Baltimore/Washington International Thurgood Marshall Airport
Airport Noise Zone (ANZ) Update
Stakeholder Advisory Committee (SAC) Meeting #2

MEETING MINUTES

Wednesday, June 25, 2025, 6:00 PM – 8:00 PM

MAA Facilities
991 Corporate Boulevard
Linthicum Heights, MD 21090

Discussion Item	Notes	Presenter
Safety Briefing	Mr. Bruce Rineer opened the meeting with a safety briefing. He noted that the main exit was through the doors attendees used to enter, with an additional exit located down the hallway. Restrooms were available for convenience. Bruce pointed out the location of an AED device and fire extinguishers in the hallway and identified the designated accountability site outside the front of the building in the event of an evacuation. He encouraged participants to report any hazards they observed during the meeting.	Bruce Rineer
Welcome and Introductions	Mr. Rineer welcomed everyone to the second SAC meeting for the BWI Marshall Airport Noise Zone update and provided a brief preview of the agenda. He acknowledged that the meeting would focus on modeling inputs, the land use inventory, the Noise Abatement Plan (NAP), and the updated project schedule. Mr. Rineer noted that there would be no facilitator at this meeting, but that he and Ms. Rhea Hanrahan would stand in if needed. He also mentioned that, like last meeting, this meeting would be interactive. Participants were invited to ask questions or offer comments at any time during the presentations. He explained that the evening's presentations would be led by various team members, including Ms. Sarah Yenson, Ms. Hanrahan, Mr. Royce Bassarab, and himself, with each person taking the lead on relevant technical topics. Attendees then introduced themselves. In addition to MAA and HMMH project staff, participants included representatives from the BWI Business Partnership, the Provinces Civic Association, Anne Arundel	Bruce Rineer

	County Planning and Zoning, the BWI Roundtable, the Federal Aviation Administration (FAA), and various community and civic organizations.	
SAC Meeting #1 Recap	Ms. Yenson opened her remarks by briefly recapping the key points covered during the first SAC meeting. She reminded attendees that the SAC was created to ensure diverse stakeholder input throughout the ANZ update process. The first meeting focused on introducing the regulatory framework for the ANZ, reviewing the role of the SAC, and providing background on the fundamentals of airport noise and modeling. She emphasized that the ANZ is updated approximately every five years in accordance with the Maryland Environmental Noise Act of 1974 and the Code of Maryland Regulations (COMAR). These updates are important not only for forecasting future noise exposure but also for helping local jurisdictions plan compatible land use around the airport. The contours developed through this process are printed on Maryland tax parcels and can influence land use decisions. Ms. Yenson reiterated that the Noise Abatement Plan (NAP) is a separate but related component of the process. While the ANZ is required by regulation, the NAP is voluntary and shaped largely by community feedback. Both the ANZ and NAP are reviewed together during this update, allowing for a more comprehensive approach to addressing aircraft noise issues. She highlighted that the goal of this second SAC meeting was to share and discuss the specific inputs that will drive the noise model, including operational forecasts and assumptions about future airport activity. This information, she explained, is crucial to understanding how noise contours are generated and how they may shift over time.	Sarah Yenson
ANZ Noise Modeling Process	Ms. Yenson introduced the noise modeling portion of the presentation by explaining that the modeling process is central to the ANZ update. It helps determine where noise contours fall based on forecasted airport activity and ensures consistency with federal and state regulations. She described the FAA's Aviation Environmental Design Tool (AEDT) as the modeling platform used to simulate aircraft operations and their associated noise impacts around the airport. Ms. Hanrahan then elaborated on the modeling process, walking the group through each step. She explained that the model begins with inputting an average annual day of operations. This daily snapshot includes a representative sample of flight activity, types of aircraft, routes flown, and operational characteristics such as time of day and runway use.	Sarah Yenson

Ms. Hanrahan noted that DNL (Day-Night Average Sound Level) is the federally accepted metric for measuring long-term noise exposure. It includes a 10-decibel weighting for nighttime operations between 10:00 PM and 7:00 AM, reflecting the higher sensitivity to noise during these hours. While DNL doesn't capture all aspects of how the public perceives noise, it provides a standardized basis for analysis and is required under COMAR.

Ms. Yenson emphasized that the contours resulting from the model are used to update the ANZ boundaries, which in turn inform Maryland's land use and permitting regulations. She explained that while actual measurements from permanent noise monitors are valuable for comparison, the modeling tool uses predictive data to generate future scenarios, such as those expected in 2030 or 2035, not just present-day conditions.

Ms. Hanrahan reiterated that the modeling process is designed to forecast, not document, noise exposure. It considers trends in aircraft technology, anticipated growth in operations, and other relevant inputs. She encouraged the group to keep this distinction in mind as they reviewed the modeling results in later meetings.

Several SAC members requested clarification on whether community-specific complaints affect the modeling assumptions. Ms. Hanrahan explained that while complaints help shape community engagement and may inform the Noise Abatement Plan, they do not directly alter the modeling inputs, which are based on empirical and regulatory data.

Ms. Yenson concluded by emphasizing that the contours generated through this modeling serve as the foundation for identifying areas of concern, engaging stakeholders, and updating the ANZ boundaries.

Noise Model Inputs	Ms. Yenson transitioned into a deeper discussion on the data inputs required for the AEDT model. She explained that modeling an accurate DNL contour requires detailed and localized input data to reflect conditions at BWI Marshall. She began by describing how physical inputs, such as aircraft type, frequency, and flight tracks, are translated into modeled noise footprints. These operations are categorized over a full year and averaged to reflect a representative "annual average day," which is central to COMAR modeling requirements.	Sarah Yenson

Ms. Yenson shared that the base year for the ANZ update is 2025, with flight track data sourced from radar information collected in late 2024.

	These tracks are bundled based on distribution patterns and verified through comparisons with actual operational data. She further explained how runway utilization patterns, especially the dominance of Runway 33L for commercial traffic, were derived from historical averages and current operating preferences. This information is paired with data on aircraft fleet mix, operations timing, and approach/departure paths to complete the core model inputs. Ms. Yenson addressed several community questions during this segment. Ms. Gina Stewart inquired about the impact of small personal jets, to which Ms. Yenson responded that general aviation operations, including private jets, are included in the model's general aviation segment and represent a small portion of overall noise exposure. Mr. Drew Roth asked about the term "air taxis," prompting Ms. Yenson to clarify that it refers to smaller, privately operated jets not associated with major airline carriers. Mr. Rineer added a clarifying question regarding the currentness of the operational assumptions. Ms. Yenson confirmed that, while certain model structures are maintained for consistency, updated operations data from 2024 and early 2025 were used to ensure accuracy and relevance. Ms. Yenson also discussed how meteorological data, specifically a 10-year average, was included to represent seasonal variability in wind patterns and temperature, which can affect runway usage and noise propagation. The section concluded with Ms. Yenson reiterating that these model inputs, aircraft operations, flight paths, runway preferences, and environmental conditions, form the backbone of the noise contour calculations, ensuring both accuracy and compliance with FAA guidance.	
ANZ Land Use Inventory	Ms. Yenson opened the discussion on the ANZ Land Use Inventory by explaining that once the noise forecast contours for 2025, 2030, and 2035 are finalized, the project team will overlay them with current land use data. This process will identify areas, such as residential neighborhoods, schools, churches, and hospitals, that fall within the modeled noise exposure contours. She explained that these overlays help assess whether land use is compatible or incompatible with forecasted noise levels and ultimately inform the certified ANZ boundary.	Sarah Yenson, Bruce Rineer, Royce Bassarab, Rhea Hanrahan

Ms. Yenson emphasized that the certified ANZ will be based on the largest extent of the three modeled forecast years, producing a composite contour that reflects the maximum potential noise exposure over the planning horizon. To confirm accuracy, the team will also conduct windshield surveys, visual checks by driving around areas to verify what is present on the ground.

Mr. Howard Johnson asked whether the land use inventory includes projected growth or population forecasts from local counties. Ms. Hanrahan responded that, yes, the team incorporates any published development plans or forecasts available through county planning departments. She encouraged members to share local insights and unofficial development knowledge, as the community often knows of pending projects before they appear in official records.

Mr. Roth referenced the Gateway Industrial Area Master Plan. Ms. Hanrahan acknowledged that the plan had been submitted and would be incorporated if finalized and published. If it remains a draft, it would not be included in the formal future land use assumptions, although the team has noted it for future reference.

Mr. Rineer expanded on MAA's process, explaining that finalized contours will be paired with GIS parcel-level data and zoning overlays to determine what falls within the 65, 70, and 75 dB DNL zones. This information is then used to support updated zoning recommendations and to clarify permits. He also addressed questions about coordination with local governments, emphasizing that Anne Arundel, Baltimore, and Howard Counties are looped in and routinely receive updated maps. Mr. Rineer noted that when development occurs near the airport, counties are required to consult with MAA to assess whether proposed uses are compatible.

Mr. Bassarab spoke to the role of the Board of Airport Zoning Appeals (BAZA), which reviews proposed noise sensitive development within the ANZ. New residential construction and schools must demonstrate that they can meet interior sound thresholds, typically no more than 45 dB indoors. Mr. Bassarab added that BAZA can issue variances with conditions like enhanced construction techniques or noise insulation.

Mr. Kevin Clarke added that MAA's coordination with county planning departments is ongoing and includes long-range efforts like Anne Arundel County's 2040 Plan. He explained that MAA receives and reviews 300–400 development applications annually within the four-mile airport zone. These reviews ensure that development is evaluated for both airspace protection and noise compatibility. He also clarified that this four-mile ring is centered on the airport reference point, a standard FAA-defined location.

Ms. Stewart and Mr. Mark Wilde asked about timing, particularly whether recent changes to land use designations in Anne Arundel County would be reflected. Mr. Wilde noted that the most recent zoning and land use updates became effective just days before the SAC meeting. Mr. Rineer confirmed this timing is appropriate, as the ANZ update occurs every five years and aligns closely with the county's planning cycle.

Ms. Yenson concluded the segment by reiterating that land use data is essential not only for aligning technical modeling with community realities but also for supporting a process that is transparent and defensible over time.

Noise Abatement Plan (NAP)	Mr. Rineer introduced the Noise Abatement Plan (NAP) by noting that BWI Marshall has had a formal NAP in place since the 1970s. As required by COMAR regulations, the NAP must be implemented when an airport's noise zone extends beyond airport property. He emphasized that noise abatement is an ongoing commitment by MAA to minimize the impact of aircraft operations on surrounding communities.	Bruce Rineer, Royce Bassarab, Rhea Hanrahan

Mr. Rineer explained that the NAP encompasses multiple components, including departure and arrival procedures, land-use measures, and programmatic strategies. He emphasized that noise abatement involves more than just adjusting flight patterns; it also includes community-focused mitigation efforts, such as zoning, permitting restrictions, and operational protocols.

He walked attendees through examples of current departure procedures, which are tailored to specific runways. These include requirements such as delaying turns until a designated distance from the runway (e.g., 2 DME) to avoid overflying residential areas. He acknowledged that traditional navigation measures, such as DME, are being phased out and replaced with GPS waypoints, which enable aircraft to follow more precise, programmable flight paths.

Mr. Dana Plagmann elaborated that the FAA's newer GPS-based procedures enable consistent adherence to noise abatement protocols and reduce reliance on outdated technology. He clarified that while pilots still receive instructions from air traffic controllers, these new procedures are designed to be embedded in onboard systems, resulting in greater consistency. Mr. Plagmann noted that while jet aircraft largely follow these published procedures, propeller aircraft, often under visual control from the tower, may deviate based on safety and traffic considerations.

Mr. Bassarab added context about MAA's role in ensuring that pilots and airport operations teams understand and implement these

procedures. He explained that Mr. Rineer and his team regularly conduct outreach to airport tenants and operators to reinforce compliance with noise abatement policies. Mr. Bassarab also discussed how the NAP intersects with local permitting and BAZA reviews, reinforcing the need to ensure new development within the ANZ meets strict acoustic performance criteria.

Mr. Rineer added that the airport's recent annual review found that compliance with existing departure procedures is in the high 90% range. A new waypoint was also introduced to improve compliance and reduce early turns off certain runways.

The group also discussed arrival procedures, which are generally less impactful from a noise standpoint than departures. Ms. Hanrahan suggested that updates to arrival language could clarify which navigational aids are still active. Mr. Plagmann confirmed that arrival procedures, while still part of the NAP, are increasingly automated and coordinated with FAA airspace designers to align with existing noise abatement policies.

Mr. Rineer then shifted to other components of the NAP, including ground-based noise controls. These include limitations on engine run-ups, restrictions on reverse thrust operations, and requirements that operators notify airport staff before conducting loud activities. He shared that MAA has placed monitoring equipment on the airfield to investigate reports of night-time noise and continues to analyze that data.

Ms. Hanrahan provided an overview of programmatic strategies embedded within the NAP, such as maintaining a dedicated airport noise office, producing quarterly and annual noise reports, and providing public complaint mechanisms and mobile noise monitoring. She emphasized that many airports do not have such robust systems, and that Maryland's model, originating in the 1970s, was a forerunner to today's federal standards.

Mr. Wayne Dixon noted that his father had once chaired the original Airport Neighbors Committee and advocated for noise controls at the federal level. He suggested reinstating similar community-facing programs, such as ambassador visits to civic associations. Mr. Rineer responded that while current staffing limits have reduced regular outreach, MAA remains committed to community dialogue and will attend meetings upon request.

Finally, Mr. Rineer explained that MAA's long-term goal is to have the most effective noise office in North America. Recent improvements, such as a full replacement of the Airport Noise and Operations Monitoring System (ANOMS) and the development of a new annual

	noise report, reflect that ambition. He invited SAC members to share ideas on how the office can improve transparency, engagement, and effectiveness.	
Schedule and Resources	Ms. Hanrahan presented an overview of the project schedule and upcoming resources. She confirmed that the next SAC meeting is expected to take place around September 2025. That meeting will likely focus on draft documentation, including a summary of all technical elements presented so far. Ms. Hanrahan emphasized that while the team will aim to share draft contours or documents in advance, only materials that have undergone internal quality checks will be distributed. SAC members may see finalized contours for the first time at the next meeting. Ms. Hanrahan explained that the September meeting will soon be followed by a 30-day public comment period for the draft ANZ update report. This period will allow community members and SAC participants to review the document, submit written comments, and participate in a public workshop and hearing. She noted that MAA values the SAC's involvement in that event, especially in encouraging public turnout and helping explain the local context. Ms. Hanrahan also provided links to previous documentation and described what the final ANZ report will look like. She invited participants to review past reports posted on the project website for reference.	Rhea Hanrahan
Q&A and Open Discussion	Several questions and comments were raised during the wrap-up of the meeting: • Mr. Clarke asked the project team how SAC members could submit feedback on the Noise Abatement Plan. Ms. Hanrahan responded that suggestions can be sent via email, brought to the next SAC meeting, or submitted during the public comment period. She welcomed input on potential programmatic or procedural improvements, even those outside the 65 dB DNL contour. • Mr. Roth inquired about tracking changes in the aircraft fleet mix over time. Ms. Hanrahan confirmed that the documentation includes projections for each aircraft type and operator, showing anticipated changes across the 10-year forecast horizon. She explained how newer, quieter aircraft are gradually replacing older models, though these changes are incremental. • Mr. Dixon raised concerns about legacy aircraft noise, particularly from charter flights and military testing. Mr. Rineer responded that most older, noisier aircraft were retired following regulatory action and pandemic-related fleet reductions. Mr. Plagmann and Ms.	Rhea Hanrahan

Hanrahan added that lighter regional jets have also largely disappeared.

- Mr. Dixon and Ms. Suzzie Schuyler expressed concern about real estate disclosures and residents unaware of proximity to the airport. Ms. Hanrahan and Mr. Rineer explained that while the state recommends disclosure forms, enforcement is limited, especially during fast-paced real estate closings. Anne Arundel County has a standard addendum for real estate disclosures within the ANZ.

- SAC members also discussed other potential ideas, including lowering the DNL threshold for ANZ designation, offering tax credits for affected residents, exploring noise walls, and reinstating community outreach programs. Mr. Rineer acknowledged these ideas and encouraged members to submit them formally.

- Mr. Bassarab described MAA's responsiveness to residents doing due diligence before moving near the airport. He noted that MAA often receives calls from prospective buyers and provides detailed summaries of aircraft operations to help them make informed decisions.

- Ms. Stewart and Mr. Plagmann raised points about balancing noise concerns with the airport's broader economic impact. They noted that while noise affects a smaller subset of residents, the airport brings significant tax revenue and employment to the region.

Adjournment	Ms. Hanrahan closed the meeting by thanking attendees for their time and their thoughtful participation. She confirmed that all meeting materials, including a finalized version of these minutes, will be posted to the project website. While meeting minutes will not be emailed directly to participants, they will be accessible for future reference. Ms. Hanrahan emphasized the importance of continued feedback and reminded participants that now is a particularly useful time to submit suggestions for inclusion in the draft ANZ update. Mr. Rineer reiterated that any ideas sent to him directly will be forwarded to the project team for review. The meeting adjourned shortly before 8:00 PM.	Rhea Hanrahan