Maryland Aviation Commission Annual Report Transportation Article § 5-201.2 SB 162/Ch. 564, 2023

A Report to the Maryland General Assembly

Maryland Department of Transportation Maryland Aviation Administration

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MARYLAND AVIATION COMMISSION ANNUAL REPORT TRANSPORTATION ARTICLE, § 5-201.2

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Introduction

Pursuant to Transportation Article §5-201.2, the Maryland Aviation Commission is required to submit an annual report. The section states that:

- (a) Subject to § 2-1246 of the State Government Article, the Commission shall report by January 15 of each year to the General Assembly on the activities of the Commission during the previous year.
 - (b) The report shall include:
- (1) A review of the financial and operational results for all State-owned airports during the previous year, a summary of Commission feedback related to health or community impact, and any recommendations of the Commission for future changes in legislation, capital funding, or operational flexibility;
- (2) Subject to review by the Department of Budget and Management, an estimate of all expenditures necessary for the operation of the Commission. The estimate shall identify staff resources allocated to the Commission that are provided by the Department or other State agencies; and
- (3) Actions taken by the Commission pursuant to § 5-201.1(a) of this subtitle, including the consideration of the comparative status of employees serving at comparable airports or aeronautical agencies.

SECTION I

BACKGROUND

Creation of the Maryland Aviation Commission

The 1994 General Assembly passed Chapter 457, Acts of 1994 (Transportation Article, §5-201.2 (c) creating the Maryland Aviation Commission, effective October 1, 1994. The Commission is the successor to the BWI Airport Commission, a gubernatorial advisory panel created in September 1993 by Executive Order.

The Maryland Aviation Commission consists of thirteen voting members. Twelve of the members are appointed by the Governor with the advice and consent of the Senate, with the Secretary of the Maryland Department of Transportation serving as Chair and the 13th voting member, and the Secretary of the Maryland Department of Commerce serving as a nonvoting ex officio member. The Commission's duties include:

- Establishment of policies to improve and promote Baltimore/Washington International Thurgood Marshall Airport (BWI Marshall) as an airport of service to the Washington-Baltimore Metropolitan area;
- Approval of regulations for the operation of State-owned airports prior to adoption by the Executive Director, Maryland Department of Transportation (MDOT) Maryland Aviation Administration (MAA);
- Direction to MAA in developing and implementing airport management policy for all State-owned airports;
- Approval of major capital projects at State-owned airports as defined in the Transportation Article, §2-103.1(a) (4), Annotated Code of Maryland;
- Consideration of information and advice from air carriers, airport concessionaires, the airport support services industry and citizen advisory groups in carrying out the provisions of law relating to the Maryland Aviation Commission; and
- Determination of qualifications, appointment and compensation for 12 senior management personnel positions and provide advice to the Chair on the appointment or removal of the Executive Director.

SECTION II

MARYLAND AVIATION COMMISSION MEMBERS

Paul Wiedefeld, Chairman

Secretary, Maryland Department of Transportation

Edward "Ned" Carey

Jesse Chancellor

T. Chineta K. Davis

Lisa Ellis

W. Drew Hawkins

José Morales

Raymond C. Nichols

Karen Price-Ward

Mary Reese

Dr. Cedric Sims

David L. Winstead, Esq.

Dr. Zafar Zafari

Kevin Anderson

Secretary, Maryland Department of Commerce ex officio, nonvoting member

SECTION III

MESSAGE FROM THE CHAIRMAN

The Maryland Aviation Administration (MAA) and the Maryland Aviation Commission work collaboratively to meet the air service needs of residents, businesses, and visitors. This report presents a comprehensive overview of the operational and financial aspects of the MAA in the past year, highlighting the key achievements, innovations, and strategic initiatives that have shaped our progress.

The Maryland aviation system plays a critical role in supporting travel, tourism, and economic development. Baltimore/Washington International Thurgood Marshall Airport, Martin State Airport, and public-use airports across the State of Maryland serve the needs of the traveling public and facilitate the transport of goods and services. Our airports generate jobs and connect residents and businesses to the world's economy and cultures.

As we look ahead, we remain committed to maintaining the highest standards of safety, service, and sustainability. Together with our tenants, partners, stakeholders, and the support of the local community, we continue to chart a course toward a bright and promising future.

I sincerely appreciate the insight and strategic guidance offered by the Maryland Aviation Commission, along with the valuable leadership and continued support from our elected officials. I extend my thanks to the entire MAA team, whose dedication and expertise are the driving forces behind our accomplishments. MAA employees remain dedicated to the successful, safe operation of Maryland's airports for the benefit of all aviation system users. I also express gratitude to our customers for their continued trust and collaboration.

SECTION IV

OVERVIEW OF MARYLAND AVIATION ADMINISTRATION AIRPORT ACTIVITIES AND ACCOMPLISHMENTS FOR 2023*

MAA is responsible for fostering safe and efficient operations, economic viability, and environmental stewardship in aviation activity state-wide. MAA operates two airports, BWI Marshall and Martin State Airport (Martin). In addition, MAA's Office of RAA develops and regulates aviation activities at Maryland's 34 public-use airports. These efforts are guided by an MDOT mission, which reads:

"The Maryland Department of Transportation is a customer-driven leader that delivers safe, sustainable, intelligent, and exceptional transportation solutions in order to connect our customers to life's opportunities."

Baltimore/Washington International Thurgood Marshall Airport

Based on economic data from State Fiscal Year (FY) 2023, BWI Marshall supports 107,066 total jobs in the regional economy. Further, BWI Marshall produces \$5.6 billion in personal income and is responsible for \$11.3 billion in business revenue for the State. The overall activity at BWI Marshall Airport produces an estimated \$782 million in tax revenue for state and local governments.

In FY 2023, 26.3 million passengers flew through BWI Marshall. As the airline industry continued to recover from the impacts of the COVID-19 pandemic, air service at BWI Marshall rebounded in FY 2022. Many airlines returned service that had been suspended. Although airline network growth was more tempered in FY 2023, BWI Marshall continued to welcome new airline partners and grow international and domestic air service. The fastest growing carrier at BWI Marshall was Frontier Airlines, who added new service to Dallas/Fort Worth, Las Vegas, Phoenix, and San Juan. Additionally, Spirit Airlines added service to Austin and San Antonio, and Delta Air Lines added service to Boston.

The end of FY 2023, the airport welcomed new international service from Copa Airlines to its hub in Panama City, Panama, where they offer convenient connections to 55 additional destinations across Latin America and the Caribbean.

Martin State Airport

Martin State Airport is an economic engine for the State, supporting both national and international business travel for based tenants and those visiting the greater Baltimore metropolitan area from around the world. Designated by the FAA as a "Reliever" airport, Martin reduces the need for capacity at BWI Marshall by relocating non-jet general aviation activity.

In FY 2023 there were 46,793 local operations at Martin. Local operations are defined as flights that originate at Martin and stay in the traffic pattern or under control by Martin ATCT.

^{*}Activities are for CY 2023, except as noted. FY data is based on FY 2023 (July 1, 2022 through June 30, 2023).

Economic impact data from CY 2017 indicates that Martin supports more than 2,400 total jobs and generates \$297 million in business revenues. The associated state and local tax revenues were \$41.9 million. Additionally, Martin's symbiotic relationship with BWI Marshall can be regarded as an economic multiplier.

As MAA continues to explore opportunities to accommodate growth at BWI Marshall, improving the quality of facilities and services at Martin is an important element. Substantial progress was made in these efforts during FY 2023. Chief among them is 100% design completion for the Runway Rehabilitation project (slated to begin Q4 FY24). Cognizant of the aviation community's future service needs, plans are underway to bring electric charging stations to Martin for the next generation of aircraft already being manufactured and delivered.

Martin continues to be the base of operations for some of the state's most crucial aviation units. The Maryland Air National Guard's 175th Flight Wing Headquarters and Cyberspace Operations Squadron, the Maryland State Police Aviation Command Headquarters as well as Baltimore County and Baltimore City Police Aviation Units are all based out of Martin. Additionally, the Department of Natural Resources and Baltimore County Police Department Marine Units use Martin as a base of operations for their regional response for water rescue and maritime law enforcement and Homeland Security. Private businesses transporting organs and conducting medivac helicopter operations also maintain bases at Martin.

Two global defense companies, four flight schools and Baltimore's only news helicopter are among Martin's many tenants contributing to a total of 269 based aircraft (244 airplanes; 25 helicopters).

In FY 2023, Martin had 93,314 airport operations and sold over 1.2 million gallons of aviation fuel. Martin maintains its "national" role (the largest category for General Aviation airports) in the FAA's National Plan of Integrated Airport Systems. The "national" role is assigned to airports who support the national airport system by providing communities access to national and international markets in multiple states and throughout the United States. National airports have very high levels of aviation activity with many jets and multiengine propeller aircraft.

Regional Aviation Assistance

In accordance with Code of Maryland Regulations 11.03.04, *Aeronautical Regulations*, MAA is charged with inspecting and certifying landing facilities for safe flight operations. In CY 2023, MAA inspected and issued operating licenses to 130 landing facilities (including 34 public-use airports).

MAA continues to foster and develop aviation in Maryland by providing support for airport infrastructure improvements to meet a wide variety of business and personal needs. In FY 2023, \$28.3 million was invested into Maryland's regional airport infrastructure (excluding BWI Marshall and Martin). MAA provided \$3.5 million in grants for airport improvements, while the Federal Aviation Administration (FAA) contributed \$21 million and airport owners invested over \$3.7 million.

Through the IIJA, the federal government has programmed an additional \$5.5 million (excludes BWI Marshall and Martin). These funds will be used towards projects improving the airport

infrastructure to include but not limited to pavement maintenance, obstruction removal and runway extensions.

Partnering with the FAA, and the newly organized industry group Maryland Aviation Council (MAC), MAA continues to support aviation safety programs and aviation promotional activities to encourage the use of Maryland's aviation gateways. In-person gatherings, meetings and seminars participation by MAA staff continues to increase. MAA continues to support MAC's in the *Explore Maryland by Air* program, designed to encourage flyers and non-flyers to visit all of the public-use airports as well as aviation museums across Maryland.

MAA continues to support the growing interest in Unmanned Aircraft Systems (UAS) and is engaged in supporting and promoting safe, responsible use of UAS and their integration into the National Airspace System. MAA is advising local communities, through their comprehensive planning updates, in preparation of ground-based solutions for the emergence of Advanced Air Mobility (AAM) capabilities. The FAA has promulgated the "Remote Id" rules designed to further integrate UAS into the NAS safely. MAA has outreach tools for the UAS community available through social media and our websites to encourage safe UAS operations. MAA continues to work with regional airport stakeholders in developing best practices for safe flight operations while maximizing life's opportunities that UAS technology brings.

Planning & Engineering

Noise Program

• DC Metroplex BWI Community Roundtable (Roundtable)

MAA continues to serve as administrative support and technical advisor to the DC Metroplex BWI Community Roundtable (Roundtable), an initiative of MAA formed in 2017 at the request of the FAA. The Roundtable serves as a vehicle for the FAA to engage with community residents to address noise issues related to the FAA's implementation of the Next Generation Air Transportation System (NextGen) in the region and to receive a consensus recommendation from representatives of the affected communities.

A series of FAA-proposed flight procedure changes were presented to the Roundtable in October 2019, and a subsequent series of flight procedure changes were developed by the Roundtable's Technical Committee, including MAA and Aviation Industry technical representations, and submitted to the FAA in late 2019. Following Covid-19 delays, FAA presented its findings and disposition on the procedures to the Technical Committee in May 2022 and to the full Roundtable in August 2022. The Roundtable accepted the FAA's design package. MAA, and Industry partners (i.e. airlines) concurred with FAA's final design package in September 2023. FAA anticipates implementation of new procedures beginning in May 2024.

• BWI Marshall Residential Sound Insulation Program

MAA strives to be a "good neighbor" within the community and has been participating in the FAA's voluntary CFR Part 150 Airport Noise Compatibility Program since the mid-1980s. Under this program, the sound insulation of eligible residences and schools intends to mitigate aircraft noise impacts to within federally accepted levels which in turn will improve the quality of life for citizens and help preserve the long-term operational sustainability of the airport. To date, more than 700 homeowners and four schools have participated in the BWI program. MAA

is working on the next phase of the program which includes sound insulation for up to 136 single-family homes and 17 multifamily structures (comprised of 344 units). The program is eligible for federal Airport Improvement Program (AIP) funding assistance and the current multi-year phase will be pursued over multiple construction packages, all at no cost to eligible homeowners. In FY 2023, MAA issued notice to proceed on the first construction package (18 homes) and completed design of the second construction package (20 homes) which is programmed for construction in FY 2024. Pending FAA approval, bid and award of the third construction package (204 multi-family residences) is also planned for FY 2024. Design of additional construction packages continues to progress.

• Transportation Community Enhancement Grants

MAA's Transportation Community Enhancement Grant program supports neighbors who live in the communities impacted by noise from BWI Marshall's daily operations by providing an opportunity to apply for transportation-related grants. Typical enhancement projects include sidewalk repairs and speed bumps. Grant applications are reviewed by a committee of 11 members that have been appointed by the Secretary of the Maryland Department of Transportation. In FY 2023, the Committee recommended grants in four eligible communities for award.

Environmental Services

National Environmental Policy Act (NEPA) Determinations

In support of obtaining federal funding for numerous airport improvement and equipment replacement projects, multiple Categorical Exclusions (CATEXs) were issued by the FAA in FY23. Projects include the rehabilitation of pavements, baggage handling systems, elevators and escalators, terminal and airfield electrical systems, and roadway signage. The replacement of snow removal equipment, sections of terminal roof, and passenger boarding bridges were also included. With these favorable environmental findings, these projects will be pursued as funding becomes available.

Environmental Compliance

Environmental compliance activities at both BWI Marshall and Martin continued with updates to the Spill Prevention, Control and Countermeasures Plans, and Asbestos Management Plans. Other compliance activities included completed review of Stormwater Pollution Preventions Plans, Title V Permit reporting, and annual training and daily guidance of BWI Marshall and Martin employees in stormwater pollution control, hazardous waste management, asbestos and lead-based paint awareness, and emergency spill response requirements. MAA continues to perform necessary inspections, sampling, testing, and reporting to maintain compliance with National Pollution Discharge Elimination System permits.

Sustainability

MAA released its Sustainability Roadmap that features a path to formalizing MAA's sustainability program based on four pillars (environment, economic, social, and human). The roadmap also includes an overview of sustainability drivers and concepts, and a benchmarking review of other airports' sustainability programs. MAA's Sustainability and Environmental Mission Statement has been updated to reflect the broadened approach using the four pillars to showcase MAA's sustainability efforts. The Environmental Steering Committee was also expanded to become the Sustainability Steering Committee (SSC) which includes involvement from divisions and offices across the organization. MAA's developing sustainability plan and

program will feature sustainability initiatives and a mechanism to rate and report on sustainability successes.

One of the flagship sustainability initiatives will be a holistic decarbonization plan that will provide a roadmap for MAA's pathway to eliminate scope 1 and 2 emissions and reduce scope 3 emissions. This effort, for both airports, will analyze the feasibility of a variety of decarbonization measures including (but not limited to) increasing renewable energy production on site, building a microgrid, electrifying fleet vehicles, and increasing energy efficiency. The decarbonization plan is funded by grants awarded in FY 2023 and includes two Federal Aviation Administration grants and a grant specifically for a microgrid study awarded by the Maryland Energy Administration.

• Airport Zone Permitting

Per the Code of Maryland Regulations (COMAR), MAA collaborates with the local jurisdictions to review proposed development plans and/or construction activity within the established BWI Marshall and Martin State Airport Zoning Districts. For BWI this encompasses the land area within a 4-statute mile radius of the airport, and for Martin State it is a 3.3-mile radius. Proposals are reviewed for airspace protection, land use compatibility, and hazardous wildlife attractants. Acceptable proposals are issued an MAA Airport Zoning Permit prior to the jurisdictions issuing their corresponding permits. In FY2023, MAA processed 215 Airport Zoning Permits and approved 79 Stormwater/Landscape Permits which is consistent with the past two years and indicates an active local development/redevelopment environment.

BWI Marshall – Terminal Improvements

• C-D Connector Program

This is the capstone project of the 2009 BWI Marshall Terminal Modernization Plan and will provide uninhibited flow of secure side passengers to all concourses and gates – it is the final post-security concourse connection. The full program includes the secure passenger connector, a consolidated and expanded baggage handling system, a consolidated Airport Operations Center (AOC), expanded concessions, improved restrooms, MAA and FAA office space, a replacement Airport Traffic Control Tower (ATCT), and a hotel with associated business and traveler amenities. Building upon past planning studies, a Concept Schematic Design was completed in FY23 that defined all needed program elements, aesthetic objectives, and established a feasible facility configuration and implementation plan. MAA continues coordinating with industry and other stakeholders to develop a supportive funding strategy.

• Replacement Airport Traffic Control Tower (ATCT) – Siting Studies Collaboration with the FAA on the new BWI Marshall ATCT siting studies continued in FY23. As of October 2023, the final overall FAA Siting Study, including tower program requirements, is still pending. FAA is currently renewing the siting study, which had expired during this period, prior to issuing the final report. Based on the selected location for the new tower, at the junction of Concourse D and the terminal (site A1), MAA is coordinating with the FAA for the environmental approval of the new location as required by the National Environmental Policy Act (NEPA). The environmental evaluation is expected to be complete in 2023.

• New Restroom Improvement Project

The initial notice to proceed (INTP) was issued in October 2021, with completion expected in April 2024. The Restroom Improvement Program includes six new sets of restrooms which include two new restroom sets in the B, C and D Concourses. Each set of restrooms includes a Men's Restroom, Women's Restroom and a suite with Adult Change, Nursing Room and Family Restrooms. The new restrooms include full-height stalls and state-of-the-art technology. Increasing the size of the individual stalls for the comfort of the passenger, the restroom design has created building additions which add an architectural feature to the exterior facades of the terminal. The following Restrooms were completed and opened to the public: B.R1 was opened on March 30, 2023; DY.R2 (Women) and C.R2 were opened on June 30, 2023; and C.R3 was opened to the public on September 13, 2023. The anticipated opening dates for the remaining restrooms are: DX.R2 on October 31, 2023; B.R2 (Women) on November 30, 2023; DY.R2 (Men) on December 15, 2023; and B.R2 (Men) on April 16, 2024. The Restrooms Program was awarded America's Best Restroom 2023 by Cintas on September 28, 2023.

• Concourse A/B Connector and Baggage Handling System (BHS) Project
This project includes a terminal expansion between Concourses A and B to provide an improved passenger connector between the two concourses, five (5) relocated gates with expanded hold rooms, new concessions, airline operations space, and a new in-line baggage screening and handling system capable of accommodating approximately eight (8) Explosive Detection System machines meeting the latest TSA design requirements. As part of the project, capacity upgrades are required at the central utility plant and energy efficient lighting improvements will be included on the adjacent lower-level roadway to comply with the Maryland State Energy Code.

The project is being pursued as a construction manager at risk (CMAR) delivery method. Design progressed through several bid packages and was on track for the first guaranteed maximum price (GMP) package advertisement when the project was placed on hold due to COVID-19 in April 2020. In February 2021, the program design was completely restarted with a reduction of \$98 million in funding. Major objectives of the original project are being maintained. In an effort to recover lost project delivery schedule due to the COVID-19 hold, the project was split into two construction procurement packages. The 1st GMP package of \$25.6 million for early mobilization and site preparation, received Board of Public Works (BPW) approval on January 5, 2022, with construction starting shortly thereafter. The 2nd GMP package of \$332.5 million to complete the terminal expansion, received BPW approval on October 12, 2022. Completion of the project is scheduled for fall 2026. The first enabling project for Lower-Level Roadway Lighting improvements is scheduled to be completed in February 2024, and the second enabling project for Central Utility Plant Improvements is scheduled to be completed in April 2024. Both enabling projects are included in the GMP-2 package. Overall A/B Project completion is scheduled for Fall 2026.

• DX-DY Concourse HVAC System Improvements

The DX/ DY concourses' HVAC system improvement project – originally constructed in 1984 and 1987 – was designed and awarded. The initial notice to proceed (INTP) was issued in October 2021 and the project achieved completion on July 13, 2023. Final seasonal commissioning and closeout are anticipated by the end of CY23. The project included the upgrade of the Concourse D Chiller Plant, the replacement of the existing direct expansion air handlers, and the replacement of the variable air volume (VAV) boxes in the terminals, as well as a replacement of the central concourse ceilings with an architectural enhanced ceiling system to include new LED lighting. Published in Airport Improvement Magazine

• The BGE Feeder Upgrade Project

This project will improve overall electrical system reliability for the Airport. Phase 1 was completed in FY22 and replaced Transformer T1, which had been in service for over 43 years, and provided liquid containment for the transformer as well as upgraded LED site lighting for energy efficiency and added safety. Phase 2 construction began in April 2023 with a duration of 600 calendar days. This phase includes the installation of a new double-ended 35kV switchgear at the North and South substations (to facilitate switching) and the installation of new BGE service feeders into the North and South switchgears (to eliminate single point of failure). The project will remove BGE automatic selector switches at the North and South Substations, replace meters and relays in the 15kV switchgear, integrate new work on the SCADA for remote monitoring and alerts, and add security features to include CCTV and access control. Completion is anticipated December 2024.

• North Area Fuel Farm Additional Storage Tanks

Construction of the North Area Fuel Farm project began in June 2023 with a duration of 550 calendar days. The project increases the jet fuel storage capacity and facilitates provision of additional supply to BWI Marshall. This project will also upgrade the existing waterline capacity to an acceptable level to support firefighting operations and complete the waterline loop around the North Area Fuel Farm. Completion is anticipated December 2024.

• Maryland Transportation Authority (MdTA) Police Relocation
The MdTA Police will be relocated from the Terminal to Building 113. In addition, a police substation will be created in the Central Terminal area (lower level, near Concourse C, also known as the "Rabbit Warren"). This relocation will enable the planned expansion of the baggage claim system in the D-E zone including two additional carousels. This project is in the bid cycle and expected to start construction in Spring 2024.

BWI Marshall - Airside Improvements

• Obstacle Action Plan

As part of MAA's ongoing efforts to protect navigable airspace from encroachment of vegetative obstructions, consistent with FAA standards for CFR Part 77 and Terminal Instrument Procedures (TERPS), several trees within the approach to Runway 10 were removed. In addition to presenting an airspace concern, these trees were beginning to affect signal integrity of the FAA Far Field Monitor which is an integral component of the Precision Instrument Landing System for that runway. Removal of these trees was accounted for in the recent *Environmental Assessment for Phase I Improvements at BWI Marshall* that received an FAA Finding of No Significant Impact/Record of Decision in November 2020. Additional planning, design and agency coordination efforts are underway to address other areas of concern around the airport.

Airline Maintenance Facility

The Airline Maintenance Facility (AMF) site work has continued with significant progress being made including handover of the hangar and apron site to Southwest Airlines for their construction. The hangar building steel erection was underway as of October 2023. The construction of the hangar and apron are expected to take 18 months. The entire AMF program is targeting a June 2025 completion for all work areas. The associated Taxiway F Relocation (Phase 1) Segments 1 and 2 have reached substantial completion and close out of the FAA AIP Grant that funded the work is underway.

• Taxiway F Relocation (Phase 2)

As described with the AMF project, Phase 1 of the Taxiway F Relocation project is substantially completed. Design and bidding of Phase 2 is complete and a NTP is anticipated this year. Phase 2 will extend the taxiway from Taxiway F Phase 1 towards the Runway 10 end.

• Remote Transmitter/Receiver (RTR) Relocation

The RTR relocation project was completed. The RTR relays voice communication from the ATCT to/from aircraft on approach. The relocation was required to restore frequencies impacted from airport development projects and allow for future projects within the line of sight from the existing RTR. This project also installed duct bank for FAA fiber optic utilities.

• New Airfield Lighting Vault (ALV)

Construction of the replacement of the existing ALV at BWI Marshall has begun. The project is funded by a sizable \$23M FAA AIP Discretionary Grant. The existing facility is a re-purposed Airfield Rescue & Fire Fighting building that is less than ideal for the provision and layout of the lighting infrastructure, workspaces, and equipment access. Additionally, the facility represents a significant risk of single point of failure for the entire airfield electrical system, and its location causes a congestion point on the airfield. The new facility is designed with each runway and associated taxiway lighting infrastructure segregated into separate fire-rated electrical rooms, reducing the risk of airfield wide loss of service. Space is provided for layout of switch gear and transformers with service areas, storage, workspace, and appropriate maintenance vehicle access. The new site also relocates the ALV from the entrance of the apron between Concourses B & C, and therefore greatly improves operational efficiency by providing for a dual-taxi entrance to the apron. Construction is currently focused on erection of the CMU walls and enclosing of the building and anticipated completion September 2024.

• Taxilane N & N1 Reconstruction

The pavement on Taxilanes N & N1 between the D and E Concourses has needed rehabilitation for several years. The reconstruction project will replace the asphalt pavement with concrete pavement for increased durability and longevity. The project is currently under construction and nearing completion of the second of six planned phases with completion scheduled for late 2024.

• Taxiway T Phases 2&3

The MAA continues the complete reconstruction of Taxiway T to support operations at BWI Marshall. Taxiway T is among the most heavily traveled pavements at BWI Marshall and is in need of complete reconstruction along its entire length. The replacement of the existing asphalt paving with concrete is carefully phased to minimize the number of airline gates closed due to the construction. Phases 2&3 extend the reconstruction behind Concourse A to the Runway 15R deicing pad and behind Concourse B to the existing ALV. As of October 2023, the project is in procurement.

• DX/DY Apron Reconstruction

Similar to the taxilane N&N1 project, the DX/DY Apron reconstruction is intended to replace asphalt apron pavement with long lasting and durable concrete paving adjacent to Concourse DX/DY. Additionally, the adjacent portion of Taxiway T will also be reconstructed. The project is scheduled to complete design by the end of 2023 and be procured in 2024. The estimated \$30M project will be majority funded by FAA Entitlement funding provided by the Bipartisan Infrastructure Legislation.

BWI Marshall - Landside Improvements

• Long-Term Parking Lot B

Landside facility improvements have been ongoing, including the construction of pavement rehabilitation to Long-Term Lot B. As of October 2022, Lot B construction is substantially complete and project closeout is ongoing.

• Parking Guidance System

The Hourly Garage Parking Guidance System has reached the end of its useful life and a project to replace the system has been awarded and is currently scheduled for Board of Public Works (BPW) approval in October 2022. The project has a construction duration of one year and replaces the parking space monitoring sensors with a camera-based system capable of license plate recognition and associated signage of the existing system. An end user car finder mobile application is also an added feature included in the system. In addition, the project also includes maintenance of the system for five years as a companion contract.

• Electric Bus Charging Infrastructure

Construction of the Electric Bus Charging Infrastructure began March 2023 with a construction duration of 230 days. The project prepares a site layout for eight (8) electric charging stations for the new electric buses purchased by MAA. It includes site improvements such as new paving and curbs, a new security camera system, and monitoring services of the chargers. The layout also allows for future expansion of additional electrical charging stations.

Martin State Capital Projects

• Amtrak Catenary Lowering - Design

In FY 2023, following the favorable FAA environmental Finding of No Significant Impact (FONSI) in FY 2022, MAA obtained an AIP grant and initiated design of the long-planned lowering of the Amtrak catenary lines in the approach to Runway 15. This project will protect navigable airspace and reclaim usable runway length for civilian and military aircraft operators. Design is planned to be complete in 2024 with construction in 2025 pending available funding. Obtained \$48M in DoD and State funding and began design of runway rehabilitation, bid and award scheduled for FY 2024.

• Runway 15-33 Rehabilitation

In collaboration with the Maryland Air National Guard, the MAA is undertaking a comprehensive rehabilitation of the runway at Martin. The project will provide necessary pavement repairs by providing for a significant asphalt overlay, installation of reinforcing fabric to prevent reflective cracking, and significant geometric improvements to meet FAA standards and support an ultimate usable runway length of 8,100 feet. The project will also provide new lighting and signage infrastructure for the runway and replace existing systems with energy efficient LED systems. The \$32M construction cost is funded by a \$32M grant from the Department of Defense with a \$16M State match. The balance of funds is being devoted to obstruction clearing, lowering of the Amtrak Catenary and planning/permitting efforts required to operate the runway at 8,100 feet. The runway rehabilitation was put out for bid in September 2023 and construction is programmed for Spring of 2024.

• Replacement Airport Traffic Control Tower (ATCT)

The existing ATCT at Martin has been in operation since 1949. The replacement ATCT will be a stand-alone facility located near the airfield midpoint with an eye elevation 36 feet higher than the current Tower. The planned site location and elevation will greatly improve overall controller line-of-sight and depth perception. The new ATCT has been designed to 30% submission.

Airport Operations Area (AOA) Fence Upgrades
 To improve security of the airport and limit bazardous in

To improve security of the airport and limit hazardous intrusions by wildlife, MAA plans to remove the existing fence and install a 10-foot-high fence with barb wire, clear brush and vegetation, remove trees and repair eroded areas and the gravel access road. Construction began March 2023 and has a project duration of 277 days.

GIS & Engineering Technology

The GIS & Engineering Technology Group manages the enterprise Geospatial/Geographic Information System (GIS), Asset Management Program, Subsurface Utility Engineering (SUE), Building Information Modeling/Management (BIM), and Document Management program utilizing Airport Information Retrieval Portal (AIRPortal) gateway. AIRPortal is a secure webbased portal for MAA's internal and external users to access documents and data that facilitate critical airport business functions comprising of over 50 applications. This group fulfills and supports a diverse range of GIS and non-GIS technological needs of MAA in developing and implementing best-in-class applications consistent with MAA's enterprise framework. This group ensures that data quality and information is consistently maintained and reliably accessible for approximately 1000 internal and external users while meeting FAA requirements with respect to FAA's Airports GIS (AGIS). This group implements customized aviation and airport specific applications to leverage GIS and subsurface asset information and other data in nearly every element of airport engineering, planning, construction, operations, security, life safety, and maintenance at BWI Marshall and Martin State Airports. This group develops and maintains advanced user-friendly, customized (desktop, mobile, and web), modular, scalable, interoperable, and secured airport and aviation GIS and non-GIS applications, portals, dashboards, and reporting tools. Defining and developing solutions to support GIS, BIM, CAD, and Asset Management data integration, interoperability, conversion, and workflows. This group leads the agency-wide Asset Management Program to improve the information, coordination, and processes related to the management of its critical infrastructure assets to remain in a state of good repair. The group manages the document control and records management of electronic formatted records; to include, but not limited to: content analysis, document management, data capture, portals, shared storage locations, workflow, collaboration, data warehousing, decision support, information dissemination, as well as, create policies, procedures, and standards for data classification and maintain a records governance framework that addresses the lifecycle of Planning and Engineering information assets. This group directs and manages the BWI Marshall and Martin State Airports' Building Information Modeling and Management (BIM). This position oversees and coordinates the process of generating and managing virtual 3D digital models of facilities/buildings that help with decision making through the life cycle of projects through planning, design, construction, and maintenance.

The Engineering Technology group has advanced several projects including updates to the AirPortal document management system; development of asset management standards, tools and processes; developed GIS based application for pavement management, airport zoning permit

applications, Part 139 Inspections; refined Building Information Management system requirements; and updated airport wayfinding data for Google Maps and Apple Maps.

Special Achievements and Awards

MAA projects continue to be recognized locally, regionally, and nationally garnering several awards, including:

Industry Awards

- American Concrete Institute: Excellence in Concrete Construction for Taxiway F
 Phase 1 Segments 1 & 2.
- American Society of Civil Engineers Maryland Chapter (ASCE-MD): Outstanding Civil Engineering Achievement – Minor Construction Project for Taxiway F Phase 1 Segments 1 & 2
- o Cintas: America's Best Restroom

Maryland Quality Initiative (MDQI) Awards

- o Modal Award Under \$5M for MARTIN Hangar Storm Damage Repairs
- o Modal Award Over \$5M for BWI Taxiway T Reconstruction

Marketing and Air Service Development

Marketing

The coronavirus (COVID-19) global pandemic resulted in changes to advertising, marketing, promotional, and media spending. As fiscal year 2023 progressed, the Maryland Aviation Administration was able to slowly increase its marketing operations toward pre-pandemic levels.

In the previous fiscal year, the "When You're Ready, We'll Take You There" campaign was launched to reassure travelers of their safety when flying to or from BWI Marshall. As COVID-19 infection rates dropped and the public became more comfortable with public activities, we were able to shift our messaging to a more general travel focus and shorten the tagline to "We'll Take You There." The campaign came to life through various elements, including video, paid social media, out-of-home, and print/digital advertising. The campaign encouraged key travel groups such as business professionals, millennials, families, and affluent adventure-seekers to consider BWI Marshall once again as the airport of choice in their travel decisions.

MAA was committed to uplifting organizations and businesses that aligned with our brand values through various sponsorships and partnerships. BWI was a local contributor to the CIAA Basketball Tournament in 2023, promoting diversity in higher education through the successes of historically black colleges and universities' sports programs. MAA also was able to resume its annual SynergyBWI Business Networking Event to promote equity in airport contracting opportunities by educating small, minority-owned, and women-owned business enterprises about the state procurement process and giving them the space to network with airport prime contractors.

To increase market share, MAA continued running a conquest marketing and geotargeting campaign for Martin State airport's affluent jet flyers, with the tagline "It's All Here." Activities

for the program included advertising by associations and trade organizations, social media, special events, the development of strategic relationships, and the creation of press releases. MAA looks to displace other general aviation competitors in the region, such as Signature, by increasing brand awareness and promoting Martin's strategic advantages including low fuel cost, proximity to Baltimore City, and ideal location between the west coast and Europe.

Now that the global state of emergency has come to an end, MAA looks to return to normal marketing activities for BWI Marshall and Martin in FY 2024.

Air Service Development

Air service at BWI Marshall Airport took strong steps in 2023 to continue the recovery of capacity lost during the pandemic. Our largest carrier Southwest Airlines flew 8% more seats in 2023 than it did in 2019. Frontier Airlines became BWI Marshall's fastest-growing carrier, adding service throughout the year to San Juan, Dallas/Fort Worth, and Tampa. In June, BWI Marshall welcomed its newest international carrier, Copa Airlines, who started flying from its hub in Panama City, Panama, where it offers connections throughout Latin America.

Many carriers took advantage of BWI Marshall's existing Air Service Incentive Program in 2023. Air Canada, Avelo, British Airways, Condor, Icelandair, and Play continued with contracts started in 2022, and Copa Airlines took advantage of the program to receive fee waivers and joint marketing funds beginning with the launch of their service in 2023.

Communications

The Office of Communications directs and executes MAA's media relations and public information programs for BWI Marshall, Martin, and the State of Maryland's 34 public-use airports. Throughout 2023, the Office of Communications highlighted new international and domestic air service and broadened efforts to feature major capital improvements underway at BWI Marshall. These important projects will enhance the passenger experience and provide important capacity for airline partners to continue growth and success in this market.

Further Office of Communications work includes a major emphasis on digital communications. The office manages and supports four websites, along with nine distinct social media accounts with about 80,000 connections. The BWI Marshall website had more than 8 million pageviews in FY 2023, about 10 percent higher than the previous year. The airport website is a valuable tool that drives passenger engagement and provides critical information for customers. For social media, notable follower growth continued in FY 2023, despite challenges in the overall social media landscape. The office continued to offer customer assistance on social media by supporting customers and responding to hundreds of passenger inquiries.

<u>Customer Experience</u>

The Office of Customer Experience's goal is to ensure a positive experience for every customer in order to build brand loyalty at BWI Marshall. We pride ourselves on our exceptional customer service so that passengers will tell their friends, family, and co-workers how much of a positive experience they encountered while flying through BWI Marshall. In addition, our Pathfinder volunteers play a crucial role in helping to provide a class-leading customer service experience

working daily with the traveling public to provide them with critical and timely travel information.

Junior Pathfinders are high school juniors and seniors volunteering at BWI Marshall Airport. The Junior Pathfinder Program was initiated in 2019. As volunteers, Junior Pathfinders learn about the airport, airlines, and ground transportation so they can answer specific questions about the airport and surrounding areas. They are expected to stay current with airport changes by walking the terminal frequently and reading all information issued by the Office of Customer Experience. Junior Pathfinders also greet customers with a smile and assist passengers. This program allows high school students to earn service-learning hours while helping BWI Marshall provide excellent customer service.

MAA, with the leadership of its Customer Experience team, led the creation of BWI Marshall's first ever Customer Service Awards and Airport Employee Intranet.

The airport community participated in several exploratory sessions to determine what the airport partners needed to build a "One BWI Marshall Community." There were three key takeaways from the sessions that included better communications of airport news, an employee intranet, and recognizing airport employees for creating exceptional customer experiences. This would later turn into the Customer Service Initiative.

Corporate and Community Relations

The Office of Corporate & Community Relations plans and executes strategic activities that increase awareness and enhance perception of BWI Marshall and Martin in order to build community support and promote usage of the airports. This work includes program management and engagement with a variety of businesses, community groups, and tourism organizations.

Highlights from FY 2023 include:

• Sixth Annual Summer Youth Initiative

MAA's signature corporate social responsibility program was held August 7-11, 2023. This year included the most community engagement to date with more than 30 program partners and corporate sponsors. The program's reimagined brand was introduced with a new logo, corporate brochure, and corporate film.

• Business engagement events and tours

Community outreach included inviting key stakeholders for presentations and tours, including the World Trade Center Institute, Leadership Anne Arundel, the Board of Directors of the Howard County Chamber, and the National Security Agency.

Business Development and Management

In FY 2023, MAA continued to see recovery from the pandemic with double digit growth over the prior fiscal year. Operating revenues (e.g. airlines rates and charges, concession and parking revenues) totaling \$311.5 million increased 12.2%, enplanements totaling 12.4 million increased 15.6% and landed weight totaling 15.4 billion pounds increased 14.7%. MAA operating expenses totaling \$224.8 million increased 6.0%.

Federal Funding Strategy Continues

The passage of the Bipartisan Infrastructure Law (BIL) in FY 2022 made additional federal funding available to MAA to improve airport infrastructure over the next several years. MAA has been able to program \$170 million in anticipated Airport Improvement Program (AIP) federal funding to construct critical airfield and terminal improvement projects at BWI Marshall and Martin. Through FY 2026, MAA entitlement increases to at least \$25 million for BWI and \$800 thousand for Martin. MAA was awarded its first BIL grant in FY 2023, totaling \$15 million to fund the Taxilane N & N1 Reconstruction project currently underway. In addition, MAA has been aggressive in submitting applications to compete for discretionary grant opportunities that have been expanded under the passage of BIL.

In FY 2023, MAA was awarded three discretionary grants totaling over \$60 million in federal funding for Concourse A/B and Baggage Handling System Program, the Residential Sound Insulation Program and Taxiway F Relocation, Phase II Project.

Revenue Bond Structure

MDOT issues Special Transportation Project Revenue Bonds, on behalf of MAA. In July 2021, MDOT issued MAA's second series (2021B) for \$200 million in new funding which also received investment grade ratings and favorable interest rates. This new funding is being used for the Terminal A/B Connector & Baggage Handling System Project. A third series of approximately \$225 million is planned for calendar year 2024 for the completion of funding for the aforementioned project.

FY 2023 Profit and Loss Statement

In FY 2023, operating revenues increased \$33.9 million due to public parking revenues of \$12.5 million, airline revenues of \$12.9 million and other concessions and revenues of \$8.5 million. MAA operating expenses increased by \$9.2 million from inflation, labor costs, and contractual increases.

Overall, MAA's revenues are considerably higher than pre-pandemic revenue levels and continues to make a strong financial recovery. The following shows a comparison of FY 2023 to pre-pandemic FY 2019 revenues and expenses.

		FY 2019
(\$ millions)	FY 2023	(Pre- Pandemic)
Operating Revenues Prior to Debt Service	\$312	\$257
Revenue Bond Debt Service		N/A
Operating Expenses	\$225	\$205
Net Operating Surplus	\$66	\$52

^{*}See Statement of Revenues and Expenses Reports at the end of this document for FY 2023 financial details.

BWI Operations and Maintenance

The BWI Marshall Airport completed a FAA full-scale disaster drill (triennial exercise) on November 5, 2022 which is required of all certificated Part 139 Airports every three years. The

Triennial Exercise takes a year of planning involving multiple disciplines and requires the attendance of approximately 300 plus volunteers. The Triennial exercise begins with discussion-based exercises and gradually includes more operational activities that build up to a full-scale exercise that involves all jurisdictions, organizations, and stakeholders outlined in the Airport Emergency Plan (AEP). The exercise is developed to assess and validate capabilities of the Airport to handle emergencies listed in FAA Part 139.325(b) and participants include those with a role or interest in the AEP (e.g., Airport Operations, Airport Rescue and Fire Fighting (ARFF), Law Enforcement, EMS, Air Carriers, Media, Airport Tenants, Hospitals, etc.)

The Airport Security Office has seen increased staffing levels by the airlines, vendors, and contractors during the reporting period. As we continue to maintain our professional relationships with our federal partners (i.e., Federal Bureau of Investigation, Transportation Security Administration, and U.S. Customs and Border Protection) the office was able to achieve timely results while adhering to all federal mandates, as noted during regulatory inspections and audits. While continuing our focus on customer service, the Office introduced new online remote learning sessions on BWI Emergency Preparedness and Human Trafficking Awareness in conjunction with the U.S. Department of Homeland Security's Blue Campaign. This allows the team to continue to educate the community on security and safety items relative to the airport environment. In addition, enhancements were developed with focus on cybersecurity policies, practices and partnerships to include training exercises with federal and state agencies that regulate or impact the aviation transportation sector.

In the first nine months of 2023, the BWI Airport Fire & Rescue Department (FRD) responded to 2,807 incidents, of which 1,822 were on the BWI Marshall campus and 985 were in support of mutual aid partners. Of the 2,807 incidents, 823 were for fire-related incidents and 1,984 were medical. Also, through this period of 2023, FRD's mutual aid colleagues responded to a total of 252 separate apparatus responses on the BWI Marshall campus. Of those responses into BWI Marshall, 153 were from the Anne Arundel County Fire Department, 95 from the Baltimore County Fire Department, and 4 from the Howard County Fire Rescue Department.

Snow Removal Equipment Replacement

BWI O&M had updated and submitted the Airport Snow and Ice Control Plan for 2023 to the FAA. As part of the plan, BWI submitted a request to replace part of the aging Snow Removal Equipment fleet using the Airport Improvement Program (AIP) and Passenger Facility Charge (PFC) funding. The FAA concurred with and approved the plan to replace 27 pieces of snow equipment, to include snow blowers, high-speed multi-functional units that plow, broom and blow snow simultaneously, and both solid and liquid deicing units. These procurements equate to approximately 58 percent of the snow removal equipment fleet.

Airport Technology & Innovation

Telecommunications

The emergency phones (call boxes) located throughout the hourly and daily garages were updated with blue LED Beacon strobe lights to increase their visibility for customers in the event of an emergency.

MAA upgraded the courtesy phones located throughout the terminal to meet the ADA requirement for corridor/courtesy phones not projecting more than four inches from the wall. The project was put on hold during the pandemic but resumed in late 2022.

Facial Biometric Technology

As mandated by U.S. Customs and Border Protection (CBP), the Collins Self-Pass Biometric Solution has been installed at 14 gates at BWI Marshall. The facial biometrics process is designed to verify passenger's identities by comparing a live photo to images that the passenger has already provided to the government, such as a passport and visa photos.

The biometric solution works as follows: the gate agent accesses the Self-Pass application through an existing MUSE gate workstation, the passenger then approaches the camera unit to board. If a passenger is rejected by the system, the decline message will be displayed on the rear facing screen for the agent to view. Passengers can be rejected for non-match by the CBP Traveler Verification Service or if the airline rejects a passenger's boarding request. Rejected passengers are then manually processed. At flight close, the gate agent accesses the Self-Pass biometric solution through the MUSE gate workstation and closes the flight.

To date, the Self-Pass solution is being used for international flights only. Air carriers using this service include Southwest, British Airways, Air Canada, Iceland Air, Play, Copa, Frontier, and Condor. (**Figure 1**)

Figure 1: Biometric Exit located in BWI:

Inguit		offictife Exit located					
	Phase 1 Installation/Deployment						
Airline	Gate	Number of Cameras	Solution	Gate Locations	Date		
BA	1	2	1-step	E1	6/25/2022		
WN	4	4	2-step	B5, B6, B7, B8	6/5/2021		
		Phase	2 Installat	ion/Deployment			
Airline	Gate	Number of Cameras	Solution	Gate Locations	Date		
AC	1	1	1-step	D7	7/5/2023		
BA	1	2	1-step	E1	7/5/2023		
DE	1	2	1-step	E6	7/5/2023		
FI	1	2	2-step	E4	7/5/2023		
WN	8	8	2-step	A15, A16, B5, B6, B7, B8, B14, B15	7/5/2023		
	Phase 3 Installation/Deployment						
Airline	Gate	Number of Cameras	Solution	Gate Locations	Date		
CM	1	2	2-step	E6	9/3/2023		
F9	1	2	1-step	D3	9/3/2023		
OG	1	2	2-step	E8	9/3/2023		

Wifi and Distributed Antenna System (DAS)

Airport Service Quality (ASQ) scores for BWI Marshall's WiFi/Cellular service have risen significantly — from 3.72 to 4.11. The WiFi network upgrade, completed earlier this year, includes installation of more than 200 new WiFi access points, 19 network switches and hundreds of feet of new Cat6A ethernet cable runs. Additional access points have been installed

in areas where WiFi connectivity was either extremely low or non-existent. Since upgrade completion, WiFi connectivity rates now average between 70 to 75mpbs throughout BWI Marshall. With phenomenal connectivity rates, WiFi service at BWI Marshall still remains fast and free to our passengers. High speed connectivity allows BWI Marshall passengers to stream videos on multiple devices, download large business files, perform multiplayer online gaming, video conferencing and more. As of September 2023, the number of users logging on to the WiFi network average almost 60,000 per week.

AT&T, a telecommunications industry expert, is leading the DAS (cellular) upgrade at BWI Marshall. To date, Phase 1 of a four-phase cellular equipment installation is nearing completion. All physical hardware including conduit, fiber, access points and rack mounts has been installed in the Hourly Garage and in the Car Rental Facility. Service on Level 1 of the Hourly Garage will be activated by late January 2024. Phases two through four will be completed by December 2024. After completion, cellular coverage will be available in every corner of the airport including aprons, jet bridged and upgraded Southwest baggage handling areas.

Administration & Performance Management

Human Resources

MAA participated in several recruitment outreach events in 2023, including two Apprenticeship Initiative Open House Meetings, an Internship Career Fair at University of Maryland Eastern Shore, three Anne Arundel Workforce Development events, and a Department of Budget & Management career fair.

MAA's Summer Internship Program continued in 2023, hosting 19 interns from various area colleges. Over the two years of the program, MAA has hosted a total of 29 student interns. The ten-week internship program is experiential learning that integrates knowledge and theory learned in the classroom with practical application and skills development in the aviation and transportation industry. By implementing this program, MAA allows interns to gain valuable, applied experience while also giving employers the opportunity to guide and evaluate talent.

Safety and Risk Management

BWI Airport proudly participated in OSHA's Safe + Sound Week in August 2023. This nationwide event, celebrated every August, recognizes, and honors the significance of workplace health and safety programs. Safe + Sound Week provides invaluable information and insights to promote safety and ensure the safety of America's workforce. Engaging in such initiatives underscores the profound impacts of a safe workplace, enhanced employee morale, amplified productivity and efficiency, and a vital reduction in risks.

In June 2023, BWI hosted its 7th Annual Community Safety Fair at the BWI Marshall Terminal. This significant event offered a dynamic platform for our Employees, Tenants, Partners, and Contractors to immerse themselves in safety-centric activities. The overarching objective was to strengthen safety awareness within the expansive airport community. We were privileged to have a plethora of safety vendors contribute to the fair's success. These ranged from the Injured Worker Insurance Fund, which addresses state employee injury claims, to vendors specializing in providing Personal Protective Equipment for the transportation community. A particularly

notable interactive program for event participants was the use of an innovative technology, Fatal Vision Impairment Goggles; these goggles offer participants the ability to experience the simulated effects of alcohol intoxication and how it impairs vision, reaction time, judgement, and balance.

In August 2023, Martin proudly hosted its inaugural safety fair, uniting both airport tenants and employees in a shared commitment to safety. The event showcased a diverse array of vendors, including participants like the MD State Natural Resources Police, IWIF, and key representatives from the MAA Offices of Safety and Environmental, alongside the dedicated Core Values Committee. Notably, safety stands as a cornerstone among the core values upheld by MAA, reflecting the unwavering commitment to ensuring a secure and safe airport environment.

Organizational Development

In 2023, MAA successfully began implementing new elements of its performance management programs. The Management Training Program (MTP) – a policy-focused curriculum for all levels of management - provides policy-focused training from a supervisor perspective on employer-employee relations, diversity, equity, and inclusion, safety, and more. This eight-module curriculum launched in April 2023. MAA also implemented the Advance Leadership Program, a 15-month, competitive leadership development program aimed at building an internal bench strength of leaders poised to compete for positions as they become available through attrition. The first cohort of fourteen started in June 2023.

MAA implemented a new competency-based performance appraisal for its eligible senior management team (SMT) members in 2023. This performance appraisal tool is intended to monitor and facilitate communication between manager and employee about progress on employees' workplans (annual performance initiatives), competencies (expected behaviors), and Individual Development Plans. In January 2023, SMT completed the first mid-year appraisal check-in. Then feedback from a new 360 degree review (also competency-based), influenced the FY 2023 annual appraisal ratings and feedback, and was performed using MAA's talent management system, Cornerstone.

Implementation of a recurring electronic/digital interactive Air Operations Area (AOA) Driver Training Program was completed in 2023. This system trains Martin's various tenants and vendors how to properly navigate Martin's airfield in a safe and secure manner, compliant with federal regulations. This upgraded system better manages Martin's recurrent AOA training and aims to reduce the frequency of airfield incidents.

Actions Taken by the Maryland Aviation Commission

- The Commission was regularly briefed and consulted on the following:
 - Air service trends and air service marketing efforts;
 - Mid-year and year-end financial results;
 - Airport operational activities and aviation security issues;
 - Various airport construction projects;
 - State and federal legislative issues impacting BWI Marshall;
 - Noise Mitigation.
- The Commission approved the following major capital projects for the FY 2024-2029 period, with total estimated costs (TEC):

New Major Capital Projects	
 D/E Bag Claim Expansion at BWI 	\$27,400,000 TEC
 Runway Improvement Program at Martin 	\$34,300,000 TEC
Existing Projects Previously Approved	
2 11	# 3
 Taxilanes N and N1 Reconstruction at BWI 	\$24,100,000 TEC
 Fuel Storage Tank Additions at BWI 	\$26,100,000 TEC
 Air Operations Area Fence Upgrade at BWI 	\$11,300,000 TEC
 DX/DY Apron Pavement Rehab at BWI 	\$12,700,000 TEC
 Deicing Pad Expansion at BWI 	\$61,800,000 TEC
 15L/33R & Associated TWs - Pavement Rehab at BWI 	\$14,200,000 TEC
 Taxiway F Extension at Martin 	\$6,800,000 TEC
 Concourse A/B Bag 0-5 Reconfiguration at BWI 	\$26,500,000 TEC
 Snow Equipment Replacement 	\$24,300,000 TEC
 Electrical Substations Reconstruction at BWI 	\$30,500,000 TEC

• The Maryland Aviation Commission approved the adoption of amendments to COMAR to establish a standard for having an Airfield Operator's Permit program. The amendments to COMAR 11.03.01.01(B) and 11.03.01.04(Q) served to update the definitions and more clearly describe the Airfield Operator's Permit program description and requirements. The Maryland Aviation Commission approved the proposed amendments to COMAR 11.03.01.01 and 11.03.01.04 on January 19, 2022. The proposed action was published in the December 2, 2022 issue of the Maryland Register and the public comment period was open until January 3, 2023. No comments were received on the proposed amendments.

FINANCIAL RESULTS

Maryland Aviation Administration Baltimore/Washington International Thurgood Marshall Airport and Martin State Airport

Comparative Statement of Revenue, Expense and Income (Thousands)

	FY 2023	FY 2022	Difference	% Change
TTF Revenue and Expense				
TTF Operating Revenue	\$284,591	\$275,372	\$9,219	3.3%
TTF Revenue - Federal	\$110	\$83,640	(\$83,530)	-99.9%
MAA Operating Expense	\$224,782	\$211,981	\$12,801	6.0%
TTF Surplus/(Deficit)	\$59,919	\$147,031	(\$87,112)	-59.2%
Non-TTF				
Non-Operating Revenue	\$63,860	\$47,852	\$16,008	33.5%
Non-TTF Debt Service	\$33,190	\$32,272	\$918	2.8%
Non-TTF Surplus/(Deficit)	\$30,670	\$15,580	\$15,090	96.9%
Total MAA Surplus/(Deficit)	\$90,589	\$162,612	(\$72,023)	-44.3%
Capital Program Expenditures	\$180,141	\$104,698	\$75,443	72.1%
Enplanements (000's)	12,365,276	10,694,176	1,671,100	15.6%

Maryland Aviation Administration Statement of Revenue Fiscal Year Ending June 30, 2023 and 2022

FY 2023	FY 2022	Difference	% Change
	1 1 MVMM	Difference	70 Change
\$72.862.829	\$68.794.611	\$4.068.218	5.9%
			1.1%
			18.5%
\$18,165,450	\$16,601,801	\$1,563,649	9.4%
\$18,223,965	\$17,194,335	\$1,029,630	6.0%
\$8,971,068	\$6,363,894	\$2,607,174	41.0%
\$5,060,339	\$4,493,009	\$567,330	12.6%
\$13,432,495	\$2,932,864	\$10,499,631	358.0%
\$299,228,792	\$265,512,608	\$33,716,184	12.7%
\$12,241,649	\$12,012,931	\$228,718	1.9%
\$311,470,441 (\$26,879,261)	\$277,525,538	\$33,944,902 (\$24,725,769)	12.2%
\$284,591,180	\$275,372,046	\$9,219,134	3.3%
us nts \$109 740	\$83 639 679	(\$83 529 939)	-99.9%
\$109,740	\$83,639,679	(\$83,529,939)	-99.9%
\$284,700,920	\$359,011,725	(\$74,310,805)	-20.7%
\$9,429,658	\$8,415,033	\$1,014,625	12.1%
\$45,520,385	\$39,019,393	\$6,500,992	16.7%
\$8,909,777	\$417,687	\$8,492,090	2033.1%
n- ng ue \$63,859,820	\$47,852,113	\$16,007,707	33.5%
	\$18,223,965 \$8,971,068 \$5,060,339 \$13,432,495 \$299,228,792 \$12,241,649 \$311,470,441 (\$26,879,261) \$284,591,180 \$109,740 \$109,740 \$109,740 \$109,740 \$9,429,658 \$45,520,385	\$72,862,829 \$68,794,611 \$82,685,626 \$81,791,818 \$79,827,020 \$67,340,275 \$18,165,450 \$16,601,801 \$18,223,965 \$17,194,335 \$8,971,068 \$6,363,894 \$5,060,339 \$4,493,009 \$13,432,495 \$2,932,864 \$299,228,792 \$265,512,608 \$12,241,649 \$12,012,931 \$311,470,441 \$277,525,538 (\$26,879,261) (\$2,153,493) \$284,591,180 \$275,372,046 us us \$109,740 \$83,639,679 \$109,740 \$83,639,679 \$109,740 \$83,639,679 \$109,740 \$83,639,679 \$284,700,920 \$359,011,725	\$72,862,829 \$68,794,611 \$4,068,218 \$82,685,626 \$81,791,818 \$893,808 \$79,827,020 \$67,340,275 \$12,486,745 \$18,165,450 \$16,601,801 \$1,563,649 \$18,223,965 \$17,194,335 \$1,029,630 \$8,971,068 \$6,363,894 \$2,607,174 \$5,060,339 \$4,493,009 \$567,330 \$13,432,495 \$2,932,864 \$10,499,631 \$2299,228,792 \$265,512,608 \$33,716,184 \$12,241,649 \$12,012,931 \$228,718 \$311,470,441 \$277,525,538 \$33,944,902 \$266,879,261) \$275,372,046 \$9,219,134 \$109,740 \$83,639,679 \$9,219,134 \$109,740 \$83,639,679 \$109,740 \$109,7

Notes:

- 1/ 2021A Revenue Bonds refunded Parking and MEDCO debt February 2021. Payments represent monthly set asides to Trustee for future debt payments. Actual debt payments are due February and August.
- 2/ FY 2023 includes CRRSAA Concession Relief Funds for consulting expenses \$56,904 and ARPA Martin Sewer reimbursement \$52,836.

FY22 Federal Reimbursements from CRSSAA and ARPA. \$79,476,802 to payback TTF capital advance and \$4,053,137 for Operating expenses. See expenses.

3/ Interest income captures revenue bonds beginning FY 2023. FY 2022 revenue bond interest excluded \$845,238.

Maryland Aviation Administration

Statement of Expense

Fiscal Years Ending June 30, 2023 and 2022

	FY 2023	FY 2022	Difference	% Change
BWI Marshall Operating Expense (TTF) ¹				
Salaries and Wages	\$52,286,831	\$47,586,232	\$4,700,599	9.9%
Technical and Special Fees	\$3,500,410	\$2,716,085	\$784,325	28.9%
Communications	\$1,727,172	\$1,457,384	\$269,788	18.5%
Travel	\$357,431	\$197,178	\$160,253	81.3%
Fuel and Utilities	\$15,947,712	\$14,184,389	\$1,763,323	12.4%
Motor Vehicle Operations	\$3,029,384	\$2,758,379	\$271,005	9.8%
Contractual Services	\$111,571,777	\$108,249,606	\$3,322,171	3.1%
Supplies and Materials	\$5,597,220	\$4,607,487	\$989,733	21.5%
Replacement Equipment	\$361,412	\$146,115	\$215,297	147.3%
Additional Equipment	\$182,235	\$59,236	\$122,999	207.6%
Grants/Subsidies/Contributions	\$1,002,524	\$919,255	\$83,269	9.1%
Fixed Charges - Debt Service (COPS/Loans)	\$5,466,602	\$4,612,350	\$854,252	18.5%
Other Fixed Charges	\$2,639,410	\$2,726,969	(\$87,559)	-3.2%
Land and Structures	\$9,358,735	\$10,704,872	(\$1,346,137)	-12.6%
Total BWI Marshall Operating Expense	\$213,028,856	\$200,925,538	\$12,103,318	6.0%
Martin Operating Expense (TTF)	\$11,252,817	\$10,567,120	\$685,698	6.5%
Regional Aviation (TTF)	\$500,618	\$488,335	\$12,282	2.5%
Total MAA Operating Expense	\$224,782,291	\$211,980,993	\$12,801,298	6.0%
Federal Reimbursements ²	(\$109,740)	(\$4,053,137)	\$3,943,397	-97.3%
Total TTF Operating Expense	\$224,672,551	\$207,927,856	\$16,744,695	8.1%
Non-TTF Debt Service Expense				
Passenger Facility Charge Backed Debt	\$24,263,349	\$23,339,374	\$923,975	4.0%
Customer Facility Charge Backed Debt	\$8,926,198	\$8,932,268	(\$6,070)	-0.1%
T (IN TOTAL) I C	Φ22 100 545	Φ22.271.642	Φ01 7 005	2.00/
Total Non-TTF Debt Service Expense	\$33,189,547	\$32,271,642	\$917,905	2.8%
Total MAA Expense	\$257,971,838	\$244,252,635	\$13,719,203	5.6%
K 1 1 1	,,,	, , , , , , , , , , , , , , , , , , , ,	1 - 7: - 7	
Capital Program Expenditures				
State Funds - TTF ³	\$66,073,428	\$44,519,729	\$21,553,699	48.4%
Federal Funds	\$19,447,618	\$12,990,871	\$6,456,747	49.7%
Other	\$94,619,959	\$47,187,348	\$47,432,611	100.5%
	. ,	. ,	•	
Total Capital Program Expenditures	\$180,141,005	\$104,697,948	\$53,889,358	51.5%
	<u> </u>	<u> </u>	<u> </u>	

Notes:

1/ Operating Contractual Services - MDTA Police expenses shown are net of the TSA LEO grant \$645,500 FY23/22; Janitorial expenses are net of TSA COVID-19 cleaning grant FY 2023 \$54,731 and FY 2022 \$500,709.

FY 2023 are prior to federal reimbursement from CRRSAA and ARPA. Technical and special fees \$56,904. Utilities – Martin Sewer \$52,836.

FY 2022 prior to federal reimbursement from CRSSAA and ARPA. Contractual Expenses Shuttle Bus \$1,899,323, Fixed Charges COPs

Shuttle Bus Debt Service \$2,058,650 and Utilities Martin sewer - \$95,164.

Supplies and Materials - shuttle bus fuel is net of MD State Fuel Tax reimbursement FY 2023 \$195,924 and FY 2022 \$120,612.

MEDCO debt was refunded February 2021 with Revenue Bonds 2021A. FY 2022 MDTA July 2022 loan payment was paid in FY 2021.

2/ Federal Reimbursements FY 2023 includes CRRSAA Concession Relief Funds and Martin Sewer Reimbursement from ARPA.

FY22 CRSSA and ARPA for Ground Transportation Shuttle Bus, COPs Shuttle Bus Debt Service & Martin sewer.

3/ Capital expenses is not strictly TTF cash but a combination of TTF revenues from the sale of Consolidated Transportation Bonds and other sources.

BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL AND MARTIN STATE AIRPORTS AVIATION ACTIVITY

	FY 2023	FY 2022	Difference	% Change
BWI Domestic Passengers	23,450,247	20,394,622	3,055,625	15.0%
BWI International Passengers	1,255,006	1,056,398	198,608	18.8%
BWI Total Passengers*	24,705,253	21,451,020	3,254,233	15.2%
BWI Aircraft Operations	229,207	213,185	15,392	7.2%
MTN Aircraft Operations	93,314	95,642	-2,328	-2%

PASSENGER ACTIVITY COMPARISON FOR FY 2023

Total Commercial Passengers	BWI Marshall 24,705,253	<u>Dulles</u> 23,346,076	Reagan National 25,234,388
Percent Change over FY 2021	15.2%	20.5%	22.5%
Total Regional Market:	2023 73,285,717		2022 61,430,746

NOTE: Statistical data is subject to change as subsequent information is received from airlines.

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^{*}Total Passengers include both enplaned and deplaned passengers.

SECTION V

MARYLAND AVIATION COMMISSION COSTS FISCAL YEAR 2023*

Total Maryland Aviation Commission Cost	\$11,662.98
Miscellaneous	\$0
Contractual Services: Public Notice Advertisements for Commission Meetings Food Services \$1,633.75	\$1,633.75
Travel Reimbursement to the Commissioners for Meetings	\$1,329.23
Technical and Special Fees	\$8,700.00

^{*}Fiscal Year 2023: July 1, 2022 to June 30, 2023