



MARYLAND TRANSPORTATION OPERATIONS SUMMIT

2008

BETTER MOBILITY THROUGH IMPROVED
TRANSPORTATION OPERATIONS

SUMMARY OF PROCEEDINGS

WHITE PAPER

EXECUTIVE SUMMARY

FINAL
AUGUST 2008



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MARYLAND TRANSPORTATION OPERATIONS SUMMIT

BETTER MOBILITY THROUGH IMPROVED TRANSPORTATION
OPERATIONS

EXECUTIVE SUMMARY

INTRODUCTION

On May 1, 2008, the Maryland Transportation Operations Summit was held at the Conference Center at the Maritime Institute in Maryland and allowed participants to engage in an open dialog to explore opportunities for coordinating transportation operations among modes, jurisdictions and levels of government. The first-of-its-kind summit brought together Maryland state, regional and local transportation and public safety agencies to discuss:

- Current national perspectives on highway and transit operations;
- Current status of highway and transit operations in Maryland;
- Agency plans and visions for improving and mainstreaming operations in Maryland; and
- Next steps for expanded and integrated agency efforts to enhance operations.

Agency and other spokespersons offered assessments on state and national progress on an operations continuum. They shared their respective plans for achieving agency operational visions.

Specific areas of focus included: institutional arrangements and barriers, technological advancements and utilization, interoperability, regional and multi-modal coordination, travel safety, incident and emergency management, congestion management, best practices, current and future leaderships, and next steps/future directions [refer to Appendix A to view the Summit Program]. The goal of the summit was to give attendees a better awareness of national and statewide operations, innovative practices, and emerging operations technologies and tools to begin setting the direction for the future advancement of statewide transportation management and operations in Maryland. This post-summit white paper is only an initial step towards achieving this goal. It is anticipated that the Operations Summit will become a regular event and that workshops focusing on specific operational areas will be held throughout the year.

Participation in the Maryland Transportation Operations Summit (MTOS) included a total of 264 people representing a wide range of individuals working in transportation operations from Maryland senior officials to field operations personnel; Federal, State, regional and local organizations; and other interested parties including the Maryland Motor Truck Association and American Automobile Association. A list of MTOS participants, along with contact information, is contained in Appendix C. Appendix C also includes a summary of participant distribution by agency/organization.



Sponsorship and organizational support of the Summit was provided by organizations involved in transportation operations such as the Maryland Department of Transportation (MDOT) and its modal administrations, county and local departments of transportation and transit agencies, the Intelligent Transportation Society of Maryland, the Federal Highway and Transit Administrations, the I-95 Corridor Coalition, and others [see following table for a complete list.]

| | |
|---|---|
| <ul style="list-style-type: none">▪ Federal Highway Administration▪ Federal Transit Administration▪ Transportation Security Administration▪ Maryland Department of Transportation▪ Maryland State Highway Administration▪ Maryland Transportation Authority▪ Maryland Transit Administration▪ Maryland Emergency Management Agency | <ul style="list-style-type: none">▪ Maryland State Police▪ Washington Metropolitan Area Transit Authority▪ Baltimore Regional Transportation Board▪ National Capital Region Transportation Planning Board▪ University of Maryland CATT▪ I-95 Corridor Coalition▪ ITS Maryland▪ ITS America |
|---|---|

Note that all presentations made during the MTOS and handouts used in afternoon Break-out Sessions can be downloaded from the Intelligent Transportation Society of Maryland (ITS MD) website reading room at:

http://www.itsmd.org/index.php?page_id=8

A copy of the full version of this document that includes details of each speaker’s remarks and a more complete summary of the break-out session discussions is available for download from the ITS MD website reading room.

SUMMARY AND KEY THEMES OF MTOS MORNING SESSIONS

WELCOME SESSION

The Honorable Beverley Swaim-Staley, Deputy Secretary, Maryland Department of Transportation, provided the “welcome” address to the MTOS attendees on behalf of Governor Martin O’Malley. Ms. Swaim-Staley noted that the Governor and Secretary of the Maryland Department of Transportation are committed to providing safe and efficient transportation systems – safety and mobility are top priorities.

Key Themes:

- Take advantage of our collective knowledge base to *explore opportunities for multi-modal coordination and share ideas across transportation modes and across levels of government;*
- While Maryland has been a leader in the area of operations, *we must do more to move operations forward beyond where we are today – building our way out of congestion is not an option so we must work together to develop innovative tools, strategies, and*



technologies to optimize our transportation infrastructure and improve safety and mobility for all travelers.

PLENARY SESSION #1: OPERATIONS FROM A LEADERSHIP PERSPECTIVE

Plenary Session 1 was moderated by Deputy Secretary Swaim-Staley and included the following panelists:

- Neil Pedersen, Administrator, Maryland State Highway Administration
- Paul Wiedefeld, Administrator, Maryland Transit Administration
- Randolph Brown, Director of Operations, Maryland Transportation Authority
- Jeffrey Paniati, Executive Director, Federal Highway Administration

Each panelist made remarks signifying operations from their perspective as a state or federal transportation leader. **For a complete summary of each speaker's remarks, please refer to the full document.**

Mr. Pedersen emphasized the importance of operations to the Maryland State Highway Administration (SHA) in that what SHA does “in essence affects everyone.” His remarks focused on the importance of incorporating operations into planning, mobility and congestion relief, investment in the CHART program and its major benefits, Office of Traffic and Safety investments in operations, homeland security and evacuation plans, regional operations coordination efforts, and traveler information.

Mr. Wiedefeld discussed the Maryland Transit Administration's (MTA's) primary role in supporting the operation and efficiency of the overall transportation system in Maryland by *getting cars off the road*. His remarks covered MTA operational statistics and a number of improvement initiatives underway in the areas of ridership, efficiency, and safety.

Mr. Brown discussed what the Maryland Transportation Authority (MdTA) is doing to reduce congestion while minimizing the need for additional capacity through the use of technology in tolling and demand management. He emphasized the success of *E-ZPass*, the need to incorporate operations into project planning, the fact that new technologies will impact operational needs and policies, and how MdTA is organizing to better support operations.

Mr. Paniati made a formal presentation titled “*Reducing Congestion – Tools of the Trade*”. The presentation covered the crisis of congestion in our nation, the U.S. DOT Congestion Initiative (emphasizing the need to bring transportation supply and demand into alignment), highlights of the sites selected for participation in the Congestion Initiative (with some emphasis on HOT to HOV conversion potential), technology and operations roles in delay reduction, traveler information, and signal timing.

Key Themes:

- High-level agency goals of reducing the impacts of congestion are clearly synergistic and opportunities for multi-agency and multi-modal coordination to achieve these goals should be explored.
- The safety of Maryland transportation system customers is a top priority from all modal perspectives.

- There is a need to improve the incorporation of operations into the project and transportation planning process.
- In confronting congestion from a policy perspective, there is a need to examine the true relationship of transportation supply, demand, and pricing.
- Build on existing technology and operations accomplishments and expand capabilities in promising areas such as traveler information through implementation of 511, travel times on DMS, and other potential opportunities.

PLENARY SESSION #2: OPERATIONS FROM A MANAGEMENT PERSPECTIVE

Plenary Session 2 was moderated by Mike Zezeski of the Maryland State Highway Administration and included the following panelists:

- Richard Steeg, Virginia Department of Transportation
- Beverly Hill, Maryland Transit Administration
- Richard Dye, Maryland State Highway Administration

Each panelist made remarks signifying operations from their perspective as a manager responsible for (or in support of) operations of the transportation system. **For a complete summary of each speaker's remarks, please refer to the full document.**

In introducing the session, Mr. Zezeski highlighted some of the challenges that Maryland will be facing in the future and the point that, from his perspective, transportation system operations management will be the best way to get the most out of our transportation systems. The challenges emphasized projected growth of congested NHS routes and movement of truck freight in the I-95 Corridor through 2035. Projected growth in VMT was also presented both with and without better operations and he used the project growth rates to make the case for Maryland to be aggressive in adopting an integrated multi-modal approach to operations.

Mr. Steeg focused his discussion on regional coordination and communication and the efforts underway through the Metropolitan Area Transportation Operations Coordination (MATOC) Program. MATOC is a multi-agency regional DOT function that is intended to facilitate interagency real-time transportation information and data sharing, enabling coordinated management of transportation systems, incidents, emergency response, and public information needs. He discussed the MATOC focus as well as its background and status. He also discussed the Regional Integrated Transportation Information System (RITIS) and how this system functions to support MATOC.

Ms. Hill highlighted her department's role within MTA and its responsibility for running transit services and day-to-day management of operations. She noted that operations is always under pressure to do more, to do it better, faster, but with less resources and under the umbrella of ever increasing regulatory constraints. She discussed her departments' respective priorities for improving performance in the area of rail and bus operations and some the critical needs her operations face.

Mr. Dye's presentation emphasized some key points related to the relationship between technology and operations. For example, too often, agencies operate based upon the technology that they buy or build. History shows at the end of a development effort, the user's view is seldom the winner. If we want to know what is needed for better operations, **ASK OPERATIONS**. He went on to discuss the tools CHART has developed, the information available in CHART, and how CHART has evolved to become a critical tool in enhancing multi-agency coordination and communication.

Key Themes:

- Adopting an integrated multi-modal approach to operations can curb impacts of project VMT growth.
- Operating regionally and playing together with both traditional and non-traditional partners "in the same sand box" is critical to how Maryland evolves its current operations capabilities.
- Operational needs must drive technological deployment, not the other way around.
- Agency operations personnel continue to be asked to do more with less. For example, increased management emphasis on data collection for improved system performance measure tracking is important; however, resources must be made available to support enhanced performance tracking efforts.

SPECIAL SESSION: CONGESTION MANAGEMENT

The Honorable James Simpson, Administrator of the Federal Transit Administration, shared his perspective of congestion management. He noted that on behalf of President Bush and Secretary Peters, he was happy to be participating in the Maryland Transportation Operations Summit. Administrator Simpson covered a number of topics in his remarks including (**for a complete summary of his remarks, please refer to the full document**):

- FTA's fiscal 2008 and 2009 budgets and program priorities;
- Our lack of resources to adequately develop transit and transportation infrastructure;
- Lack of funding to re-invest in legacy system to keep in good repair;
- Gap in resource needs vs. what we have;
- Need for new revenue models – congestion pricing;
- Promise of congestion pricing based on cities that are doing it;
- Use of public-private partnerships on capital transit projects; and
- Supporting transit oriented development (including his acknowledgement of Governor O'Malley and Secretary Porcari for supporting more transit-oriented development in places like Prince George's County).

Key Themes:

- Due to lack of funding for both capital transportation infrastructure and existing transportation infrastructure maintenance we need to look well beyond the fuel-tax model towards more innovative revenue development models such as congestion pricing.
- Developing new ways of paying for and using transportation infrastructure will require leaders to make tough and courageous decisions about what it will really take to build and sustain a world class transportation infrastructure.
- We cannot allow geopolitical boundaries to stop us from doing the right thing – especially in the Baltimore-Washington corridor.

PANEL DISCUSSION: ASSESSING OPERATIONS MATURITY

This special panel session focused on assessing operations maturity from an organizational perspective – that is providing a technique for evaluating the effectiveness of an organization’s processes from an operations oriented perspective. Panel participants were:

- Phil Tarnoff, University of Maryland Center for Advanced Transportation Technology; and
- Stephen Lockwood, Parsons Brinckerhoff

Mr. Tarnoff focused on defining organizational maturity, the history of the concept and its relationship to the transportation community, and its application at a micro-level (incident management). Mr. Lockwood then followed with a discussion of assessing organizational maturity at a more macro-level (agency wide). Both Messrs. Tarnoff and Lockwood encouraged agencies to use the presented assessment techniques to identify their level of organizational maturity.

Key Themes:

- Organizational maturity is a technique for evaluating the effectiveness of an organization’s processes. The objectives focus on repeatability, effectiveness, performance measurement, and optimization. Organizational maturity is not another quality initiative, is not a prescriptive approach defining processes to be followed, nor a directive from external organizations or senior management – it is a way of “getting your act together”.
- Organizational maturity model is based on a similar framework used successfully in the information technology industry.
- The organizational maturity model provides a formalized transparent self appraisal process that will allow agencies to enhance their operational effectiveness.

SUMMARY OF AFTERNOON BREAK-OUT SESSIONS

The afternoon session of the Maryland Transportation Operations Summit included six Break-out Sessions. The sessions and corresponding facilitators are identified below.



Session A: Managing Congestion and Planning for Operations — Raja Veeramachaneni
Session B: Incident and Emergency Management — Alvin Marquess
Session C: Improving Travel Safety through Operations — Tom Hicks
Session D: Systems Interoperability and Providing Public Information — Glenn McLaughlin
Session E: Regional and Multi-Modal Coordination — Andrew Meese
Session F: Integrating Homeland Security and Transportation Operations — Mike Fischer

Each facilitator was provided a similar framework to organize the discussion and conduct of the session. The facilitator worked with a pre-determined group of individuals (discussants) who are considered knowledgeable in the break-out session topic area. The discussants helped the facilitator engage the MTOS participants in the discussion. While the facilitators were given broad flexibility in organizing their respective sessions, they were asked to lead their session participants through the following questions:

- *Where are we now?* That is, what is the current state-of-the-practice in Maryland and the region?
- *Where should we be?* What should we be doing, but are not? What are the best practices in your respective topic area from around the country? What should Maryland and the region's model programs in your topic area look like in approximately five years?
- *How do we get there?* What are the broad steps to achieving the model program? What are some of the practical and institutional challenges?
- *How do we measure progress?* What are some of the applicable metrics for assessing success?
- *How does this discussion relate to the theme of the Summit?* The theme of the Summit is *Better Mobility Through Improved Transportation Operations*. The Summit's goals are to continue to incorporate different modes and agency levels in the operations process and to include innovative practices and emerging technologies in regional operations.

While this format was not followed to the letter, all break-out sessions generally resulted in setting the stage for follow-on actions, mainly by emphasizing answers to *Where should we be* and *How do we get there?* Each facilitator was provided with a note-taker to help log the discussion.

Following are the session summaries provided by each facilitator during the Report Back and Wrap-Up closing session. **For details of the discussions related to each session, please see the full document.**

SESSION A: MANAGING CONGESTION AND PLANNING FOR OPERATIONS

Facilitator: Raja Veeramachaneni, Maryland State Highway Administration. Mr. Veeramachaneni opened his summary remarks by noting that Maryland is NOT going to put up with congestion anymore. Key highlights of his session were noted as follows.

- We need to better define what is meant by level of congestion.

- The “standard” as what constitutes congestion varies by area (e.g., rural vs. urban)
 - We need to focus more on measures that emphasize travel reliability
 - We need to figure out how to communicate these measures with our customers
- The traditional transportation planning process is defined over a long time horizon (20-30 years) whereas planning for operations is done with the next few months in mind. We need to figure out a way to link these horizons.
- We must keep management of human error in mind as we plan and build our transportation systems.
- We need to expand our emphasis of traffic incident management beyond highways to arterials and look at incident management from a “system level”.
- Providing traditional capacity enhancements (e.g. lane additions) is becoming more challenging as we don’t have the right-of-way. Operations improvements will be critical to addressing congestion.
- Finally, we need champions to focus on the issue of planning and operations.

SESSION B: INCIDENT AND EMERGENCY MANAGEMENT

Facilitator: Alvin Marquess, Maryland State Highway Administration. Following are the highlights of the session discussion and outcomes:

- *Advertise Maryland Move IT! Law* – Maryland has a Move It! law but it is not widely known by Maryland motorists. Marketing efforts should be increased.
- *Command Vehicles* – We need policies in place to better utilize command vehicle resources. We also need better regional procedures for using these resources.
- *Standard Policy for Towing Across State* – concerns related to tower liability can reduce the effectiveness of quick clearance policies. Legislation should be passed that would exempt towers from liability for services performed at incident scenes at the direction of the Incident Commander (except for gross negligence).
- *Slow Down/Move Over law* – These laws require motorists to slow down and move over when approached by response vehicles responding to an incident. Forty-one (41) states have these laws but only 24 have included towers. The group felt that including towers was important and should be pursued.
- *Safety Clothing Laws* – As of November 24, 2008 all traffic incident management responders will be required to wear ANSI approved high visibility safety garments.
- *Multi-day Incident Training* – Training is done for large-scale incidents and evaluations, but rarely is training conducted for multi-day incidents like the tornado in LaPlata.

- *After Action Reviews* – In order for After Action Reviews to be effective, all participants that responded to the incident need to be completely **honest** about what happened during the incident and **open to constructive criticism**.
- *Specific Traveler Information for Motorists* – In the future, it would be great if motorists could go to a web site and select specific travel information they want for specific times of day. Then, that information could be e-mailed to them daily. Thus, they could receive information about their rush hour travel routes as they are ready to leave for home or the office.

SESSION C: IMPROVING TRAVEL SAFETY THROUGH OPERATIONS

Facilitator: Tom Hicks, Maryland State Highway Administrator. Following are the highlights of the session discussion and outcomes:

- More enforcement is needed on our roadways to promote safer driving practices. This includes automated enforcement;
- Safety programs should not suffer due to lack of funds;
- Maintaining safety and mobility in work zones is extremely important to maintain the level of service (LOS) of the transportation system;
- Improvements to our transportation system (e.g., intersection designs) so they are pedestrian and bicycle friendly;
- The urgency to produce safety related information/documentation needs to be revisited (e.g., placing key safety information in the Motor Vehicle Administration Driver's Handbook).
- Public information and education programs are important. These programs need to target drivers of all ages. Education that promotes safer practices while changing modes of transportation should also be considered; and
- Safety programs need to address all modes of transportation.

SESSION D: SYSTEMS INTEROPERABILITY AND PROVIDING PUBLIC INFORMATION

Facilitator: Glenn McLaughlin, Maryland State Highway Administration. Following are the highlights of the session discussion and outcomes:

Where is Maryland Now?

- In the area of system interoperability and providing public information in Maryland, the consensus appears to be that incremental progress is being made, albeit many would say the progress is not as fast as it could or should be.
- There are a number of existing collection, management, and information dissemination mechanisms in place; however, there are significant data/information issues that must be addressed:
 - Coverage

- Temporal
- Quality
- Types
- Sources
- Security
- Data Archiving
- Various Audiences
- Lack of well defined roles for the public and private sector

Where Should We Be?

- We need more detailed / proactive and complete information tailored and delivered to the end user. For example, Maryland should be aiming for the provision of pre-trip and en-route traveler information that includes real-time decision support for choosing alternative routes (including arterials) and alternative modes.
- There needs to be a robust relationship between the private sector and public sector along with well defined roles for delivering specific types of services to end users based on needs.
- From a system interoperability / data exchange perspective, we have extremely thorough multi-modal and regional “situational awareness”.

How Do We Get There?

- There is no one owner of the problems/issues that have been identified (and that have been around for a long time). Given the many players involved, a collaborative approach to addressing the issues is required.
- While the previous bullet notes the need for collaboration amongst players, it was also mentioned that there needs to be a champion to push to get us where we need to go and to have implemented the paradigm shifts that will likely be required in order to be successful.
- We need to define detailed objectives of what we want to see accomplished and use these objectives to further define the roles of the public and private sector.
- From an operations perspective, operations agencies already collect data for their operational needs. What operational needs are not being addressed by current data collection capabilities (e.g., travel times)? Are there multi-modal operational opportunities that can be exploited?

How Do We Measure Progress?

- Ultimately, we will know if we are successful if the public gets the traveler information they want and they are satisfied with it. From a private perspective, it’s as simple as: is the public satisfied enough to the point they are willing to pay for it?

SESSION E: REGIONAL AND MULTI-MODAL COORDINATION

Facilitator: Andrew Meese, Metropolitan Washington Council of Governments. Following are the highlights of the session discussion and outcomes:

Where Are We Now?

- Some successes, but there is more we can do. Many opportunities to take advantage of.
- We must deal with highway and transit capacity limitations.

Where should we be?

- Need to provide information to enable people to make better decisions.
- Getting operations funding on the table with capital funding is important.
- Operations activities such as developing a Concept of Operations is not necessarily understood at the senior executive level.
- Multi-modal coordination by mode and roadway functional classification is important.

How do we get there?

- We have done the planning, now time to act.
- Build on I-270 Integrated Corridor Management ConOps to get planning and operations together.

How do we measure progress?

- Need to develop 3-5 meaningful performance measures that are applicable regionally.
- Focus on reliability as a performance measure.

How does this discussion relate to the theme of the Summit?

- A regional view in regard to multi-modal transportation operations is essential.
 - This will help use existing resources better.

SESSION F: INTEGRATING HOMELAND SECURITY AND TRANSPORTATION OPERATIONS

Facilitator: Mike Fischer, Maryland Department of Transportation. Following are the highlights of the session discussion and outcomes:

- Need to balance need for security with need for system efficiency. Video cameras are the main tool for enhanced security of the transportation infrastructure. Sharing video infrastructure between Transportation Operations and Security requires early planning and understanding the needs of both, otherwise a clash of policies and operational issues may ensue.
- Need to provide domain awareness:
 - Preventative pressure;
 - Responders need to know what they are responding to;
 - Need to be able to manage incident scene remotely;
 - Need interoperable systems to share data/information;



- Need to be able to archive information from incidents.
- The federal government can encourage security enhancements through prioritization of funding and education.
- Security procedure and tools need to be incorporated and contribute to day-to-day operations – otherwise they will not be effective during emergencies.
- Technology can support solutions, but they are not solutions in themselves.
- Must account for legacy systems – they are always with us and we need to use them.
- We need to move forward incrementally....we can't build the ultimate solution all at once.
- How do we measure success? Every day that we don't have an event/incident is success.

MARYLAND TRANSPORTATION OPERATIONS SUMMIT – POTENTIAL ACTION ITEMS

Following is a list of potential action items resulting from the MTOS. This list of action items could be addressed in a number of ways: through specific workshops, studies, scanning tours, R&D, or direct implementation (or some combination thereof). In addition, there may be opportunities to match action items with conferences or workshops that are being held in other areas of the country. The appropriate next step is to prioritize the action items and determine how best to achieve them.

- Examine the true relationship of transportation supply, demand, and pricing – include the potential for establishing an overall congestion pricing program in Maryland.
- Identify specific multi-agency and multi-modal operational opportunities, establish goals, and determine how best to work together to achieve the goals.
- Using the Baltimore metropolitan area as a target area, identify and implement strategies for strengthening the relationship between operations and the transportation planning process. Identify and enlist the help of a “champion” to help make this happen.
- Conduct agency organizational assessments using the techniques identified in the Organizational Maturity Model.
- Identify and implement new congestion performance measures using best practices from around the world. Develop 3-5 meaningful measures that can be implemented regionally. Examine the potential for travel time reliability as a meaningful measure.
- Identify potential multi-modal system performance measures looking at best practices around the nation and world.

- Identify the resource requirements for expanding traffic incident management beyond highways to arterials and other modes.
- Expand marketing efforts for Maryland’s Move-It! Law.
- Develop policies and procedures for coordinated use and deployment of mobile command vehicles.
- Develop a standard policy for towing across the state.
- Implement a Slow Down / Move Over law in Maryland.
- Develop multi-day incident management training exercises – examine possibility of using simulation to provide training exercises.
- Identify and implement best practices for maintaining safety and mobility in work zones.
- Identify and implement best practices for pedestrian and bicycle friendly intersection designs.
- Identify and implement best practices in public information and education programs targeting drivers of all ages.
- Define detailed objectives of what the state wants to accomplish in the area of traveler information. Use objectives to identify respective roles of public and private sector.
- Identify and enlist the support of a champion (or champions) for providing multi-modal traveler information and bring the public and private sectors together to accomplish.
- Identify and implement best practices in protecting transportation infrastructure focusing on maintaining a balance between security needs and the need for system operational efficiency.

MARYLAND TRANSPORTATION OPERATIONS SUMMIT EVALUATION SURVEY RESULTS

A web-based survey containing 20 questions was sent to each MTOS attendee. Of the 264 MTOS attendees, a total of 73 responded to the survey or 28% of the participants. A summary of survey results are included in Appendix B. Note that not every person who responded answered every survey question. Overall, the survey results were extremely positive, but there is room for improvement in future conferences such as this. Some highlights of the results include:

- Of 73 respondents, 52% “agreed” and 20% “strongly agreed” that Overall, the Operations Summit met their expectations and was worth their time. Note that 12% “disagreed” and 3% “strongly disagreed”.

- Of 73 respondents, 45% “agreed” and 31% “strongly agreed” that the Operations Summit should be an annual event. Note that 4% “disagreed” and 0% “strongly disagreed”.
- 41 respondents offered suggested topics for future conferences.
- Of 69 respondents, 49% “agreed” and 20% “strongly agreed” that the morning sessions did a good job of conveying the status and challenges associated with Operations in Maryland. Note that 4% “disagreed” and 7% “strongly disagreed”.
- Of 58 respondents, 41% “agreed” and 34% “strongly agreed” that the afternoon break-out session attended met their expectations and was worth their time. Note that 9% “disagreed” and 2% “strongly disagreed”.
- Of 57 respondents, 32% “agreed” and 44% “strongly agreed” that the format of the afternoon break-out session attended helped generate audience participation. Note that 11% “disagreed” and 2% “strongly disagreed”.
- Of 52 respondents, 91% liked the format of the afternoon break-out sessions.
- 25 respondents provided suggested topics for future break-out sessions.
- Overall, the conference facility received high marks for quality of the auditorium, lunch facility, and food. Some did not give high marks to the quality of the break-out session room.



APPENDIX – A

MARYLAND TRANSPORTATION OPERATIONS SUMMIT PROGRAM

Douglas Rose, Deputy Administrator/ Chief Engineer for Operations, Maryland State Highway Administration, Presiding

| | | |
|----------------------|---|-------------------|
| 7:30 – 8:00 | Registration and Breakfast | |
| 8:00 – 8:30 | Welcome | <i>Auditorium</i> |
| | <ul style="list-style-type: none"> • The Honorable Beverley Swaim-Staley, Deputy Secretary, Maryland Department of Transportation | |
| 8:30 – 9:30 | Plenary Session #1: Operations from a Leadership Perspective | |
| | Moderator: Deputy Secretary Swaim-Staley | <i>Auditorium</i> |
| | Presenters: | |
| | <ul style="list-style-type: none"> • Neil Pedersen, Administrator, Maryland State Highway Administration • Paul Wiedefeld, Administrator, Maryland Transit Administration • Randolph Brown, Director of Operations, Maryland Transportation Authority • Jeffrey Paniati, Executive Director, Federal Highway Administration | |
| 9:30 – 9:45 | Break | |
| 9:45 – 10:45 | Plenary Session #2: Operations from a Management Perspective | |
| | Moderator: Michael Zezeski, Maryland State Highway Administration | |
| | Presenters: | <i>Auditorium</i> |
| | <ul style="list-style-type: none"> • Richard Steeg, Virginia Department of Transportation • Beverly Hill, Maryland Transit Administration • Richard Dye, Maryland State Highway Administration | |
| 10:45 – 11:15 | Special Session: Congestion Management | <i>Auditorium</i> |
| | <ul style="list-style-type: none"> • The Honorable James Simpson, Administrator, Federal Transit Administration | |
| 11:15 – 12:00 | Panel Discussion: Assessing Operations Maturity | <i>Auditorium</i> |
| | <ul style="list-style-type: none"> • Philip Tarnoff, University of Maryland • Stephen Lockwood, PB Consult | |
| 12:00 – 1:30 | Lunch – The dining room is located in Building 2. Please take your lunch ticket with you. | |

1:30 – 3:00

Break-out Sessions

A: Managing Congestion and Planning for Operations – Room A302

- Facilitator: Raja Veeramachaneni, Maryland State Highway Administration

B: Incident and Emergency Management – Room A111

- Facilitator: Alvin Marquess, Maryland State Highway Administration

C: Improving Travel Safety Through Operations – Room A303

- Facilitator: Tom Hicks, Maryland State Highway Administration

D: Systems Interoperability and Providing Public Information – Room A304

- Facilitator: Glenn McLaughlin, Maryland State Highway Administration

E: Regional and Multi-Modal Coordination – Room A305

- Facilitator: Andrew Meese, Metropolitan Washington Council of Governments

F: Integrating Homeland Security and Transportation Operations – Room A307

- Facilitator: Michael Fischer, Maryland Department of Transportation

3:00 – 3:15

Break

3:15 – 4:30

Closing Session: Report Back and Wrap-Up

Auditorium



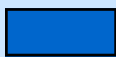
APPENDIX – B

ATTENDEE SURVEY RESULTS SUMMARY

| 1. Overall, the Operations Summit met my expectations and was worth my time. | | | | | | |
|--|----------------|-------------------|---------------------------|-----------|-------------------|----------------|
| | Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree | Response Count |
| Please rate your opinion. | 20.5% (15) | 52.1% (38) | 12.3% (9) | 12.3% (9) | 2.7% (2) | 73 |

| 2. The Operations Summit Conference should be an annual event. | | | | | | |
|--|----------------|-------------------|---------------------------|----------|-------------------|----------------|
| | Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree | Response Count |
| Please rate your opinion. | 31.5% (23) | 45.2% (33) | 19.2% (14) | 4.1% (3) | 0.0% (0) | 73 |

In response to making the MTOS an annual event most participants agreed that an annual event would be beneficial and encouraged the interaction between the various agencies that attended. Samples of other feedback provided included having a similar event in DC or have a DC representative participate, involve topics of interest to law enforcement and first responders, and have a way to report the status of forward movement in problematic areas discussed during the MTOS.

| 3. I thought the overall length of the Operations Summit was: | | | |
|---|--|--------------|----------------|
| | | | Response Count |
| Just Right |  | 74.3% | 52 |
| Too Long |  | 10.0% | 7 |
| Too Short (could have been 1.5 - 2 days) |  | 15.7% | 11 |



| 4. What topics would you suggest be included in a future conference such as this? | Response Count |
|---|----------------|
| | 41 |

The numerous responses given to what topic would you suggest be included in a future conference such as the MTOS included some of the following. Opening a session for cargo/freight/commercial vehicles, strategic development on how to increase communication between MDOT and first responders as well as the coordination between local/state and agencies/jurisdictions, developing a unified incident response plan including cross agency training. Homeland security, emerging technologies, and evacuation preparedness issues were also provided.

| 5. Any suggestions or comments based on your overall experience at this conference? Please identify any memorable highlights of the program. | Response Count |
|---|----------------|
| | 34 |

When respondents were asked to provide feedback or identify a memorable highlight they offered the following suggestions. Facilitators and speakers did a great job in the afternoon sessions, would have liked to attend more than one break-out session, the variety of issues and speakers were great and the break-out sessions should have been longer.

| 6. Any suggestions or comments on the conference location and facilities? | Response Count |
|---|----------------|
| | 48 |

In response to the facilities, the majority provided outstanding feedback praising not only the location but the facility, availability of parking as well as the food. Some other suggestions included maybe rotating the location around the Washington, D.C. Metropolitan region, using community college facilities, and having better coffee.

| 7. Overall, I thought the morning sessions did a good job of conveying the status and challenges associated with Operations in Maryland. | | | | | | | |
|--|----------------|-------------------|---------------------------|----------|-------------------|----------------|----------------|
| | Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree | Did Not Attend | Response Count |
| Please rate your opinion. | 20.3% (14) | 49.3% (34) | 17.4% (12) | 4.3% (3) | 7.2% (5) | 1.4% (1) | 69 |

When asked if the morning sessions succeeded in conveying the status and challenges associated



with operations in Maryland, participants provided the following feedback. The majority agreed that the status and challenges were conveyed and discussed at length; some participants said this topic could have been a lot shorter. Others suggested using PowerPoint presentations where the slides could have been handed out or emailed to participants and including in this discussion the operations of airports and seaports.

| 8. Please rate the quality of Plenary Session #1 “Operations from a Leadership Perspective” moderated by the Deputy Secretary with MDOT Modal Administration and FHWA Executive Director as speakers. | | | | | | | |
|---|-----------------------|-------------------|------------|---------------|----------|----------------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Did Not Attend | Response Count |
| Please rate your opinion. | 7.7% (5) | 41.5% (27) | 32.3% (21) | 4.6% (3) | 4.6% (3) | 9.2% (6) | 65 |

When asked to provide a rating for the Plenary Session #1, participants remarked: would like to have heard about identifying opportunities for modal cross connects, the speakers and session were great, and the discussion about the future goals and needs was great.

| 9. Please rate the quality of Plenary Session #2: “Operations from a Management Perspective”. | | | | | | | |
|---|-----------------------|---------------|-------------------|---------------|----------|----------------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Did Not Attend | Response Count |
| Please rate your opinion. | 7.5% (5) | 28.4% (19) | 41.8% (28) | 7.5% (5) | 4.5% (3) | 10.4% (7) | 67 |

Participants provided the following feedback to the quality of Plenary Session #2. Concentrate on less management and more front line discussion, needed more details, good representative panel, good discussion on regional coordination/communication, and the panel was more interesting as they addressed the issues that we may be able to fix.

| 10. Please rate the quality of the Special Session: “Congestion Management”. | | | | | | | |
|--|-----------------------|----------------------|------------|---------------|----------|----------------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Did Not Attend | Response Count |
| Please rate your opinion. | 9.2% (6) | 41.5% (27) | 27.7% (18) | 1.5% (1) | 0.0% (0) | 20.0% (13) | 65 |

The Special Session: Congestion Management received an above average rating and participants provided the following feedback. Simpson was good and his message was very relevant, this should be a regular topic of the summit and should include congestion management of overcrowded buses, trains, etc., excellent discussions, statistics were informative. This was the most refreshing speech I have attended in a very long time - relevant, honest, and funny but sincere. I take my hat off to the Administrator. James Simpson of the FTA came to “lay it on the line” and succeeded.

| 11. Please rate the quality of the Panel Discussion: “Assessing Operations Maturity”. | | | | | | | |
|---|-----------------------|---------------|-------------------|---------------|----------|----------------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Did Not Attend | Response Count |
| Please rate your opinion. | 12.3% (8) | 24.6% (16) | 30.8% (20) | 9.2% (6) | 3.1% (2) | 20.0% (13) | 65 |

The following feedback was provided for the average rating of the Panel Discussion: Assessing Operations Maturity.” While the presentation was commended for being good, some participants expressed that this topic was irrelevant, theoretical, confusing, and way over many people’s heads. Others noted that it was fascinating, the speakers were exceptional; it was obvious they came to encourage thinking outside the box, and maybe if examples from multiple disciplines were given it might have been helpful.

| 12. Please indicate which afternoon break-out session you attended: | |
|--|-----------------------------------|
| | Response Percent (response count) |
| Managing Congestion and Planning for Operations facilitated by Raja Veeramachaneni, Maryland State Highway Administration. | 10.4% (7) |
| Incident and Emergency Management facilitated by Alvin Marquess, Maryland State Highway Administration. | 14.9% (10) |



| | |
|--|------------|
| Improving Travel Safety Through Operations facilitated by Tom Hicks, Maryland State Highway Administration. | 20.9% (14) |
| Systems Interoperability and Providing Public Information facilitated by Glenn McLaughlin, Maryland State Highway Administration. | 19.4% (13) |
| Regional and Multi-Modal Coordination facilitated by Andrew Meese, Metropolitan Washington Council of Governments. | 10.4% (7) |
| Integrating Homeland Security and Transportation Operations facilitated by Michael Fischer, Maryland Department of Transportation. | 13.4% (9) |
| Did not attend an afternoon break-out session. | 13.4% (9) |
| Total responses | 67 |

| 13. The afternoon break-out session I attended met my expectations and was worth my time. | | | | | | |
|---|----------------|-------------------|---------------------------|----------|-------------------|----------------|
| | Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree | Response Count |
| Please rate your opinion. | 34.5% (20) | 41.4% (24) | 13.8% (8) | 8.6% (5) | 1.7% (1) | 58 |

| 14. The format of my afternoon break-out session generated audience participation. | | | | | | |
|--|-------------------|------------|---------------------------|-----------|-------------------|----------------|
| | Strongly Agree | Agree | Neither Agree or Disagree | Disagree | Strongly Disagree | Response Count |
| Please rate your opinion. | 43.9% (25) | 31.6% (18) | 12.3% (7) | 10.5% (6) | 1.8% (1) | 57 |

The following was provided in response to whether the format of the afternoon break-out sessions generated audience participation. Would have been better to have broken up into smaller groups and discussed particular questions and brought it back to the group for peer discussion. It was a good discussion despite trying to staying on target, this was an excellent session and being able to freely participate provides a better understanding with a smaller group. Definitely could have used some more time (with a short break in the middle).

| 15. Did you like the format of your afternoon break-out session? | | |
|--|------------------|----------------|
| | Response Percent | Response Count |
| Yes | 91.2% | 52 |
| No | 8.8% | 5 |
| | Total Responses: | 57 |

The following feedback was provided about the format of the afternoon break-out sessions. Some participants would have liked to see more interaction/exchanging of ideas among attendees, others would have liked to have more time to further discussions, and one participant suggested letting attendees choose more than one session to attend.

| 16. What topic(s) would you suggest be included in a future break-out session? | Response Count |
|--|----------------|
| | 25 |

When asked for a suggested topic for a future break-out session, participants provided the following feedback. Less management, more topics dedicated to front line people, the Maryland strategic highway safety plan, signal operations, more on managing long-term incidents in the NIMS/ICS environment, discuss security and how all transportation modes are affected by terrorism, and future plans for furthering operational practices.

| 17. Please rate the quality of the Conference Auditorium: | | | | | | |
|---|-----------------------|---------------|------------|---------------|----------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Response Count |
| Please rate your opinion. | 35.3% (24) | 50.0% (34) | 14.7% (10) | 0.0% (0) | 0.0% (0) | 68 |

The following feedback was provided on the quality of the conference auditorium. Very comfortable, easy to hear, no view is obstructed, sound quality is good, and there is really not a bad seat in the auditorium at the Maritime Institute.

| 18. Please rate the quality of the lunch facility: |
|--|
|--|

| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Response Count |
|---------------------------|------------------------------|---------------|----------|---------------|----------|----------------|
| Please rate your opinion. | 47.0% (31) | 43.9% (29) | 9.1% (6) | 0.0% (0) | 0.0% (0) | 66 |

When asked to provide feedback on the quality of the lunch facility the responses included: Excellent, buffet tables always exceed expectations, clean and efficient service, very nice atmosphere for an event such as this one, the management of the facility is professional grade, and more signage directing the group would have been helpful.

| 19. Please rate the quality of the lunch food: | | | | | | |
|---|------------------------------|---------------|------------|---------------|----------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Response Count |
| Please rate your opinion. | 49.2% (32) | 33.8% (22) | 16.9% (11) | 0.0% (0) | 0.0% (0) | 65 |

When asked to provide feedback on the quality of the lunch food the responses included: Excellent, variety and quality of the food was excellent, would have like to have seen more spices and condiments available, incredible selection, good quality foods, and the quality of the roast beef at the carving station was too fatty.

| 20. Please rate the quality of your break-out session room: | | | | | | |
|--|-----------------------|---------------|-------------------|---------------|----------|----------------|
| | Exceeded Expectations | Above Average | Average | Below Average | Poor | Response Count |
| Please rate your opinion. | 10.3% (6) | 32.8% (19) | 50.0% (29) | 5.2% (3) | 1.7% (1) | 58 |

The following feedback was provided on the quality of the break-out rooms. Overall nice facility, would have liked to have tables so note taking would have been easier, and would have liked to have the panel in front of the audience instead of mixed in with audience.



APPENDIX – C

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2008 Maryland Transportation Operations Summit Attendee Summary

| | |
|--------------------------------|-----|
| Registered Attendees | 303 |
| Final Attendees | 264 |
| Registered, but did not attend | 55 |
| Walk-on registrants | 16 |

| Agency/Company | Attendees |
|--|-----------|
| AAA | 2 |
| Andhra Pradesh Transportation Department | 10 |
| Anne Arundel County | 1 |
| Anne Arundel County - Traffic | 3 |
| ARINC | 2 |
| B.W. Zimmerman & Associates | 1 |
| Baltimore City DOT | 1 |
| Baltimore Metropolitan Council | 2 |
| Calvert County Transportation | 1 |
| Carroll County, DPW | 2 |
| City of Alexandria | 3 |
| City of Annapolis | 2 |
| City of Baltimore | 1 |
| City of Baltimore, Dept of Transportation | 1 |
| City of Fairfax, DPW | 1 |
| City of Salisbury | 1 |
| Daniel Consultants | 3 |
| Delcan | 1 |
| District Department of Transportation | 7 |
| DMJM Harris | 1 |
| DPW&T | 1 |
| DPW&T- STS Transportation | 1 |
| E-Squared Engineering | 1 |
| Federal Highway Administration | 8 |
| Federal Transit Administration | 3 |
| FHWA - Office of Operations | 3 |
| FHWA DelMar Division | 2 |
| Frederick County, MD | 1 |
| Green's Garage | 1 |
| Harford County | 1 |
| Harford County Emergency Operations | 1 |
| He Delivers International, Inc. | 1 |
| Howard County Traffic Engineering Division | 1 |
| I-95 Corridor Coalition | 1 |
| IBI Group | 1 |

| Agency/Company | Attendees |
|---|------------------|
| Jacobs | 1 |
| Maryland Aviation Administration | 1 |
| Maryland Department of the Environment | 1 |
| Maryland Department of Transportation | 4 |
| Maryland Department of Transportation - TSO | 1 |
| Maryland Emergency Management Agency | 3 |
| Maryland Highway Safety Office | 2 |
| Maryland Motor Truck Association | 1 |
| Maryland Port Administration | 1 |
| Maryland State Highway Administration | 35 |
| Maryland State Highway Administration - CHART | 1 |
| Maryland State Highway Administration - District 4 | 2 |
| Maryland State Highway Administration - OOTS | 2 |
| Maryland State Police | 29 |
| Maryland State Police - Waterloo Barrack | 1 |
| Maryland State Police Commercial Vehicle Enforcement Division | 1 |
| Maryland Transit Administration | 3 |
| Maryland Transportation Authority | 6 |
| Maryland Transportation Authority Police | 10 |
| Meridian Environmental Technology | 1 |
| Montgomery County DPWT | 1 |
| Montgomery County Police Department | 1 |
| Montgomery County Transit - Ride On | 2 |
| Morgan State University | 4 |
| Motion Maps, LLC | 1 |
| MSU National Transportation Center | 1 |
| MWCOG | 4 |
| National Park Service | 1 |
| North Carolina Department of Transportation | 1 |
| Open Roads Consulting Inc | 1 |
| Parsons Brinckerhoff | 3 |
| PBS Rentals of MD | 2 |
| PBS&J | 1 |
| Pennsylvania Turnpike Commission | 5 |
| Potomac Crossing Consultants | 1 |
| Prince George's County | 1 |
| Prince George's County DPW&T | 3 |
| Prince George's County OEM | 1 |
| Prince George's County Police Department | 2 |
| RAM Consulting Corporation | 1 |
| RK&K | 2 |
| Sabra, Wang & Associates, Inc. | 1 |
| SAIC | 1 |
| Sensys Networks | 1 |

| Agency/Company | Attendees |
|---|------------------|
| Telvent Farradyne | 12 |
| The Louis Berger Group | 4 |
| Towing & Recovery Professionals of Maryland | 2 |
| Traffic.com, Inc. | 1 |
| Transit Riders Action Council of Metropolitan Baltimore | 1 |
| Transportation Security Administration | 1 |
| University of Maryland | 3 |
| University of Maryland CATT | 6 |
| URS Corporation | 1 |
| US DOT/FMCSA | 1 |
| VHB, Inc. | 1 |
| Virginia Department of Transportation | 3 |
| Whitman Requardt & Assoc./MdTA | 1 |
| WMATA | 5 |
| Woodrow Wilson Bridge Project | 1 |