state MPO and we will have to make an amalgamation of that kind of information. The Transportation Safety Subcommittee met the previous day and talked about this, but the conversation was not substantial since the regulations had not been released.

7. Other Business

Mr. Point-du-Jour spoke about an update to the Maryland Accident Database. They are migrating to Automated Crash Reporting System (ACRS) by the end of 2015. It is an all-electronic system designed and maintained by Maryland State Police.

There were questions about whether the latitude and longitude of every incident that goes into ACRS will be included and if every police officer will have a device to record location. Mr. Point-du-Jour was not certain, but he said that a lot of local police officers are being trained to use the system and some are using it already. Mr. Trigueros added that this topic was discussed at the Traffic Safety Subcommittee the previous day and there are devices for entering location, but there is a challenge in that many officers would complete their reports after the incident so they were seeing a number of crashes happening wherever the officers had stopped to fill out their reports, rather than at the actual crash location.

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Mr. Meese suggested that since there were a few extra minutes in the meeting, maybe it would be a good time to discuss something on the previous agendas that we never got to and go around the table to see if anybody has any suggestions of topic areas they would like to see as either a onetime presentation or some sort of focus for MOITS as a committee during this calendar year. Some of the suggestions included:

- A discussion on the use of the VPP Suite, specifically from the perspective of TPB staff, which would be different than the basic how-to training that is provided by CATT Lab. Mr. Meese commented that as more agencies are using the VPP Suite, the consistency, or lack thereof, of assumptions and approaches as compared to COG/TPB studies could lead to confusion. A session where TPB staff explains its approach for data analysis and why it has chosen that approach could be useful. Mr. Point-du-Jour added that if there is a way that COG/TPB and BMC can work together on the data, which would be helpful for SHA. He mentioned that Maryland traffic engineers are meeting on June 5th, and he would be interested in presenting any Maryland data that TPB staff have prepared.
- A detailed study of I-66 which was suggested because the facility came up three times in the quarterly congestion report. Mr. Meese stated that it was an interesting question. It is rare for MOITS to delve into site specifics or a corridor study but he thinks it is something to consider.
- A review of the 2010 MOITS Strategic Plan to report on where we are and to look for upcoming activities
- A presentation on DDOT's signal optimization project. Mr. Thommana suggested that he may be able to get the project manager to present to MOITS, but that would likely occur after presenting to the Traffic Signals Subcommittee

8. **Adjourn**

Next Scheduled Meeting:

Tuesday, April 8, 2014, 12:30 PM to 2:30 PM, COG Meeting Room 1 [Later changed to a conference call only]