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- Eddie Lukemire, MDOT
- Emma Stockton, CS/ARAC Consultant
- Jacqueline Djomo, MVA
- Jessica Shearer, Blackwater/SHA Consultant
- Kaiqi Zhang, FS/ARAC Consultant
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- Nimisha Deshwal, CS/ARAC Consultant
- Megan Jansen, MDOT
- Michelle Martin, MDOT
- Peter Moe, MDOT
- Ross Turlington, MDOT
- Ryan Caro, HS/MTP Consultant
- Sophia Cortazzo, MDOT
- Sydney Joseph, HS/MTP Consultant
- Tom Harrington, CS/ARAC Consultant
- Toria Lassiter, MDOT

Public

- Staci Hartwell, NAACP
- Michael Scepaniak, Strong Towns Baltimore
- Bill Pugh, Coalition for Smarter Growth
- Brian O'Malley, Central Maryland Transportation Alliance

Introductions / Roll Call / Meeting #1 Overview

Michelle Martin, Deputy Director of the MDOT Office of Planning and Capital Programming, let everyone know that Assistant Secretary Joe McAndrew was not able to make today's meeting due to a conflict with a WMATA Board Meeting, and that he sent his regrets. She encouraged MDOT staff, MDOT consultant staff and any members of the public to introduce themselves in the chat. The Chair, Dr. Mansoureh Jeihani welcomed the Committee and conducted roll call of the ARAC members. For Committee members who were not able to attend the first meeting, Dr. Jeihani gave them a chance to introduce themselves: Jacqueline Allsup, Vice President of the Maryland NAACP and new member Chuck Boyd (replacing Val Lazdins) with the Maryland Department of Planning. Louis Campion, who arrived late to the last meeting and Charlotte Davis were not present to introduce themselves.

The Chair then provided a summary of the first ARAC Committee Meeting, which included an overview of MDOT, Transportation in Maryland, the Maryland Transportation Plan, the Bicycle and Pedestrian Master Plan, and the Attainment Report (AR), and a more detailed interactive discussion on the MTP Guiding Principles, Goals, and Key Outcomes. Michelle Martin noted there was great feedback from the Committee, which is still being addressed by the MDOT team but some feedback has already been incorporated. The Chair asked if there were any issues or questions with the Meeting Summary sent by email, with no additional comments provided.

The Chair also noted that the second MTP survey is now live and everyone should have received an email. The survey is open to the public and available on the [MTP web page](#), or can be found directly at: <https://metroquestsurvey.com/vj71u>. The survey is focused on seeking key outcomes for the 2050 MTP, transportation needs using a map drag and drop feature, and gaining insight on transportation investments priorities. She encouraged everyone to share the survey with their Maryland colleagues, family, and friends. The survey will be available through July 10.

Questions

- Dr. Ting Ma: I do not think I have received the survey through email. Is there a mailing list that I can join?
 - The press release was shared just before the meeting, so you may not have received anything in advance of the meeting.
 - We will add the ARAC to the email distribution to ensure everyone received the email.

Overview of Performance Measurement

The Chair turned the meeting over to Michelle Martin and the ARAC Consultant team. Michelle Martin let the Committee know she had sent hard copies of the AR to those who requested them and to let her know if anyone would still like one.

Michelle Martin provided an overview of performance measurement, specifically focusing on the selection of performance measures and their relation to the goals outlined in the AR. The Committee's objective for this meeting was help with making sure measures are effective, measurable, and understandable. It was noted that there are currently too many performance measures in the AR and that it is necessary to identify a select number of impactful measures that truly illustrate the performance of the transportation system. Ideally, the aim is to have no more than 1-3 performance measures per objective, with some exceptions. The Committee was encouraged to share their ideas on proposed performance measures, including the possibility of moving some measures to an online appendix.

Michelle Martin discussed the selection criteria utilized in identifying and recommending performance measures for the annual AR. These criteria included:

- Compliance with state and federal requirements, considering legislation and any alignment opportunities for statewide and federal performance reporting.
- Alignment with the goals and objectives of the 2050 MTP and the evaluation of their effectiveness in achieving these objectives.
- Technical feasibility, including the availability of current or historical data, existing tracking systems, and the effort required to collect and report the data.
- Efficiency, comprehensiveness, and balance in measuring the overall performance of the transportation system, as well as responsiveness to annual changes and the creation of a balanced report by mode.
- Understandability and ease of communication to the public.

Michelle Martin highlighted the desired outcomes when selecting measures, such as linking them clearly to MDOT goals, measuring what is important, ensuring their understandability, and quantifying complex issues. It was emphasized that the data should be consistent and available, indicating a clear direction for improving performance.

While setting targets for performance measures was not discussed in detail during the meeting, it was noted that targets should be challenging yet attainable. Historical data and performance trends, as well as desired policies and outcomes, should be taken into consideration when setting targets. The challenges associated with setting targets, such as the availability and impact of external factors beyond MDOT's control, were also acknowledged.

Presentation with Interactive Discussion: Performance Measures by Goals

Michelle and the ARAC Consultant team presented slides containing performance measures for each goal and engaged in an interactive discussion with the Committee members. The discussion was based on the Performance Measure summary document that the ARAC received via email the previous week. Utilizing the raised hand functionality to facilitate discussion, they reminded the attendees that the goals had been slightly adjusted and would continue to be refined based on public comments. They also reminded the attendees of the color coding used in the document:

- Yellow – existing measure, keep in AR
- Blue – existing measure, move to an online appendix
- Green – proposed new measure based on research, best practices, and modal administration input

□ Chester Harvey asked whether moving the (blue) existing performance measures to an online appendix was due to a space issue. Michelle explained it was not a space issue but rather a focus to include the most impactful measures for assessing how the transportation system is performing. While the blue measures are still valuable, they are not directly aligned with the key goals and objectives. The intention is to keep the report concise, readable, and understandable, as opposed to extending it to 60 pages.

The presentation included slides for all four goals, but the group focused on the first two goals in this meeting and will finish the remaining two goals in Meeting #3.

Questions

- Jacqueline Allsup raised a question about the absence of performance measures for environmental justice (EJ) and pollution-impacted communities in the previous meeting. She mentioned that some of the new proposed draft performance measures focus on underserved and overburdened communities.
 - Michelle Martin explained that Meeting #1 reviewed key outcomes and not performance measures. There are several proposed performance measures that address EJ and pollution-impacted communities that will be covered in this meeting.
- Gustavo Torres asked why race and equity are not key criteria for the performance measures.
 - Michelle Martin clarified that race and equity are guiding principles for the measures. The equity guiding principle will cross over with many of the performance measures, as will the other guiding principles. Additionally, equity metrics and measures are cascaded throughout the goals, and they will be discussed in more detail.

Goal: Enhance Safety & Security

Objectives/Focus Areas to Measure	Guiding Principles				
	Equity	Resilience	Preservation	Experience	Modernization
Prioritize efforts that will reduce the number of lives lost and injuries sustained on Maryland's transportation system.			X	X	X
1. Annual Number of Fatalities and Injuries on All Roads in Maryland (MFR)					
2. Annual Number of Bicycle Fatalities and Injuries (MFR)					
3. Annual Number of Transit Passenger Fatalities and Injuries					
4. Number of Pedestrian Fatalities and Injuries (MFR)					
5. Number of at-grade railroad crossing incidents resulting in injury or fatality					
Minimize disparities in safety across Maryland's diverse communities.	X				
1. Traffic fatalities and serious injuries in historically disadvantaged communities					
Address multimodal safety needs to support a safe and secure transportation system.	X			X	X
1. Preventable Incidents Per 100,000 Vehicle Miles on Transit					
2. Miles of lower level of traffic stress (LTS 2 or better)					
Maintain a safe system during adverse weather events, man-made threats, and other system disruptions.		X	X		
1. Roadway clearance times					
2. Incident (CHART) response rates/times					

Objective 1 - Prioritize efforts that will reduce the number of lives lost and injuries sustained on Maryland's transportation system

It was suggested that transit-related incidents should not be placed in the online appendix, as it may create the perception that transit safety is not a priority. Instead, incorporating transit-related data into the report's narrative was suggested to address this concern. The focus on preventable accidents/incidents was highlighted as crucial, but opinions differed on whether to combine bicycle, transit, and pedestrian fatalities into one indicator or maintain separate measures. Maintaining separate measures was discussed based on the classification of transit riders as passengers and the existence of specific safety plans for pedestrians and bicyclists. Lastly, there was a proposal to showcase a metric across different modes to demonstrate transit safety and provide a breakdown of fatalities and injuries at the beginning of the report, potentially calculated per 1,000 miles for transit.

Objective 2 – Minimize disparities in safety across Maryland's diverse communities

During the discussion, several important points were raised regarding the prioritization and reporting of safety measures in the context of underserved or overburdened communities. Primarily, there were questions from the Committee on why the Objective 2 measure focuses on serious injuries and fatalities, while Objective 1 focuses on fatalities and all injuries. It was explained that a focus on serious injuries, as opposed to all injuries, aligns with the safe system approach. The aim is not to prevent all crashes but to prevent all serious injuries and fatalities. This discussion was continued in Objective three and resulted in a proposal to consider three measures: fatalities, serious injuries, and injuries of all severity types.

Objective 3 – Address multimodal safety needs to support a safe and secure transportation system

During the discussion, several important points were raised regarding the inclusion of language access (particularly for Spanish-speakers), consistency in measuring railroad incidents, and the focus on serious accidents for diverse communities. A consistency issue was identified regarding the measurement of at-grade railroad crossing incidents. There were some Committee member questions on why we might add this measure, while moving the transit preventable incidents to the online appendix, especially if both have lower numbers; however, at-grade railroad crossing incidents is a federally required metric. Continuing the conversation on injury severity from Objective 2, the proposal to differentiate the severity level for transit passengers and other modes was suggested, leading to the proposal of three measures: fatalities, serious injuries, and injuries of all severity types. The ultimate goal of zero fatalities and serious injuries was emphasized, and it was clarified that while the goal measures the most severe crashes, program planning considers all injury crashes. The inclusion of new modes, such as e-scooters and e-bikes, was discussed, with the explanation that scooter riders are currently counted as non-motorists/pedestrians on crash reports, making it challenging to separate them as a distinct category. The proposed measure “Miles of lower level of traffic stress (LTS 2 or better) has been moved to the “Serve Communities and Support Economies” goal, so there was not a discussion of this measure in this meeting.

Objective 4 – Maintain a safe system during adverse weather events, man-made threats, and other system disruptions

No Committee members had questions or comments for the measures in this objective.

Below are the results of a poll ranking the new, proposed performance measures.

Figure 1. ARAC ranking of new proposed performance measures for the goal "Enhance safety and Security"



* "Miles of lower level of traffic stress (LTS 2 or better) has been moved to the "Serve Communities and Support Economies" goal.

Goal: Deliver System Quality

Objectives/Focus Areas to Measure	Guiding Principles				
	Equity	Resilience	Preservation	Experience	Modernization
Provide a multimodal system resilient to changing conditions and hazards.		X	X		X
1. Preparedness of the transportation system for weather conditions and hazards					
2. Percentage of lane-miles/transit-miles that cannot withstand a storm + sea level rise (100-year storm)					
Preserve and maintain State-owned or funded facilities in a state of good repair.		X	X	X	X
1. Unfunded State of Good Repair Backlog					
2. Percentage of the Maryland State Highway Network in Overall Preferred Maintenance Condition (MFR)					
3. Overall Acceptable Pavement Condition (MFR)					
4. Percent of all Maryland Bridges that are in Poor Condition (MFR)					
Minimize travel delays and improve reliability and quality on all modes.	X			X	X
1. Annual Cost of Congestion (Billions) on the MDOT highway network (MFR)					
2. User cost savings for the traveling public due to incident management (MFR)					
3. Percent of all MDOT Transit Service Provided On Time (MFR)					
4. Percent of VMT in Congested Conditions on Arterials in Maryland During the Evening Peak Hour (MFR)					
5. Percent of VMT in Congested Conditions on Freeways/Expressways in Maryland During the Evening Peak Hour (MFR)					
6. Percentage of State-Owned Roadway Directional Miles Within Urban Areas that Have Sidewalks (MFR)					
7. Truck Hours of Delay (All traffic hours of delay in appendix) (MFR)					
Accelerate project completion through improved project delivery.		X	X		X
1. Percent of toll transactions collected by E-ZPass® vs. video tolls (MFR)					
2. MDOT MVA Alternative Service Delivery (ASD) Transactions as Percent of Total Transactions (MFR)					
3. MDOT MVA Average Cost Per Transaction (MFR)					
4. Percent of program funds in the CTP that are leveraging partnership and discretionary grant program dollars					
5. Percent of On-time project delivery across MDOT (determine how best to measure)					
6. Percent of on budget projects delivered across MDOT (determine how best to measure)					
Improve the efficiency of the Port of Baltimore and BWI Thurgood Marshall Airport with respect for surrounding communities.	X	X	X	X	X
1. Port of Baltimore Foreign Cargo Tonnage and MPA General Cargo Tonnage (MFR)					
2. Freight Originating and Terminating in Maryland by Mode – Total Tonnage					
3. Freight Originating and Terminating in Maryland by Mode – Total Value					
4. BWI Marshall Airport Total Annual Passengers (MFR)					
5. Airline Cost Per Enplaned Passenger (CPE) (MFR)					
6. Number of Nonstop Airline Markets Served (MFR)					
7. MPA's Operating Cost (TBD)					

Objective 1 - Provide a multimodal system resilient to changing conditions and hazards

It was suggested by a Committee member that we add the 3 feet above the 100-year floodplain standard for determining the percentage of lane-miles/transit-miles that cannot meet that elevation. They recommended looking into what other states are doing in terms of capital investment standards and that the Maryland Department of the Environment (MDE) has mapping resources for coastal and riverine areas that could be applied to assess all infrastructure.

Objective 2 - Preserve and maintain State-owned or funded facilities in a state of good repair

Performance Measure 2a: *Unfunded State of Good Repair Backlog*

Further context was provided on the Unfunded State of Good Repair (SOGR) and how it is compiled, its accuracy, and how it is measured. Michelle Martin explained that the SOGR is converted into dollars and compared to the Consolidated Transportation Program (CTP). She mentioned that they are still figuring out how to measure this accurately. There was apprehension about removing the other three measures related to SOGR, as the public is accustomed to seeing them and understands them. The Committee members emphasized the importance of explaining this change, especially to the national press. Michelle Martin acknowledged the need to explain the change well and stated that this new measure would capture all relevant aspects. A question was asked if the unfunded state of repair backlog would be broken down by modal administration. Michelle Martin responded that this is not necessarily the case; but it possible could be broken down by asset classification or mode. Another Committee member asked what modes are included in the backlog. Michelle Martin explained the backlog is for all the modes at MDOT and does take into consideration facilities as well. Cole Greene provided [reference information](#) for the MTA Capital Needs/SOGR Backlog. A Committee member said that they love this backlog measure.

Performance Measures 2b-d:

Tom Harrington mentioned that these objectives have been tracked over time and will continue to be tracked. The focus now is on finding effective ways to communicate the findings.

Objective 3 - Minimize travel delays and improve reliability and quality on all modes

During the discussion, several important points were raised regarding the on-time performance measure. There was interest in tracking the condition of state-owned roadways, adding a bicycle measure, and adding an airline/airport on-time performance measure. There were some questions on the online appendix, and the importance of local connectivity and transit coverage in the AR. Suggestions were made to have a separate measure for local buses, tracking on-time performance at specific stops, and considering late arrivals (or no arrival) as not meeting the on-time performance measure. The question of tracking the condition of state-owned roadways in disproportionately impacted communities was raised, and it was agreed that further research should be given to this suggestion. The inclusion of a bicycle measure and the measurement of airline/airport on-time performance were discussed, with plans to follow up on these suggestions. The suggestion of moving the Percentage of State-Owned Roadway measure to the appendix was acknowledged. The importance of local connectivity beyond MDOT's right of way was highlighted, with discussions on considering incentives for connecting sidewalks to transit systems and recognizing the holistic system. The importance of assessing the coverage and frequency of public transit over time was emphasized by the Committee, with mentions of measuring a frequent transit network, the number of jobs/households within its radius, and addressing access to Transit-Oriented Development (TOD) and the overall transit coverage area, which is actually covered by some of the new proposed measures.

Objective 4 - Accelerate project completion through improved project delivery

During the discussion, a Committee member expressed satisfaction with the new measures under Objective 4. There was a question about the definition of on-time project delivery, to which Michelle Martin clarified that it refers to projects being delivered on schedule (compared to construction notice to proceed). Another Committee member asked questions about the inclusion of average cost per motor vehicle transaction and the use of E-ZPass in measuring tolls. Michelle Martin explained that E-ZPass transactions are less expensive for Maryland, while video collection tolls are more expensive, and the average cost per transaction at the MVA is measured at the Maryland Motor Vehicle Administration (MVA). Hesitancy was expressed regarding the partnerships measure since less affluent communities might not have the resources to participate. Michelle Martin clarified that the intention behind partnerships is to maximize state dollars through other funding sources, and in particular federal funding sources. The Committee noted concern for the perception of this measure and asked MDOT to focus on the federal funding. With the uncertainty of federal grants and what year to allocate funding, it might be best to simplify the measure to assess federal and state funding as an overall percentage of the program (CTP).

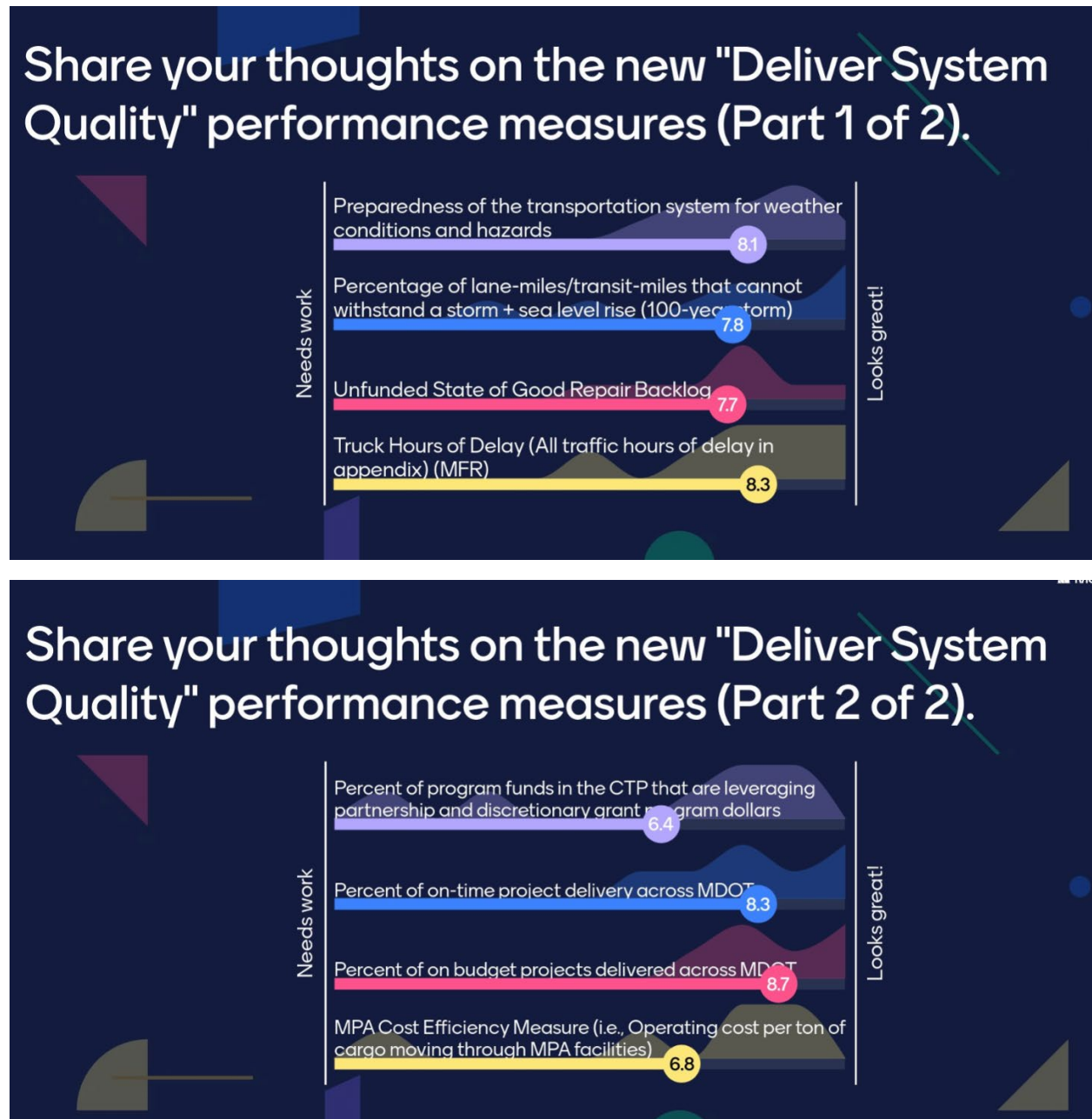
Objective 5 - Improve the efficiency of the Port of Baltimore and BWI Thurgood Marshall Airport with respect for surrounding communities

A question was raised asking whether Baltimore/Washington International Thurgood Marshall Airport (BWI) freight should be included in the measures. Michelle Martin acknowledged the growth in BWI freight and noted that cargo at the airport is noted in one of the cargo measures.

There was a comment on the "MPA's Operating Cost" performance measure, noting that not all freight mileage in transit is the same, and this can skew towards heavier freight (by volume). For example, freight movement in the Northeast Corridor is different from the Beltway. We will continue to explore the best measure for MPA operating efficiencies. Deron Lovaas shared a [mapping tool](#) on climate change vulnerability of Maryland's transportation system for consideration.

Below are the results of the poll ranking new, proposed performance measures for the goal "Deliver System Quality."

Figure 2. Results of ARAC poll ranking new, proposed performance measures for the goal "Deliver System Quality"



Next Steps

Michelle Martin said that the remaining two goals, "Serve Communities and Support the Economy" and "Promote Environmental Stewardship," would be discussed in the next meeting and ARAC members can review the slides before the next meeting. The goal order was based on

how many MFR measures each goal had as that is an upcoming Department of Budget and Management (DBM) deadline.

Dr. Jeihani provided an overview of the upcoming meetings:

- Tuesday, June 20th – Meeting #3 – discuss any follow up items from Meeting #2 and performance measures for the last two goals, "Serve Communities and Support the Economy" and "Promote Environmental Stewardship"
- Tuesday, July 11th – Meeting #4 – review recommendations and draft report, review of AR requirements, data, and targets, and discuss any suggested improvements to the AR document and to the AR dashboard

Public Comments

Dr. Jeihani invited the public attendees to raise their hand if they had any questions or comments.

Staci Hartwell inquired if the survey was open to the public, if equity metrics and measures would be covered, and about the prioritization of underserved or overburdened communities and the provision of remedies/recommendations.

MDOT responded that the survey is open to the public. Equity metrics and measures as well as potential performance measure edits were discussed, and this would help the agency field recommendations or strategies.

Bill Pugh from the Coalition for Smarter Growth encouraged the Committee and MDOT to consider an AR target for Vehicle Miles Traveled (VMT) in the context of state climate goals. He emphasized the need for progress in both electric vehicle adoption and reducing VMT to meet climate targets. He cited research from the Washington Metropolitan Transportation Board and the Rocky Mountain Institute. Bill Pugh also suggested reframing the airline passenger target for BWI as a share of regional air passengers. He also recommended diverting short-haul flights to more efficient rail travel to align with the state's rail goals.

Brian O'Malley from the Central Maryland Transportation Alliance expressed his appreciation for the AR as he uses it often and echoed Bill's point about setting a target for VMT reduction per capita. He highlighted the urgent need for action due to the inequitable climate crisis and emphasized that reducing VMT can help achieve various goals, especially in reducing greenhouse gas emissions. He mentioned the importance of better transportation and land-use policies to shorten and reduce trips through modes like walking, biking, and transit. He noted that relying solely on electric vehicles would not be enough to combat climate change.

ARAC members Lindsey Mendelson, Gustavo Torres, and Ben Groff expressed agreement and emphasized the importance of having a numerical VMT target.

Meeting Conclusion

The Chair concluded the meeting. The meeting summary will be posted online and emailed to the Committee. If the ARAC has any questions, please contact Michelle Martin.