

Update on Operations Planning at the National Capital Region Transportation Planning Board

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Overview of Regional Efforts

- TPB Management Operations, and Intelligent Transportation Systems Planning (MOITS) Policy Task Force
 - MOITS Technical Subcommittee
 - MOITS Regional ITS Architecture Subcommittee
 - MOITS Traffic Signals Subcommittee
- Regional Emergency Support Function (RESF) Transportation Committee
- Transportation Safety Subcommittee
- Travel Management Subcommittee CMP/Performance Measures
- Multimodal Planning
 - TPB Freight Subcommittee
 - Regional Bicycle/Pedestrian Subcommittee
 - Regional Bus Subcommittee
 - Aviation Technical Subcommittee
- Metropolitan Area Transportation Operations Coordination Steering Committee (MATOC)

MOITS



- MPO committee structure includes two “Management, Operations, and Intelligent Transportation Systems (MOITS)” committees
 - Board-level Policy Task Force
 - Staff-level MOITS Technical Subcommittee
 - Regional ITS Architecture Subcommittee
 - Traffic Signals Subcommittee
 - Other Subcommittees (currently inactive)
- The core mission of the MOITS committees is to advise the TPB on transportation management, operations, and technology
 - And to serve as a forum for information exchange on these topics among members

History of MOITS

- Began in January 1997 as the ITS Task Force
- 1999: Expanded into Policy and Technical Task Forces
 - Because of budgetary discussions with policy implications (earmark funding)
- 2001 (pre-9/11): Added management and operations focus
- 2001-2006: Post-9/11 emergency planning focus
 - Met jointly with or in lieu of a separate emergency transportation committee (RESF-1)
- 2006: Separate RESF-1 committee was permanently established
- 2007: MOITS Technical Task Force became a standing subcommittee of the TPB
- 2008: Official formation of the “MATOC Program” independent of MOITS – real-time regional coordination
- 2009: Formation of MATOC Subcommittees to look at regional operations issues (separate from metropolitan planning issues)

Overview of the MOITS Strategic Plan

- The *Strategic Plan for the MOITS Planning Program* was developed over the August 2009 – June 2010 time frame by a consultant team and TPB staff
- Officially approved by the TPB on June 16, 2010
- Main desired outcomes of the strategic plan were to guide upcoming MOITS activities, and provide a list of potential regional projects for future funding opportunities
- Strong interest expressed by the then-chairman (elected official) of the TPB

Proposed Projects and Strategic Efforts – Unfunded



1. Sustain MATOC/RITIS
2. Upgrade RITIS regional ITS data warehouse capabilities
3. Enhance RITIS data sharing capabilities
4. Support 3rd party development of trip planning “apps”
5. Deploy integrated corridor management technologies (pilot)
6. Deploy park-and-ride parking availability information (pilot)
7. Develop special event traffic management plans
8. Develop a regional managed lane facilities (HOV, HOT, ETL) coordination process (e.g. annual summit meetings)
9. Develop a venue and process for coordinating maintenance and construction schedules (e.g., semi-annual meetings)
10. Develop a venue and process for interjurisdictional signal timing coordination

Emphasis Areas Identified in the MOITS Strategic Plan

- Systems engineering-based topics in the MOITS purview
 - ITS Data Warehouse
 - Multi-modal Coordination
 - Transit Signal Priority
 - Interactive Traveler Information
 - Transportation Operations Data Sharing
 - HOV Lane Management
 - Regional Traffic Management
 - Regional Parking Management
 - Maintenance and Construction Activity Coordination
- Other topics are being addressed in venues/committees that convene the necessary stakeholders, in close coordination with MOITS



Congestion Management Process (CMP) and Congestion Dashboard

- Effort to raise the frequency and visibility of reports on regional congestion
- www.mwcog.org/congestion

MOITS ITS Architecture Subcommittee

- Shepherd the Regional ITS Architecture
www.mwcog.org/itsarch
- Information sharing and best practices
- Input/follow-up to MOITS Strategic Plan

MOITS Traffic Signals Subcommittee

- Provide advice and input to TPB, other committees on traffic signals and their operations
- Technical information sharing
- Surveys/data collection
- Strong elected official interest

Metropolitan Area Transportation Operations Coordination (MATOC) Program Background



- Joint program of the District of Columbia, Maryland, and Virginia departments of transportation (DDOT, MDOT, and VDOT) and the Washington Metropolitan Area Transit Authority (WMATA)
- Established in 2008
- Mission – provide real-time situational awareness of transportation operations/incidents in the National Capital Region
- Activities –
 - Communicate consistent and reliable information that enables operating agencies and the traveling public to make effective and timely decisions
 - Develop and maintain tools and processes needed to facilitate coordinated operating agency responses
 - Operate and share information the automated Regional Integrated Transportation Information System (RITIS)
 - Complement RITIS information with targeted notifications and coordination activities by a designated MATOC facilitator and support staff

MATOC and RITIS



- RITIS developed and operated by U-MD
- Information sharing engine for the region
- Successful and growing
- Depends on MATOC funding, guidance
 - MATOC Information Systems Subcommittee also serves as the Configuration Advisory Board for RITIS

TPB Coordination with MATOC

- TPB (staff) ex-officio members of MATOC committees
- Administrative/planning support provided in part under the Unified Planning Work Program Funding
- Briefings and coordination between MATOC and TPB committees, RESF-1
- MOITS plays long-range planning advisory role for MATOC

MATOC Funding

- Original SAFETEA-LU grant has ended
- Annual contributions from DDOT, MDOT, VDOT
- Ad hoc federal grants
- In-kind TPB staff support through UPWP for planning and administration

Regional Emergency Support Function #1 – Transportation Committee (Security)

- Part of COG (not TPB) family of public safety committees
 - But partially supported by MPO UPWP funds
- Associated with DHS, public safety work and needs
 - UASI process
- Transportation agency representatives participate
- Focus on planning for transportation sector's role in catastrophic emergencies

Transportation Safety Subcommittee

- Advisory subcommittee to the TPB
- Focus on traffic / transportation safety (e.g. crashes)
- Advises the “transportation safety element” that is federally required for all metropolitan transportation plans

Comparative Committee Activities

	MOITS	MATOC	RESF-1 Emergency Transportation Committee	TRANSPORTATION SAFETY SUBCOMMITTEE
REPORTING	Advisory subcommittee to the MPO (TPB)	Independent organization with its own Steering Committee made up of state DOTs, WMATA (external to the MPO)	Advisory subcommittee to the COG Board / public safety committee structure (not MPO/TPB)	Advisory subcommittee to the MPO (TPB)
COMMITTEE STRUCTURE	Reports up to TPB Technical Committee; supported by Traffic Signals, ITS Architecture, and Traveler Information Subcommittees	MATOC Steering Committee (DDOT, MDOT, VDOT, WMATA); supported by Information Systems Subcommittee & Operations Subcommittee	Reports to COG Public Safety Policy Committee; coordination as necessary with parallel RESF committees (RESF-2 through RESF-16)	Reports up to TPB Technical Committee
TOPIC AREAS	PLANNING: MOITS considerations in regional long-range transportation planning; planning for non-emergency transportation operations	OPERATIONS: Current interagency coordination on transportation operations, incidents, & related information sharing/traveler information	Provide transportation sector input to the regional catastrophic emergency planning process and DHS-driven requirements	Shepherd the federally-required transportation safety element of the long-range transportation plan

Regional Issues

- We are fortunate to have transportation agencies in our region that are supportive of operations coordination efforts
- Lack of funding sources / ongoing funding for regional operations projects
- Progress but still challenges with coordination with agencies outside transportation (e.g. public safety, emergency management)
- High-growth area presents challenges and opportunities

Recent Incidents

- January 26, 2011 snow/ice storm stranded commuters for hours during and after evening rush hour
 - Our parent agency COG convened a high-level committee for after-action investigation
 - Special interest of chairman – power backup systems for traffic signals
- August 23, 2011 earthquake
 - Disruption similar to January 26
- June 29, 2012 derecho storm
 - Senior official focus on 911 system failures, slowness of utility electric power restorations
- What is the evolving role of a regional organization / MPO in performing after-action reviews or investigating failures?

Questions/Discussion