Briefing on the Strategic Plan for the Management, Operations, and Intelligent Transportation Systems (MOITS) Program

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Overview

- The draft MOITS Strategic Plan was developed over the August 2009 – April 2010 time frame by a consultant team and TPB staff
- Developing such a plan was recommended by MOITS
 Technical Subcommittee members
- 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 TPB Chairman Snyder

Preparation of the Draft Plan

- Consultant team:
 - Craig Franklin, Trichord, Inc.
 - Donna Nelson, Daniel Consultants, Inc.
 - Kenneth Vaughn, Trevilon, Inc.
- MOITS Strategic Plan Working Group
 - Amy McElwain, VDOT, Chair
 - Michael Harris, VDRPT
 - Yanlin Li, DDOT (emeritus)
 - Mena Lockwood, VDOT
 - Alvin Marquess, MSHA
- TPB Staff

Reconfirming Core Missions of the MOITS Technical Subcommittee

- Advise the TPB and its committees on transportation management, operations, and technology
- Serve as a forum for information exchange on these topics among members
- Coordinate with other key regional activities:
 - The RESF-1 Committee (transportation emergency preparedness planning)
 - MATOC (real-time information coordination)
 - WMATA committees (transit operations and technology efforts)
- And some recommendations for new or enhanced activities

Building from the TPB Vision

- Two goals from the TPB Vision (1998), along with their associated objectives and strategies, were the key goals for MOITS
 - Management, performance, maintenance, and safety (Goal 3)
 - Technology to maximize system effectiveness (Goal 4)
- The MOITS Strategic Plan builds upon the TPB Vision by identifying four additional "tactical actions"
 - Provide regional situational awareness of transportation system conditions
 - Regionally coordinate operating procedures
 - Inform travelers' decision-making
 - Integrate systems and processes

Features of the Strategic Plan

Emphasis Areas

Technical topics that are in the MOITS purview and lend themselves to a regional-level focus

Best Practices

Anticipated to be especially effective in achieving desired outcomes

Performance Measures

Metrics to assess MOITS impacts

How MOITS-Related Activities Will Directly Benefit the Public

In addition to agency/systems efficiencies

Proposed Projects and Strategic Efforts

A list of priority regional-level projects or activities, and estimates of funding needed

Key Recommendations

Guiding the future activities of the MOITS program

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 that convene the necessary stakeholders
 - RESF-1 for emergency topics, WMATA for transit topics, MATOC for day-today operations information sharing

Best Practices

- The Strategic Plan identifies a number of recommended "best practices"
 - Defined as a process or activity anticipated to be especially effective in achieving a desired outcome
- Best practices are structured as recommended general actions for the region or for individual agencies/jurisdictions
- The plan's proposed projects build in part off of the best practices
- The MOITS Technical Subcommittee serves as a continuing forum for identifying and promoting best practices

How MOITS-Related Activities Directly Benefit the Public

- Reduced delays: through efficient operations and reduced duration of incidents
- Better availability of information: through better data through the sources the public knows and relies upon, such as radio traffic reports, web sites, and smart phone apps
- Better quality of information: questions such as whether to travel, when to start, what mode to take, and what route to take depend rely upon good information about the status of the transportation system
- Safety: reduce the chances of secondary incidents in traffic backups through MATOC and other traffic management programs
- Better responsiveness of transportation systems to traveler needs: agencies can better prepare for and provide services that meet needs, such as where and when congestion and traffic incidents occur, or when traffic or transit demands are highest
- Plan also includes performance measures for assessment of activities

Proposed Projects (1-7) and Strategic Efforts (8-10) — 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

Key Recommendations Identified in the MOITS Strategic Plan

- Continue MOITS roles in advising the TPB and regional information exchange
- Strengthen coordination among MOITS, MATOC, RESF-1, and WMATA
- Strengthen focus on the tactical actions (situational awareness, operating procedures, informing travelers, and systems interoperability) identified in the strategic plan
- 4. Strengthen MOITS role in developing regional project proposals
- 5. Encourage best practices
- 6. Strengthen understanding of MOITS performance measurement and benefit-cost analysis
- 7. Inform decision makers on the recommendations of the MOITS Strategic Plan, and encourage funding of recommended projects

Outlook

- The draft MOITS Strategic Plan slated to go to TPB for the May 19 meeting
- Once finalized, the plan will serve as a major guide for upcoming MOITS activities, and as a source for prioritized project proposals as funding opportunities arise