

OFFICIAL STATEMENT DATED JUNE 5, 2019

NEW ISSUE – Book-Entry Only

**RATINGS:
(See “RATINGS” herein)
Moody’s: A2
Standard and Poor’s: A+
Fitch: A**

In the opinion of Bond Counsel, under existing law, the Bonds, their transfer, the interest payable on them, and any income derived from them, including any profit realized in their sale or exchange, shall be exempt at all times from every kind and nature of taxation by the State of Maryland or by any of its political subdivisions, municipal corporations, or public agencies of any kind; no opinion is expressed as to estate or inheritance taxes or any other taxes not levied or assessed directly on the Bonds, their transfer or the income therefrom. Assuming compliance with certain covenants described herein, under existing statutes, regulations and decisions, interest on the Bonds will be excludable from gross income for federal income tax purposes except, with respect to any Bond, during any period that such Bond is owned by a “substantial user” of the Project or a “related person” (as such terms are used in Section 147(a) of the Code), and as described herein, interest earned on such Bonds will be includable in the alternative minimum taxable income of individuals as an enumerated item of tax preference or other specific adjustment. Additionally, interest on the Bonds will be subject to the branch profits tax imposed on foreign corporations engaged in a trade or business in the United States of America. See “TAX MATTERS.”

**\$108,705,000
MARYLAND TRANSPORTATION AUTHORITY
Passenger Facility Charge Revenue Bonds
Series 2019
Baltimore/Washington International Thurgood Marshall Airport
(Qualified Airport Bonds - AMT)**

Dated: Date of delivery

Due: June 1 of the years shown on the inside cover

The Bonds are issuable as fully registered bonds without coupons in denominations of \$5,000 or any integral multiple thereof. The Bonds initially will be maintained under a book-entry system and registered in the name of Cede & Co., as registered owner and nominee for The Depository Trust Company, New York, New York (“DTC”), which will act as securities depository for the Bonds. Interest on the Bonds from the date of delivery of the Bonds will be payable semiannually on June 1 and December 1 of each year, commencing December 1, 2019. So long as the Bonds are maintained under a book-entry system, payments of principal and premium, if any, and interest on the Bonds will be made when due by Manufacturers and Traders Trust Company, as trustee (the “Trustee”), to DTC in accordance with the Trust Agreement described herein, and the Trustee will have no obligation to make any payments to any beneficial owner of the Bonds. See “THE BONDS – Book-Entry Only System.”

The Bonds are subject to redemption prior to maturity as described herein under “THE BONDS – Redemption.”

The Bonds are limited obligations of the Maryland Transportation Authority (the “Authority”) payable solely from Pledged Revenues under the Trust Agreement and are not and shall not be deemed (i) to be general obligations of the Authority, (ii) to constitute obligations of the Department of Transportation of Maryland (the “Department”), (iii) to constitute obligations of the Maryland Aviation Administration (the “MAA”) or (iv) to constitute a debt or a pledge of the faith and credit of the State of Maryland or any political subdivision thereof. None of the Authority, the Department or the MAA has taxing power.

FOR MATURITY SCHEDULES, INTEREST RATES, YIELDS AND CUSIPS, SEE INSIDE COVER

The Bonds are offered for delivery when, as and if issued by the Authority and subject to the approving opinions of McKennon Shelton & Henn LLP, Baltimore, Maryland, Bond Counsel and other certain conditions, including the conditions specified in the Official Notice of Sale. Certain legal matters will also be passed upon for the Authority by Kimberly A. Millender, Assistant Attorney General and Principal Counsel to the Authority, and by Louisa H. Goldstein, Assistant Attorney General and Principal Counsel to the Maryland Aviation Administration. It is expected that the Bonds will be available for delivery through the facilities of DTC on or about June 19, 2019.

This cover page contains certain information for quick reference only. It is not a summary of the Official Statement. Investors must read the entire Official Statement to obtain information essential to the making of an informed investment decision.

MATURITIES, PRINCIPAL AMOUNTS, INTEREST RATES, YIELDS AND CUSIPS

\$108,705,000
Passenger Facility Charge Revenue Bonds, Series 2019
Baltimore/Washington International Thurgood Marshall Airport
(Qualified Airport Bonds - AMT)

Due June 1	Principal Amount	Interest Rate[†]	Price[†]	Yield[†]	CUSIP[‡]
2021	\$3,620,000	5.000%	106.660	1.520%	57429NCJ9
2022	3,800,000	5.000	109.909	1.550	57429NCK6
2023	3,990,000	5.000	113.004	1.590	57429NCL4
2024	4,190,000	5.000	115.859	1.650	57429NCM2
2025	4,400,000	5.000	118.412	1.730	57429NCN0
2026	4,615,000	5.000	120.671	1.820	57429NCP5
2027	4,850,000	5.000	122.690	1.910	57429NCQ3
2028	5,090,000	5.000	124.286	2.020	57429NCR1
2029	5,345,000	5.000	126.018	2.090	57429NCS9
2030	5,615,000	5.000	125.304	2.160*	57429NCT7
2031	5,895,000	5.000	124.594	2.230*	57429NCU4
2032	6,190,000	5.000	123.889	2.300*	57429NCV2
2033	6,500,000	4.000	113.140	2.500*	57429NCW0
2034	6,760,000	4.000	112.296	2.590*	57429NCX8
2035	7,030,000	4.000	111.924	2.630*	57429NCY6
2036	7,310,000	3.000	99.735	3.020	57429NCZ3
2037	7,530,000	4.000	111.183	2.710*	57429NDA7
2038	7,830,000	4.000	110.815	2.750*	57429NDB5
2039	8,145,000	4.000	110.448	2.790*	57429NDC3

* Yield to first call date.

† The interest rates shown above are the interest rates payable by the Authority resulting from the successful bid for the Bonds on June 5, 2019. The interest rates, prices and yields shown above are furnished by the successful bidder. All other information concerning the terms of reoffering of the Bonds should be obtained from the successful bidder and not from the Authority. See "Sale at Competitive Bidding."

‡ CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein are provided by CUSIP Global Services, which is managed by S&P Capital IQ, a division of McGraw-Hill Financial, and neither the Department nor the Authority takes responsibility for the accuracy thereof. These data are not intended to create a database and do not serve in any way as a substitute for CUSIP Global Services.

No dealer, broker, sales representative or any other person has been authorized by the Authority to give any information or to make any representation, other than those contained in this Official Statement, and if given or made, such other information or representation must not be relied upon as having been authorized by the Authority. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information set forth herein has been provided by the Authority and other sources. The Authority believes that the information contained in this Official Statement is correct and complete and has no knowledge of any inaccuracy or incompleteness as to any of the information herein contained. The information set forth herein is not guaranteed as to accuracy or completeness by the Authority and is not to be construed as a representation by the Authority as to information from sources other than the Authority. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the Authority since the date hereof.

No quotations from or summaries or explanations of provisions of law and documents herein purport to be complete and reference is made to such laws and documents for full and complete statements of their provisions. This Official Statement is not to be construed as a contract or agreement between the Authority and the purchasers or holders of any of the Bonds described herein. Any statements made in this Official Statement involving estimates or matters of opinion, whether or not expressly so stated, are intended merely as estimates or opinions and not as representations of fact. Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in such forward looking statements. Any forecast is subject to such uncertainties. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between forecasts and actual results, and those differences may be material. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

The cover page hereof, list of officials, this page and the appendices attached hereto are part of this Official Statement.

The order and placement of materials in this Official Statement, including the appendices, are not to be deemed a determination of relevance, materiality or importance, and this Official Statement, including the appendices, must be considered in its entirety. The captions and headings in this Official Statement are for convenience only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provision or section of this Official Statement. The offering of the Bonds is made only by means of this entire Official Statement.

The Bonds have not been registered under the Securities Act of 1933, as amended, nor has the Trust Agreement described herein been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon exemptions contained in such acts.

IN MAKING AN INVESTMENT DECISION, INVESTORS SHOULD RELY ON THEIR OWN EXAMINATION OF THE AUTHORITY, THE DEPARTMENT AND THE MAA AND THE TERMS OF THE OFFERING, INCLUDING THE MERITS AND RISKS INVOLVED. NO REGISTRATION STATEMENT RELATING TO THE BONDS HAS BEEN FILED WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION ("SEC") OR WITH ANY STATE SECURITIES AGENCY. THE BONDS HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SEC OR ANY STATE SECURITIES AGENCY NOR HAS THE SEC OR ANY STATE SECURITIES AGENCY PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

The Trustee has neither participated in the preparation of, nor reviewed, this Official Statement.

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MARYLAND TRANSPORTATION AUTHORITY

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OFFICIAL STATEMENT
of the
MARYLAND TRANSPORTATION AUTHORITY
relating to
\$108,705,000
Passenger Facility Charge Revenue Bonds
Series 2019
Baltimore/Washington International Thurgood Marshall Airport
(Qualified Airport Bonds - AMT)

INTRODUCTION

General

This Official Statement sets forth information concerning the sale by the Maryland Transportation Authority (the “Authority”), acting on behalf of the Maryland Department of Transportation (the “Department”), of its Passenger Facility Charge Revenue Bonds, Series 2019, Baltimore/Washington International Thurgood Marshall Airport (Qualified Airport Bonds - AMT) (the “Bonds”), in the aggregate principal amount of \$108,705,000.

The Bonds are limited obligations of the Authority issued pursuant to (i) Sections 4-101 through 4-405 of the Transportation Article of the Annotated Code of Maryland, as amended (the “Enabling Legislation”), (ii) certain resolutions of the Authority and (iii) the Trust Agreement dated as of December 1, 2003 between the Authority and Manufacturers and Traders Trust Company (the “Trustee” and the “Registrar and Paying Agent”), as amended and supplemented (the “Trust Agreement”). A summary of certain provisions of the Trust Agreement is set forth in Appendix A and, unless otherwise indicated, terms used but not otherwise defined herein have the meanings assigned to such terms in the Trust Agreement. See “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT” in Appendix A.

The Authority previously issued its Variable Rate Passenger Facility Charge Revenue Bonds, Baltimore/Washington International Airport Facility Projects, Series 2003A (Governmental Purpose Bonds) (the “Series 2003A Bonds”), its Variable Rate Passenger Facility Charge Revenue Bonds, Baltimore/Washington International Airport Facility Projects, Series 2003B (Qualified Airport Bonds – AMT) (the “Series 2003B Bonds” and, together with the Series 2003A Bonds, the “Series 2003 Bonds”), its Passenger Facility Charge Revenue Bonds, Series 2012A (the “Series 2012A Bonds”), its Passenger Facility Charge Revenue Bonds, Series 2012B (the “Series 2012B Bonds”), its Variable Rate Passenger Facility Charge Revenue Bonds, Baltimore/Washington International Airport Facility Projects, Series 2012C (Qualified Airport Bonds – AMT) (the “Series 2012C Bonds” and, together with the Series 2012B Bonds, the “Series 2012B-C Bonds”), and its Passenger Facility Charge Revenue Bonds, Series 2014 (Qualified Airport Bonds – AMT) (the “Series 2014 Bonds” and together with the Series 2003 Bonds, the Series 2012A Bonds and the Series 2012B-C Bonds, the “Prior Airport Bonds”) under the Trust Agreement. As of April 1, 2019, \$39,510,000 principal amount of the Series 2012A Bonds,

\$63,485,000 principal amount of the Series 2012B Bonds, \$43,400,000 principal amount of the Series 2012C Bonds and \$35,030,000 principal amount of the Series 2014 Bonds remain outstanding. The Series 2003 Bonds are no longer outstanding.

The Authority

The Authority, an agency of the State of Maryland (the “State”), acting on behalf of the Department, is authorized under the Enabling Legislation to finance the cost of transportation facilities projects through the issuance of revenue bonds. The Authority currently owns, operates and maintains certain revenue-producing transportation facilities projects, the revenues from which will not be available to make any payments with respect to the Bonds. See “THE AUTHORITY.”

BWI Marshall Airport

Baltimore/Washington International Thurgood Marshall Airport (“BWI Marshall Airport” or “BWI Marshall”) is one of three major airports serving the Baltimore-Washington metropolitan area. Located nine miles south of Baltimore and 32 miles northeast of Washington, D.C., BWI Marshall Airport is situated on a 3,596-acre site in Anne Arundel County, Maryland between Baltimore, Maryland and Washington, D.C. BWI Marshall Airport is owned by the State and operated by the Maryland Aviation Administration (the “MAA”). See “BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL AIRPORT - General.”

The Air Service Area

The Baltimore-Washington metropolitan area is the fourth largest and wealthiest metropolitan area in the United States. Although BWI Marshall draws the majority of its passengers from the Baltimore-Washington area; many passengers from Southern Pennsylvania and Delaware also use BWI Marshall due to its combination of convenient highway and rail access, low fares and “easy come, easy go” reputation (collectively, the “Air Service Area”).

Agreement with Airlines

The MAA has entered into a Use and Lease Agreement (the “Airline Agreement”) with eleven airlines operating at BWI Marshall Airport, including, Alaska Airlines, Air Canada, American Airlines (“American”), British Airways, Condor Airlines, Delta Air Lines (“Delta”), JetBlue Airways (“JetBlue”), Southwest Airlines (“Southwest”), Spirit Airlines (“Spirit”), United Airlines (“United”), and WOW Air* (“WOW”), as well as cargo airlines Federal Express (“FedEx”), United Parcel Services (“UPS”), Air Transportation International (“ATI”), ABX Air (“ABX”), and Atlas Air (“Atlas”) (collectively, the “Signatory Airlines”). The current term of the Airline Agreement commenced on July 1, 2014 and extends through June 30, 2019. A new agreement will commence on July 1, 2019 and extend through June 30, 2026. For fiscal year 2018,

* Due to financial difficulties, WOW ceased all operations effective March 28, 2019 and has filed for bankruptcy in Iceland.

the Signatory Airlines accounted for more than 98% of total enplaned passengers at BWI Marshall Airport. See “AIRPORT AGREEMENTS – Airline Agreement” for more detailed discussion.

Use of Proceeds of the Bonds

The proceeds of the Bonds will be used to: (i) finance a portion of the costs of construction of the airport facilities projects located at BWI Marshall Airport described in “THE PROJECT” herein (the “Project”), (ii) fund a deposit to the debt service reserve fund for the Bonds, and (iii) pay certain costs of issuance of the Bonds. See “THE PROJECT” and “SOURCES AND USES OF FUNDS.”

Description of the Project

The Project consists of the passenger facility charge projects at BWI Marshall Airport described in detail in “THE PROJECT.”

Security for the Bonds

The Bonds will be secured equally and ratably on parity with the Series 2012A Bonds, the Series 2012B-C Bonds, the Series 2014 Bonds and any other Additional Bonds under the Trust Agreement by the Pledged Revenues, consisting of (i) \$4.50 of the Passenger Facility Charges (“PFCs”) collected from eligible enplaning passengers on and after July 1, 2004 payable to the MAA net of airline retention (the “Pledged PFCs”) and (ii) interest earnings on certain funds and accounts established under the Trust Agreement. See “Security and Sources of Payment for the Bonds.”

The Bonds are limited obligations of the Authority payable solely from Pledged Revenues and shall not be deemed (i) to be general obligations of the Authority, (ii) to constitute obligations of the Department, (iii) to constitute obligations of the MAA or (iv) to constitute a debt or a pledge of the faith and credit of the State or any political subdivision thereof. None of the Authority, the Department or the MAA has taxing power.

The Bonds are not secured by any mortgage or other interest in the Project, nor are they secured by any pledge of revenues from the Project or any other revenues of the MAA besides the Pledged Revenues.

Certain Other Agreements between the Authority and the MAA

In connection with the issuance of each series of the Prior Airport Bonds, the Authority, the State and the MAA entered into a corresponding Lease of Airport Facilities Projects at the Baltimore/Washington International Thurgood Marshall Airport and Assignment of Passenger Facility Charges pursuant to which (i) the MAA leased the site of the facilities financed with the proceeds of such series of Prior Airport Bonds to the Authority, and the Authority subleased the site and improvements back to the MAA; and (ii) the State, through the MAA, confirmed and extended its assignment of the Pledged PFCs to secure such series of Prior Airport Bonds on parity with any series of Prior Airport Bonds then outstanding.

In connection with the financing of the Project, the Authority, the State and the MAA will enter into a Lease of Airport Facilities Projects at the Baltimore/Washington International Thurgood Marshall Airport and Assignment of Passenger Facility Charges (the “2019 Lease and Assignment Agreement”) pursuant to which (i) the MAA will lease the site of the Project to the Authority, and the Authority will sublease the site and improvements back to the MAA, and (ii) the State, through the MAA, will confirm and extend its assignment of Pledged PFCs to secure the Bonds on parity with the Series 2012A Bonds, the Series 2012B-C Bonds and the Series 2014 Bonds. The State’s Board of Public Works (the “Board of Public Works”) approved the 2019 Lease and Assignment Agreement on May 22, 2019. In addition, the Authority and the MAA will enter into an Agreement on Financing Airport Facilities Projects at Baltimore/Washington International Thurgood Marshall Airport (the “2019 Financing Agreement”) under which the Authority will agree to finance the Project, and the MAA will agree to develop, construct, operate and maintain the Project on behalf of the Authority. See “THE 2019 LEASE AND ASSIGNMENT AGREEMENT AND THE 2019 FINANCING AGREEMENT” for a more detailed description of the agreements between the Authority and the MAA.

In addition to financing the Project with the Bonds, the Authority and the MAA will enter into a loan agreement pursuant to which the Authority will make a loan to the MAA to provide financing for the Project.

Additional Parity Indebtedness

Under the Trust Agreement, the Authority may issue other Additional Bonds on parity with the outstanding Prior Airport Bonds and the Bonds, subject to the satisfaction of certain conditions. See “SECURITY AND SOURCES OF PAYMENT FOR THE BONDS – Additional Bonds” and “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT” in Appendix A.

Investment Considerations

The Bonds may not be suitable for all investors. Prospective purchasers of the Bonds should read this Official Statement in its entirety. For a discussion of certain investment considerations relating to the Bonds, see “INVESTMENT CONSIDERATIONS.”

Additional Information

This Official Statement contains brief descriptions of, among other things, the Bonds, the Trust Agreement, the Authority, BWI Marshall Airport and the Project. Such descriptions do not purport to be comprehensive or definitive. All references in this Official Statement to laws and documents are qualified in their entirety by reference to such laws and documents; references to the Bonds are qualified in their entirety by reference to the form of the Bonds included in the Trust Agreement. Copies of the Trust Agreement and other agreements described in this Official Statement may be obtained upon written request from the Executive Director of the Authority.

SOURCES AND USES OF FUNDS

The following is a description of the expected sources and uses of the proceeds of the Bonds.

Sources of funds:

Par Amount of the Bonds	\$108,705,000
Net Original Issue Premium	<u>16,685,809</u>
Total sources of funds	<u>\$125,390,809</u>

Uses of funds:

Construction Account Deposit.....	\$118,026,766
Underwriter's Discount	126,098
Deposit to Series 2012/14/19 Debt Service Reserve Fund	6,887,945
Costs of Issuance	<u>350,000</u>
Total uses of funds	<u>\$125,390,809</u>

THE BONDS

Details of the Bonds

The Bonds are issuable as fully registered bonds without coupons in denominations of \$5,000 or any integral multiple thereof. The Bonds are dated as of the date of their delivery and will mature on June 1 of the years and in the principal amounts shown on the inside front cover of this Official Statement. The Bonds shall bear interest from their date until paid at the rate or rates set forth on the inside front cover (computed on the basis of a 360-day year composed of twelve 30-day months) payable on December 1, 2019 and semiannually thereafter on June 1 and December 1 of each year (the "Interest Payment Dates").

So long as the Bonds shall be maintained under a book-entry system, payments of the principal of, premium, if any, and interest on the Bonds will be made as described below under the heading "Book-Entry Only System." At any other time, interest on the Bonds will be payable by electronic funds transfer on each Interest Payment Date, or the next Business Day (herein defined) if such Interest Payment Date is not a Business Day, to each registered owner thereof at the address of such owner as it appears on the registration books of the Registrar and Paying Agent at the close of business on the 15th day of the month immediately preceding the Interest Payment Date (the "Record Date"), and the principal of the Bonds will be payable upon presentation and surrender of the Bonds, when due, at the designated corporate trust office of the Trustee. "Business Day" means a day other than a Saturday, Sunday or day on which banking institutions in the State are authorized or obligated by law or required by executive order to remain closed.

Redemption

Optional Redemption

Bonds maturing on or after June 1, 2030 are subject to redemption on or after June 1, 2029 in whole or in part at any time at the option of the Authority, at a Redemption Price equal to 100% of the principal amount thereof, together with interest accrued to the date fixed for redemption.

Redemption of Bonds Subject to Deposit of Funds and Other Conditions

Any redemption of Bonds shall be subject to the deposit of funds for such redemption by or on behalf of the Authority and may be subject to such other conditions as the Authority shall determine.

Selection of Bonds to Be Redeemed

If fewer than all of the Bonds shall be called for redemption, then the Series and maturities of the Bonds to be redeemed shall be selected by the Authority.

So long as the Bonds are maintained under a book-entry system, the selection of individual ownership interests in the Bonds of any one maturity to be credited with any partial redemption or purchase shall be made as described below under “Book-Entry Only System,” except as otherwise directed by the Authority.

If fewer than all of the Bonds of any one maturity shall be called for redemption during any other period, the Trustee shall select or cause to be selected the particular Bonds or portions of the Bonds to be redeemed from such maturity as shall be directed by the Authority or, in the absence of any such direction, by lot or in such other manner as the Trustee in its discretion may deem proper.

Notice of Redemption

So long as the Bonds are maintained under a book-entry system, notice of the call for any redemption of the Bonds shall be given only to the Depository Trust Company (“DTC”). At any other time, the Trustee shall mail notice of the call for any redemption at least 20 days before the redemption date to the registered owners of the Bonds to be redeemed at their addresses as they appear on the registration books maintained by the Trustee, but failure to mail any such notice to any of such registered owners or any defect in any notice shall not affect the validity of the proceedings for the redemption of any Bonds.

Effect of Call for Redemption

The Bonds so called for redemption will cease to bear interest on the specified redemption date and shall no longer be secured by the Trust Agreement, provided that funds for such redemption shall be on deposit at that time with the Trustee and that all conditions to such redemption shall have been satisfied.

Registration and Exchange of Bonds

So long as the Bonds are maintained under a book-entry system, Beneficial Owners (herein defined) thereof will have no right to receive physical possession of the Bonds, and transfers of ownership interests in the Bonds will be made through book-entries by DTC and the Direct Participants (herein defined). See “BOOK-ENTRY ONLY SYSTEM” below.

If the book-entry system is discontinued, upon surrender of the Bonds at the designated office of the Registrar and Paying Agent, together with an assignment duly executed by the registered owner or the attorney or legal representative of such owner in such form as shall be satisfactory to the Registrar and Paying Agent, such Bonds will be exchanged for an equal aggregate principal amount of Bonds of the same maturity, of any authorized denomination or denominations, and bearing interest at the same rate as the Bonds surrendered for exchange.

The transfer of any Bond may be registered only upon the books kept for the registration and transfer of the Bonds upon surrender of such Bond to the Registrar and Paying Agent, together with an assignment duly executed by the registered owner or the attorney or legal representative of such owner in such form as shall be satisfactory to the Registrar and Paying Agent.

Upon any exchange or registration of transfer, the Authority shall execute, and the Registrar and Paying Agent shall authenticate and deliver in exchange for such Bond, within a commercially reasonable time according to then-prevailing industry standards, a new Bond or Bonds, registered in the name of the transferee, of any authorized denomination or denominations, in aggregate principal amount equal to the principal amount of the Bond surrendered, of the same maturity and bearing interest at the same rate.

The Authority or the Registrar and Paying Agent may make a charge for every such exchange or registration of transfer of Bonds sufficient to reimburse it for any tax or other governmental charge required to be paid with respect to such exchange or registration of transfer, but no other charge shall be made to any Bondholder for the privilege of exchanging or registering the transfer of Bonds under the provisions of the Trust Agreement.

Book-Entry Only System

The information contained in the following paragraphs of this subsection “Book-Entry Only System” has been extracted from a schedule prepared by DTC entitled “SAMPLE OFFERING DOCUMENT LANGUAGE DESCRIBING BOOK-ENTRY ONLY ISSUANCE.” The Authority makes no representation as to the completeness or the accuracy of such information or as to the absence of material adverse changes in such information subsequent to the date hereof.

General. DTC will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond will be issued for each maturity of the Bonds in principal amount equal to the aggregate principal amount of the Bonds of such maturity, and will be deposited with DTC.

DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the

New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com and www.dtc.org.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC’s records. The ownership interest of each actual purchaser of each Bond (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Bonds

may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Bonds, such as redemptions and defaults. For example, Beneficial Owners of the Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Paying Agent/Registrar and request that copies of the notices be provided directly to them.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the Record Date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Bonds are credited on the Record Date (identified in a listing attached to the Omnibus Proxy).

So long as a nominee of DTC is the registered owner of the Bonds, references herein to the bondholders or the holders or owners of the Bonds shall mean DTC and shall not mean the Beneficial Owners of the Bonds. The Authority and the Paying Agent/Registrar will recognize DTC or its nominee as the holder of all of the Bonds for all purposes, including the payment of the principal of and interest on, and the purchase price of, the Bonds, as well as the giving of notices. Neither the Authority nor the Paying Agent will have any responsibility or obligation to Direct or Indirect Participants or Beneficial Owners with respect to payments or notices to Direct or Indirect Participants or Beneficial Owners.

So long as the Bonds are held by DTC under a book-entry system, principal and interest payments and any premium on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Paying Agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Direct and Indirect Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Direct or Indirect Participant and not of DTC, DTC's nominee, the Paying Agent or the Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest or premium to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Authority or its Paying Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

Book-Entry Only System — Miscellaneous. The information in the Section "Book-Entry Only System — General" has been obtained from DTC. The Authority takes no responsibility for the accuracy or completeness thereof. The Authority will have no responsibility or obligation to DTC Participants or the persons for whom they act as nominees with respect to the payments to or the providing of notice to the DTC Participants, or the Indirect Participants, or Beneficial Owners. The Authority cannot and does not give any assurance that DTC Participants or others will distribute principal and interest payments paid to DTC or its nominees, as the registered owner, or

any redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis or that DTC will serve and act in the manner described in this Official Statement.

Discontinuation of Book-Entry Only System. DTC may discontinue providing its services as securities depository with respect to the Bonds at any time by giving reasonable notice to the Authority. Under such circumstances, in the event that a successor securities depository is not obtained, Bond certificates are required to be printed and delivered. The Authority may also decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered.

In the event that the Book-Entry Only System is discontinued, the Bonds in fully certificated form will be issued as fully registered Bonds without coupons in the denomination of \$5,000 each or any integral multiple thereof. Such Bonds will be transferable only upon the registration books kept at the principal office of the Paying Agent/Registrar, by the registered owner thereof in person, or by an attorney duly authorized in writing, upon surrender thereof together with a written instrument of transfer in the form attached thereto and satisfactory to the Paying Agent/Registrar, and duly executed by the registered owner or a duly authorized attorney. Within a reasonable time of such surrender, the Authority shall cause to be issued in the name of the transferee a new registered Bond or Bonds of any of the authorized denominations in an aggregate principal amount equal to the principal amount of the Bond surrendered and maturing on the same date and bearing interest at the same rate. The new Bond or Bonds shall be delivered to the transferee only after due authentication by an authorized officer of the Paying Agent/Registrar. The Authority may deem and treat the person in whose name a Bond is registered as the absolute owner thereof for the purpose of receiving payment of or on account of the principal or redemption price thereof and interest due thereon and for all other purposes.

In the event that the Book-Entry Only System is discontinued, the Bonds may be transferred or exchanged at the principal office of the Paying Agent/Registrar. Upon any such transfer or exchange, the Authority shall execute and the Paying Agent/Registrar shall authenticate and deliver a new registered Bond or Bonds without coupons of any of the authorized denominations in an aggregate principal amount equal to the principal amount of the Bond exchanged or transferred, and maturing on the same date and bearing interest at the same rate. In each case, the Paying Agent/Registrar may require payment by any holder of Bonds requesting exchange or transfer of Bonds of any tax, fee or other governmental charge, shipping charges and insurance that may be required to be paid with respect to such exchange or transfer, but otherwise no charge shall be made to the holder of Bonds for such exchange or transfer. The Paying Agent/Registrar shall not be required to transfer or exchange any Bond after the mailing of notice calling such Bond or portion thereof for redemption as previously described; provided, however, that the foregoing limitation shall not apply to that portion of a Bond in excess of \$5,000 which is not being called for redemption.

THE AUTHORITY AND PAYING AGENT CANNOT AND DO NOT GIVE ANY ASSURANCES THAT DTC WILL DISTRIBUTE TO ITS PARTICIPANTS OR THAT DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL DISTRIBUTE TO BENEFICIAL OWNERS OF THE BONDS (A) PAYMENTS OF THE PRINCIPAL OF, OR INTEREST ON, THE BONDS, (B) CONFIRMATION OF OWNERSHIP INTERESTS IN THE BONDS, OR (C)

NOTICES OR THAT THEY WILL DO SO ON A TIMELY BASIS, OR THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT. THE CURRENT “RULES” APPLICABLE TO DTC ARE ON FILE WITH THE SECURITIES AND EXCHANGE COMMISSION AND THE CURRENT “PROCEDURES” OF DTC TO BE FOLLOWED IN DEALING WITH ITS PARTICIPANTS ARE ON FILE WITH DTC.

SECURITY AND SOURCES OF PAYMENT FOR THE BONDS

General

The principal of and interest on the Bonds are payable solely from the Pledged Revenues pledged and assigned by the Authority to the Trustee pursuant to the Trust Agreement. The Bonds are limited obligations of the Authority and do not constitute a debt or a pledge of the faith and credit of the State, the Department or the MAA, and neither the faith and credit nor the taxing power of the State nor the revenues of the Department, the MAA or the Authority (other than the Pledged Revenues) are pledged to the payment of the principal of or the interest on the Bonds. None of the Authority, the Department or the MAA has taxing power.

The Trust Agreement does not convey title to or mortgage the Project or any other property of BWI Marshall Airport. The Authority, the Department and the MAA have no obligation to rebuild any damaged or destroyed airport facilities project regardless of the existence of insurance proceeds. The Bonds are not secured by a pledge of revenues of any facilities (other than the Pledged Revenues), and no such revenues will be available to pay debt service on the Bonds.

Pledged Revenues

Pursuant to the 2019 Lease and Assignment Agreement, the State through the MAA has confirmed and extended its assignment to the Authority of all of its right, title and interest in the Pledged PFCs and any security therefor, including the right of the MAA to the Pledged PFCs and any payment bonds or performance bonds delivered to the MAA to secure the obligations of the airline operators to the MAA in respect of the Pledged PFCs, and all rights to receive the same, whether in the form of accounts receivable, contract rights, general intangibles or other rights, and the proceeds of such rights, whether now existing or hereafter coming into existence or whether now owned or held or hereafter acquired.

Deposit of Pledged Revenues

As contemplated by the 2019 Lease and Assignment Agreement, under the 2019 Financing Agreement, the MAA will agree that Pledged PFCs remitted by airlines in accordance with Federal Aviation Regulation Part 158 will continue to be transferred by or at the direction of the MAA to the Trustee for deposit in the PFC Revenue Fund. Amounts so deposited each month will be (i) transferred to the Bond Funds created for each Series of bonds outstanding under the Trust Agreement, in an amount equal to respective amounts of the monthly debt service accruing on such Series, (ii) applied to the payment of Administrative Expenses, (iii) applied to cure certain deficiencies in the Debt Service Reserve Funds created for each Series of bonds under the Trust Agreement, if any, and (iv) thereafter applied for such other purposes specified in the Trust

Agreement. Any balance remaining in the Pledged Revenue Fund in any month will be deposited in the Facility Improvements Fund. See “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – Deposit of Pledged Revenues” in Appendix A.

The 2012/14/19 Debt Service Reserve Fund

The 2012/14/19 Debt Service Reserve Fund (formerly designated the 2012/14 Debt Service Reserve Fund, before that, the 2012 Debt Service Reserve Fund and, before that, the 2012A Debt Service Reserve Fund) secures the Series 2012A Bonds, the Series 2012B-C Bonds, the Series 2014 Bonds and the Bonds. Upon the delivery of the Bonds, there will be deposited into the 2012/14/19 Debt Service Reserve Fund an amount necessary to make the amount on deposit therein equal to the 2012/14/19 Debt Service Reserve Fund Requirement on all outstanding bonds secured by the 2012/14/19 Debt Service Reserve Fund.

Under the Trust Agreement, the 2012/14/19 Debt Service Reserve Fund may secure other Additional Bonds provided that upon the issuance of such Additional Bonds, there is deposited therein the amount required to make the amount on deposit in the 2012/14/19 Debt Service Reserve Fund equal to the 2012/14/19 Debt Service Reserve Fund Requirement, after giving effect to the issuance of such Additional Bonds. The Trust Agreement establishes the 2012/14/19 Debt Service Reserve Fund Requirement for the 2012/14/19 Debt Service Reserve Fund as an amount equal to the least of (i) 10% of the proceeds of the bonds secured thereby, (ii) Maximum Annual Debt Service on all outstanding bonds secured thereby and (iii) 125% of the average annual debt service requirements of all bonds secured thereby. See “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – Additional Bonds” in Appendix A.

Holders of the Bonds may not look to any other Debt Service Reserve Fund created under the Trust Agreement for payment.

The Authority may provide for the delivery to the Trustee of a Debt Service Reserve Fund Credit Facility in substitution for amounts initially deposited in the 2012/14/19 Debt Service Reserve Fund. See “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT – 2012/14/19 Debt Service Reserve Fund” in Appendix A.

If as a result of any withdrawal from the 2012/14/19 Debt Service Reserve Fund, the amount credited thereto is less than the 2012/14/19 Debt Service Reserve Fund Requirement, the Trustee is required under the Trust Agreement to transfer from the Pledged Revenue Fund in each month such amount as will cure the deficiency within 12 months. The Trust Agreement also contains provisions which require the Trustee to make certain transfers from the Pledged Revenue Fund to the 2012/14/19 Debt Service Reserve Fund in the event of certain investment losses and in the event that any Debt Service Reserve Fund Credit Facility fails to qualify to be credited to the 2012/14/19 Debt Service Reserve Fund.

Additional Bonds

Under the Trust Agreement, the Authority may issue other Additional Bonds on parity with each Series of bonds previously issued under the Trust Agreement and the Bonds, subject to the satisfaction of certain conditions. See “SUMMARY OF CERTAIN PROVISIONS OF THE

TRUST AGREEMENT – Authorization of Additional Bonds; Conditions Precedent to Delivery of Additional Bonds” in Appendix A.

Events of Default and Remedies; No Acceleration

The Bonds may *not* be accelerated upon the occurrence of an Event of Default under the Trust Agreement. The remedies for Events of Default are limited to such suits, actions or special proceedings, at law or in equity, for enforcement. As a result, the MAA may be able to continue indefinitely collecting revenues and applying them to the operation of BWI Marshall Airport even if an Event of Default has occurred and no payments are made on the Bonds. See “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT” in Appendix A.

THE AUTHORITY

General

The Authority was established by the Maryland General Assembly on July 1, 1971. Pursuant to the Enabling Legislation, the Authority is responsible for the supervision, financing, construction, operation, maintenance and repair of certain revenue-producing transportation facilities projects.

Relationship of the Department and the Authority

The Department is responsible for all State-owned transportation facilities and programs (except for the transportation facilities projects of the Authority), including the planning, financing, construction, operation and maintenance of various transportation facilities and the performance of related licensing and administrative functions. The modal administrations of the Department created by statute are the MAA, the Maryland Port Administration, the Motor Vehicle Administration, the Maryland Transit Administration (the “MTA”) and the State Highway Administration. The Department provides funds for the construction and operation of transportation facilities through a combination of taxes and fees, user charges, federal aid and bond proceeds credited to and expended from the Transportation Trust Fund of the Department.

Acting on behalf of the Department, the Authority has various powers and duties relating to the supervision, financing, construction, operation, maintenance and repair of transportation facilities projects. In addition to its existing transportation facilities projects, the Authority may authorize the acquisition, financing, or construction of any other projects for transportation facilities, including vehicle parking, highway, airport, port, rail and transit facilities, as “transportation facilities projects.” The Authority is empowered to finance the cost of transportation facilities projects by the issuance and sale of revenue bonds, notes or other obligations. The Maryland Secretary of Transportation, by statute, is the Chairman of the Authority.

Authority Membership

The Authority is comprised of the Maryland Secretary of Transportation, as Chairman, and eight members appointed by the Governor of Maryland (the “Governor”) with the advice and

consent of the Maryland Senate. The Chairman, Pete K. Rahn, serves at the pleasure of the Governor. The Authority acts by motions or resolutions that must be adopted by the affirmative vote of a majority of the appointed members of the Authority and concurred in by the Chairman.

The appointed members of the Authority, their principal occupations and the expiration of their terms of office are:

Katherine Bays Armstrong – Member since September 2016; Term expires September 2020.

Certified Financial Planner of Heritage Financial Consultants, LLC. Previously served as Vice President of Investment and Wealth Management for Mercantile-Safe Deposit & Trust Co. (now PNC).

Peter J. Basso – Member since August 2007; Term expires June 2019.

Senior Advisor in the strategic consulting group at WSP USA, formerly Parsons Brinkerhoff. Previously served as Chief Operating Officer and Business Development Director of the American Association of State Highway and Transportation Officials (AASHTO), and Assistant Secretary for the Budget and Programs and Chief Financial Officer of the United States Department of Transportation.

Dontae Carroll – Member since July 2017; Term expires June 2019.

Senior Vice President/Regional Manager, Northern Virginia & West Virginia for Long & Foster Real Estate.

William H. Cox, Jr. – Member since July 2016; Term expires June 2020.

President of William H. Cox, Jr., Real Estate, Inc. Previously served as a member of the Maryland House of Delegates.

William C. Ensor III – Member since July 2015; Term expires June 2019.

Retired former president of Maryland Paving, Inc.

W. Lee Gaines, Jr. – Member since April 2015; Term expires June 2020.

President of Gaines and Company, an underground-utility contractor based in Reisterstown, Maryland.

Mario J. Gangemi, P.E. – Member since September 2017; Term expires June 2020.

An engineer in the geotechnical, construction, environmental and structural fields, currently with Greggo & Ferrara, Inc., a highway construction firm that has been in business for more than 70 years.

John von Paris – Member since July 2016; Term expires June 2020.

President and chief executive officer of Von Paris Enterprises, Inc., the parent company of the Von Paris Family Moving and Storage business.

Each appointed member serves for a term of four years and until a successor is appointed and qualified. An appointed member may not serve more than three consecutive terms. The members of the Authority receive nominal compensation for their services, as well as reimbursement for expenses incurred in the performance of their duties.

The Board of the Authority meets once a month in a public meeting to approve Authority contracts and to review and determine policies affecting the operation and management of the facilities owned and operated by the Authority. The day-to-day operation of such facilities is performed by the management and staff of the Authority, supervised by the Authority's Executive Director.

Organization of the Authority Staff

The Executive Director of the Authority is appointed by and reports directly to the Chairman and members of the Authority. The Executive Director, as the Chief Executive Officer, is responsible for the overall operation, maintenance and coordination of all Authority facilities and functions and is accountable to the Chairman and members of the Authority. Functions and divisions directly supervised by the Executive Director include the Office of Audits and the Office of Legal Counsel. The remaining functions are led by the Executive Director and members of the Executive Advisory Committee (the "EAC"). The EAC is comprised of the Authority's Chief Administrative Officer, Chief Financial Officer, Chief Law Enforcement Officer, Chief of Operations, and the Chief of Staff. The Executive Director and the EAC are supported by Division and Office Directors and Managers.

As of March 7, 2019, 1,738 full-time and part-time employee positions were authorized by the Authority (including the Maryland Transportation Authority Police force), of which 1,590 positions were filled.

The Maryland Office of the Attorney General assigns staff to provide legal counsel to the Authority.

Management

The following comprise the management of the Authority responsible in connection with the issuance of the Bonds:

Pete K. Rahn, Chairman: Pete K. Rahn was appointed Transportation Secretary by Governor Larry Hogan on January 13, 2015. As Transportation Secretary, Mr. Rahn oversees a \$6.1 billion annual budget (fiscal year 2019) and manages 10,805 employees. The Department has direct supervision over all aspects of transportation including: the State's highway, transit and rail networks; toll facilities; motor vehicles; Baltimore/Washington International Thurgood Marshall Airport; and the Port of Baltimore. All Department agencies receive funding from a common State Transportation Trust Fund with the exception of the toll facilities that are funded through the Authority. Prior to his appointment, Mr. Rahn was National Transportation Practice Leader with the Kansas City, Missouri-based HNTB engineering firm since 2010. While in this position, Mr. Rahn was named Chairman of the New Mexico State Transportation Commission in 2011. One of only four people to have led transportation departments in multiple states, Mr. Rahn served as the

Director of the Missouri Department of Transportation from 2004 to 2010 and Cabinet Secretary of the New Mexico State Highway and Transportation Department from 1995 to 2002. Mr. Rahn received a Bachelor of Arts, Government and a Bachelor of Science, Planning from New Mexico State University.

John J. O’Neill, Acting Executive Director: The Board of the Authority selected Mr. O’Neill to serve as Acting Executive Director on April 16, 2019. Prior to this role, he served as the Authority’s Chief of Operations, responsible for managing the operations of the Authority’s eight toll facilities, including direction of *E-ZPass* Operations, Engineering and Construction, Facilities Management, and Traffic Management and Support Services. In previous positions, Mr. O’Neill served as program manager for the Authority’s Electronic Toll Collection, Next Generation, Open Road Tolling, and related projects. He played a vital role in designing and implementing all-electronic tolling on the Intercounty Connector (the “ICC”) – the State’s first all-electronic toll facility – and on the I-95 Express Toll Lanes in northeast Baltimore. Mr. O’Neill joined the Authority in 2006. He holds a B.S. degree from Stevenson University.

Deborah E. Sharpless, CPA, Chief Financial Officer: Ms. Sharpless joined the Authority in September 2008 as its Chief Financial Officer. Ms. Sharpless has over 16 years of experience in governmental and enterprise fund accounting. Prior to joining the Authority, Ms. Sharpless held the positions of Controller and Internal Audit Chief for the Maryland State Lottery, an agency with annual revenue and assets in excess of \$1.5 billion and \$300 million, respectively. Ms. Sharpless began her career in public service as a legislative auditor and was responsible for overseeing a team of staff auditors in conducting performance, fiscal/compliance, and financial statement audits of governmental agencies. Ms. Sharpless was awarded her B.S. degree from the University of Baltimore with a summa cum laude distinction and received her Master of Business Administration at the University of Baltimore /Towson University in May 2011.

Percy E. Dangerfield, Chief Administrative Officer: Mr. Dangerfield was selected by the Board of the Authority to serve as the Chief Administrative Officer in March 2013 and oversees five (5) business units – which include the Office of Procurement and the Office of Information Technology. Prior to joining the Authority, Mr. Dangerfield served as the Chief of Staff for the Cleveland Department of Port Control (DPC) in Cleveland, Ohio. Mr. Dangerfield served as the Principal Assistant to the Director with executive oversight of the administrative and operational functions of the organization. Although the importance of business development has been a central theme throughout Mr. Dangerfield’s 20 year career in public service, the experience gained while serving as the Manager of the Disadvantaged and Minority Business Enterprise Program for the Maryland State Highway Administration was the most impactful. In this position, he ensured compliance and executed programs geared toward promoting fairness and opportunities for the “least of us.”

Kimberly A. Millender, Esq., Principal Counsel: Ms. Millender was named Principal Counsel for the Authority in July 2013. Prior to her current position, Ms. Millender served as Deputy Counsel for the Authority starting in April 2011. Prior to her service with the Authority, Ms. Millender held positions in Carroll County serving as the County Attorney and an Assistant County Attorney for 15 years. As Principal Counsel for the Authority, Ms. Millender supervises the agency’s legal staff and advises the Authority regarding litigation, contracts and procurement, public financing, police matters, real-estate and agency operations. She earned a Bachelor’s

degree in political science from Washington College in Chestertown, Maryland and her law degree from the University of Baltimore School of Law. Ms. Millender is a member of the Maryland State Bar.

Chantelle M. Green, Director of Finance: Ms. Green joined the Authority in November 2014 as Deputy Chief Financial Officer and was named the Director of Finance in June 2019. Prior to joining the Authority, she served as a Senior Policy Analyst with the Maryland Department of Legislative Services where she advised legislators on policy and budgetary matters relating to transportation, environment, personnel and public safety. As the Director of Finance, Ms. Green manages and oversees the daily operations of the Authority's Finance Division with over \$600 million in annual tolls, approximately \$500 million in investments, and \$1.6 billion in toll-backed outstanding revenue bonds. Ms. Green received her Master of Business Administration degree from Florida A&M University and a law degree from the University of Maryland. Ms. Green is a member of the Maryland State Bar.

Allen W. Garman, Director of Treasury and Debt: Mr. Garman joined the Authority in June 2007 after 11 years at Legg Mason as a municipal credit analyst, portfolio manager and bond market strategist. His more than 20 years of investment industry experience also includes positions at Merrill Lynch and Nations Securities. Mr. Garman is charged with managing the Authority's investments and advising on bond financings and long-term leases. He received a Bachelor of Science degree in economics from the University of Baltimore and a Master of Science degree in finance from the University of Maryland. Professional memberships include the CFA Institute, The Municipal Bond Club of Baltimore, and the Government Finance Officers Association (GFOA). Serving as a standing member of the National GFOA's Committee of Treasury and Investment Management, Mr. Garman writes policy on industry best practices. Mr. Garman is also an advisory board member for the Maryland Local Government Investment Pool.

MARYLAND AVIATION ADMINISTRATION

General

The Maryland General Assembly established the MAA on July 1, 1971. The MAA, as provided by Title 5 of the Transportation Article of the Annotated Code of Maryland, as amended, is responsible for fostering and developing aviation activity and facilities throughout the State and operating State-owned airports. By legislative action in the 1972 Session of the General Assembly, ownership of BWI Marshall Airport was acquired by the State from the City of Baltimore on July 26, 1972 and responsibility for its operation, maintenance, protection and development was assigned to the MAA. Martin State Airport ("Martin Airport") was purchased by the State on July 1, 1975. The MAA operates Martin Airport as a joint facility, serving the needs of private and corporate aircraft owners, two squadrons of the Maryland Air National Guard, the Maryland State Police, Baltimore County Aviation and Marine Police and the Baltimore City Police. Martin Airport also serves as a federally designated reliever airport for noncommercial air carrier traffic at BWI Marshall Airport.

The MAA Staff

The Executive Director of the MAA is responsible for carrying out the powers and duties vested by law in the MAA and for adopting and carrying out regulations.

The Executive Office includes seven Chiefs: the Chief of the Division of Business Development & Management, the Chief of the Division of BWI Airport Operations & Maintenance, the Chief of the Division of Planning and Engineering, the Chief of the Division of Administration & Performance Management (currently vacant), the Chief of Airport Technology, the Chief of the Division of Marketing & Air Service Development, and the Chief of Martin Airport Operations & Maintenance. The Executive Office also includes Regional Aviation Assistance, Policy & Government Affairs, and the Office of the Attorney General.

Within the Division of Business Development & Management are the Offices of Commercial Management, Capital Programs, Finance, Ground Transportation, and Procurement.

Within the Division of BWI Operations and Maintenance are the Offices of Airport Operations; Airport Fire & Rescue, Airport Security, Maintenance, Grounds Maintenance, Fleet Maintenance, and Custodial Services.

Within the Division of Planning & Engineering are Offices of Planning, Engineering & Construction, Environmental Services, and Architecture.

Within the Division of Administration & Performance Management are the Offices of Safety & Risk Management, Fair Practices, Human Resources, Administration Services, and Organizational Development.

Within the Division of Airport Technology are the Offices of Infrastructure Services, Communications Systems, Enterprise Services, and Technology Project Management.

Within the Division of Marketing and Air Services Development are the Offices of Air Service Development, Passenger Services Development, Corporate & Community Affairs, and Marketing.

The following comprise the principal managerial staff of the MAA:

Ricky D. Smith, Executive Director: Mr. Smith was appointed Executive Director of the MAA by Governor Larry Hogan on July 10, 2015. As Executive Director, he is responsible for the planning, operation, and management of BWI Marshall Airport, Martin State Airport, and regional aviation activities for the State. A 29-year transportation official, Mr. Smith returned to Maryland after serving as Chief Executive Officer of the Cleveland Airport System, which includes Cleveland Hopkins International Airport (“Cleveland Hopkins”) and Burke Lakefront Airport. In addition, he was responsible for the management and development of Cleveland’s lakefront properties. During Mr. Smith’s leadership, Cleveland Hopkins was recognized as the most-improved airport in North America by the Airports Council International- North America. He also led the development of a \$2 billion master plan for the Cleveland Airport System. Prior to his service in Cleveland, Mr. Smith served as the Chief Operating Officer for the MAA. Mr. Smith has an Accounting Degree from Howard University and an Executive Master of Business

Administration from Loyola University in Maryland. He is a graduate of several leadership programs, including Leadership Cleveland, the Greater Baltimore Committee, and the University of Maryland Government Executive Institute. Mr. Smith is also a member of the American Association of Airport Executives, the Washington Board of Trade, the BWI Business Partnership, the World Trade Center Institute, AERO Club of Washington, the Greater Baltimore Urban League, and the U.S. Department of Transportation National Freight Advisory Council.

James G. Walsh, A.A.E., Chief Financial Officer and Chief of Business Development & Management: Mr. Walsh was appointed Chief Financial Officer and Chief of Business Development & Management in November 2012. He returns to a position that he held from 2004 to 2009 and is responsible for all financial, commercial and marketing operations. Mr. Walsh has 30 years of experience in airport management and consulting. He began his aviation career in 1988 with the Port Authority of New York & New Jersey's Aviation Department, primarily at John F. Kennedy International Airport (JFK) in the Business & Administration Division. In 1996, he joined Landrum & Brown and became a Director in the airport finance practice advising numerous airport clients on financial, property, economic, forecasting and rate setting issues. After his initial tenure at BWI Marshall Airport, Mr. Walsh re-joined Landrum & Brown in 2009 as its Vice President – Financial Planning and Forecast Division where he led the firm's consulting engagements related to financial feasibility, benefit-cost analysis, and capital program modeling among other financial and economic services. Mr. Walsh received Bachelor and Master of Science degrees in economics from Fordham University in New York. He is also an Accredited Airport Executive and a graduate of Airport Council International's Airport Executive Leadership Program. Mr. Walsh is also a past president of the Board for the Northeast Chapter of the American Association of Airport Executives.

Edward P. Carey, C.M., Chief of Airport Technology: Mr. Carey began work at the MAA in 1984 as an aviation planner and managed the MAA's aviation planning group from 1989 to 1995. From 1995 through 1999, he served as Senior Aviation Planner for the Metropolitan Washington Airports Authority, where he was involved in planning and development of a \$2 billion capital program for both Ronald Reagan Washington National Airport ("Reagan National") and Washington Dulles International Airport ("Dulles"). In 1999, he returned to the MAA as Director of Aviation Noise and Abatement. From 2000 to 2002 he served as Chief of Staff for the MAA, and from 2002 to 2005, he was the Director of Aviation Technology. Mr. Carey became the Chief Administrative Officer in 2005 and the Chief of Airport Technology in 2019. Mr. Carey received a Bachelor of Science degree in Planning from the University of Maryland College Park.

Wayne S. Pennell, A.A.E., Chief Operating Officer: Mr. Pennell was appointed Chief Operating Officer for the MAA in July 2003. Prior to his appointment at the MAA, Mr. Pennell served as the Area General Manager for Signature Flight Support/ASIG from December 1989 to July 2003. As a U.S. Army Reserve Chief Warrant Officer – Aviator in the late 1980's, Mr. Pennell earned both rotorcraft and single/multi fixed wing commercial instrument pilot certifications. Mr. Pennell is an Accredited Airport Executive and a past president of the Northeast Chapter of the American Association of Airport Executives. Mr. Pennell has more than 30 years of aviation management experience.

Paul L. Shank, P.E., C.M., Chief Engineer: Mr. Shank is the Chief Engineer at the MAA overseeing the planning, design and construction of the airport's multi-hundred million-dollar capital improvement and systems preservation programs at BWI Marshall Airport and Martin State

Airport. Mr. Shank has over 30 years of experience in airport development and associated transportation, commercial and institutional development. His accomplishments are measured in billions of dollars of airport and transportation related development projects completed throughout the United States and overseas. He is a licensed Professional Engineer and a Certified Member of the American Association of Airport Executives. Mr. Shank is also a licensed commercial pilot, flight instructor and aircraft owner.

Annette Fisher, Chief of Marketing and Air Service Development (MASD): Ms. Fisher is responsible for producing marketing campaigns, projects and communication initiatives aligned with the airport's strategic plan. In addition, she leads a team responsible for the offices related to MASD, Corporate and Community Relations, Communications and the Office of Passenger Development Services. During her career, Ms. Fisher's journey has included all facets of marketing and communications, including television, radio, corporate, state and city governments, non-profit and real estate. Prior to her work in public relations and marketing, Ms. Fisher served as a television news producer, a freelance reporter for the Baltimore Sun newspaper and a contributing writer for the Baltimore Business Journal. Ms. Fisher earned a Bachelor of Arts in Journalism from the College of Notre Dame in Maryland and holds an MBA from Johns Hopkins University. She is an active member of the Public Relations Society of America, National Association of Journalists, Airport Council International – North America and the American Association of Airport Executives.

Alfred Pollard, A.A.E., Chief of Martin Operations & Maintenance: Mr. Pollard has worked for the MAA since 1994, as a Landside Management Specialist, an Airport Licensing Office, an Assistant Airport Manager, and Chief of Operations & Maintenance. He is a private pilot and holds a B.S. Degree in Aviation Management from Florida Institute of Technology. A (former) U.S. Marine, Mr. Pollard served in Marine helicopter squadron 204, based in North Carolina. Mr. Pollard currently serves on the Policy Review Committee of the American Association of Airport Executives (the "AAAE"), and served as a former member of the Board of Directors and former Chair of their General Aviation Airports Committee. He is a Past President of the Northeast Chapter of AAEE. He also serves on the Federal Aviation Administration's (the "FAA") Research and Development Advisory Committee. Member of the Aero Club of Washington. Member of the Editorial Board, Airport Magazine. Mr. Pollard is a member of the Board of Directors of the Chesapeake Gateway Chamber of Commerce.

Louisa Goldstein, Principal Counsel: Ms. Goldstein is an Assistant Attorney General for the State and has served as Principal Counsel for the MAA since February 1989. As Principal Counsel, Ms. Goldstein supervises the activities of the MAA's legal staff, drafts and reviews agency contracts, supervises tort defense and contract claim litigation, and advises the MAA and its employees regarding federal law relating to airports, operations, security, management, financial, real estate, risk-management, environmental, land use and noise, procurement and personnel issues. Ms. Goldstein received a Bachelor of Arts degree from the American University, earned a Juris Doctor degree from the Washington College of Law, American University, and holds a Master of Taxation degree from the Georgetown University Law Center. She is a member of Airports Council International – North America Legal Steering Committee. She is a member of the Maryland and District of Columbia Bars.

Patrick Bradley, C.M., Director of Finance: Mr. Bradley was promoted to Director, Office of Finance in December 2009. As Director, Office of Finance, Mr. Bradley has

management responsibility for the Accounting, Budget, Audit and Financial Planning and Analysis departments. Prior to that, Mr. Bradley had served in an Acting capacity as Director, Office of Finance from September 2008 to November 2009, as Manager of Finance from 2003 to 2008 and as Budget Manager for 2002. Prior to his service with the MAA, Mr. Bradley held financial analysis and management positions with International Business Machines, the Coca Cola Company and America Online as well as serving for six years as an officer in the United States Army. Mr. Bradley received a Bachelor of Science degree in Accounting from Arizona State University, a Master of Science degree in Systems Management from the University of Southern California and a Master of Business Administration degree from New York University.

BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL AIRPORT

General

BWI Marshall Airport is one of the three major airports serving the Baltimore-Washington metropolitan area, which is the fourth largest population and travel market in the United States. BWI Marshall Airport is a major commercial air carrier airport, ranking 22nd in the U.S. based on the number of enplaned passengers for the 12 months ended June 30, 2018. More than 25 scheduled airlines, including commuter and cargo air carriers, serve BWI Marshall Airport and currently provide an average of 330 domestic and international departing flights daily serving 83 markets nonstop. During fiscal year 2018, 27 million passengers used BWI Marshall Airport. BWI Marshall Airport is currently served by seven major/national passenger airlines, as well as eleven regional/commuter airlines, three international carriers and five all-cargo carriers. During fiscal year 2018, total domestic and international enplanements at BWI Marshall Airport were 13.5 million.

Recent Market Trends

The large market area served by BWI Marshall Airport, combined with a convenient terminal layout, an uncongested airfield system, and close proximity to many East Coast destinations led Southwest to pick the BWI Marshall Airport as its first East Coast airport in September 1993. Southwest's decision to bring its high-frequency low cost service to BWI Marshall Airport has had a substantial, positive impact on BWI Marshall Airport's local origin and destination traffic base. From a modest beginning in 1993 with eight flights to two cities, Southwest has increased operations to a current summer peak of 220 daily flights to 54 destinations. Passenger enplanements for Southwest reached 9.1 million at BWI Marshall in fiscal year 2018. Southwest was subsequently joined at BWI Marshall by other low-cost carriers including JetBlue, Spirit, Allegiant and Frontier.

In addition to the low-cost carriers, BWI Marshall is served by legacy mainline carriers Alaska Airlines, American, Delta and United. These carriers and their affiliated regional partners enplaned nearly 2.7 million passengers at BWI Marshall in fiscal year 2018, and provided nonstop service to 19 destinations.

Several carriers offer international service from BWI Marshall. Air Canada has nonstop service from BWI Marshall to Toronto and Montreal, with connections to points throughout

Canada. British Airways provides BWI Marshall with daily nonstop service to London's Heathrow Airport. Scheduled service is offered by Southwest to Aruba, Cancun, Costa Rica (Liberia and San Jose), Montego Bay, Nassau, and Punta Cana. Condor offers twice-weekly seasonal nonstop service from BWI Marshall to Frankfurt, Germany. The closest alternative international facilities are Dulles and Philadelphia International Airport.

Existing BWI Marshall Airport Facilities

The major airfield facilities at BWI Marshall Airport as of March 31, 2019 consist of three runways: east-west Runway 10/28 is currently 10,500 feet long and 150 feet wide; northwest-southeast Runway 15R/33L is 9,500 feet long and 150 feet wide; and northwest-southeast commuter Runway 15L/33R is 5,000 feet long and 100 feet wide. Runways 10/28, 15R/33L, and 15L/33R are all equipped with precision Instrument Landing Systems. Runway 10 is equipped with CAT II/III landing aids and the other runways are Category I equipped. Associated taxiways provide efficient access from the runways to the airline parking, general aviation, and air cargo ramps.

The passenger terminal, consisting of approximately 2.4 million square feet, comprises five concourses and 72 gates. The terminal contains facilities for a number of activities, including baggage claim, federal inspection services, ground transportation, airline ticket counters, airline operations, food and beverage services, news and gift shops, retail, restrooms, telephones, charging stations and public circulation areas.

The air cargo complex at BWI Marshall Airport comprises five buildings located adjacent to Aviation Boulevard (MD. Rte. 170), three buildings located on Terminal Road, one building located on Elm Road and one building located on Mathison Way. The ten buildings combined contain approximately 425,000 square feet of cargo building space.

General aviation facilities are located on the northeast side of BWI Marshall Airport. These general aviation facilities include several hangar buildings and the fixed base operator facilities, along with a 22-acre aircraft and parking ramp.

BWI Marshall Airport is served by a consolidated rental car facility (the "Consolidated Rental Car Facility"), which was placed in service in 2003 and is currently managed and operated by ten on-airport rental car company brands. The Consolidated Rental Car Facility consolidates all rental car operations into a single facility that includes maintenance/storage facilities for rental car operators. It accommodates over 8,300 vehicles and is accessible by shuttle bus service.

Amtrak's BWI Marshall Airport Rail Station is located on the intercity high-speed rail line that extends from Washington, D.C. to New York City, and on to Boston. The BWI Marshall Airport Rail Station also accommodates the local MTA Maryland Area Regional Commuter ("MARC") train service between the Baltimore metropolitan area and Washington, D.C. The MAA operates shuttle services to and from the BWI Marshall Airport passenger terminal and the BWI Marshall Airport Rail Station.

BWI Marshall Airport is directly linked to downtown Baltimore and other Baltimore regional destinations by the MTA Light Rail service that operates directly into the terminal. MTA operates local bus service to BWI Marshall Airport from several destinations, and also operates

express bus service linking BWI Marshall Airport to Montgomery County via the ICC. The Regional Transportation Agency of Central Maryland provides bus service to BWI Marshall Airport. Also, the Washington Metropolitan Area Transit Authority (“WMATA”) provides bus service to BWI Marshall Airport from the Greenbelt Metro Station, which is part of the WMATA Metrorail system serving Washington, D.C., Maryland and Northern Virginia.

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Airlines Serving BWI Marshall Airport

The airlines serving BWI Marshall Airport as of January 2019 are delineated in the chart below.

PASSENGER AIRLINES SERVING BWI MARSHALL AIRPORT January - June 2019 ¹

<i>Mainline Airlines</i> ²	<i>Essential Air Service</i> (“EAS”)
Alaska Airlines American Airlines Delta Air Lines United Airlines	Southern Airways Express Boutique Air Contour Airlines
<i>Low-Cost Carriers</i>	<i>Foreign Flag Carriers</i>
Allegiant Air Frontier Airlines Jet Blue Airways Southwest Airlines Spirit Airlines	Air Canada ² British Airways Condor Airlines WOW Air ³

Sources:

MAA records and Official Airline Guides, Inc., online database, accessed January 2019.

Notes:

¹ Other passenger services from charter airlines include but are not limited to OMNI Air, Miami Air and Swift Air.

² Regional Affiliates may include but are not limited to Air Wisconsin, Air Georgian, Express Jet, Jazz Aviation, Sky Regional Airlines and Sky West Airlines.

³ WOW ended service March 2019.

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Aviation Activity

BWI Marshall Airport primarily serves origination and destination (O&D) passenger traffic. Over the past decade, O&D passengers have accounted for approximately 70% to 80% of all passengers enplaned at BWI Marshall Airport, with the remaining 20% to 30% connecting between flights.

Passenger enplanements. The table on the following page sets forth historical enplanement information for BWI Marshall Airport since fiscal year 1995. Leading up to fiscal year 2001, BWI Marshall Airport experienced a period of rapid growth. As the table shows, the number of enplaned passengers increased from 6.6 million in fiscal year 1995 to 10.4 million in fiscal year 2001, an average annual growth rate of 7.7%. In fiscal year 2002, air service reductions following the September 11 terrorist attacks and passenger anxieties about the possibility of further attacks reduced air travel demand. Travel demand was also depressed by the national economic recession in 2000-2001.

Between fiscal year 2002 and fiscal year 2004, passenger traffic at BWI Marshall Airport recovered, largely as a result of increased numbers of Southwest flights. In fiscal year 2005, passenger traffic declined due to regional competition from Independence Air service out of Dulles. Independence Air ceased operations in January 2006, and passenger levels increased again at BWI Marshall Airport through fiscal year 2008. In fiscal year 2009, enplaned passenger numbers decreased as a result of the economic recession and reduced seat capacity. Between fiscal year 2009 and fiscal year 2011, the number of enplaned passengers increased at an average rate of 5.8% per year compared to a nationwide average of 1.5% annually. Enplanements were essentially flat to slightly down during fiscal year 2012, 2013 and 2014 due to a combination of factors including the integration of AirTran into Southwest, the government shutdown, sequestration and a slower economy. Recovery began in fiscal year 2015 with a 2.5% increase from fiscal year 2014. Enplanements have increased at a healthy rate during the past three fiscal years (8.1% in fiscal year 2016, 4.4% in fiscal year 2017 and 5.1% in fiscal year 2018). Enplanements for the first nine months of fiscal year 2019 were 9.8 million.

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HISTORICAL ENPLANED PASSENGERS
Baltimore/Washington International Thurgood Marshall Airport

Fiscal Year	Enplaned passengers	Percent change
1995	6,645,135	--
2000	9,230,583	--
2001	10,376,040	12.4%
2002	9,625,720	(7.2)
2003	9,467,275	(1.6)
2004	10,381,018	9.7
2005	9,782,822	(5.8)
2006	10,180,996	4.1
2007	10,315,555	1.3
2008	10,662,196	3.4
2009	10,066,162	(5.6)
2010	10,685,247	6.2
2011	11,267,225	5.4
2012	11,340,264	0.6
2013	11,288,150	(0.5)
2014	11,139,583	(1.3)
2015	11,412,595	2.5
2016	12,331,941	8.1
2017	12,875,954	4.4
2018	13,534,033	5.1

Source: Maryland Aviation Administration records.

Note: Enplanements for the first nine months of fiscal year 2019 were 9.8 million.

Enplanements by Airline. The following table sets forth enplanement information for the airlines operating at BWI Marshall Airport for fiscal year 2013 through fiscal year 2018. Southwest enplaned approximately 9.1 million domestic and international passengers in fiscal year 2018 (67.6% share) compared with 8.9 million passengers in fiscal year 2017 (69.4% share).

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AIRLINE MARKET SHARES OF ENPLANED PASSENGERS
Baltimore/Washington International Thurgood Marshall Airport
(Ranked by Fiscal Year 2018)

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
	<i>Enplaned Passengers</i>				
Domestic					
Southwest (a)	7,634,857	7,847,410	8,278,543	8,632,719	8,850,763
Spirit	258,626	337,311	587,150	823,536	1,104,570
Delta	1,033,396	994,716	1,047,350	1,028,406	1,048,574
American (b)	1,072,996	1,048,690	1,007,490	880,180	875,283
United	570,660	504,362	510,232	482,260	529,636
JetBlue	143,433	143,339	213,927	271,098	258,668
Alaska	--	46,450	100,955	128,266	191,805
Allegiant	--	1,677	12,205	46,966	50,044
Other (c)	--	--	--	<u>4,228</u>	<u>20,865</u>
Subtotal	<u>10,713,968</u>	<u>10,923,955</u>	<u>11,757,852</u>	<u>12,297,659</u>	<u>12,930,208</u>
International					
Southwest (a)	260,284	308,140	338,253	304,247	299,322
WOW**	--	6,574	49,547	74,223	77,300
British Airways	55,762	54,970	57,189	62,308	62,733
Air Canada	29,660	33,659	42,261	48,693	54,822
Spirit	--	--	--	--	35,834
Other (c)	8,509	<u>11,433</u>	<u>23,904</u>	<u>33,959</u>	25,742
Subtotal	<u>354,215</u>	<u>414,776</u>	<u>511,154</u>	<u>523,430</u>	<u>555,753</u>
Charter	71,400	73,864	62,935	54,865	48,072
Total	<u>11,139,583</u>	<u>11,412,595</u>	<u>12,331,941</u>	<u>12,875,954</u>	<u>13,534,033</u>
Domestic					
Southwest (a)	68.5%	68.8%	67.1%	67.0%	65.4%
Spirit	2.3	3.0	4.8	6.4	8.2
Delta	9.3	8.7	8.5	8.0	7.7
American (b)	9.6	9.2	8.2	6.8	6.5
United	5.1	4.4	4.1	3.7	3.9
JetBlue	1.3	1.3	1.7	2.1	1.9
Alaska (c)	0.0	0.4	0.8	1.0	1.4
Allegiant	0.0	0.0	0.1	0.4	0.4
Other (d)	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.2</u>
Subtotal	<u>96.2%</u>	<u>95.7%</u>	<u>95.3%</u>	<u>95.5%</u>	<u>95.5%</u>
International					
Southwest (a)	2.3%	2.7%	2.7%	2.4%	2.2%
WOW**	0.0	0.1	0.4	0.6	0.6
British Airways	0.5	0.5	0.5	0.5	0.5
Air Canada	0.3	0.3	0.3	0.4	0.4
Other (c)	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.2</u>
Subtotal	<u>3.2%</u>	<u>3.6%</u>	<u>4.1%</u>	<u>4.1%</u>	<u>4.1%</u>
Charter	<u>0.6%</u>	<u>0.6%</u>	<u>0.5%</u>	<u>0.4%</u>	<u>0.4%</u>
Total*	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>	<u>100.0%</u>

Note: For fiscal years ended June 30.
Data include regional affiliates.

- (a) Includes AirTran Airways.
- (b) Includes US Airways in FY 2016.
- (c) Includes Boutique Air, Cape Air, Contour Airlines, Southern Airways Express, and Via Air.
- (d) Includes Condor Airlines, Air Jamaica, Alaska, Bahamasair, Frontier, Icelandair, Norwegian, Sunwing, USA 3000 and Vision Airlines.

* Total may not add up to 100% due to rounding.

** WOW ceased all operations effective March 28, 2019.

Source: Baltimore/Washington International Thurgood Marshall Airport records.

BWI Marshall Airport Insurance

The MAA maintains a comprehensive program of insurance covering the operations of BWI Marshall Airport. Currently, a commercial Airport Owners and Operators Liability policy is purchased by the State Treasurer’s Office, Insurance Division through Willis of Maryland. The primary liability policy (\$100,000,000 limit) is provided by Starr Indemnity & Liability Company, with an additional layer of excess liability (\$650,000,000 limit) provided by underwriters at Lloyds of London (various companies). The following liability coverages and annual limits are provided with no deductible:

<u>Limit</u>	<u>Coverage</u>
\$750,000,000	Bodily injury, personal/advertising injury, and property damage liability combined, each occurrence/offense, and in the aggregate where applicable, included within which are the following sub-limits:
750,000,000	Products-Completed Operations Annual Aggregate Limit
50,000,000	Personal Injury & Advertising Injury Annual Aggregate Limit
750,000,000	Hangarkeepers Limit any One Occurrence
750,000,000	Hangarkeepers Limit any One Aircraft
750,000,000	Non-Owned Aircraft Liability Limit any One Occurrence
350,000,000	Extended coverage War, Hijacking and Other Perils Aggregate Limit

Property damage for MAA-owned buildings, contents, and electronic data processing equipment is self-insured by the State Insurance Trust Fund, which is managed by the State Treasurer’s Office, Insurance Division. The State Insurance Trust Fund covers property losses up to a limit of \$2,500,000 per occurrence, with a \$1,000 deductible. Damage beyond this coverage is provided by a commercial blanket excess property insurance policy with a limit of \$500,000,000 per occurrence in excess of the \$2,500,000 self-insured retention. The policy is purchased by the State Treasurer’s Office, Insurance Division through Willis of Maryland using various insurance carriers and various layers of coverage.

Planned Capital Improvements at BWI Marshall Airport

The MAA maintains a six-year capital improvement program for BWI Marshall Airport. The current fiscal year 2019 to fiscal year 2024 capital improvement program totals \$604 million with funding from the Department’s Transportation Trust Fund, federal grants, PFC collections and rental car customer facility charge collections. Major BWI Marshall Airport capital improvement projects during the next six years, in addition to the Project (\$175 million), include various system preservation projects (\$273 million), International Concourse Extension (\$12 million), BWI Marshall shuttle bus fleet replacement (\$38 million), Midfield Cargo area improvements (\$31 million), Concourse B apron pavement rehabilitation (\$8 million), Taxiway B pavement reconstruction (\$13 million), and aircraft maintenance facility infrastructure (\$54 million).

THE PROJECT

Background

In 2011, the MAA completed an airport-wide master plan update for airside, terminal and landside facilities (the “Master Plan”). The proposed improvements for the terminal included improving the facilities to meet current federal airport passenger security and baggage screening requirements and life safety/egress requirements. The modernization program also included improving the level of service for the travelling public with provisions for moving walkways in the terminal, reconfigured holdrooms, secure interconnected concourses and improved passenger amenities. Over the past eight years, major elements of the Master Plan have been completed including the relocation and expansion of two passenger screening checkpoints, the construction of connecting corridors between Concourses B/C and D/E along with the widening of Concourse C, the extension of Concourse E and the expansion of the baggage screening systems.

General Description of the Project

Concourse A Improvements Phase II

This project adds five gates sized for B-737-800 aircraft by extending the existing Concourse A approximately 230 feet to the northwest to create an approximately 55,000 square foot addition. Like the existing building, the addition will consist of two primary levels, a lower level (the “Lower Level”) and an upper level (the “Upper Level”). This project represents the second phase of improvements envisioned during the Concourse A/B expansion completed in 2003 (“Phase I”). A majority of the supporting apron work was completed as part of Phase I.

The Lower Level will consist of approximately 24,000 square feet of new building and renovations to about 2,000 square feet of existing space. It will provide concession storage rooms along with mechanical, electrical, communication, and custodial support spaces. The Upper Level will consist of approximately 32,000 square feet of new building and renovations to about 5,000 square feet of existing space. The addition will include five new holdrooms sized to accommodate B-737 MAX8 aircraft, new concessions space and a new public restroom.

A new non-public elevator will be installed for the concessionaire’s use and two emergency egress stairs will also be constructed. A new common use Flight Information Display System will be installed. The existing Public Address, CCTV, and CASS systems will be extended into the new terminal areas. Specific elements of the project include, but are not limited to, underground utilities; concrete pavement; reinforced concrete and structural steel framing; building envelope systems including architectural curtain wall; metal wall panel; roofing systems, and skylights; interior architectural finishes; vertical transportation; hydronic air handling units with associated piping, ducts, and building automation system; fire protection and fire alarm systems; plumbing systems; electrical distribution; telecommunications, data, and security systems; and passenger boarding bridges.

Restroom Improvement Program

This project consists of major renovation and rehabilitation of 64 of the existing 71 restrooms throughout BWI Marshall Airport to expand facilities, modernize fixtures and finishes, address Americans with Disabilities Act compliance, improve the overall passenger experience and meet recommended guidelines of the 2015 Airport Cooperative Research Program Report 130, *Guidelines for Airport Terminal Restroom Planning and Design*. The seven restrooms not included in this project consist of three restrooms that were recently renovated as part of the D/E Connector Project and four restrooms in the old commuter concourse that are planned for demolition in the next decade. Specific Concourse A/B facilities include:

Lower Level Post-Security	2 – Men and Women Restroom sets 1 – Family Assist Restroom
Upper Level Pre-Security	2 – Men and Women Restroom sets 2 – Family Assist Restroom
Upper Level Post-Security	5 – Men and Women Restroom sets 5 – Family Assist Restroom

The program will renovate restrooms with modern, easily maintained restroom facilities. The design will allow for significant expansion of the restroom facilities and an increased number of fixtures to accommodate approximately 15% more passengers during peak hours to meet current and anticipated demand. Under the renovation project, new partitions, plumbing fixtures, accessories and finishes will be installed. The new design will provide deeper and elongated stalls with added privacy, and improved lighting and ventilation. The program will incorporate private nursing rooms for mothers and improved companion/family assist restrooms. To implement the terminal-wide restroom improvements, the entire program is divided into five phases to minimize disruption to passengers and coordinate with other terminal construction projects.

FIS Hall Reconfiguration

This project will optimize the capacity of the existing Federal Inspection Service Hall (the “FIS Hall”) to accommodate increases in the number of inbound international passengers by reconfiguring the primary screening areas and passenger processing facilities to accommodate the U.S. Customs and Border Protection (the “CBP”) 2017 design guidelines.

The existing FIS Hall is approximately 60,000 square feet and will be expanded to approximately 72,060 square feet. Of the additional square footage, approximately 10,000 square feet was constructed under prior Concourse E improvement projects as shell space to accommodate future FIS needs. The remaining 2,060 square feet of additional square footage will be an addition to the Technology Hall.

In the last five years, eight new international arrival gates have been added to the terminal and corresponding improvements within the FIS and Technology Hall have not kept up with the additional arrival capacity of the new gates. The project will increase the CBP booths from 14 to

22 to expand queuing space for arriving passengers to avoid plane holds, and the Technology Hall will be realigned to accommodate new biometric technology and screening that will improve processing efficiency. Space for secondary inspection areas will increase and the CBP offices will be relocated to accommodate the reconfiguration of the passenger processing areas.

Concourse A/B Modifications for B-737-800 Aircraft

Concourses A and B have three combined holdrooms serving six gates that require modifications to address capacity deficiencies created by Southwest upsizing their aircraft to B-737-800 and B-737-MAX8 aircraft. The smaller B-737-700 aircraft has a seating capacity of 143 and the larger B-737-800 and B-737-MAX8 aircraft have a seating capacity of 175; therefore holdrooms A6/8, A7/9 and B2/4 require expansion into nearby common, tenant and office spaces to support the increased passenger volume.

In addition, the increased aircraft capacity drives a need to upsize the egress stair capacity used in an emergency event. The Concourse B modification includes the design and construction of a new exterior emergency egress stair to the airfield. The proposed design includes concrete masonry unit interior walls with steel framing with steel pan stairs and concrete fill similar to existing locations. Exterior finishes would be ground face concrete masonry unit at the Lower Level and metal panels above to match the existing Concourse B design.

Concourse D HVAC Replacement

This project consists of replacing the existing HVAC systems serving Concourse D and the Commuter Concourse. The existing HVAC systems were installed in 1987 and have reached the end of their functional life.

This project will include replacement of rooftop units and a new chiller plant to improve the HVAC system reliability and reduce operational downtime, thereby maintaining a comfortable temperature on the concourses. While working in the ceiling area, ceiling tile and lighting will be replaced along with the fire protection sprinkler piping.

PASSENGER FACILITY CHARGES

General

The Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508) (the “1990 Act”) allows public agencies controlling certain commercial service airports (those with regularly scheduled service and enplaning 2,500 or more passengers annually) to charge each eligible enplaning passenger using the airport a \$1.00, \$2.00 or \$3.00 PFC. In 1994, as part of Public Law 103-272, which revised, codified, and enacted without substantive change certain general and permanent laws related to transportation as various subtitles of title 49, United States Code, the PFC provisions of the 1990 Act were codified into positive law as 49 U.S.C. §40117 (the “PFC Act”). The Aviation Investment and Reform Act for the 21st Century (P.L. 106-181) amended the PFC Act to increase the maximum per passenger PFC allowed to be charged by qualifying airports from \$3.00 to \$4.50. Public agencies wishing to impose and use these PFCs must apply to the

FAA for such authority and meet certain requirements contained in the legislation and regulations issued by the FAA. Regardless of the number of PFC applications which have been approved by the FAA, an airport can only collect a maximum of \$4.50 from each eligible enplaning passenger.

The proceeds from PFCs must be used to finance eligible airport-related projects. Eligible airport-related projects include airport development or planning, terminal development, airport noise compatibility measures and planning and construction of gates and related areas (other than restaurants, rental car facilities, automobile parking or other concessions) for the movement of passengers and baggage. Projects funded with PFCs must preserve or enhance safety, capacity or security of the national air transportation system, reduce noise from an airport that is part of such system, or furnish opportunities for enhanced competition between or among air carriers.

An airport operator must obtain the FAA's approval before imposing and using the proceeds of PFCs. FAA approval may be for "*impose only*" authority, "*impose-and-use*" authority, or "*use*" authority. Projects for which "*impose-and-use*" authority is granted must be implemented within two years after approval of the use of the PFCs. Implementation means that a notice to proceed has been issued by the airport operator to a contractor, in the case of a construction project; that a title search, survey or appraisal has commenced for a significant part of the property in the case of property acquisition; or that a contractor or public agency has started work in the case of any other non-construction project. As described under "The PFC Program for the MAA" below, the FAA has granted the MAA "*impose-and-use*" authority for the Project and for other projects.

PFCs are collected on behalf of airports by air carriers, certain foreign air carriers and their agents ("Collecting Carriers"). A PFC may be collected from a passenger (i) on a one-way trip, only for the first two enplaning airports on the travel itinerary where PFCs are imposed and (ii) on a roundtrip, only for the first two and the last two enplaning airports where PFCs are imposed. Passengers exempt from PFCs include passengers traveling on frequent-flyer program award tickets, flight crews and other nonrevenue passengers, certain passengers on multi-segment connecting flights, certain passengers using tickets purchased outside the United States, passengers on a charter paid for by the Department of Defense, passengers flying on EAS routes, or passengers on certain nonscheduled or on-demand small carriers. Approximately 87% of enplaned passengers at BWI Marshall Airport were eligible for PFC collection in fiscal year 2018.

The PFC Program for the MAA

In July 1992, the MAA received FAA approval to begin imposing PFCs at the \$3.00 level. In March 2002, the MAA received FAA approval to increase its per passenger PFC level from \$3.00 to \$4.50. The PFC level increased to \$4.50 on June 1, 2002. By federal statute, air carriers may retain \$0.11 of each PFC collected. This fee coupled with the exemptions from PFC collections described above have reduced the MAA's PFC collection rate to an average \$3.83 per enplanement for fiscal year 2018.

Since inception of the PFC program at BWI Marshall in 1992 through 2016, the MAA has received FAA approval to impose PFCs for \$1,634,224,780 in 12 applications. In August 2018, the FAA amended and closed three applications which revised the MAA approval to impose PFCs to \$1,356,801,182 for the twelve applications.

In March 2019, the MAA received approval for a thirteenth PFC application with authority to impose and use \$274,659,000 in PFCs at \$4.50 per enplaned passenger and use them for the financing and construction of various terminal improvements to extend Concourse A, implement a terminal-wide restroom renovation program, replace the Concourse D HVAC system along with other improvements at BWI Marshall Airport. Bond proceeds will be supplemented by PFC pay-as-you-go funding, a loan from the Authority to the MAA, and the Department's Transportation Trust Fund. This thirteenth approval revised the total approval to impose PFCs to \$1,631,460,182.

Authority to impose a PFC under the thirteenth application is estimated to expire in May 2037. The FAA estimates that, by that date, sufficient PFCs to pay debt service on the Bonds through their maturity date will have been collected and paid to the Trustee. If annual PFC collections are less than projected, the MAA can extend the expiration date until the authorized amount of PFCs has been collected by notifying the FAA and the airlines. While the Bonds are outstanding, the MAA may submit additional PFC applications for additional projects or amendments to extend the estimated expiration date of the MAA's overall authority to impose PFCs.

No assurance can be given that the PFC revenues and the schedule for their receipt by the MAA which are assumed in the Authority's plan of financing will be attained.

Collection of PFCs; Collection Fee

PFCs are collected by the Collecting Carriers on behalf of an airport operator from each eligible enplaning passenger at such airport operator's commercial airport. The Collecting Carriers are authorized to retain, as a collection fee (i) eleven cents per eligible enplaning passenger from whom a PFC is collected and (ii) any investment income earned on the amount collected prior to the due date of the remittance to the airport operator. From time to time, the FAA considers permitting an increase in the amount the Collecting Carriers may retain as a collection fee.

PFC Collections and Expenditures

The MAA has accounting and management procedures to maximize PFC collections. Under the MAA's PFC collection procedures, the Collecting Carriers remit PFC payments directly to the Trustee by check or electronic funds transfer.

For Collecting Carriers that are subject to a written use and lease agreement with the MAA, the MAA will issue a written notification of non-payment to such Collecting Carriers if PFC payments are not received within 10 days after the date such Collecting Carrier's PFCs are due. The Collecting Carrier will then have 10 days from the date of such written notification to remit the PFC payment. If such payment is not received within the 10-day cure period, the MAA may charge a late payment fee at a rate of 1.25% per month, retroactive to the date the PFC remittance was due.

If a Collecting Carrier fails, within 10 calendar days after receipt of a written notice of non-payment from the MAA, to remit all required PFC amounts in compliance with federal laws, regulations, and FAA guidance, the MAA may send a Notice of Default under the Airline Agreement by certified mail to the Collecting Carrier and will also send a copy of that notification to the FAA.

The MAA compares the amount of PFCs remitted with enplanement figures provided by the Collecting Carriers. The MAA compiles and electronically sends a PFC report to the FAA each quarter. Pursuant to the PFC Regulations, upon the request of the MAA, each Collecting Carrier that collects a PFC from more than 50,000 passengers annually is required to provide the MAA with a copy of the annual audit of such Collecting Carrier's PFC account. The MAA's auditors annually report to the MAA on PFC compliance of each Collecting Carrier. From 2006 through November 2018 there were no material delinquencies in remitting PFC payments by Collecting Carriers that collect PFCs from more than 50,000 passengers annually. WOW ceased operations on March 28, 2019 and has not remitted payments for December 2018 through March 2019.

It is unclear whether the MAA would be afforded the status of a secured creditor with regard to PFCs collected or accrued by a Collecting Carrier operating at BWI Marshall Airport that is involved in bankruptcy proceedings. See "INVESTMENT CONSIDERATIONS – Effect of Bankruptcy on the Airline Agreement and PFC Collection" below.

Termination of the MAA's Authority to Impose and Use PFCs

The FAA may terminate the MAA's authority to impose PFCs, subject to informal and formal procedural safeguards, if the FAA determines that (i) the MAA is in violation of certain provisions of the Airport Noise and Capacity Act of 1990 (the "Noise Act") relating to airport noise and access restrictions, (ii) PFC collections and investment income thereon are not being used for PFC-approved projects in accordance with the FAA's regulations, (iii) implementation of the PFC-approved projects does not commence within the time periods specified in the FAA's regulations or (iv) the MAA is otherwise in violation of the FAA's regulations, the PFC Act or the FAA's Final Agency Decisions.

Informal Resolution and Formal Termination Process for PFC Act Violations

Pursuant to the FAA's regulations, the formal termination process for PFC collection is initiated by the FAA only after the agency has attempted informal resolution with the public agency or any other affected party relating to concerns that the public agency may not be using PFC revenues for approved projects in accordance with the FAA's Final Agency Decision or the PFC Act. If the FAA determines that informal resolution is not successful, it initiates the formal PFC termination process by publishing a notice and sending it to the airport operator, followed by a 60-day period during which the airport operator and others may submit comments and the airport operator may take corrective action. The FAA's regulations provide that if corrective action is not taken as prescribed in the notice, the FAA is required to hold a public hearing at least 30 days after notifying the airport operator and publishing a notice of the hearing in the Federal Register. After the public hearing, the airport operator would have 10 days after receiving notice of the FAA's decision to advise the FAA in writing that it will complete any corrective action prescribed in the FAA's decision within 30 days or to provide the FAA with a list of Collecting Carriers, after which the FAA would notify the Collecting Carriers to terminate or to modify the PFC collection accordingly.

Noise Act Violations

The MAA's authority to impose PFCs may be terminated if the MAA violates the provisions of the Noise Act. Although the procedures described above do not apply to alleged violations of the Noise Act, the Noise Act and the FAA regulations thereunder provide procedural safeguards to ensure that the MAA's authority to impose PFCs at BWI Marshall Airport will not be summarily terminated because of violations of the Noise Act. In general, the MAA can prevent termination of its PFC authority by suspending the effectiveness of any noise or access restriction in question, until the legal sufficiency of the restriction, and its impact on the MAA's authority to impose PFCs at BWI Marshall Airport, has been determined.

AIRPORT AGREEMENTS

The MAA has agreements with various users of BWI Marshall Airport, but none of the revenues collected under these agreements are pledged to pay the principal of or premium, if any, or interest on the Bonds.

Airline Agreements

The MAA has entered into a substantially similar Airline Agreement (which relates to the terminal lease and airfield operations) with sixteen Signatory Airlines, including, Alaska Airlines, Air Canada, American, British Airways, Condor Airlines, Delta, JetBlue, Southwest, Spirit, United and WOW,* as well as cargo airlines FedEx, UPS, ATI, ABX, and Atlas. The Airline Agreement provides for a commercial compensatory rate-making methodology to calculate terminal rental rates, and a residual rate-making methodology to calculate the airfield area landing fees and bag claim fees. The term of the current Airline Agreement commenced on July 1, 2014 and extends through June 30, 2019. A new agreement with substantially the same terms as the existing agreement will commence on July 1, 2019 and will extend through June 30, 2026. Non-Signatory Airlines generally operate at BWI Marshall Airport under written agreements on a month-to-month basis. Airlines that do not have an executed Airline Agreement with the MAA may operate at BWI Marshall Airport but are subject to higher fees than Signatory Airlines. Airlines which do not have executed Airline Agreements with the MAA, could, potentially, challenge the MAA's airline rate-making methodology under the U.S. Department of Transportation's rates and charges review process. The Signatory Airlines account for approximately 98% of total enplaned passengers at BWI Marshall Airport.

Other Agreements

Other agreements entered into by the MAA with respect to BWI Marshall Airport include the following:

Terminal Building Concessions Contracts. The most significant sources of terminal building concession revenues are food and beverage, retail, and news and gift. The current Lease and Concession Contract (the "Concession Contract") is with Fraport (formerly Airmall)

* Due to financial difficulties, WOW ceased all operations effective March 28, 2019 and filed for bankruptcy in Iceland.

Maryland, Inc. The Concession Contract was entered into in March 2004 and runs through March 2022. The MAA has the right to terminate the Concession Contract with or without cause upon six months prior written notice at any time on or after April 1, 2017, without any cost to the MAA except for the cost of buyouts authorized by the Concession Contract.

Parking Agreements. The MAA entered into the Concession Contract dated January 1, 2014 (the “Parking Agreement”), with SP+ Parking (the “Parking Operator”). Pursuant to the Parking Agreement, the Parking Operator manages and operates parking facilities located at BWI Marshall Airport and collects customer parking fees on behalf of the MAA. The parking fees payable to the MAA are pledged to pay debt service on the Authority’s BWI Marshall Airport parking revenue bonds. The term of the Parking Agreement is set to expire on December 31, 2019. An extension of the Parking Agreement to June 30, 2020 is planned for submission to the Board of Public Works in fall of 2019. The MAA is in the process of issuing a request for proposals for a new parking operator.

Rental Car Agreements. The MAA has entered into agreements with certain rental car companies (the “Rental Car Agreements”) under which each rental car company is required to collect from customers certain customer facility charges (“Customer Facility Charges”). Customer Facility Charges collected by the MAA are pledged to pay debt service on certain revenue bonds issued by the Authority to finance the Consolidated Rental Car Facility. The current Customer Facility Charge is \$3.75 per transaction day. The term of each of the Rental Car Agreements extends to December 2023. The Bonds are not secured by the Customer Facility Charges.

THE 2019 LEASE AND ASSIGNMENT AGREEMENT AND THE 2019 FINANCING AGREEMENT

The 2019 Lease and Assignment Agreement

Pursuant to the terms of the 2019 Lease and Assignment Agreement (i) the State through the MAA will lease the site of the Project to the Authority, and the Authority will sublease the site and improvements back to the MAA, and (ii) the State through the MAA will confirm and extend the assignment to the Authority of all of its right, title and interest in and to the Pledged Revenues. The term of the 2019 Lease and Assignment Agreement extends to the earlier of June 1, 2039, and the date on which the principal of and premium, if any, and interest on all of the Bonds shall have been paid or provision for the payment thereof shall have been made in accordance with the Trust Agreement, and all amounts payable under the 2019 Financing Agreement shall have been paid.

During the term of the 2019 Lease and Assignment Agreement, the MAA, as agent for the Authority, is responsible for the engineering, construction, operation, security, maintenance, insurance and all related costs and expenses of the Project. The Authority covenants that it will not interfere with, or impede, the MAA’s control and operation of the Project.

The 2019 Financing Agreement

The Authority and the MAA will enter into the 2019 Financing Agreement whereby the Authority, subject to certain conditions, will agree to finance the Project and will designate the

MAA as its agent for the development, design, operation, insurance, security and maintenance of the Project.

The Authority and the MAA will each agree in the 2019 Financing Agreement to take any actions necessary to comply with federal and State law, regulations, directives and executive orders and federal grant assurances with respect to the Project or BWI Marshall Airport and any existing or future agreements between the MAA and the U.S. Government relative to the operation and maintenance of the Project or BWI Marshall Airport, the execution of which has been or may be required as a condition precedent to the transfer of federal rights or property to the MAA for airport purposes, or to the expenditure of federal funds for the development of BWI Marshall Airport, in accordance with any applicable federal law.

In addition, the Authority and the MAA will covenant that they will comply with all provisions of the PFC Act, the FAA's regulations, and the FAA's Final Agency Decisions ("FADs") with respect to the MAA's PFC applications, and that they will not take any action or omit to take any action with respect to the PFC revenues, the Project or otherwise if such action or omission would, pursuant to the FAA regulations, cause the termination of the MAA's PFC collection and use authority as contemplated by the 2019 Financing Agreement.

The Authority and the MAA covenant that, to the extent necessary to comply with the foregoing paragraph, (1) the MAA will begin implementation of the Project within the time periods set forth in the FAA regulations; (2) the MAA will continue to impose a PFC of \$4.50 to the full extent authorized; (3) the MAA will not seek to decrease the level of the PFCs to be collected from any eligible enplaning passenger; (4) the MAA will seek FAA approval for increases in total approved PFC revenues to the extent that the MAA and the Authority project that such increases will be necessary to pay the debt service requirements of the Bonds; (5) the MAA will not unilaterally impose any noise or access restriction not in compliance with the Noise Act; (6) the MAA will take all action that the MAA deems reasonably necessary to cause all Collecting Carriers to collect and remit to the MAA all PFCs required by the FAA regulations to be so collected and remitted; (7) the MAA will inform the Authority if the FAA undertakes informal resolution with the MAA regarding FAA concerns over whether PFC revenue is being used for PFC-approved projects in accordance with the PFC Act, the FAA's regulations, or the FAA FADs; and (8) in the event that the FAA begins proceedings to terminate the MAA's authority to impose PFCs through a notice of proposed termination, the MAA will use its best efforts to avoid termination by (a) complying with the FAA prescribed corrective action contained in the notice, (b) contesting the FAA's proposed termination action, (c) reaching an accommodation with the FAA, or (d) any combination of the foregoing; and (9) the MAA will not take or omit to take any action which would materially and adversely impact the ability of the MAA to receive the Pledge Revenues or its ability to perform any of its obligations under the 2019 Financing Agreement or 2019 Lease and Assignment Agreement.

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DEBT SERVICE SCHEDULE

The following table sets forth the debt service requirements for the Bonds, and the outstanding Prior Airport Bonds for each 12-month period ending June 30.

Fiscal Year	Outstanding Prior Airport Bonds⁽¹⁾ Total Combined Debt Service	<u>Series 2019 Bonds</u>			Combined Total Debt Service
		<u>Principal</u>	<u>Interest</u>	<u>Total</u>	
2020	\$ 16,994,644	-	\$ 4,608,545	\$ 4,608,545	\$ 21,603,189
2021	16,982,794	\$ 3,620,000	4,851,100	8,471,100	25,453,894
2022	16,957,194	3,800,000	4,670,100	8,470,100	25,427,294
2023	16,936,500	3,990,000	4,480,100	8,470,100	25,406,600
2024	16,934,400	4,190,000	4,280,600	8,470,600	25,405,000
2025	16,934,325	4,400,000	4,071,100	8,471,100	25,405,425
2026	16,930,075	4,615,000	3,851,100	8,466,100	25,396,175
2027	16,934,988	4,850,000	3,620,350	8,470,350	25,405,338
2028	16,815,919	5,090,000	3,377,850	8,467,850	25,283,769
2029	16,812,694	5,345,000	3,123,350	8,468,350	25,281,044
2030	16,852,069	5,615,000	2,856,100	8,471,100	25,323,169
2031	16,886,119	5,895,000	2,575,350	8,470,350	25,356,469
2032	16,910,975	6,190,000	2,280,600	8,470,600	25,381,575
2033	2,952,800	6,500,000	1,971,100	8,471,100	11,423,900
2034	2,953,600	6,760,000	1,711,100	8,471,100	11,424,700
2035	-	7,030,000	1,440,700	8,470,700	8,470,700
2036	-	7,310,000	1,159,500	8,469,500	8,469,500
2037	-	7,530,000	940,200	8,470,200	8,470,200
2038	-	7,830,000	639,000	8,469,000	8,469,000
2039	-	8,145,000	325,800	8,470,800	8,470,800
Totals:	\$225,789,094	\$108,705,000	\$56,833,645	\$165,538,645	\$391,327,739

(1) The debt service for the Series 2012C Bonds is estimated using an assumed interest rate of 5%. The average rate for the Series 2012C Bonds for FY2018 was 1.131%.

Note: Totals may not add due to rounding.

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HISTORIC DEBT SERVICE COVERAGE

The following table below sets forth historic coverage of debt service on the Series 2003 Bonds (no longer outstanding), the Series 2012A Bonds, the Series 2012B-C Bonds, and the Series 2014 Bonds.

<u>Fiscal Year</u>	<u>Enplaned Passengers</u>	<u>Eligible PFC Passengers</u>	<u>PFC Revenue</u>	<u>Actual PFC Debt Service</u>	<u>Coverage</u>
2004	10,381,018	10,019,216	\$43,984,360	\$ 371,336	118.4
2005	9,782,822	9,514,816	41,770,041	1,256,090	33.3
2006	10,180,996	9,135,882	40,106,521	2,062,508	19.4
2007	10,315,555	9,606,245	42,171,416	11,107,947	3.8
2008	10,662,196	10,387,161	45,599,638	10,826,543	4.2
2009	10,066,162	9,299,290	40,823,884	10,273,319	4.0
2010	10,685,247	10,044,597	44,095,783	10,000,790	4.4
2011	11,267,225	10,265,562	45,065,816	10,475,186	4.3
2012	11,340,264	10,625,953	46,647,934	11,066,825	4.2
2013	11,288,150	11,055,540	48,533,820	16,572,408	2.9
2014	11,139,583	10,004,215	43,918,504	12,127,918	3.6
2015	11,412,595	10,192,569	44,745,378	13,418,364	3.3
2016	12,331,941	10,946,752	48,056,243	15,015,431	3.2
2017	12,875,954	11,169,056	49,032,158	15,219,744	3.2
2018	13,534,033	11,795,313	51,781,426	15,381,818	3.4

Note: By federal statute, air carriers may retain \$0.11 of each PFC they collect from eligible passengers. In fiscal year 2018, approximately 87% of BWI Marshall Airport enplaned passengers were eligible.

Source: Maryland Aviation Administration

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REPORT OF AIRPORT CONSULTANT

LeighFisher prepared the Report of the Airport Consultant (the “ROAC”) (included as Appendix E to this Official Statement) in connection with the issuance of the Bonds. References made herein to the ROAC are made to the entire ROAC, which contains material information, forecasts, findings, assumptions, and conclusions regarding BWI Marshall Airport. The ROAC has been included herein in reliance upon the knowledge and experience of LeighFisher as airport consultants (the “Airport Consultant”).

The ROAC presents certain airline traffic and financial forecasts for the fiscal years ending June 30, 2019 through June 30, 2024 and sets forth the assumptions upon which the forecasts are based. The financial forecasts are based on certain assumptions that were provided by, or reviewed and agreed to by, the MAA management. In the opinion of Airport Consultant, these assumptions provide a reasonable basis for the forecasts.

The ROAC should be read in its entirety for an understanding of the forecasts and the underlying assumptions contained therein.

The ROAC includes a discussion of the underlying economic base of the Air Service Area, analysis of historical and forecast numbers of enplaned passengers at BWI Marshall, a description of certain projects in BWI Marshall’s capital improvement program, and forecasts of Pledged Revenue and debt service coverage ratios during the forecast period.

The following table shows forecasted debt service coverage on outstanding obligations secured by Pledged Revenues for the fiscal years ending June 30, 2019 through June 30, 2024, as provided by the Airport Consultant and taken from the Report of the Airport Consultant included herein as Appendix E.

Fiscal Year	Forecast Pledged Revenues [A]	Estimated Debt Service Requirement (a) [B]	Coverage ratio [C=A/B]
2019	\$ 51,479,000	\$ 17,018,000	3.02
2020	53,770,000	22,630,000	2.38
2021	54,916,000	26,416,000	2.08
2022	56,062,000	26,391,000	2.12
2023	57,208,000	26,370,000	2.17
2024	58,353,000	26,367,000	2.21

(a) Includes Debt Service Requirements associated with Series 2012A Bonds, the Series 2012B-C Bonds, the Series 2014 Bonds and the proposed Bonds.

INVESTMENT CONSIDERATIONS

The Bonds may not be suitable investments for all persons, and prospective purchasers should be able to evaluate the risks and merits of an investment in the Bonds and should confer with their own legal and financial advisors before considering a purchase of any Bonds. In considering the matters set forth in this Official Statement, prospective investors should carefully review the investment considerations set forth throughout this Official Statement and specifically consider certain investment considerations associated with the Bonds. The material under this heading is a discussion of some, but not all, of the possible investment considerations that should be evaluated carefully by prospective purchasers of the Bonds prior to any investment. The order in which such considerations are presented does not necessarily reflect the relative importance of such considerations or the likelihood that any of the events or circumstances described below will occur or exist.

Limited Obligations

The Bonds are limited obligations of the Authority payable solely from Pledged Revenues and shall not be deemed to (i) be general obligations of the Authority, (ii) constitute obligations of the Department, (iii) constitute obligations of the MAA or (iv) constitute a debt or a pledge of the faith and credit of the State or any political subdivision thereof. None of the Authority, the Department or the MAA has taxing power.

General Airline Industry Factors

The Bonds are payable solely from Pledged Revenues derived from PFCs assessed eligible enplaning passengers at BWI Marshall Airport. PFC collections are dependent primarily on the levels of aviation activity and enplaned passenger traffic at BWI Marshall Airport and are affected substantially by the economic health of the airline industry and the airlines serving BWI Marshall Airport. Certain factors that may materially affect BWI Marshall Airport, the MAA's ability to impose PFCs and the financial health and viability of the airlines include, but are not limited to, changes in the population and the economic health of the region and nation; airline service and route networks; local, regional, national and international economic and political conditions; aviation security concerns; changes in demand for air travel; service and cost competition; mergers; the availability and cost of aviation fuel and other necessary supplies; levels of air fares; fixed costs and capital requirements; the cost and availability of financing; the capacity of the national air traffic control system; the capacity of BWI Marshall Airport; competition from other airports; national and international disasters and hostilities; domestic and world health concerns; the cost and availability of employees; labor relations within the airline industry; regulation by the federal government; environmental risks and regulations; noise abatement concerns and regulation; passenger frustrations with delays caused by increased security measures; bankruptcy and insolvency laws; acts of war or terrorism; and business travel substitutes.

Southwest Airlines' Presence at BWI Marshall Airport

Southwest is the dominant air carrier operating at BWI Marshall Airport and maintains a large connecting hub at BWI Marshall Airport. Southwest accounted for approximately 67.6% of the total passengers enplaned at BWI Marshall in fiscal year 2018. No assurance can be given

with regard to Southwest's future level of activity at BWI Marshall Airport. If, for whatever reason, Southwest reduces or discontinues its operations at BWI Marshall, the level of activity of Southwest may not be replaced by other carriers, which could result in a reduction of the total number of enplaned passengers at BWI Marshall and a reduction in the amount of Pledged Revenues. See "THE BALTIMORE/WASHINGTON INTERNATIONAL THURGOOD MARSHALL AIRPORT" above.

Effect of Airline Industry Consolidation

In response to competitive pressures, the U.S. airline industry has consolidated. In December 2009, Delta and Northwest Airlines merged, with the combined airline operating as Delta. In October 2010, United and Continental Airlines merged, with the combined airline operating as United. In 2011, Southwest completed its acquisition of AirTran Airways, and in 2012 was issued a single operating certificate. In 2013, American and US Airways merged, with the combined airline operating as American, and in October 2016 was issued a single operating certificate. In 2016, Alaska Air Group completed its acquisition of Virgin America and received a single operating certificate in January 2018. While prior mergers have not materially affected operations at BWI Marshall Airport, any future mergers or consolidations of other Signatory Airlines could materially adversely affect operations at BWI Marshall Airport.

Financial Condition of Airlines Serving BWI Marshall Airport

The number of passengers using BWI Marshall Airport will depend partly on the profitability of the airline industry and the associated ability of the industry and individual airlines, particularly Southwest, to make the necessary investments to continue providing service.

As a result of the 2001 economic recession, the disruption of the airline industry that followed the September 2001 attacks, increased fuel and other operating costs and price competition, the industry experienced financial losses. From 2001 through 2006, the major U.S. passenger airlines collectively recorded net losses of approximately \$46 billion. To mitigate those losses, the major network airlines restructured their route networks and flight schedules and reached agreements with their employees, lessors, vendors and creditors to cut costs. Between 2002 and 2005, Delta, Northwest Airlines, United and US Airways filed for bankruptcy protection and restructured their operations.

In 2007, the U.S. passenger airline industry was profitable, recording net income of approximately \$7 billion, but, in 2008, as oil and aviation fuel prices increased to unprecedented levels and the U.S. economy contracted, the U.S. passenger airline industry recorded net losses of approximately \$26 billion. The industry responded by grounding less fuel-efficient aircraft, eliminating unprofitable routes and hubs, reducing seat capacity and increasing airfares. Between 2007 and 2009, U.S. passenger airlines collectively reduced domestic available seat-mile capacity by approximately 10%.

From 2010 to 2013, the U.S. passenger airline industry recorded net income of approximately \$18 billion, notwithstanding sustained high fuel prices, by controlling capacity and nonfuel expenses, increasing airfares, achieving high load factors and increasing ancillary revenues. Between 2009 and 2013, the airlines collectively increased domestic seat-mile capacity

by an average of 1.0% per year. American filed for bankruptcy protection in 2011. World Airways filed for bankruptcy in 2012.

In 2014, the U.S. passenger airline industry reported net income of \$9 billion, assisted by reduced fuel prices. In 2015, the industry achieved record net income of \$26 billion as fuel prices decreased further, demand remained strong, and capacity control allowed average fares and ancillary charges to remain high. Strong industry profitability continued in 2016 through 2018.

Recent agreements between the major airlines and their unionized employees have resulted in increased labor costs. According to Airlines for America (a trade association and lobbyist for most airlines), U.S. airlines increased wages and benefits per full-time employee by 28% between 2013 and 2018. Contributing to the increased costs, a shortage of qualified airline pilots, resulting from retirements and changed FAA qualification standards and duty and rest rules, has required the airlines to increase salaries and improve benefits to attract and retain pilots.

Sustained industry profitability will depend on, among other factors, economic growth to support airline travel demand, continued capacity control to enable increased airfares, and stable fuel prices and labor costs.

Consolidation has resulted in four airlines (American, Delta, Southwest and United) and their regional affiliates now accounting for approximately 80% of domestic seat-mile capacity. The consolidation has contributed to industry profitability. However, any resumption of financial losses could cause one or more U.S. airlines to seek bankruptcy protection or liquidate. The liquidation of any of the large network airlines would drastically affect airline service at certain connecting hub airports and change airline travel patterns nationwide.

The revenues of the airlines serving BWI Marshall may be materially affected by many factors, including (without limitation) those listed under “General Airline Industry Factors” above, and the following: technological changes; strikes and other employee disruptions; the maintenance and replacement requirements of aircraft; the availability of routes and slots at various airports; litigation liability; and other risks. Historically, the airline industry’s results have correlated with the performance of the economy.

In March 2019, WOW, one of the Signatory Airlines, ceased all global operations and cancelled all future scheduled flights. WOW’s share of enplaned passengers at BWI Marshall Airport was less than 1% in FY 2018. Future financial or operational difficulties by one or more Signatory Airlines may directly or indirectly have an adverse impact on BWI Marshall Airport operations and may result in a reduction in the amount of Pledged Revenues.

Aviation Safety and Security Concerns

A terrorist threat or terrorist incident aimed at aviation could have an immediate and significant impact on the demand for aviation services, including, but not limited to, services at BWI Marshall Airport, and depress airline industry revenues. Since 2001, intensified security precautions have been instituted by government agencies, airlines and airport operators. Enhanced security procedures create the potential for increased inconvenience and delays at many airports, although to date only relatively minor delays have been experienced. No assurance can be given

that such enhanced security precautions will be successful or will not create unacceptable inconvenience and delays. The possibility of intensified international hostilities and further terrorist attacks involving or affecting commercial aviation are a continuing concern that may affect future travel behavior and airline passenger demand.

Following two fatal crashes of B-737 MAX aircraft, which are suspected to have been caused by the malfunction of the aircraft's automated flight control system, all B-737 MAX aircraft were grounded in March 2019. North American airlines impacted by the grounding of the B-737 MAX include Air Canada, American, Southwest and United. At the time of the grounding, B-737 MAX aircraft accounted for approximately 1.5% of the United States airline seat capacity.

Southwest has the largest B-737 MAX fleet of any airline and its flight operations have been particularly affected by the grounding. At BWI Marshall Airport, where Southwest has the largest share of seat capacity, operations by B-737 MAX aircraft accounted for 8.7% of seat capacity on Southwest and 5.9% of seat capacity on all airlines before the grounding. Daily departing seats on all airlines as scheduled for May 2019 averaged 49,000 before the grounding, compared with 47,300 as now scheduled, a 3.5% reduction. It is currently expected that the grounding will last several months, during which time the flight control system software must be updated and approved by the FAA and pilot training completed.

The MAA does not expect that reduced airline seat capacity caused by the temporary grounding of B-737 MAX aircraft will have a material effect on the number of enplaned passengers, or the finances or operations at BWI Marshall Airport.

Aviation Fuel Prices

The price of aviation fuel is an important determinant of an airline's operating economics. Over the last 15 years, fuel prices have fluctuated drastically, reaching record highs in 2008. Fuel prices continue to be susceptible to, among other factors affecting the global demand for and supply of oil, political unrest in various parts of the world, Organization of Petroleum Exporting Countries ("OPEC") policy, increased demand for fuel caused by the rapid growth of economies such as those of China and India, the levels of fuel inventory maintained by certain industries, the amounts of reserves maintained by governments, currency fluctuations, disruptions to production and refining facilities, and weather. It is not possible to predict whether and to what extent fuel prices will increase and the effect of such increases on the airlines serving BWI Marshall Airport.

Regulations, Grant Assurances, and Other Restrictions Affecting the Airport

The operations of BWI Marshall Airport are affected by a variety of contractual, statutory, regulatory and grant assurance restrictions and limitations including, without limitation, the provisions of the Airline Agreement, the PFC Act and extensive federal legislation, regulations, and grant assurances applicable to commercial service airports in the United States. It is not possible to predict whether future restrictions or limitations on BWI Marshall Airport operations will be imposed, whether future legislation, regulations or grant assurances will affect future federal funding or PFC collections for capital projects for BWI Marshall Airport or whether such restrictions, legislation, regulations or grant assurances would adversely affect Pledged Revenues.

Climate Change and Possible New Regulations.

Climate change concerns are shaping laws and regulations at the federal and state levels that could have a material adverse effect on airlines operating at BWI Marshall Airport and could also affect ground operations at BWI Marshall Airport. While the U.S. Environmental Protection Agency (the “EPA”) does not currently regulate greenhouse gas (“GHG”) emissions from aircraft, it has taken steps toward regulation of GHG under existing federal law. These steps may in turn lead to further regulation of aircraft GHG emissions. On July 5, 2011, the United States District Court for the District of Columbia issued an order concluding that the EPA has a mandatory obligation under the Clean Air Act to consider whether the GHG and black carbon emissions of aircraft engines endanger public health and welfare. On August 15, 2016, the EPA found that GHG emissions from certain aircraft cause and contribute to pollution that endangers public health and welfare. In that endangerment finding, the EPA stated that it intends to propose GHG emission standards for covered aircraft that will be at least as stringent as emission standards under development by the International Civil Aviation Organization (“ICAO”). The ICAO’s standards were approved on October 6, 2016 and adopted on March 6, 2017. The ICAO standards apply to new aircraft type designs from 2020 forward, and in-production aircraft must meet the standards by 2028. EPA has publicly indicated as recently as January 2018 its intent to adopt the ICAO emission standards for the United States, but the agency has not initiated rulemaking or set a timeline for such actions. Consequently, the Authority cannot predict when the EPA’s emission standards will be proposed, when the FAA will adopt regulations to implement those standards, or what effect the standards may have on BWI Marshall Airport or on air traffic at BWI Marshall Airport. Further, the Authority cannot predict what additional laws and regulations on other environmental issues (including but not limited to air, water, hazardous substances and waste regulations) will be adopted, or what effects such laws and regulations will have on the BWI Marshall Airport. The effects, however, could be material.

Government Sequestration and Shutdowns

Government sequestration and the impacts of a government shutdown may affect local air travel. The impact of a federal government shutdown on the demand for local air travel would depend on the duration and depth of such a shutdown and, therefore, is difficult to quantify.

Effect of Bankruptcy on the Airline Agreement and PFC Collections

In the event of bankruptcy proceedings involving one or more Signatory Airlines, the debtor airline or its bankruptcy trustee must determine within a time period determined by the court whether to assume or reject the applicable Airline Agreement. In the event of assumption, the debtor airline would be required to cure any prior defaults and to provide adequate assurance of future performance under the relevant document. Rejection of the Airline Agreement by any airline would give rise to an unsecured claim of the MAA for damages, the amount of which may be limited by the U.S. Bankruptcy Code.

The PFC Act provides that PFCs collected by the airlines constitute a trust fund held for the beneficial interest of the eligible agency (*i.e.*, the MAA) imposing the PFC, except for any handling fee or retention of interest collected on unremitted proceeds. In addition, federal regulations require airlines to account for PFC collections separately and to disclose the existence

and amount of funds regarded as trust funds in their financial statements. The airlines, however, are permitted to co-mingle PFC collections with other revenues and are also entitled to retain interest earned on PFC collections until such PFC collections are remitted.

In 2003, Congress amended the PFC Act to provide that air carriers that file for chapter 7 or chapter 11 of title 11 bankruptcy protection, or have involuntary chapter 7 of title 11 bankruptcy proceedings commenced against them, are subject to certain additional requirements, including (1) an obligation to segregate in a separate account PFC revenue equal to the average monthly liability for PFCs collected by the carrier or its agents for the benefit of the eligible agencies (such as the MAA and other airport operators) entitled to such PFC revenue, and (2) a prohibition against granting any third party any security or other interest in PFC revenue. In addition, the PFC Act provides that if such a carrier or its agent fails to segregate passenger facility revenue in violation of this provision, the trust fund status of such PFC revenue shall not be defeated by an inability of any party to identify and trace the precise funds in the accounts of the air carrier.

The bankruptcy courts have not consistently addressed such trust arrangements. Therefore, the MAA cannot predict how a bankruptcy court might rule on this matter in the event of a bankruptcy filing by one of the airlines operating at BWI Marshall Airport. It is possible that the Authority and/or the MAA could be held to be an unsecured creditor with respect to unremitted PFCs held by an airline that has filed for bankruptcy protection. Additionally, the MAA cannot predict whether an airline operating at BWI Marshall Airport that files for bankruptcy protection or is the subject of involuntary bankruptcy proceedings would have properly accounted for the PFCs owed to the MAA or whether the bankruptcy estate would have sufficient moneys to pay the MAA in full for the PFCs owed by such airline. See also “PASSENGER FACILITY CHARGES.”

Cost of Project and Schedule

The estimated costs of, and the projected schedule for, the Project are subject to a number of uncertainties. The ability of the MAA to complete the Project may be adversely affected by various factors including: (i) estimating errors, (ii) design and engineering errors, (iii) changes to the scope of the Project, (iv) delays in contract awards, (v) material and/or labor shortages, (vi) unforeseen site conditions, (vii) adverse weather conditions, (viii) contractor defaults, (ix) labor disputes, (x) unanticipated levels of inflation, (xi) environmental issues, (xii) litigation and (xiii) additional security improvements and associated costs mandated by the federal government. A delay in the completion of certain portions of the Project could increase costs for the Project, and may cause a change in the sequencing of other portions of the Project. There can be no assurance that the cost of construction of the Project will not exceed the currently projected dollar amount, or that a change in the sequencing of certain portions of the Project will not occur.

Dependence upon PFCs

While the Authority believes that PFCs will be collected at times and in amounts sufficient to provide for the timely payment of the principal of and interest on the Bonds, no assurance can be given that PFC collections will be provided at the time and in the amounts currently contemplated. In the event that the full amount of PFCs is not received by the MAA or the receipt of such PFCs is delayed, the MAA expects to alter the scope or change the sequencing of various portions of the Project. However, no assurance can be given that any such change of scope or

delay in completion will result in sufficient PFCs to pay the principal of and interest on the Bonds when due. The Bonds may not be accelerated upon the occurrence of an Event of Default. See “PASSENGER FACILITY CHARGES -- The PFC Program for the MAA” above and “Limitation on Bondholders Remedies” below.

Competition, Alternative Modes of Transportation, and Travel Substitutes

BWI Marshall Airport’s Air Service Area is the Baltimore-Washington metropolitan area, which includes Washington, D.C., Maryland, and Northern Virginia. Other Washington area airports, notably Reagan National and Dulles, compete with BWI Marshall Airport. In addition, commercial airline service between BWI Marshall Airport and cities in the Northeast corridor competes with rail and other forms of transportation which may become more attractive to passengers in the future with improvements in ground transportation service and in differences in costs of each form of transportation, and in light of security concerns and countermeasures. While the effects cannot be quantified, the use of business jets has been expanding rapidly and may hold down the return of high-yield business travel on commercial airlines at BWI Marshall Airport. Furthermore, the MAA may continue to experience increases in its operating costs due to compliance with federally mandated and other security and operating changes. Such increased costs may increase costs per enplaned passenger to the airlines, which could result in BWI Marshall Airport being at a competitive disadvantage relative to other airports and transportation modes.

Teleconference, video-conference and web-based meetings have improved in quality and price and are often considered a satisfactory alternative to face-to-face business meetings. Although the impact cannot be quantified, it is possible that business travel to and from BWI Marshall Airport may be susceptible to such travel substitutes.

Limitation on Bondholders’ Remedies

The Bonds may not be accelerated upon the occurrence of an Event of Default. Under the terms of the Trust Agreement, remedies for Events of Default are limited to such actions which may be taken at law or in equity. As a result, the MAA may be able to continue indefinitely collecting revenues and applying them to the operation of BWI Marshall Airport even if an Event of Default has occurred and no payments are made on the Bonds. See “SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT” in Appendix A.

In the event of a default in the payment of principal of or interest on the Bonds, the remedies available to the owners of the Bonds upon default are in many respects dependent upon judicial action, which is often subject to discretion and delay under existing law, including the United States Bankruptcy Code. The approving opinions of Bond Counsel to the Authority with respect to the Bonds will be qualified as to enforceability of the various legal instruments by certain limitations, including limitations imposed by bankruptcy, reorganization, insolvency and equitable principles. See Appendix B hereto.

Forward-Looking Statements

This Official Statement contains statements relating to future results that are “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. When used in this Official Statement, the words “estimate,” “forecast,” “intend,” “expect” and similar

expressions identify forward-looking statements. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated events and circumstances may occur. Therefore, there are likely to be differences between forecasts and actual results, and those differences may be material.

TAX MATTERS

In rendering its opinion, Bond Counsel will rely without independent investigation on the representations and certifications of certain officials of the Authority made on behalf of the Authority with respect to certain material facts within the knowledge of the Authority relevant to the tax-exempt status of interest on the Bonds, and certain related representations of certain officials of the MAA made on behalf of the MAA.

The following is only a general summary of certain provisions of the Internal Revenue Code of 1986, as amended (the "Code") as enacted and in effect on the date hereof and does not discuss all aspects of federal income taxation that may be relevant to a particular holder of the Bonds in light of such holder's particular circumstances and income tax situation. Each holder of the Bonds should consult such holder's tax advisors as to the specific consequences to such holder of the ownership and disposition of the Bonds, including the application of state, local, foreign and other tax laws.

Maryland Income Taxation

In the opinion of Bond Counsel, under existing law, the Bonds, their transfer, the interest payable on them, and any income derived from them, including any profit realized in their sale or exchange, shall be exempt at all times from every kind and nature of taxation by the State or by any of its political subdivisions, municipal corporations, or public agencies of any kind. No opinion is expressed as to estate or inheritance taxes or any other taxes not levied or assessed directly on the Bonds, their transfer or the income therefrom. Interest on the Bonds may be subject to state or local income taxes in jurisdictions other than the State under applicable state or local tax laws. Holders or prospective purchasers of the Bonds should consult their own tax advisors regarding the taxable status of the Bonds in jurisdictions other than the State.

Federal Taxation of Bonds

In the opinion of Bond Counsel, assuming compliance with certain covenants described herein, under existing statutes, regulations and decisions, the interest on the Bonds will be excludable from gross income for federal income tax purposes, except with respect to any Bond during any period in which such Bond is owned by a "substantial user" of the Project or a "related person," as such terms are used in Section 147(a) of the Code.

Under the provisions of the Code, there are certain restrictions that must be met subsequent to the delivery of the Bonds, including restrictions that must be complied with throughout the term of the Bonds, in order for interest on the Bonds to remain excludable from gross income for federal income tax purposes. These include the following: (i) a requirement that certain earnings received from the investment of the proceeds of the Bonds be rebated to the United States of America under certain circumstances (or that certain payments in lieu of rebate be made);

(ii) other requirements applicable to the investment of the proceeds of the Bonds; and (iii) other requirements applicable to the use of the proceeds of the Bonds and the facilities financed or refinanced with such proceeds. Failure to comply with one or more of these requirements could result in the inclusion of the interest payable on the Bonds in gross income for federal income tax purposes, effective from the date of their issuance. The Authority and the MAA have made certain covenants regarding actions required to maintain the excludability of interest on the Bonds from gross income for federal income tax purposes.

Further, Bond Counsel is of the opinion that interest on the Bonds will be includable in the alternative minimum taxable income of individuals and certain other taxpayers for income tax purposes and will be subject to the branch profits tax imposed on certain foreign corporations engaged in a trade or business in the United States of America.

In rendering this opinion, we have relied without independent investigation on the representations of certain officials of the Authority made on behalf of the Authority in its Tax Compliance Certificate and Agreement with respect to certain material facts within the knowledge of the Authority relevant to the tax-exempt status of interest on the Bonds, and certain related representations of certain officials of the MAA made on behalf of the MAA.

Certain Federal Income Tax Consequences of Ownership

There are other federal income tax consequences of ownership of obligations such as the Bonds under certain circumstances, including the following: (i) deductions are disallowed for certain expenses of taxpayers allocable to interest on tax-exempt obligations, as well as interest on indebtedness incurred or continued to purchase or carry tax-exempt obligations and interest expense of financial institutions allocable to tax-exempt interest; (ii) for property and casualty insurance companies, the amount of the deduction for losses incurred must be reduced by 25% of the sum of tax-exempt interest received or accrued and the deductible portion of dividends received by such companies; (iii) interest income which is exempt from tax must be taken into account for the purpose of determining whether, and what amount of, social security or railroad retirement benefits are includable in gross income for federal income tax purposes; (iv) for S corporations having Subchapter C earnings and profits, the receipt of certain levels of passive investment income, including interest on tax-exempt obligations such as the Bonds, can result in the imposition of tax on such passive investment income and, in some cases, loss of S corporation status; (v) net gain realized upon the sale or other disposition of the Bonds generally must be taken into account when computing the 3.8% Medicare tax with respect to net investment income imposed on certain high income individuals and specified trusts and estates; and (vi) receipt of certain investment income, including interest on the Bonds, is considered when determining qualification limits for obtaining the earned income credit provided by Section 32(a) of the Code.

Tax Accounting Treatment of Bonds Constituting Discount Bonds

Certain maturities of the Bonds may be issued at an initial public offering price which is less than the amount payable on such Bonds at maturity (the "Discount Bonds"). The difference between the initial offering price at which a substantial amount of the Discount Bonds of each maturity was first sold and the principal amount of such Discount Bonds payable at maturity constitutes original issue discount. The amount of such original issue discount which is treated as

having accrued with respect to such Discount Bonds is added to the original cost basis of the holder in determining, for federal income tax purposes, gain or loss upon disposition (including sale, early redemption or repayment at maturity). For federal income tax purposes (a) any holder of a Discount Bond will recognize gain or loss upon the disposition of such Discount Bond (including sale, early redemption or purchase or payment at maturity) in an amount equal to the difference between (i) the amount received upon such disposition and (ii) the sum of (1) the holder's original cost basis in such Discount Bond, and (2) the amount of original issue discount attributable to the period during which the holder held such Discount Bond, and (b) the amount of the basis adjustment described in clause (a)(ii)(2) will not be included in the gross income of the holder.

Original issue discount on Discount Bonds will be attributed to permissible compounding periods during the life of any Discount Bonds in accordance with a constant rate of interest accrual method. The yield to maturity of the Discount Bonds of each maturity is determined using permissible compounding periods. In general, the length of a permissible compounding period cannot exceed the length of the interval between debt service payments on the Discount Bonds and must begin or end on the date of such payments. Such yield then is used to determine an amount of accrued interest for each permissible compounding period. For this purpose, interest is treated as compounding periodically at the end of each applicable compounding period. The amount of original issue discount which is treated as having accrued in respect of a Discount Bond for any particular compounding period is equal to the excess of (a) the product of (i) the yield for the Discount Bond (adjusted as necessary for an initial short period) divided by the number of compounding periods in a year multiplied by (ii) the amount that would be the tax basis of such Discount Bond at the beginning of such period if held by an original purchaser who purchased at the initial public offering price, over (b) the amount actually payable as interest on such Discount Bond during such period. For purposes of the preceding sentence, the tax basis of a Discount Bond, if held by an original purchaser, can be determined by adding to the initial issue price of such Discount Bond the original issue discount that is treated as having accrued during all prior compounding periods. If a Discount Bond is sold or otherwise disposed of between compounding dates, then interest which would have accrued for that compounding period for federal income tax purposes is to be apportioned in equal amounts among the days in such compounding period. Holders of Discount Bonds should note that, under the tax regulations, the yield and maturity of Discount Bonds are determined without regard to commercially reasonable sinking fund payments and any original issue discount remaining unaccrued at the time that a Discount Bond is redeemed in advance of stated maturity will be treated as taxable gain. Moreover, tax regulations prescribe special conventions for determining the yield and maturity of certain debt instruments that provide for alternative payment schedules applicable upon the occurrence of certain contingencies.

The yields (and related prices) provided by the successful bidder for the Bonds as shown on the inside cover of this Official Statement may not reflect the initial issue prices for the purpose of determining the original issue discount for federal income tax purposes.

The foregoing summarizes certain federal income tax consequences of original issue discount with respect to the Discount Bonds but does not purport to deal with all aspects of federal income taxation that may be relevant to particular investors or circumstances, including those set out above. Prospective purchasers of Discount Bonds should consider possible state and local income, excise or franchise tax consequences arising from original issue discount on Discount Bonds. In addition, prospective purchasers should consider possible federal tax consequences

arising from original issue discount on such Discount Bonds under the alternative minimum tax and the branch profits tax. The amount of original issue discount considered to have accrued may be reportable in the year of accrual for state and local tax purposes or for purposes of the alternative minimum tax or the branch profits tax without a corresponding receipt of cash with which to pay any tax liability attributable to such discount. Purchasers with questions concerning the detailed tax consequences of transactions in the Discount Bonds should consult their tax advisors.

Purchase, Sale and Retirement of Bonds

Except as noted below in the case of market discount, the sale or other disposition of a Bond will normally result in capital gain or loss to its holder. A holder's initial tax basis in a Bond will be its cost.

Upon the sale or retirement of a Bond, for federal income tax purposes a holder will recognize capital gain or loss upon the disposition of such security (including sale, early redemption or payment at maturity) in an amount equal to the difference between (a) the amount received upon such disposition and (b) the tax basis in such Bond, determined by adding to the original cost basis in such Bond the amount of original issue discount that is treated as having accrued as described above under "TAX MATTERS -- Tax Accounting Treatment of Discount Bonds." Such gain or loss will be a long-term capital gain or loss if at the time of the sale or retirement the Bond has been held for more than one year. Present law taxes both long and short-term capital gains of corporations at the rates applicable to ordinary income. For noncorporate taxpayers, however, short-term capital gains are taxed at the rates applicable to ordinary income, while net capital gains are taxed at lower rates. Net capital gains are the excess of net long-term capital gains (gains on capital assets held for more than one year) over net short-term capital losses.

Market Discount

If a holder acquires a Bond after its original issuance at a discount (or in the case of a Bond issued at an original issue discount, at a price that produces a yield to maturity higher than the yield to maturity at which such Bond was first issued), the holder will be deemed to have acquired the Bond at "market discount," unless the amount of market discount is *de minimis*, as described in the following paragraph. If a holder that acquires a Bond with market discount subsequently realizes a gain upon the disposition of the Bond, such gain shall be treated as taxable interest income to the extent such gain does not exceed the accrued market discount attributable to the period during which the holder held such Bond, and any gain realized in excess of such market discount will be treated as capital gain. Potential purchasers should consult their tax advisors as to the proper method of accruing market discount.

In the case of a Bond not issued at an original issue discount, market discount will be *de minimis* if the excess of the Bond's stated redemption price at maturity over the holder's cost of acquiring the Bond is less than 0.25% of the stated redemption price at maturity multiplied by the number of complete years between the date the holder acquires the Bond and its stated maturity date. In the case of a Bond issued with original issue discount, market discount will be *de minimis* if the excess of the Bond's revised issue price over the holder's cost of acquiring the Bond is less than 0.25% of the revised issue price multiplied by the number of complete years between the date the holder acquires the Bond and its stated maturity date. For this purpose, a Bond's "revised issue price" is the sum of (i) its original issue price and (ii) the aggregate amount of original issue

discount that is treated as having accrued with respect to the Bond during the period between its original issue date and the date of acquisition by the holder.

Amortizable Bond Premium

A Bond will be considered to have been acquired at a premium if, and to the extent that, immediately after the acquisition of such Bond, the holder's tax basis in the Bond exceeds the amount payable at maturity (or, in the case of a Bond callable prior to maturity, the amount payable on the earlier call date). Under tax regulations applicable to the Bonds, the amount of the premium would be determined with reference to the amount payable on that call date (including for this purpose the maturity date) which produces the lowest yield to maturity on the Bonds. The holder will be required to reduce such holder's tax basis in the Bond for purposes of determining gain or loss upon disposition of the Bond by the amount of amortizable bond premium that accrues determined in the manner prescribed in the tax regulations. Generally, no deduction (or other tax benefit) is allowable in respect of any amount of amortizable bond premium on the Bonds.

Legislative Developments

Legislative proposals, either on the state or federal level, currently under consideration or proposed after issuance and delivery of the Bonds, as applicable, could adversely affect the market value of the Bonds. Further, if enacted into law, any such legislation could cause the interest on the Bonds to be subject, directly or indirectly, to federal or state income taxation and could otherwise alter or amend one or more of the provisions of federal or state tax law described above or their consequences, as applicable. Prospective purchasers of the Bonds should consult with their tax advisors as to the status and potential effect of any legislative proposals, as to which Bond Counsel expresses no opinion.

NO LITIGATION AFFECTING THE BONDS

There is no litigation pending or, to the knowledge of the Authority, threatened, questioning the existence of the Authority, the validity of the Bonds, or any proceedings of the Authority taken with respect to the issuance or sale thereof, or seeking to restrain or enjoin the issuance, sale, execution or delivery of the Bonds, or questioning the power of the Authority to collect and pledge revenues to pay the Bonds as provided in the Trust Agreement. There is no litigation pending or, to the knowledge of the Authority or the MAA, threatened, questioning the validity of the 2019 Financing Agreement or the 2019 Lease and Assignment Agreement or the ability of the MAA to transfer the Pledged Revenues to the Trustee on behalf of the Authority.

SALE AT COMPETITIVE BIDDING

The Bonds were offered by the Authority at a competitive sale on June 5, 2019, in accordance with the Official Notice of Sale attached hereto as Appendix D. The interest rates shown on the inside front cover of this Official Statement are the interest rates that resulted from the award of the Bonds at the competitive sale. The initial yields and prices shown on the inside front cover of this Official Statement were furnished by J.P. Morgan Securities LLC, the successful bidder for the Bonds. Other information concerning the terms of the reoffering of the Bonds, if any, should be obtained from J.P. Morgan Securities LLC and not from the Authority.

FINANCIAL ADVISOR

PFM Financial Advisors, LLC has been retained as financial advisor to the Department and as financial advisor to the Authority in connection with the sale of the Bonds and other matters pertinent thereto.

RATINGS

Moody's Investors Service, Inc., Standard & Poor's Rating Services and Fitch Ratings have assigned ratings to the Bonds of "A2", "A+", and "A", respectively. Any explanation of the significance of each of the ratings of the Bonds may be obtained from the rating agency furnishing the same. There is no assurance that such ratings will be obtained for any given period of time or that they may not be lowered or withdrawn entirely by such rating agencies, or any of them, if in their or its judgment, circumstances so warrant. Any such downward change in or withdrawal of such ratings, or any of them, may have an adverse effect on the market price of the respective Bonds.

LEGAL MATTERS

The validity of the issuance of the Bonds will be passed upon and is subject to the approving opinion of McKennon Shelton & Henn LLP, Baltimore, Maryland, Bond Counsel to the Authority ("Bond Counsel"). Certain legal matters will also be passed upon for the Authority by Kimberly A. Millender, Assistant Attorney General and Principal Counsel to the Authority, and for the MAA by Louisa H. Goldstein, Assistant Attorney General and Principal Counsel to the MAA. The proposed form of the approving opinion of Bond Counsel is included in Appendix B.

CONTINUING DISCLOSURE AGREEMENT

To enable the bidders for the Bonds to comply with the requirements of paragraph (b)(5) of the Rule, the Authority will execute and deliver, on or before the date of issuance and delivery of the Bonds, a Continuing Disclosure Agreement, the form of which is attached as Appendix C. Potential purchasers should note that certain of the 16 events listed in Section 5(a) of the Continuing Disclosure Agreements have been included for purposes of compliance with the Rule but are not relevant for the Bonds.

The following information describes the instances of non-compliance occurring in the previous five years known to the Authority with the terms of certain previous continuing disclosure undertakings entered into by the Authority pursuant to the Rule. The Authority inadvertently did not file notices of certain rating upgrades with respect to bonds for which the Authority undertook continuing disclosure obligations. The Authority has subsequently made these filings and taken steps to ensure that future rating changes will be filed in a timely manner. With the exception of the foregoing, the Authority believes it has complied in all material respects with its obligations under its previous continuing disclosure undertakings pursuant to the Rule.

RELATIONSHIPS

McKennon Shelton & Henn LLP, Bond Counsel to the Authority in connection with the issuance of the Bonds, also serves from time to time as bond counsel to the Department on other unrelated matters.

MISCELLANEOUS

So far as any statements made in this Official Statement involve matters of opinion, forecasts or estimates, whether or not expressly stated, they are set forth as such and not as representations of fact. No representation is made by the Authority, the Department or the MAA that any of the opinions, forecasts or estimates will be realized. This Official Statement is not intended to be construed as a contract or agreement between the Authority and any purchaser or owner of any of the Bonds.

The Trustee has not participated in the preparation of this Official Statement.

Copies of the Trust Agreement and other agreements described in this Official Statement may be obtained upon written request from the Executive Director of the Authority.

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The execution and delivery of this Official Statement has been duly authorized by the Authority.

MARYLAND TRANSPORTATION AUTHORITY

By: /s/ John J. O'Neill
John J. O'Neill
Acting Executive Director

APPENDIX A

SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT

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SUMMARY OF CERTAIN PROVISIONS OF THE TRUST AGREEMENT

The following is a summary of certain provisions of the Trust Agreement. It is not a complete recital of the terms of the Trust Agreement and reference should be made to the Trust Agreement for a complete statement of its terms. Words and terms used in this summary shall have the same meanings as in the Trust Agreement, except where otherwise noted.

Definitions (*Section 1.01 and Fourth Supplement*)

In addition to terms defined elsewhere in this Official Statement, the following are definitions of certain terms used in this Official Statement. Terms used but not defined herein shall have the meanings set forth in the Trust Agreement.

“Additional Bonds” means the Series 2019 Bonds and any other bond, note or other evidence of obligation issued by the Authority pursuant to the Trust Agreement.

“Additional Facilities” means the Project and any other “transportation facilities project” as defined in the Enabling Legislation and any other facility for which Additional Bonds may be issued pursuant to the Enabling Legislation that is financed or refinanced with proceeds of any Additional Bonds.

“Administrative Expenses” means any expenditures reasonably and necessarily incurred by the Authority by reason of its issuance and administration of any Bonds and the performance of its obligations under the Trust Agreement, including (without limitation) fees and expenses of the Trustee (whether as Trustee or Registrar and Paying Agent for the Bonds) and any Auction Agent, fees and expenses of preparing annual disclosure statements, fees and expenses of calculating rebates, fees and expenses of the issuer of any Credit Facility securing any Bonds, the Remarketing Agent and any Broker-Dealer or other similar agent not otherwise paid or provided for, legal, financing and administrative expenses, fees and expenses of the Authority’s financial advisor and expenses incurred by the Authority to compel full and punctual performance of the provisions of the Lease and Assignment and the Financing Agreement.

“Agency Obligations” means direct obligations, including bonds, debentures, notes, participation certificates or similar obligations of, or obligations the timely payment of the principal of and the interest on which are unconditionally guaranteed by any agency or instrumentality of the United States of America or their successors.

“Applicable Law” means any law, regulation, requirement or order of any federal, state or local agency, court or other governmental body applicable from time to time to the acquisition, design, construction, equipping, financing, ownership, possession or operation of all, or any portion, of the Facilities or the performance of any of the obligations of the Authority under the Trust Agreement, including (without limitation) all permits, licenses and governmental approvals required for the operation of any portion of the Facilities.

“Authorized Denomination” means, with respect to the Series 2019 Bonds, \$5,000 and any integral multiple thereof.

“Balloon Debt” means Indebtedness 25% or more of the principal amount of which matures in the same 12-month period, which portion of such principal amount is not required to be amortized by redemption prior to such period.

“Bond” or **“Bonds”** means the Series 2003 Bonds, Series 2012A Bonds, the Series 2012B Bonds, the Series 2012C Bonds, the Series 2014 Bonds, the Series 2019 Bonds and any Additional Bonds, collectively.

“Bond Counsel” means an attorney or firm of attorneys having a national reputation in the field of municipal law whose legal opinions are generally accepted by purchasers of municipal bonds designated by the Authority as its bond counsel from time to time. The firm of McKennon Shelton & Henn LLP is recognized as constituting Bond Counsel, subject to further action by the Authority.

“Bond Year” means the period from and including June 2 of each year to and including June 1 of the immediately succeeding year.

“Cost” as applied to any Additional Facilities, includes the cost of and all expenses incident to the construction, reconstruction, acquisition, improvement, extension, alteration, modernization, planning, maintenance and repair of such Additional Facilities, including (without limitation) the cost and expenses of (a) all property acquired in connection with it; (b) financial, architectural, consulting, engineering and legal services; (c) plans, specifications, surveys, estimates, feasibility reports and direct and indirect labor, material, equipment and administrative expenses; and (d) financing such Additional Facilities, including (without limitation) financing charges and interest before, during and for one year after completion of construction.

“Credit Facility” means the letter of credit securing the 2012C Bonds and any other credit or liquidity facility securing any Bond or held to the credit of any fund or account created by the Trust Agreement and any alternate credit facility delivered in substitution therefor.

“Credit Facility Agreement” means the agreement under which the letter of credit securing the Series 2012C Bonds was issued and any other agreement, pursuant to which any Credit Facility is issued.

“Debt Service Requirements” means, when used with respect to any Bonds for any Bond Year, as of any particular date of calculation, the amount required to pay the sum of (a) the interest on such Bonds payable during the period from the second day of such Bond Year through the first day of the immediately succeeding Bond Year, and (b) the principal of, the Sinking Fund Installment for and any other amount required to effect any mandatory redemption of such Bonds, if any, during such Bond Year less any amount of such interest or principal for the payment of which moneys or Permitted Investments, the principal of and interest on which when due will provide for such payment when due, are held in trust and pledged to such payment, including (without limitation) any accrued interest and capitalized interest on deposit in any Bond Fund or Construction Fund. For the purpose of calculating the Debt Service Requirements:

- (a) with respect to any Variable Rate Indebtedness:

(i) for the purpose of calculating the Debt Service Reserve Fund Requirement and the principal amount of any such Indebtedness constituting Balloon Debt payable in any Bond Year described in clause (b) below, such Indebtedness shall be deemed to bear interest at the fixed rate that it would have borne had it been issued at a fixed rate for the term thereof, as evidenced by a certificate of an investment banking firm or financial advisor knowledgeable in financial matters relating to the Facilities satisfactory to the Authority, who may be, without limitation, the financial advisor to the Authority, confirming such interest rate assumption as reasonable, *provided* that if the Authority shall have entered into a Qualified Hedging Transaction identified in the records of the Authority with respect to such Indebtedness, at the option of the Authority, such Indebtedness shall be deemed to bear interest at the rate payable by the Authority under such Qualified Hedging Transaction;

(ii) for all other purposes of the Trust Agreement, such Indebtedness shall be deemed to bear interest at an annual rate equal to (A) in the case of any period during which such Indebtedness shall have been outstanding, the weighted average interest rate per annum borne by such Indebtedness during such period and (B) in any other case, the higher of (1) the weighted average interest rate per annum borne by such Indebtedness during the 12-month period ending on the date of calculation (or, in the case of any Indebtedness to be issued during the immediately preceding 12-month period, the weighted average interest rate per annum borne by other outstanding indebtedness having comparable terms and of comparable creditworthiness during the immediately preceding 12-month period, as evidenced by a certificate of an investment banking firm or a financial advisor knowledgeable in financial matters relating to the Facilities satisfactory to the Authority, who may be, without limitation, the financial advisor to the Authority) and (2) the interest rate per annum borne by such Indebtedness on the date of calculation, *provided* that if any Qualified Hedging Transaction identified in the records of the Authority with respect to any such Indebtedness shall be in effect for the period for which such calculation is to be made, at the option of the Authority, such Indebtedness shall be deemed to bear interest at the rate payable by the Authority under such Qualified Hedging Transaction during such period;

(b) with respect to any Balloon Debt, the principal amount of such Indebtedness payable in each Bond Year may be deemed to be the amount that would payable during such Bond Year if such Indebtedness were required to be amortized in full from the date of its issuance in substantially equal annual installments of principal (such principal to be rounded to the nearest \$5,000) and interest over a term equal to the shorter of (i) 30 years and (ii) 120% of the weighted average economic life of the facilities financed or refinanced thereby;

(c) with respect to any Optional Tender Debt, the option of the holder thereof to tender such Indebtedness for purchase or redemption prior to maturity shall be disregarded; and

(d) with respect to any Credit Facility Agreement, so long as no demand for payment under the Credit Facility issued under such Credit Facility Agreement shall have been made, the debt service requirements of such Credit Facility Agreement shall be excluded from such calculation.

“Debt Service Reserve Fund Credit Facility” means any Credit Facility held to the credit of the Debt Service Reserve Fund.

“Engineer” means an individual or firm of engineers registered in the State (who may be, without limitation, an employee of the Authority, the Department, the MAA or the State or any agency or political subdivision thereof) designated and retained by the Authority to perform the activities required by the Trust Agreement to be performed by the Engineer.

“Facilities” means the facilities financed with proceeds of Series 2003 Bonds, the Series 2012A Bonds, the Series 2012B Bonds, the Series 2012C Bonds and the Series 2014 Bonds, the Project and any other Additional Facilities.

“Favorable Opinion of Bond Counsel” means, when used with respect to or in connection with any action, a written opinion of Bond Counsel to the effect that such action will not adversely affect the excludability from gross income of interest paid on any Tax-Exempt Bond for federal income tax purposes.

“Fitch” means Fitch Ratings and its successors and assigns.

“Fourth Supplement” means the Fourth Supplemental Trust Agreement dated as of June 1, 2019 between the Authority and the Trustee.

“Generally Accepted Accounting Principles” means generally accepted accounting principles in the United States of America applicable in the preparation of financial statements of governmental units, as promulgated by the Governmental Accounting Standards Board or such other body as shall be recognized as authoritative by the American Institute of Certified Public Accountants or any successor body (as such principles may change from time to time), applied on a consistent basis (except for changes in application in which the Independent Public Accountant concurs) applied both to classification of items and amounts.

“Government Obligations” means direct obligations of, or obligations that are unconditionally guaranteed by, the United States of America, including (without limitation) obligations of Resolution Funding Corporation.

“Holder” or **“holder”** or **“Bondholder”** or any similar term means the registered owner of any Bond.

“Indebtedness” means any indebtedness or liability for borrowed money, any installment sale obligation or any obligation under any lease that is capitalized under Generally Accepted Accounting Principles, to the extent that any of the foregoing is payable from the Pledged Revenues.

“Independent Consultant” means an independent consulting firm having a favorable reputation for skill and experience with respect to the design, construction and operation of transportation facilities or the determination of the economic feasibility of such facilities, designated and retained by the Authority to perform the activities required by the Trust Agreement to be performed by the Independent Consultant.

“Independent Public Accountant” means an individual, partnership or corporation engaged in the accounting profession, either entitled to practice, or having members or officers entitled to practice, as a certified public accountant under the laws of the State and in fact

independent, employed by the Authority from time to time to pass upon those matters required by the Trust Agreement to be passed upon by an Independent Public Accountant. The firm of Ernst & Young is recognized as constituting the Independent Public Accountant, subject to further action by the Authority.

“Interest Payment Date” means, with respect to the Series 2019 Bonds, June 1 and December 1 of each year and the maturity or redemption date of the Series 2019 Bonds.

“Maximum Annual Debt Service” means, when used with reference to any Bonds for any Bond Year, as of any particular date of computation, the greatest amount required in the then-current or any future Bond Year to pay the Debt Service Requirements of such Bonds.

“Moody’s” means Moody’s Investors Service, Inc. and its successors and assigns.

“Permitted Investment” means each of the following investments to the extent that the amounts to be invested therein are then permitted to be invested in such investments under Applicable Law:

(a) Government Obligations;

(b) Agency Obligations;

(c) interest bearing time deposits, certificates of deposit or similar arrangements (“Deposits”) with any commercial bank, trust company or savings and loan association (including, without limitation, the Trustee), *provided* that, to the extent such Deposits are not fully insured by the Federal Deposit Insurance Corporation, the outstanding unsecured long-term indebtedness of such commercial bank, trust company or savings and loan association (or its holding company) is rated by a Rating Agency in one of its two highest Rating Categories, and such Deposits are continuously secured by lodging with a bank or trust company, as collateral security, obligations described in clause (a), (b), (e) or (f) below, having a market value, calculated no less frequently than weekly, not less than 102% of the amount of such Deposit;

(d) repurchase agreements provided by financial institutions the outstanding unsecured long-term indebtedness of which is rated by a Rating Agency in one of its two highest Rating Categories for obligations described in clause (a) or (b) above, *provided* that (i) such obligations shall be (A) delivered to the Authority or the Trustee (as the case may be) or supported by a safekeeping receipt issued by a depository satisfactory to the Authority or the Trustee (as the case may be) if issued in certificated form, or (B) supported by a receipt or other confirmatory documentation satisfactory to the Authority or the Trustee (as the case may be) if issued in book-entry form, (ii) the Authority or the Trustee (as the case may be) shall have a perfected security interest in such obligations, (iii) such obligations shall be free and clear of any other liens or encumbrances, and (iv) such repurchase agreements shall provide that the value of the underlying obligations shall be continuously maintained at a current market value, calculated no less frequently than weekly, of not less than 102% of the purchase price;

(e) obligations issued by or on behalf of any state of the United States of America or any political subdivision thereof for the payment of the principal or redemption price of and

interest on which there shall have been irrevocably deposited Government Obligations maturing as to principal and interest at times and in amounts sufficient to provide such payment;

(f) any other obligations issued by or on behalf of any state of the United States of America or any political subdivision thereof, *provided* that such obligations, or other obligations of the issuer thereof of comparable maturities that are secured equally and ratably with such obligations, shall be rated by a Rating Agency in one of its two highest Rating Categories;

(g) banker's acceptances issued by any commercial bank, trust company or savings and loan association (including, without limitation, the Trustee), the outstanding unsecured long-term indebtedness of which is rated by a Rating Agency in one of its two highest Rating Categories;

(h) commercial paper or finance company paper rated by a Rating Agency in its highest Rating Category;

(i) investment agreements, including (without limitation) forward purchase agreements pursuant to which the Trustee agrees to purchase securities of the type described in clause (a), (e), (f) or (h) above, *provided* that (a) the outstanding unsecured long-term indebtedness of the provider thereof (or of its holding company) is rated by a Rating Agency in one of its two highest Rating Categories, (b) such agreements are continuously secured by obligations described in clause (a), (b), (e), (f) or (h) above, (iii) the Authority or the Trustee (as the case may be) shall have a perfected security interest in such obligations, (d) such obligations shall be free and clear of any other liens or encumbrances, and (e) such investment agreements shall provide that the value of the underlying obligations shall be maintained at a current market value, calculated no less frequently than weekly, of not less than 102% of the amount deposited thereunder;

(j) shares in investment companies that invest only in obligations described in clauses (a), (b), (c), (d), (e), (f), (g), (h) and (i) above (including any proprietary mutual fund, money market fund or short term investment fund maintained by the Trustee and for which the Trustee or an affiliate is investment advisor, or provides other services, and receives reasonable compensation for such services).

“Pledged Revenues” means (a) all PFCs in an amount up to \$4.50 assessed to eligible passengers enplaning at BWI Airport on and after July 1, 2004 payable to the MAA, (b) any additional PFCs which may be pledged by the Authority under the Trust Agreement as part of the Trust Estate pursuant to a Supplemental Trust Agreement, (c) interest earnings on the funds and accounts created by the Trust Agreement, (d) all amounts payable to or for the benefit of the Authority or the Trustee pursuant to any Qualified Hedging Transaction and (e) all rights to receive the same and the proceeds of such rights, whether now existing or hereafter coming into existence.

“Qualified Hedging Transaction” means any rate swap transaction, basis swap transaction, cap transaction, floor transaction, collar transaction or other hedging arrangement, which is intended to convert or limit the interest rate payable with respect to any Bonds, and which (a) is designated in writing to the Trustee by the Authority as a Qualified Hedging Transaction related to all or part of one or more Series of Bonds; (b) is with a Qualified Hedge Provider; and (c)

has a term not greater than the term of the designated Bonds or a specified date for mandatory tender or redemption of such designated Bonds.

“Qualified Hedge Provider” means a financial institution whose senior long-term debt obligations are rated by a Rating Agency in one of the two highest Rating Categories, or whose obligations under any Qualified Hedging Transaction are guaranteed by a financial institution or subsidiary of a financial institution whose senior long-term debt obligations are rated in one of the three highest Rating Categories by a Rating Agency.

“Rating Agency” means Fitch, Moody’s, S&P or any other securities rating agency that, at the request of the Authority, shall have assigned a rating that is then in effect with respect to any Bonds, and their successors and assigns, and **“Rating Agencies”** means each such Rating Agency, collectively.

“Rating Category” means one of the general rating categories of a Rating Agency, without regard to any refinement or gradation of such rating category by a numerical modifier or otherwise.

“Redemption Price” means, when used with respect to any Bond or portion thereof, the principal amount of such Bond or such portion thereof plus the applicable premium, if any, payable upon redemption thereof pursuant to the Trust Agreement.

“Sinking Fund Installment” means the amount of money provided in the Trust Agreement to redeem Bonds of such Series at the times and in the amounts provided in the Trust Agreement. The Sinking Fund Installments for the Series 2019 Bonds are set forth above under **“THE BONDS – Redemption – Mandatory Sinking Fund Redemption.”**

“S&P” means Standard & Poor’s Ratings Services and its successors and assigns.

“Trust Estate” means all property, rights and other assets that from time to time may be pledged and assigned to the Trustee under the Trust Agreement.

“Variable Rate Indebtedness” means, as of any particular date, any Indebtedness the interest rate on which is not established at a fixed rate or rates for the remaining term thereof.

“2012/14/19 Debt Service Reserve Fund Requirement” means when used with respect to or in connection with the Series 2012/14/19 Debt Service Reserve Fund, as of any particular date of computation, an amount equal to the least of (a) 10% of the proceeds of the Bonds secured thereby, (b) Maximum Annual Debt Service on all outstanding Bonds secured thereby, and (c) 125% of the average annual debt service requirements of all Bonds secured thereby.

Additional Bonds (*Section 2.05*)

The Trust Agreement authorizes the issuance, from time to time, of Additional Bonds by the Authority for any purpose for which indebtedness may be incurred by the Authority under the Enabling Legislation, including (without limitation): (a) refinancing, refunding or advance refunding of any Outstanding Indebtedness (“Refunding Purposes”), (b) obtaining funds to pay the Cost of completing the Project or any other Additional Facilities (“Completion Purposes”), (c)

obtaining funds necessary to pay the costs of land acquisition or improvements to any Facilities, including (without limitation), repairs, replacements or improvements required as a result of any casualty or taking or other extraordinary occurrence or to meet the requirements of Applicable Law (“Extraordinary Maintenance Purposes”) or (d) obtaining funds to pay the Cost of any Additional Facilities. Additional Bonds may be issued to pay the costs incurred in connection with the issuance and sale of any Bonds, to establish reserves and to pay interest on any Bonds prior to and during acquisition and construction. Each Additional Bond shall be on parity with, and shall be entitled to the same benefit and security of, the Trust Agreement as the Series 2012A Bonds, the Series 2012B Bonds, the Series 2012C Bonds, the Series 2014 Bonds, the Series 2019 Bonds and any other Additional Bonds that may be issued from time to time, to the extent provided in the Trust Agreement.

The Supplemental Trust Agreement authorizing the issuance of any Series of Additional Bonds shall specify the maturities and redemption provisions of such Additional Bonds, the form and denominations thereof and other details of such Additional Bonds. Without limiting the generality of the foregoing, Additional Bonds may constitute Variable Rate Indebtedness, Optional Tender Debt or Balloon Debt, as shall be determined by the Authority, in its discretion. The Authority may provide for the creation of a separate Bond Fund, Debt Service Reserve Fund or Redemption Fund and other funds and accounts for any Series of Additional Bonds as shall be deemed advisable by the Authority. Amounts on deposit in the funds and accounts created for particular Series of Bonds available for the payment of any Bonds shall be applied solely to the payment of the principal or Redemption Price of and interest on, or the purchase price of, the Bonds of such Series or to the reimbursement of the issuer of any Credit Facility securing such Bonds and shall not be available to satisfy the claims of Holders of Bonds of any other Series or the issuer of any Credit Facility securing any other Series of Bonds.

The Supplemental Trust Agreement authorizing the issuance of any Additional Bonds shall provide for the deposit of Pledged Revenues in the Bond Fund and the Debt Service Reserve Fund, if any, maintained for such Bonds, which deposits shall be made not more frequently than monthly except to the extent required to pay the principal of and interest on such Bonds when due.

The Supplemental Trust Agreement authorizing the issuance of any Series of Additional Bonds may provide that any proceeds of such Additional Bonds and investment earnings thereon remaining after the completion of the Project or any Additional Facilities financed with the proceeds of such Additional Bonds shall be applied to the payment or redemption of such Series of Additional Bonds.

Any Supplemental Trust Agreement authorizing the issuance of other Additional Bonds may provide that (i) such Series of Additional Bonds shall be secured by the Series 2012/14/19 Debt Service Reserve Fund, (ii) such Series of Additional Bonds shall not be secured by a Debt Service Reserve Fund, or (iii) such Series of Additional Bonds shall be secured by a separate Debt Service Reserve Fund. If any Supplemental Trust Agreement authorizing the issuance of any Series of Additional Bonds provides that such Additional Bonds shall be secured by the Series 2012/14/19 Debt Service Reserve Fund, such Supplemental Trust Agreement shall provide for the deposit in the Series 2012/14/19 Debt Service Reserve Fund on the date of issuance of such Additional Bonds of the amount, if any, necessary to make the amount on deposit therein equal to the Debt Service Reserve Fund Requirement after giving effect to the issuance of such Additional

Bonds. Such Supplemental Trust Agreement may provide that the amount of any increase in the Debt Service Reserve Fund Requirement resulting from the issuance of such Additional Bonds shall be applied to the final payments of the principal or Redemption Price of such Additional Bonds.

If the Supplemental Trust Agreement authorizing the issuance of any Additional Bonds provides that such Series of Additional Bonds shall be secured by a separate Debt Service Reserve Fund, such Supplemental Trust Agreement shall (i) establish the amount of the Debt Service Reserve Fund Requirement for such Debt Service Reserve Fund, (ii) provide the period during which any deficiency shall be cured, (iii) contain provisions with respect to the issuance of any other Additional Bonds secured by such Debt Service Reserve Fund and (iv) provide such terms with respect to the valuation of such Debt Service Reserve Fund, the application of any earnings on or surpluses in such Debt Service Reserve Fund and any Credit Facilities held to the credit of such Debt Service Reserve Fund (which terms may be different from those applicable to the Series 2012/14/19 Debt Service Reserve Fund) as the Authority shall deem appropriate, any other provision of the Trust Agreement to the contrary notwithstanding. If a separate Debt Service Reserve Fund is created for any Series of Bonds, the Debt Service Reserve Fund Requirement shall be calculated separately for each Series of Bonds for which a separate Debt Service Reserve Fund is maintained.

Prior to the issuance of any Additional Bonds there shall be delivered to the Trustee, among other items, each of the following:

(i) a Certificate of the Authority to the effect that, upon the authentication and delivery of such Additional Bonds, no Event of Default shall exist under the Trust Agreement;

(ii) unless such Additional Bonds are issued or incurred for Refunding Purposes, the written approval of FAA for payment of the costs of such Additional Facilities with PFCs;

(iii) unless such Additional Bonds are issued or incurred for Refunding Purposes, Completion Purposes or Extraordinary Maintenance Purposes and the items described below are furnished to the Trustee, a Certificate of the Authority to the effect that (A) the amount of the Pledged Revenues actually collected in the most recent Bond Year was not less than 150% of the Debt Service Requirements of Outstanding Bonds for such Bond Year and (B) the estimated Pledged Revenues during each of the five immediately succeeding Bond Years are projected to be not less than 150% of the Debt Service Requirements of Outstanding Bonds for such Bond Year, taking into account the Additional Bonds then to be issued; and

(iv) the amount, if any, required to make the amount on deposit in the Debt Service Reserve Fund equal the respective Debt Service Reserve Fund Requirements upon the issuance of such Additional Bonds.

If Additional Bonds are issued or incurred for Completion Purposes or Extraordinary Maintenance Purposes, the certificate described in clause (iii) above need not be provided to the Trustee if, in lieu thereof, there shall be furnished to the Trustee (I) a Report of an Independent Consultant to the effect that the amount of the Pledged Revenues for each of the five full Bond

Years following the date on which the proceeds of such Additional Bonds are expected to have been fully applied is projected to be not less than the Debt Service Requirements of all Outstanding Long-Term Indebtedness as of the last day of each such Bond Year, and (II) a Report of an Engineer to the effect that the proceeds of such Additional Bonds do not exceed the amount necessary to accomplish the intended Completion Purpose or Extraordinary Maintenance Purpose, respectively.

If Additional Bonds are issued or incurred for Refunding Purposes, the approval of the FAA described in clause (ii) above need not be provided to the Trustee if there shall be furnished to the Trustee a Certificate of the Authority to the effect that the Maximum Annual Debt Service on Outstanding Bonds, taking into account the issuance of such Additional Bonds and the Bonds to be refinanced or refunded, will not be increased by more than ten percent during the life of any then Outstanding Bonds that are not refinanced or refunded with proceeds of such Additional Bonds.

Creation of Funds (*Section 4.01 and Fourth Supplement*)

The following funds, among others, are created by the Trust Agreement: PFC Revenue Fund, 2019 Construction Fund, 2019 Bond Fund, Series 2012/14/19 Debt Service Reserve Fund, Redemption Fund, Facility Improvements Fund and Rebate Fund. Pending the application of amounts on deposit in the PFC Revenue Fund, the 2019 Construction Fund, the Redemption Fund and the Facility Improvements Fund in accordance with the Trust Agreement, such amounts are pledged to the payment of all Outstanding Bonds. Pending the application of amounts on deposit in the 2019 Bond Fund and the Series 2012/14/19 Debt Service Reserve Fund in the Trust Agreement, such amounts are pledged to the payment of the Series 2019 Bonds and may be pledged to the payment of Additional Bonds. The Rebate Fund is not pledged to the payment of any Bonds.

Deposit of Pledged Revenues (*Section 4.03 and Fourth Supplement*)

(a) Pledged Revenues received by the Trustee shall be deposited by the Trustee into the PFC Revenue Fund. On the first day of each month, the Trustee shall transfer amounts in the PFC Revenue Fund as follows in the following order of priority:

(i) to the 2012A Bond Fund, the 2012B Bond Fund, the 2012C Bond Fund, the 2014 Bond Fund and the 2019 Bond Fund, respectively:

(A) in the case of the 2019 Bond Fund maintained for the Series 2019 Bonds, the sum of (1) the lesser of (I) one-sixth (1/6) of the interest becoming due on the outstanding Series 2019 Bonds on the immediately succeeding Interest Payment Date and (II) the amount, if any, necessary to make the amount on deposit therein equal to interest becoming due on the outstanding Series 2019 Bonds on the immediately succeeding Interest Payment Date; (2) the lesser of (I) one-twelfth (1/12) of the amount of the principal of and any Sinking Fund Installment for the Series 2019 Bonds Outstanding becoming due on the immediately succeeding June 1, and (II) the amount, if any, necessary to make the amount on deposit therein equal to principal of and any Sinking Fund Installment for the outstanding Series 2019 Bonds becoming due on the immediately succeeding June 1; and (3) an amount equal to any deficiency in the amount deposited in the 2019 Bond Fund in any prior month

below the amount which was required to be deposited in the 2019 Bond Fund in accordance with this paragraph;

(B) in the case of the 2014 Bond Fund maintained for the Series 2014 Bonds, the sum of (1) the lesser of (I) one-sixth (1/6) of the interest becoming due on the outstanding Series 2014 Bonds on the immediately succeeding Interest Payment Date and (II) the amount, if any, necessary to make the amount on deposit therein equal to interest becoming due on the outstanding Series 2014 Bonds on the immediately succeeding Interest Payment Date; (2) the lesser of (I) one-twelfth (1/12) of the amount of the principal of and any Sinking Fund Installment for the Series 2014 Bonds Outstanding becoming due on the immediately succeeding June 1, and (II) the amount, if any, necessary to make the amount on deposit therein equal to principal of and any Sinking Fund Installment for the outstanding Series 2014 Bonds becoming due on the immediately succeeding June 1; and (3) an amount equal to any deficiency in the amount deposited in the 2014 Bond Fund in any prior month below the amount which was required to be deposited in the 2014 Bond Fund in accordance with this paragraph;

(C) in the case of the 2012B-C Bond Fund maintained for the Series 2012B Bonds and the Series 2012C Bonds, (i) with respect to the Series 2012B Bonds, to a subaccount for the Series 2012B Bonds within the 2012B-C Interest Account, the lesser of (A) one-sixth (1/6) of the interest becoming due on the outstanding Series 2012B Bonds on the immediately succeeding Interest Payment Date with respect to the Series 2012B Bonds, and (B) the amount, if any, necessary to make the amount on deposit therein equal to interest becoming due on the outstanding Series 2012B Bonds on the immediately succeeding Interest Payment Date; and (ii) with respect to the Series 2012C Bonds, to a subaccount for the Series 2012C Bonds within the 2012B-C Interest Account, (A) during any Daily Rate Period, Weekly Rate Period, Fixed Rate Period of fewer than six months or Commercial Paper Period of fewer than six months, the amount equal to the interest becoming due on the Series 2012C Bonds on the immediately succeeding Interest Payment Date or such lesser amount as shall be required to make the amount on deposit in such subaccount of the 2012B-C Interest Account equal to the interest becoming due on the outstanding Series 2012C Bonds on the immediately succeeding Interest Payment Date, (B) during any Fixed Rate Period or Commercial Paper Period of six months or longer, one sixth (1/6) of the amount equal to the interest becoming due on the Series 2012C Bonds on the immediately succeeding Interest Payment Date or such lesser amount as shall be required to make the amount on deposit in such subaccount of the 2012B-C Interest Account equal to the interest becoming due on the outstanding Series 2012C Bonds on the immediately succeeding Interest Payment; and

(D) in the case of the Bond Fund maintained for the Series 2012A Bonds, the sum of (1) the lesser of (I) one-sixth (1/6) of the interest becoming due on the outstanding Series 2012A Bonds on the immediately succeeding Interest Payment Date and (II) the amount, if any, necessary to make the amount on deposit therein equal to interest becoming due on the outstanding Series 2012A Bonds on the immediately succeeding Interest Payment Date; (2) the lesser of (I) one-twelfth (1/12) of the amount of the principal of and any Sinking Fund Installment for the Series 2012A Bonds Outstanding becoming due on the immediately succeeding June 1, and (II) the amount, if any, necessary to make the amount on deposit therein equal to principal of and any Sinking Fund Installment for the outstanding Series 2012A Bonds becoming due on the immediately succeeding June 1; and (3) an amount equal to any deficiency in the amount deposited

in the 2012A Bond Fund in any prior month below the amount which was required to be deposited in the 2012A Bond Fund in accordance with this paragraph;

(ii) to the payment of any Administrative Expenses then due and any amounts payable under the Credit Facility Agreements;

(iii) to the Series 2012/14/19 Debt Service Reserve Fund, beginning in the month immediately succeeding any month in which the Authority receives notice of any deficiency in such Debt Service Reserve Funds, respectively, (A) one-fourth (1/4) of the amount of such deficiency if the value of the assets credited to such Debt Service Reserve Fund is less than 90% of the Debt Service Reserve Fund Requirement and such deficiency results from a decline in the value of the assets of such Debt Service Reserve Fund, (B) one-twelfth (1/12) of the amount of such deficiency if such deficiency results from a withdrawal from such Debt Service Reserve Fund or (C) one-sixth (1/6) of the amount of such deficiency if such deficiency results from the failure of the Authority to deliver to the Trustee a Debt Service Reserve Fund Credit Facility (or a commitment therefor) which meets the requirements of the Trust Agreement described below under “Investments” in substitution for any Debt Service Reserve Fund Credit Facility prior to the first day of the sixth month before the expiration of the Debt Service Reserve Fund Credit Facility then in effect, in each case until the amount credited to such Debt Service Reserve Fund equals the Debt Service Reserve Fund Requirement;

(iv) to the payment of any termination payment then due and any amounts other than regularly scheduled hedge payments under any Qualified Hedging Transaction; and

(v) to the Facility Improvements Fund any balance remaining.

(b) In accordance with the Trust Agreement, if on any date on which any amounts are required to be transferred from the PFC Revenue Fund or any other fund created by the Trust Agreement (i) to the Bond Fund, the amount on deposit therein shall be insufficient to make all transfers required to be made to the Bond Fund created by the Trust Agreement for the Series 2012A Bonds, the 2012B-C Bonds, the Series 2014 Bonds, the Series 2019 Bonds and any Bond Fund created pursuant to any Supplemental Trust Agreement for any other Additional Bonds (collectively, the “Bond Funds”), then the Trustee shall allocate the amount available to be transferred to the Bond Fund on such date *pro rata* among all of the Bond Funds on the basis of the respective amounts of the principal of, the Sinking Fund Installments for and the interest on the Series of Bonds secured thereby required to be deposited on such date, or (ii) to the Debt Service Reserve Fund, the amount on deposit therein shall be insufficient to make all transfers required to be made to the Series 2012/14/19 Debt Service Reserve Fund and any Debt Service Reserve Fund created pursuant to any Supplemental Trust Agreement for any other Additional Bonds (collectively, the “Debt Service Reserve Funds”), then after the transfers to the Bonds Funds and the Administrative Expenses Fund required to be made under the Trust Agreement on such date, the Trustee shall allocate the amount available to be transferred to the Debt Service Reserve Fund on such date *pro rata* among all of the Debt Service Reserve Funds on the basis of the respective aggregate principal amounts of the Bonds Outstanding secured by such Debt Service Reserve Funds.

Construction Fund (*Section 4.04*)

Amounts held in the 2019 Construction Fund shall be applied to pay the Costs of or relating to the Project.

As soon as practicable after the Completion Date of the Project, the Authority shall deliver to the Trustee a Certificate of the Authority certifying any amounts to be retained in the 2019 Construction Fund to pay any unpaid costs of the Project. The Trustee shall transfer any balance on deposit in the 2019 Construction Fund that is not required to pay any unpaid Costs of the Project as follows and in the following order of priority:

FIRST: to the Debt Service Reserve Fund, such amount as shall be necessary to make the amount credited to the Debt Service Reserve Fund equal the Debt Service Reserve Fund Requirement; and

SECOND: to the Facility Improvements Fund, the Redemption Fund or the Bond Fund, as shall be directed by Order of the Authority.

2019 Bond Fund (*Fourth Supplement*)

Amounts on deposit in the 2019 Bond Fund shall be applied as described below.

(a) Interest. On each Interest Payment Date with respect to outstanding Series 2019 Bonds, the Trustee shall pay or cause to be paid from the 2019 Bond Fund the amount required to pay the interest due on such date.

(b) Principal. On each date on which the principal of the Outstanding Series 2019 Bonds becomes due, the Trustee shall pay or cause to be paid from the 2019 Bond Fund the amount required to pay the principal due on such date.

(c) Sinking Fund Installments. Moneys in the 2019 Bond Fund for the payment of Sinking Fund Installments on such Bonds shall be applied to the purchase or redemption of such Bonds as follows:

(i) Subject to the provisions of paragraph (ii) below, prior to the due date for the payment of each Sinking Fund Installment for such Bonds, the Trustee shall direct the Registrar and Paying Agent to call for redemption Outstanding Series 2019 Bonds subject to redemption from such Sinking Fund Installment in an aggregate principal amount equal to such Sinking Fund Installment, less the amount previously credited against such Sinking Fund Installment as described in paragraph (iii) below. On the date fixed for redemption of such Bonds, the Trustee shall pay or cause to be paid from the 2019 Bond Fund an amount equal to the principal amount of such Bonds so called for redemption.

(ii) Upon the direction of the Authority, the Trustee shall endeavor to purchase Outstanding Series 2019 Bonds subject to redemption from the Sinking Fund Installment due on any date from amounts on deposit in the 2019 Bond Fund for the payment of such Sinking Fund Installment at the most advantageous price then obtainable with reasonable diligence. No such purchase shall be made by the Trustee (A) after the earlier of the date on which the Trustee gives

notice of the redemption of Series 2019 Bonds from such Sinking Fund Installment and the date that is 45 days before the due date for the payment of such Sinking Fund Installment, or (B) at a price, including any brokerage and other charges, greater than the principal amount of such Bonds and accrued interest thereon.

(iii) If (A) the Trustee purchases Series 2019 Bonds from amounts on deposit in the 2019 Bond Fund for the payment of the Sinking Fund Installment for such Bonds as described in paragraph (ii) above and such Bonds are cancelled, (B) the Authority delivers to the Trustee for cancellation Series 2019 Bonds subject to redemption from such Sinking Fund Installment on or before the earlier of the date on which the Trustee gives notice of the redemption of any Bonds from such Sinking Fund Installment and the date that is 45 days before the due date for the payment of such Sinking Fund Installment and such Bonds are cancelled, or (C) Bonds subject to redemption from any Sinking Fund Installment are redeemed at the election of the Authority, then an amount equal to 100% of the aggregate principal amount of such Bonds so purchased and delivered to the Trustee for cancellation or redeemed (as the case may be) shall be credited against such Sinking Fund Installment.

(iv) If the aggregate principal amount of Series 2019 Bonds purchased and cancelled or redeemed in any 12-month period ending July 1 is in excess of the Sinking Fund Installment due on such Bonds in such period, the Trustee shall credit the amount of such excess against subsequent Sinking Fund Installments for such Bonds as directed by a Certificate of the Authority.

Series 2012/14/19 Debt Service Reserve Fund *(Section 4.06 and Fourth Supplement)*

If on any Interest Payment Date the amount in the 2019 Bond Fund shall be less than the amount of interest then due on the Series 2019 Bonds, or if on any date on which the principal amount of any Series 2019 Bonds become due, the amount in the 2019 Bond Fund shall be less than the amount of the principal and the Sinking Fund Installment (either or both, as the case may be) then due on such Series 2019 Bonds, the Trustee forthwith shall transfer moneys from the Series 2012/14/19 Debt Service Reserve Fund to the 2019 Bond Fund to the extent necessary to make good any deficiency.

The Trustee shall determine the value of the assets of the Series 2012/14/19 Debt Service Reserve Fund in the manner described below under “Investments” of the close of business (i) on June 1 in each year, (ii) on the date of any withdrawal from the Series 2012/14/19 Debt Service Reserve Fund and on the last Business Day of each month thereafter until such determination discloses that a deficiency no longer exists in such fund, (iii) on any date on which the Trustee obtains actual knowledge that any Debt Service Reserve Fund Credit Facility held to the credit of the Series 2012/14/19 Debt Service Reserve Fund is no longer entitled to be credited to the Series 2012/14/19 Debt Service Reserve Fund, (iv) on the date that is six months prior to the stated expiration date of any Debt Service Reserve Fund Credit Facility, and (v) on any other date directed by the Authority.

As promptly as practicable after making such determination, the Trustee shall notify the Authority of the result of such determination and of the amount of any deficiency or surplus determined to exist in the Series 2012/14/19 Debt Service Reserve Fund.

The Trustee shall transfer the amount of any surplus that exists in a Debt Service Reserve Fund from time to time to the 2019 Bond Fund, the Redemption Fund or the Facility Improvements Fund upon the direction of the Authority.

Redemption Fund (*Section 4.07*)

The Trustee shall deposit in the Redemption Fund any amounts paid to the Trustee for the redemption of Bonds (other than any redemption from the Sinking Fund Installments).

Available moneys in the Redemption Fund shall be applied by the Trustee to the purchase or redemption of Bonds of such Series and maturities as the Authority shall direct in writing. At the direction of the Authority, the Trustee shall endeavor to purchase such Bonds at the most advantageous price obtainable with reasonable diligence.

Notwithstanding the foregoing, to the extent provided in any Supplemental Trust Agreement authorizing the issuance of any other Additional Bonds (i) moneys available for the redemption or purchase of Bonds on any date shall be allocated among all Series of Bonds in proportion (as nearly as practicable) to the aggregate principal amount of Bonds of each such Series subject to redemption on such date and (ii) the Bonds of such Series to be purchased or redeemed on any date shall be selected in accordance with the provisions of such Supplemental Trust Agreement.

The Authority may set aside any available amount on deposit in the Redemption Fund for the redemption of particular Bonds by the delivery of irrevocable written instructions to the Trustee directing the Trustee to set aside such amount for such purpose. Amounts set aside for the redemption of Bonds and investment earnings on such amounts shall be applied to the payment of the interest due on such Bonds on or prior to the redemption date of such Bonds to the extent provided in such instructions. Moneys set aside to pay the Redemption Price of any Bonds theretofore called for redemption or the purchase price of Bonds theretofore contracted to be purchased shall not be deemed to be available for application as described herein.

Facility Improvements Fund (*Section 4.08, as amended*)

Amounts on deposit in the Facility Improvements Fund shall be applied to the following purposes in the following order of priority:

- (a) at any time when a deficiency exists in any amount required to be deposited to any Bond Fund or Debt Service Reserve Fund, the Trustee shall transfer such amounts from the Facility Improvements Fund to such Bond Fund or Debt Service Reserve Fund, respectively, necessary to eliminate such deficiency (deficiencies in the Bond Funds and the Debt Service Reserve Funds to be so eliminated in same order of priority as described above under “Deposit of Pledged Revenues”);
- (b) at any time when Administrative Expenses or amounts owed under a Credit Facility Agreement are due and payable, the Trustee shall apply amounts held in the Facility Improvements Fund to the payment of such Administrative Expenses or amounts owed under a Credit Facility Agreement;

(c) at any time when an event of default (as defined in any Credit Facility Agreement) has occurred and is continuing, the Trustee shall apply amounts held in the Facility Improvements Fund to cure such event of default or, if such event of default cannot be cured by application of such amounts held in Facility Improvements Fund, the Trustee shall hold amounts in the Facility Improvements Fund and apply the same to only those purposes described in paragraphs (a), (b), (c), (d), and (e) of this Section until such event of default is cured or no longer continues;

(d) at any time when Bonds purchased with amounts advanced under a Credit Facility are outstanding, the Trustee shall transfer amounts from the Facility Improvements Fund to the Redemption Fund sufficient to redeem such Bonds;

(e) at any time when the Sufficiency Covenant cannot be satisfied the Authority shall cure such failure by either (i) directing the Trustee to transfer amounts held in the Facility Improvements Fund to the Redemption Fund to be applied to the redemption, purchase and immediate cancellation or defeasance of Bonds until such time as the Sufficiency Covenant can be satisfied; or (ii) obtaining an amendment to the existing PFC Authority or obtaining new PFC Authority authorizing additional PFCs which shall be pledged as part of the Pledged Revenues under the Trust Agreement in an amount sufficient to cause the Sufficiency Covenant to be satisfied; and

(f) amounts on deposit in the Facility Improvements Fund shall be (i) applied to the payment of such costs of additions, improvements or betterments to, or design, expansion, construction, replacement, remodeling or equipping of “transportation facilities projects” as defined in the Enabling Legislation at BWI Marshall Airport, including (without limitation) any land acquisition, as shall be permitted under Applicable Law and approved in writing by the FAA or (ii) paid to the MAA to be applied to the payment of such costs; provided that (1) the Authority, the Trustee and each Credit Facility Provider shall have received a certificate from the MAA in which the MAA covenants at all times to manage the PFC program in such manner as will enable the Authority to meet the Sufficiency Covenant, (2) at the beginning of each Bond Year and as of the date which is 180 days thereafter, the MAA will demonstrate whether the Sufficiency Covenant is being complied with and the amount, if any, that may be withdrawn from the Facility Improvements Fund without violating the Sufficiency Covenant and (3) the amount withdrawn as described above will not result in the violation of the Sufficiency Covenant if the calculations necessary to determine compliance were made on the date of such withdrawal.

As used in this Section, the following terms shall have the meanings specified:

“*Adjusted Costs*” means Costs of Airport Facilities Projects paid from the Pledged PFCs to date plus payments made with respect to the Bonds, plus all Administrative Expenses paid, plus amounts paid with respect to Credit Facility Agreements, plus all other payments made from the Pledged PFCs to date, minus amounts then on deposit in the funds and accounts created under the Trust Agreement and available for payment of debt service on the Bonds.

“*PFC Authority*” means the FAA’s Final Agency Decision through September 17, 2002, as the same may be amended from time to time, and any other final agency decision (and

amendments) issued by the FAA relating to the PFCs imposed or to be imposed through the date no later than the final maturity date of the Bonds by the MAA at the BWI Marshall Airport which are pledged as part of the Trust Estate under the Trust Agreement.

“Projected Aggregate Principal and Interest Requirements” means the aggregate amount of Debt Service Requirements for the Bonds through the scheduled maturity of each Series of Bonds outstanding; provided, however, the interest rate used in calculating the Debt Service Requirements on any Bonds that bear a Variable Rate shall be assumed to be 15% per annum (unless the interest rate borne by the Bonds bearing a Variable Rate shall have averaged greater than 7% for a period of 90 consecutive days, after which time the interest rate assumed for purposes of this calculation shall increase to 24% per annum); provided further that if the Authority enters into a Qualified Hedging Transaction, the interest rate assumed for purposes of this calculation shall be the fixed rate payable by the Authority or cap rate under such Qualified Hedging Transaction for the period of time the Qualified Hedging Transaction is in place; and provided further that if any Series of Bonds outstanding is subject to optional redemption and such Bonds have been called for redemption, then the annual Debt Service Requirements for such Series of Bonds shall be calculated through the applicable optional redemption date (and such calculation shall include any applicable redemption premium).

“Sufficiency Covenant” means the requirement that Unspent PFC Authority is at least equal to 105% of Projected Aggregate Principal and Interest Requirements with respect to all outstanding Bonds.

“Unspent PFC Authority” means the aggregate dollar amount of Pledged PFCs authorized to be collected by the MAA under the PFC Authority minus the dollar amount of Adjusted Costs.

So long as no Event of Default shall have occurred and be continuing, upon the Order of the Authority, any amount from time to time on deposit in the Facility Improvements Fund shall be transferred to the Redemption Fund.

Investments (*Section 4.09*)

Moneys in any of the funds and accounts established by the Trust Agreement may be invested, but only in Permitted Investments maturing or redeemable at the option of the holder in such amounts and on such dates as may be necessary to provide moneys to meet the payments from such funds and accounts. The Trustee shall invest amounts on deposit in the funds and accounts held by the Trustee as directed by an Authority Representative.

In determining the value of the assets of the funds and accounts created by the Trust Agreement (i) investments and accrued interest thereon shall be deemed a part thereof, and (ii) investments shall be valued at the current market value thereof. In addition, in determining the value of the assets of the Series 2012/14/19 Debt Service Reserve Fund on any date, there shall be credited to the Series 2012/14/19 Debt Service Reserve Fund the amount that can be realized by the Trustee under any Debt Service Reserve Fund Credit Facility if each of the following conditions is met: (i) on the date of delivery of such Debt Service Reserve Fund Credit Facility to the Trustee, the unsecured indebtedness or claims-paying ability of the issuer thereof is rated in one of the three highest Rating Categories of a Rating Agency; (ii) such Debt Service Reserve

Fund Credit Facility permits the Trustee to realize amounts thereunder at such times as the Trustee is required to transfer any amount (other than any surplus) from the Series 2012/14/19 Debt Service Reserve Fund in accordance with the Trust Agreement; (iii) if amounts realized under such Debt Service Reserve Fund Credit Facility are, under any circumstances, payable from the Pledged Revenues, such amounts shall be payable in no fewer than 12 equal monthly installments; and (iv) the expiration date of such Debt Service Reserve Fund Credit Facility is at least six months after the date of valuation or is after the maturity date of the outstanding Bonds secured by the Series 2012/14/19 Debt Service Reserve Fund or such Debt Service Reserve Fund Credit Facility permits the Trustee to draw thereunder for deposit to the Series 2012/14/19 Debt Service Reserve Fund an amount equal to the Debt Service Reserve Fund Requirement prior to its expiration.

Neither the Authority nor the Trustee shall be liable for any depreciation in the value of any obligations in which moneys of the funds or accounts created by the Trust Agreement shall be invested in accordance with the Trust Agreement, or for any loss arising from any investment permitted therein.

Accounts and Audits *(Section 5.04)*

The Authority shall keep or cause the MAA to keep proper books of records and accounts (separate from all other records and accounts) in which complete and correct entries shall be made of its transactions with respect to the Pledged Revenues. Such books and accounts shall be subject to the inspection of the Trustee (at reasonable hours and subject to the reasonable rules and regulations of the Authority).

Additional Indebtedness *(Section 5.05)*

The Authority shall not create or incur any Indebtedness payable in whole or in part from any portion of the Trust Estate other than Additional Bonds issued in accordance with the Trust Agreement.

Lease and Assignment; Financing Agreement *(Section 5.06)*

The Authority shall perform its obligations under, and enforce the performance of the obligations of the other parties to, the Lease and Assignment and the Financing Agreement (collectively, the “Facilities Contracts”), in each case to the extent necessary to permit the Authority to meet its obligations under the Trust Agreement. The Authority shall take all reasonable measures permitted by law to enforce payment to it of all Pledged Revenues, and to defend, preserve and protect the rights, benefits and privileges of the Authority under the Facilities Contracts. Nothing in the Trust Agreement shall be deemed to require the Authority to take any action to enforce its rights under the Facilities Contracts or otherwise or to require the MAA to enforce the rights of the MAA under any contracts with respect to the Facilities, including (without limitation) the right to receive any Pledged Revenues, if the Authority in good faith determines that such action is not reasonably justified by the nature of the potential remedy or recovery or the likelihood of the recovery and the expense or other adverse effects of such action.

No Disposition of Trust Estate (*Section 5.08*)

Except as permitted by the Trust Agreement, the Authority shall not sell, lease, pledge, assign or otherwise dispose of, and shall neither create nor suffer to remain any lien, encumbrance or charge upon, its interest in the Trust Estate ranking prior to or on a parity with the claim, lien and pledge created by the Trust Agreement as security for the Bonds. The Authority from the Pledged Revenues will cause to be discharged, or will make adequate provisions to satisfy and discharge, within 60 days after the same shall accrue, all lawful claims and demands that, if unpaid, might by law become such a lien upon its interest in the Trust Estate, *provided* that nothing contained in the Trust Agreement shall require the Authority to pay or cause to be discharged, or make provision for, any such lien, encumbrance or charge so long as the validity thereof shall be contested in good faith and by appropriate legal proceedings.

Modification or Amendment of Trust Agreement (*Sections 8.01, 8.02 and 8.03*)

Without notice to, or the consent of, the Holders, the Authority and the Trustee may enter into a Supplemental Trust Agreement supplementing, modifying or amending the Trust Agreement or any Supplemental Trust Agreement at any time or from time to time for one or more of the following purposes, among others: (a) to grant to the Trustee for the benefit of the Holders any additional rights or security; (b) to add to the agreements of the Authority contained in the Trust Agreement; (c) to surrender to the Trustee any right reserved to the Authority by the Trust Agreement; (d) to confirm, as further assurance, any pledge under, and the subjection to any lien on, or claim or pledge of (whether created or to be created by the Trust Agreement), the Trust Estate; (e) to cure any ambiguity or to cure or correct any defect or inconsistent provisions contained in the Trust Agreement or to make such provisions in regard to matters or questions arising under the Trust Agreement as may be necessary or desirable and not contrary to or inconsistent with the Trust Agreement; (f) to provide for the issuance of Additional Bonds including (without limitation) any modifications or amendments required to grant to or otherwise secure for the Holders of such Additional Bonds a parity interest in the security granted to the holders of any then-Outstanding Bonds in accordance with the Trust Agreement; (g) to permit the qualification of the Trust Agreement or any Supplemental Trust Agreement under any federal statute now or hereafter in effect or under any state blue sky law and, in connection therewith, to add to the Trust Agreement or any Supplemental Trust Agreement such other terms, conditions and provisions as may be permitted or required by such federal statute or state blue sky law; (h) to obtain or to maintain any ratings on the Bonds of any Series from any nationally recognized securities rating agency; (i) to provide for the issuance of any Bonds in coupon form or in book-entry form, to change any Securities Depository or to discontinue any book-entry system, provided that, prior to the effective date of any such amendment that provides for the issuance of any Tax-Exempt Bonds in coupon form, there shall be delivered to the Authority a Favorable Opinion of Bond Counsel; (j) to preserve the excludability from gross income for federal income tax purposes of the interest paid on any Tax-Exempt Bonds theretofore issued; or (k) to make any other change in the Trust Agreement that the Trustee determines shall not prejudice in any material respect the rights of the Holders of the Bonds Outstanding at the date as of which such change shall become effective.

In addition to Supplemental Trust Agreements described above, with the prior written consent of the Holders of majority in aggregate principal amount of the outstanding Bonds

affected thereby, the Authority and the Trustee may enter into at any time and from time to time Supplemental Trust Agreements amending or supplementing the Trust Agreement, any Supplemental Trust Agreement or any Bond to modify any of the provisions thereof or to release the Authority from any of the agreements or restrictions therein contained, provided that nothing contained in the Trust Agreement shall permit (i) a change in any terms of redemption or purchase of any Bond, the due date for the payment of the principal of or interest on any Bond or any reduction in the principal or Redemption Price of or interest rate on any Bond without the consent of the Holder of such Bond, or (ii) the creation of a claim or lien upon, or a pledge of, the Trust Estate ranking prior to or on a parity with the claim, lien and pledge created by the Trust Agreement as security for the Bonds, a preference or priority of any Bond over any other Bond or a reduction in the percentage of Bonds the consent of the Holders of which is required for any modification of the Trust Agreement without the unanimous consent of the Holders.

Without limiting the generality of the foregoing, the purchasers of any Bonds upon the original issuance thereof in accordance with the Trust Agreement may be deemed to have consented to any amendment to the Trust Agreement, any Supplemental Trust Agreement or any Bond permitted to be made with the consent of the Holders of Bonds with the same effect as if such Holders shall have filed a written consent to such amendment.

Events of Default and Remedies (*Sections 7.01, 7.02, 7.03 and 7.06*)

Events of Default under the Trust Agreement include, among others: failure to pay the principal of or interest on any of the Bonds when the same shall become due and payable; and default by the Authority in the performance of any covenant, condition, agreement or provision contained in any Bond or the Trust Agreement, subject to certain grace periods.

Enforcement and Priority of Payments Following Default (*Sections 4.03, 7.02 and 7.03*)

Upon the happening and continuance of any Event of Default, then and in every such case the Trustee may proceed, and upon the written request of the holders of not less than 25% in aggregate principal amount of the outstanding Bonds shall proceed, to protect and enforce its rights and the rights of the Holders under the laws of the State and under the Trust Agreement and any Credit Facility by such suits, actions or special proceedings in equity or at law as the Trustee shall deem most effectual to protect and enforce such rights.

In the enforcement of any remedy upon the occurrence of an Event of Default under the Trust Agreement, the Trustee shall be entitled to sue for, enforce payment of and receive any and all amounts then or during any default becoming, and at any time remaining, due from the Authority, for principal of or interest on the Bonds, or otherwise under any of the provisions of the Trust Agreement or of any Bonds, with interest on overdue payments of principal at the rate or rates of interest specified in the Bonds, together with any and all costs and expenses of collection and of all proceedings thereunder and under the Bonds, and to recover and enforce judgment or decree against the Authority, but solely as provided in the Trust Agreement and in the Bonds and from the sources and moneys provided therein and in the Bonds, for any portion of such amounts remaining unpaid and to collect in any manner provided by law the moneys adjudged or decreed to be payable.

The principal of the Bonds shall not be subject to acceleration by the Trustee or the Bondholders upon the occurrence of any Event of Default notwithstanding any other provision of the Trust Agreement.

If at any time there shall have occurred and be continuing an Event of Default, after payment of all amounts owing to the Trustee under the Trust Agreement, amounts held by the Trustee under the Trust Agreement, together with any moneys thereafter becoming available for such purpose, shall be applied as follows:

(a) unless the principal of all Outstanding Bonds shall have become due and payable, all such moneys shall be applied:

FIRST: to the payment to the persons entitled thereto of all installments of interest then due on the Bonds Outstanding and all amounts, if any, due under the Credit Facility Agreements as a result of any amounts realized under the Credit Facilities issued thereunder for the payment of interest due on such Bonds and interest on amounts realized under such Credit Facilities for the payment of the principal or Redemption Price of and interest on, and the purchase price of, such Bonds in the order in which such amounts became due and payable and, if the amount available shall not be sufficient to pay in full all such amounts due on any particular date, then to the payment of such amounts, ratably, according to the amounts due on such date, to the persons entitled thereto, without any discrimination or preference, except as to any difference in the respective rates of interest specified in such Bonds and Credit Facility Agreements;

SECOND: to the payment to the persons entitled thereto of the unpaid principal of any Outstanding Bonds that shall have become due and payable, in the order of their due dates, with interest thereon and all amounts, if any, due under the Credit Facility Agreements as a result of any amounts realized under the Credit Facilities issued thereunder for the payment of principal or Redemption Price of such Bonds from the respective dates upon which such amounts shall have become due and payable and, if the amount available shall not be sufficient to pay in full all such amounts due on any particular date, together with such interest, then first to the payment of such interest, ratably, according to the amount of interest due on such date, and then to the payment of the balance due under the Trust Agreement, ratably, according to the amount due on such date, to the persons entitled thereto, without any discrimination or preference, except as to any difference in the respective rates of interest specified in the Bonds and Credit Facility Agreements; and

THIRD: to the payment of any other amounts due under the Credit Facility Agreements; and

(b) if the principal of all Outstanding Bonds shall have become due by their terms, all such moneys shall be applied to the payment of the principal and interest then due and unpaid upon such Bonds and all amounts, if any, due under the Credit Facility Agreements as a result of any amounts realized under the Credit Facilities issued thereunder for the payment of the principal or Redemption Price of and interest on, or the purchase price of, such Bonds and interest on such amounts, ratably, according to the amounts due, to the persons entitled thereto, without any preference or priority of principal over interest or of interest over principal, or of any Bond or Credit Facility Agreement over any other Bond or Credit Facility Agreement, except as to any difference in the respective rates of interest specified in the Bonds.

Notwithstanding any other provision of the Trust Agreement (i) amounts on deposit in the funds and accounts established for particular Series of Bonds shall be applied solely to the payment of amounts due on such Bonds and amounts payable under any Credit Facility Agreement with respect to such Bonds as a result of amounts realized under any Credit Facility issued thereunder for the payment of the principal or Redemption Price of and interest on, and the purchase price of, such Bonds, and accrued interest on such amounts; (ii) the Trustee shall allocate any other amounts held by the Trustee under the Trust Agreement among the Outstanding Bonds of each Series after giving effect to the application of amounts on deposit in the funds and accounts maintained for such Bonds to the payment thereof, provided that the amount allocated to any Series of Bonds under the Trust Agreement shall not exceed the amount necessary to pay the principal of and interest on such Bonds after the application to such payment of any amount on deposit in any Debt Service Reserve Fund securing such Bonds; and (iii) prior to the application of any moneys that constitute proceeds of any Series of Tax-Exempt Bonds or the investment earnings on such proceeds to the payment of any Bond of any other Series, the Trustee shall obtain a Favorable Opinion of Bond Counsel.

Whenever moneys are to be applied by the Trustee pursuant to the provisions of the Trust Agreement, such moneys shall be applied by the Trustee at such times, and from time to time, as the Trustee may determine, having due regard to the amount of such moneys available for application and the likelihood of additional moneys becoming available for such application in the future. The setting aside of such moneys in trust for the benefit of all Holders shall constitute proper application by the Trustee, and the Trustee shall incur no liability whatsoever to the Authority, to any Holder or to any other person for any delay in applying any such moneys, so long as the Trustee acts with reasonable diligence, having due regard to the circumstances, and ultimately applies the same in accordance with such provisions of the Trust Agreement as may be applicable at the time of application by the Trustee. Whenever the Trustee shall exercise such discretion in applying such moneys, it shall fix the date (which shall be an Interest Payment Date for the Bonds unless the Trustee shall deem another date more suitable) upon which such application is to be made, and upon such date interest on the amounts of principal of the Bonds to be paid on such date shall cease to accrue. The Trustee shall give such notice as it may deem appropriate of the fixing of any such date. The Trustee shall not be required to make payment to the Holder of any Bond unless such Bond shall be presented to the Trustee for appropriate endorsement.

Restrictions upon Action by Individual Beneficiaries *(Section 7.06)*

No Holder of any Bond shall have any right to institute any suit, action or proceeding in equity or at law on any Bond for the execution of any trust under the Trust Agreement or for any other remedy thereunder unless (i) such Holder previously shall have given to the Trustee written notice of the Event of Default on account of which such suit, action or proceeding is to be instituted, (ii) the holders of not less than 25% in aggregate principal amount of the outstanding Bonds shall have made written request to the Trustee after the right to exercise such powers or right of action, as the case may be, shall have accrued, and shall have afforded the Trustee a reasonable opportunity either to proceed to exercise the powers granted by the Trust Agreement or to institute such action, suit or proceeding in its or their name, and (iii) there shall have been offered to the Trustee security and indemnity reasonably satisfactory to it against the costs, expenses and liabilities to be incurred therein or thereby, and the Trustee shall have refused or

neglected to comply with such request within a reasonable time. Notwithstanding the foregoing and without complying therewith, the holders of 25% or more in aggregate principal amount of the outstanding Bonds may institute any such suit, action or proceeding in their own names for the benefit of all Holders.

It is understood and intended that, except as otherwise described above, no one or more Holders shall have any right in any manner whatever to affect, disturb or prejudice the security of the Trust Agreement or to enforce any right thereunder except in the manner therein provided, and that all proceedings at law or in equity shall be instituted and maintained in the manner therein provided and for the benefit of all Holders and that any individual right of action or other right given by law to one or more of such Holders is restricted by the Trust Agreement to the rights and remedies described above.

Defeasance (*Section 9.01*)

If the Authority shall pay or cause to be paid the principal or Redemption Price of and interest on all Bonds at the times and in the manner stipulated therein and in the Trust Agreement, then the pledge of the Trust Estate to the Trustee for the benefit of the Holders and all other rights granted thereby to the Trustee or the Holders, other than rights which by their terms survive termination of the Trust Agreement, shall be discharged and satisfied. In such event, upon the written request of the Authority, the Trustee shall execute and deliver to the Authority all such instruments as may be desirable to evidence such discharge and satisfaction, and the Trustee shall pay or deliver to the Authority, or to such officer, board or body as may then be entitled by law to receive the same, all property held by it pursuant to the Trust Agreement (other than any moneys and securities required for the payment or redemption of Bonds not theretofore surrendered for such payment or redemption).

A Series 2019 Bond shall be deemed to have been paid within the meaning of, and with the effect expressed in the Trust Agreement if (i) money for the payment or redemption of such Bond shall be held by the Trustee (through deposit by the Authority of moneys for such payment or redemption or otherwise, regardless of the source of such moneys), whether at or prior to the maturity or the redemption date of such Bond, or (ii) if the maturity or redemption date of such Bond shall not have arrived, provision shall have been made by the Authority for the payment of the principal or Redemption Price of and interest on such Bond on the due dates for such payments by deposit with the Trustee (or other method satisfactory to the Trustee) of Government Obligations, the principal of and the interest on which when due will provide for such payment, provided that, if such Bond is to be redeemed prior to the maturity thereof, the Authority shall have taken all action necessary to redeem such Bond and notice of such redemption shall have been duly and irrevocably given or provisions satisfactory to the Trustee shall have been made for the giving of such notice.

Anything in the Trust Agreement to the contrary notwithstanding, at the written request of the Authority, any moneys held by the Trustee in trust for the payment of any of the Bonds that remain unclaimed for two years after the later of the date at which such Bonds became due and payable and the date of deposit of such moneys shall be repaid by the Trustee to the Authority, or to such officer, board or body as may then be entitled by law to receive such moneys, as its

absolute property and free from trust, and the Trustee shall thereupon be released and discharged with respect thereto.

Indemnification; Responsibilities of Trustee (*Sections 6.01 and 6.02*)

The Trustee shall be under no obligation to institute any suit, or to undertake any proceeding under the Trust Agreement, or to enter any appearance or in any way defend in any suit in which it may be made defendant, or to take any steps in the execution of the trusts thereby created or in the enforcement of any rights and powers thereunder, until it shall be indemnified to its satisfaction against any and all costs and expenses, advances, outlays and counsel fees and other reasonable disbursements, and against all liability except as a consequence of its own negligence, willful misconduct or its default of the Trust Agreement. Nevertheless, the Trustee may begin suit, or appear in and defend suit, or do anything else in its judgment proper to be done by it as the Trustee, without indemnity. Notwithstanding the foregoing, the Trustee shall not be entitled to indemnification prior to applying amounts on deposit in the Bond Fund to the payment of Bonds as provided under the Trust Agreement.

The recitals, statements and representations contained in the Trust Agreement and in the Bonds shall be taken as the statements of the Authority and not of the Trustee, and the Trustee assumes no responsibility for the correctness of the same. The Trustee makes no representations as to the validity or sufficiency of the Trust Agreement or with respect to the security afforded by the Trust Agreement or the due execution thereof by the Authority, and the Trustee shall incur no liability with respect thereto. Except as otherwise expressly provided in the Trust Agreement, the Trustee shall have no responsibility or duty with respect to: (i) the issuance of the Bonds for value, (ii) the application of the proceeds thereof, except to the extent that such proceeds are received by it in its capacity as Trustee, or (iii) the application of any moneys paid to the Authority or others in accordance with the Trust Agreement except as to the application of any moneys paid to it in its capacity as Trustee.

The duties and obligations of the Trustee shall be determined by the express provisions of the Trust Agreement and no implied covenant or obligation shall be read into the Trust Agreement against the Trustee, and the Trustee shall not be liable except for the performance of such duties and obligations as are specifically set forth in the Trust Agreement. The Trustee shall not be liable for any action taken or omitted by it in the performance of its duties under the Trust Agreement except for its own negligence, willful misconduct or its default of the Trust Agreement. In case an Event of Default shall have occurred and be continuing, the Trustee shall exercise such of the rights and powers vested in it by the Trust Agreement and use the same degree of care and skill in their exercise as a prudent person would exercise under the circumstances in the conduct of his or her own affairs.

The Trustee shall not be deemed to have notice of any default or Event of Default unless a responsible officer of the Trustee has actual knowledge thereof or unless written notice of any event which is in fact such default is received by the Trustee at the Designated Office of the Trustee, and such notice references the Bonds and the Trust Agreement. The rights, privileges, protections, immunities and benefits given to the Trustee, including (without limitation) its rights to be indemnified, are extended to, and shall be enforceable by the Trustee in each of its capacities under the Trust Agreement.

Resignation and Removal (*Sections 6.07 and 6.08*)

The Trustee may at any time resign and be discharged of its duties and obligations under the Trust Agreement by giving not fewer than 30 days' written notice, specifying the date when such resignation shall take effect, to the Authority and each Holder. Such resignation shall take effect upon the appointment of a successor Trustee and the acceptance of such appointment by such successor. The Trustee may be removed by the Authority so long as no Event of Default shall have occurred and be continuing or, if any Event of Default shall have occurred and be continuing, by the holders of a majority in aggregate principal amount of the outstanding Bonds by an instrument in writing signed and acknowledged by such Holders or by their attorneys-in-fact, duly authorized and delivered to the Authority. The Trustee may also be removed at any time for any breach of trust or for acting or proceeding in violation of, or for failing to act or proceed in accordance with, any provision of the Trust Agreement with respect to the duties and obligations of the Trustee by any court of competent jurisdiction upon the application of the Authority or of the holders of not less than ten percent in aggregate principal amount of the outstanding Bonds.

Successor Trustee (*Section 6.09*)

If the Trustee shall resign, be removed, be dissolved or become incapable of acting, or shall be adjudged a bankrupt or insolvent, or if a receiver, liquidator or conservator of the Trustee or of its property shall be appointed, or if any public officer shall take charge or control of the Trustee or of its property or affairs, the position of the Trustee shall thereupon become vacant. If the position of Trustee shall become vacant for any reason, a successor Trustee shall be appointed by the Authority.

The Authority shall mail notice of any such appointment of a successor Trustee to each Holder within 90 days after such appointment. If in a proper case no appointment of a successor Trustee shall be made within 60 days after the giving by any Trustee of any written notice of resignation or after the occurrence of any other event requiring or authorizing such appointment, the Trustee or any Holder may apply to any court of competent jurisdiction for the appointment of such a successor, and the court may thereupon, after such notice, if any, as the court may deem proper, appoint such successor.

Any successor Trustee appointed under the Trust Agreement shall be a commercial bank or trust company or national banking association having a capital and surplus aggregating at least \$100,000,000, if there be such a commercial bank or trust company or national banking association willing and able to accept the appointment on reasonable and customary terms, and authorized by law to perform all the duties of the Trustee required by the Trust Agreement.

Moneys and Funds Held for Particular Bonds (*Section 10.04*)

Amounts held by the Trustee for the payment of the principal or Redemption Price of, and interest on, or the purchase price of, Bonds due on any date shall, pending such payment, be set aside and held in trust by it for the Holders of such Bonds and, for the purposes of the Trust Agreement, such principal or Redemption Price of and interest on, or such purchase price, such Bonds shall no longer be considered to be unpaid, and the holders of such Bonds shall have no

further rights under the Trust Agreement except to receive payment from such amounts set aside or held for such payment.

No Recourse against Members and Officers (*Section 10.05*)

No recourse shall be had for the payment of the principal or Redemption Price of and interest on the Bonds or for any claims based thereon or on the Trust Agreement against any member or officer, employee or agent of the Authority, all such liability, if any, being expressly waived and released by every Holder of Bonds by the acceptance of such Bonds.

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APPENDIX B

PROPOSED FORM OF OPINION OF BOND COUNSEL

(Date of Delivery)

Maryland Transportation Authority
Baltimore, Maryland

Members of the Authority:

In connection with the issuance of \$_____ Maryland Transportation Authority Airport Passenger Facility Charge Revenue Bonds, Baltimore/Washington International Thurgood Marshall Airport, Series 2019 (Qualified Airport Bonds – AMT) (the “Series 2019 Bonds”), as limited obligations of the Maryland Transportation Authority (the “Authority”), we have examined:

(i) Title 4 of the Transportation Article of the Annotated Code of Maryland (2012 Replacement Volume and 2018 Supplement) (the “Act”);

(ii) a Trust Agreement dated as of December 1, 2003 between the Authority and Manufacturers and Traders Trust Company, as trustee (the “Trustee”), as amended and supplemented by the First Supplemental Trust Agreement dated as of April 1, 2012, the Second Supplemental Trust Agreement dated as of December 1, 2012, the Third Supplemental Trust Agreement dated as of December 1, 2014 and the Fourth Supplemental Trust Agreement dated as of June 1, 2019, each between the Authority and the Trustee (as so amended and supplemented, the “Trust Agreement”);

(iii) a Lease of Airport Facilities Projects at the Baltimore/Washington International Thurgood Marshall Airport and Assignment of Passenger Facility Charges dated as of June 1, 2019 (the “Lease”) among the State of Maryland (the “State”), the Authority and the Maryland Aviation Administration (the “MAA”);

(iv) an Agreement on Financing Airport Facilities Projects at Baltimore/Washington International Thurgood Marshall Airport dated as of June 1, 2019 between the Authority and the MAA (the “Financing Agreement”);

(v) the form of the Series 2019 Bond;

(vi) relevant provisions of the Constitution and laws of the State;

(vii) relevant provisions of the Internal Revenue Code of 1986, as amended (the “Code”); and

(viii) other proofs submitted to us relative to the issuance and sale of the Series 2019 Bonds.

The terms of the Series 2019 Bonds are contained in the Trust Agreement and the Series 2019 Bonds. The Series 2019 Bonds are subject to redemption in the manner and upon the terms and conditions set forth in the Trust Agreement.

We have made no investigation of, and are rendering no opinion regarding, the title to real or personal property.

In rendering this opinion, we have relied without independent investigation on the representations of certain officials of the Authority made on behalf of the Authority with respect to certain material facts within the knowledge of the Authority relevant to the tax-exempt status of interest on the Series 2019 Bonds, and certain related representations of certain officials of the MAA made on behalf of the MAA.

Based upon the foregoing, we are of the opinion that:

(a) The Trust Agreement has been duly authorized, executed and delivered by the Authority and, assuming the due authorization, execution and delivery thereof by the Trustee, constitutes the valid and binding obligation of the Authority in accordance with its terms.

(b) The Lease and the Financing Agreement have been duly authorized, executed and delivered by the Authority and, assuming the due authorization, execution and delivery thereof by the other parties thereto, constitute the valid and binding obligations of the Authority in accordance with their respective terms.

(c) The Authority is duly authorized and entitled to issue the Series 2019 Bonds. The Series 2019 Bonds executed, authenticated and delivered as provided in the Trust Agreement have been duly and validly issued and constitute valid and binding limited obligations of the Authority, payable solely from Pledged Revenues (as defined in the Trust Agreement) and other amounts pledged to such payment under the Trust Agreement. The Authority has heretofore issued revenue bonds under the Trust Agreement (the "Series 2012A Bonds," the "Series 2012B Bonds," the "Series 2012C Bonds" and the "Series 2014 Bonds") which remain outstanding and the Trust Agreement contains provisions permitting the issuance of Additional Bonds (as defined in the Trust Agreement). The Series 2012A Bonds, the Series 2012B Bonds, the Series 2012C Bonds, the Series 2014 Bonds, the Series 2019 Bonds and any Additional Bonds issued within the limitations and provisions of the Trust Agreement outstanding from time to time are equally and ratably secured by the Trust Agreement to the extent provided therein.

(d) The Series 2019 Bonds are limited obligations of the Authority payable solely from the Pledged Revenues. None of the State, the Maryland Department of Transportation (the "Department"), the MAA, the Authority or any political subdivision of the State shall be obligated to pay the Series 2019 Bonds or the interest thereon except from the Pledged Revenues and from other sources as provided in the Trust Agreement; and neither the faith and credit nor the taxing power of the State, the Department, the MAA, the Authority or any political subdivision of the State is pledged to the payment of the Series 2019 Bonds or the interest thereon. The issuance of the Series 2019 Bonds does not directly or indirectly or contingently obligate the State, the Department, the MAA, the Authority or any political subdivision of the State to levy or to pledge any form of taxation whatsoever therefor or to make any appropriation for their payment. None of the Authority, the Department or the MAA has taxing powers.

(e) Under the Act, the Series 2019 Bonds, their transfer, the interest payable on them, and any income derived from them, including any profit realized in their sale or exchange, shall

be exempt at all times from every kind and nature of taxation by the State of Maryland or by any of its political subdivisions, municipal corporations or public agencies of any kind. No opinion is expressed as to estate or inheritance taxes or other taxes not levied or assessed directly on the Series 2019 Bonds or the income therefrom.

(f) Assuming compliance with the covenants referred to herein, interest on the Series 2019 Bonds will be excludable from gross income for federal income tax purposes under existing statutes, regulations and decisions, except, with respect to any Series 2019 Bond, during the period that such Series 2019 Bond is owned by a “substantial user” of the financed facilities or a “related person” (as such terms are used in Section 147(a) of the Code). Under the provisions of the Code, there are certain restrictions that must be met subsequent to the delivery of the Series 2019 Bonds, including restrictions that must be complied with throughout the term of the Series 2019 Bonds in order for interest on the Series 2019 Bonds to remain excludable from gross income for federal income tax purposes. These include the following: (i) a requirement that certain earnings received from the investment of the proceeds of the Series 2019 Bonds be rebated (or that certain payments in lieu of rebate be made) to the United States of America under certain circumstances; (ii) other requirements applicable to the investment of the proceeds of the Series 2019 Bonds; and (iii) other requirements applicable to the use of the proceeds of the Series 2019 Bonds and the facilities financed or refinanced with such proceeds. Failure to comply with one or more of these requirements could result in the inclusion of the interest payable on the Series 2019 Bonds in gross income for federal income tax purposes, effective from the date of their issuance. The Authority and the MAA have made certain covenants regarding actions required to maintain the excludability of interest on the Bonds for federal income tax purposes of interest on the Series 2019 Bonds. It is our opinion that, assuming compliance with such covenants, the interest on the Series 2019 Bonds, will remain excludable from gross income for federal income tax purposes under the provisions of the Code, except, with respect to any Series 2019 Bond, during the period that such Series 2019 Bond is owned by a “substantial user” of the financed facilities or a “related person” (as such terms are used in Section 147(a) of the Code).

(g) Interest on the Series 2019 Bonds (i) is a specific preference item for purposes of the federal alternative minimum tax of individuals and certain other taxpayers and (ii) will be subject to the branch profits tax imposed by the Code on certain foreign corporations engaged in a trade or business in the United States of America.

We assume no obligation to supplement this opinion if any applicable laws or interpretations thereof change after the date hereof or if we become aware of any facts or circumstances that might change the opinions expressed herein after the date hereof. The opinions expressed above are limited to the matters set forth above, and no other opinions should be inferred beyond the matters expressly stated.

FORM OF CONTINUING DISCLOSURE AGREEMENT

This **CONTINUING DISCLOSURE AGREEMENT** (the “Disclosure Agreement”) dated as of June __, 2019, is executed and delivered by the Maryland Transportation Authority (the “Authority”) and Manufacturers and Traders Trust Company (the “Trustee”) in connection with the issuance by the Authority, on behalf of the Maryland Department of Transportation (the “Department”), of its Passenger Facility Charge Revenue Bonds, Series 2019, Baltimore/Washington International Thurgood Marshall Airport (Qualified Airport Bonds - AMT) (the “Series 2019 Bonds”). The Bonds are being issued pursuant to a Fourth Supplemental Trust Agreement dated as of June 1, 2019, amending and supplementing the Trust Agreement dated as of December 1, 2003 (as so amended and supplemented, the “Trust Agreement”), each by and between the Authority and the Trustee. The Authority and the Trustee covenant and agree as follows:

SECTION 1. Purpose of the Disclosure Agreement. This Disclosure Agreement is being executed and delivered by the Authority and the Trustee for the benefit of the owners of the Bonds, including Beneficial Owners (as defined herein) and in order to assist the Underwriter (as defined herein) in complying with the Rule (as defined herein). The obligations of the Authority and the Trustee hereunder shall be limited to those that would be required by written undertaking pursuant to the Rule.

SECTION 2. Definitions. In addition to the definitions set forth in the Trust Agreement, which apply to any capitalized term used in this Disclosure Agreement unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

“**Annual Information**” shall mean the financial information and operating data described in Exhibit B attached to this Disclosure Agreement, submitted annually to the Authority by the Maryland Aviation Administration (the “MAA”) or the Department.

“**Beneficial Owner**” shall mean any person which (i) has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds (including persons holding Bonds through nominees, depositories or other intermediaries), or (ii) is treated as the owner of any Bonds for federal income tax purposes.

“**Bond Counsel**” shall mean an attorney or firm of attorneys having a national reputation in the field of municipal law whose legal opinions are generally accepted by purchasers of municipal bonds designated by or on behalf of the Authority as bond counsel to the Authority.

“**Disclosure Representative**” shall mean the Executive Director or the Chief Financial Officer of the Authority or the Executive Director’s designee, or such other officer or employee as the Authority shall designate in writing to the Trustee from time to time.

“**Dissemination Agent**” shall mean any person designated by the Authority in writing to act as its agent hereunder and which has filed with the Trustee a written acceptance of such designation.

“**Financial Obligation**” shall mean (a) a debt obligation; (b) a derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (c) a guarantee of (a) or (b). The term Financial Obligation does not include municipal securities as to which a final official statement has been otherwise provided to the Municipal Securities Rulemaking Board under the Rule.

“**Listed Events**” shall mean any of the events listed in Section 5(a) of this Disclosure Agreement.

“**National Repository**” shall mean any Nationally Recognized Municipal Securities Information Repository for purposes of the Rule. The National Repository currently approved by the Securities and Exchange Commission is the repository established by the Municipal Securities Rulemaking Board, known as the Electronic Municipal Market Access System (“EMMA”), <http://emma.msrb.org/>.

“**Rule**” shall mean Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time, any successor provisions of similar import promulgated by the Securities and Exchange Commission in the future, and any applicable no-action letters and other authoritative interpretations of Rule 15c2-12 released by the Securities and Exchange Commission.

“**State**” means the State of Maryland.

“**Underwriter**” shall mean the purchaser of the Bonds required to comply with the Rule in connection with the offering of the Bonds.

SECTION 3. Provision of Annual Information.

(a) The Authority shall, or shall cause the Disclosure Representative to, not later than two hundred seventy-five (275) days after the end of the State’s fiscal year (presently June 30), commencing with the report for the fiscal year ending June 30, 2019, provide to the National Repository a report of Annual Information that is consistent with the requirements of Section 4 of this Disclosure Agreement. The MAA and the Department have agreed to timely provide to the Authority the Annual Information. The Annual Information may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Agreement. If the State’s fiscal year changes, the Authority shall give notice of such change in the same manner as notice of a Listed Event is required to be given under Section 5 of this Disclosure Agreement.

(b) Not later than fifteen (15) Business Days prior to the date specified in paragraph (a) of this Section 3 for providing the Annual Information to the National Repository, the Authority shall provide the Annual Information to the Trustee. If by such date, the Trustee has

not received a copy of the Annual Information, the Trustee shall contact the Authority to determine if the Authority is in compliance with the first sentence of this paragraph (b).

(c) If the Trustee is unable to verify that Annual Information has been provided to the National Repository by the date required in paragraph (a) of this Section 3, the Trustee shall send a notice to the National Repository in a timely manner in substantially the form attached as Exhibit A.

(d) The Authority shall determine each year prior to the date for providing the report of Annual Information the name and address of the National Repository.

SECTION 4. Content of Report of Annual Information. Subject to the provisions of Section 3(a) of this Disclosure Agreement, the Authority's Annual Information shall include the financial information and operating data of the type set forth in Exhibit B.

To the extent applicable, the presentation of any financial information and operating data provided in accordance with this Section shall be made in accordance with generally accepted accounting principles applicable to governmental entities from time to time as promulgated by the Government Accounting Standards Board.

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the State or related public entities, which have been submitted to the National Repository or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the Municipal Securities Rulemaking Board. The Authority shall clearly identify each such other document so included by reference.

The Authority may make changes to the presentation of the financial information required in this Section 4 necessitated by changes in generally accepted accounting principles, if applicable, and may otherwise modify the presentation of the financial information required herein, *provided* that this Disclosure Agreement is amended in accordance with Section 7 hereof.

SECTION 5. Reporting of Significant Events.

(a) Pursuant to the provisions of this Section 5, the Authority shall give, or cause to be given, notice of the occurrence of any of the following events with respect to the Bonds:

- (i) principal and interest payment delinquencies;
- (ii) non-payment related defaults, if material;
- (iii) modifications to rights of owners of the Bonds, if material;
- (iv) bond calls, if material, and tender offers;
- (v) defeasances;
- (vi) rating changes;

- (vii) adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds;
- (viii) unscheduled draws on the debt service reserves reflecting financial difficulties;
- (ix) unscheduled draws on credit enhancements reflecting financial difficulties;
- (x) substitution of credit or liquidity providers, or their failure to perform;
- (xi) release, substitution or sale of property securing repayment of the Bonds, if material;
- (xii) bankruptcy, insolvency, receivership or similar event of the obligated person;
- (xiii) the consummation of a merger, consolidation, or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;
- (xiv) appointment of a successor or additional trustee or the change of name of a trustee, if material;
- (xv) incurrence of a Financial Obligation of the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the obligated person, any of which affect the security holders, if material; and
- (xvi) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the obligated person, any of which reflects financial difficulties.

(b) The Trustee shall, within three (3) days of obtaining actual knowledge of the occurrence of a Listed Event, contact the Disclosure Representative, inform such person of the event, and request that the Authority promptly notify the Trustee in writing whether to report the event pursuant to paragraph (d) of this Section 5.

(c) Whenever the Authority obtains actual knowledge of the occurrence of an event which constitutes a Listed Event, the Authority shall file or cause the Trustee to file pursuant to paragraph (d) of this Section 5 a notice in a timely manner and in any event not in excess of ten (10) Business Days after the occurrence of such Listed Event with the National Repository.

Notwithstanding the foregoing, notice of Listed Events described in (a)(iv) and (a)(v) of this Section 5 need not be given under this paragraph any earlier than the notice (if any) of the underlying event is given to owners of affected Bonds pursuant to the Trust Agreement.

(d) If the Trustee has been instructed by the Authority in writing to report the occurrence of an event constituting a Listed Event, the Trustee shall file a notice of such occurrence with the National Repository in a timely manner and in any event not in excess of ten (10) Business Days after the occurrence of such Listed Event. Notwithstanding the foregoing, notice of Listed Events described in (a)(iv) and (a)(v) of this Section 5 need not be given under this paragraph any earlier than the notice (if any) of the underlying event is given to owners of affected Bonds pursuant to the Trust Agreement.

SECTION 6. Termination of Reporting Obligation. The Authority's obligations under this Disclosure Agreement shall terminate upon the prior redemption or payment in full of all of the Bonds. In addition, the Authority may terminate its obligations under this Disclosure Agreement if and when the Authority no longer remains an obligated person with respect to the Bonds within the meaning of the Rule.

SECTION 7. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Authority and the Trustee may amend this Disclosure Agreement (and the Trustee shall agree to any amendment so requested by the Authority), and any provision of this Disclosure Agreement may be waived, *provided* that the following conditions are satisfied:

(a) if the amendment or waiver relates to the provisions of Section 4 of this Disclosure Agreement, it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business conducted;

(b) the Disclosure Agreement, as amended or taking into account such waiver, would, in the opinion of Bond Counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) the amendment or waiver does not materially impair the interests of the Holders or Beneficial Owners of the Bonds, in the opinion of Bond Counsel.

In the event of any amendment or waiver of a provision of this Disclosure Agreement, the Authority shall describe such amendment in the next reporting of Annual Information, as set forth in Section 3, and shall include a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the Authority.

SECTION 8. Additional Information. Nothing in this Disclosure Agreement shall be deemed to prevent the Authority or the Department from disseminating any other information, using the means of dissemination set forth in this Disclosure Agreement or any other means of communication, or including any other information in any report of Annual Information or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Agreement.

If the Authority chooses to include any information in any report of Annual Information or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Agreement, the Authority shall have no obligation under this Disclosure Agreement to update such information or include it in any future report of Annual Information or notice of occurrence of a Listed Event.

SECTION 9. Failure to Comply. In the event of a failure of the Authority to comply with any provision of this Disclosure Agreement, the Authority shall be given written notice at the address set forth below of any claimed failure by the Authority to perform its obligations under this Disclosure Agreement, and the Authority shall be given forty-five (45) days to remedy any such claimed failure. Any registered owner or Beneficial Owner of the Bonds may take such actions as may be necessary and appropriate, including seeking mandamus or specific performance by court order, to cause the Authority to comply with its obligations under this Disclosure Agreement. A failure to comply with the provisions of this Disclosure Agreement shall not be deemed an event of default under the Trust Agreement, the Bonds or any documents relating to the Bonds, and the sole remedy under this Disclosure Agreement in the event of any failure of the Authority to comply with this Disclosure Agreement shall be an action to compel performance.

SECTION 10. Limitation of Forum. Any suit or other proceeding seeking redress with regard to any such claimed failure by the Authority must be filed in the Circuit Court for Anne Arundel County, Maryland, or the Maryland State Board of Contract Appeals (if applicable).

SECTION 11. Law of Maryland. This Disclosure Agreement, and any claim made with respect to the performance by the Authority of its obligations hereunder, shall be governed by, subject to, and construed in accordance with, the laws of the State and federal law.

SECTION 12. Performance of Obligations. Notwithstanding anything to the contrary contained in this Disclosure Agreement, the Authority's obligations as set forth in this Disclosure Agreement shall be undertaken and performed in accordance with the Rule, Securities and Exchange Commission interpretations of the Rule as published or provided from time to time, and applicable federal securities laws.

SECTION 13. Dissemination Agent. The Authority may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Agreement, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The Dissemination Agent shall not be responsible in any manner for the content of any notice or report prepared by the Authority pursuant to this Disclosure Agreement.

SECTION 14. Limitation on Trustee's Liability. The Trustee shall have no liability in connection with the Authority's filing obligations under this Disclosure Agreement. The Trustee shall have under this Disclosure Agreement only those duties specifically set forth in this Disclosure Agreement. To the extent permitted by law, the Authority agrees to save and indemnify the Trustee, its officers, directors, employees and agents, harmless against any loss, expense or liability arising out of the performance of its duties hereunder, excluding any loss, expense or liability due to the Trustee's negligence or willful misconduct.

SECTION 15. Notices. Any notices or communications to or among any of the parties to this Disclosure Agreement may be given as follows:

To the Authority: Maryland Transportation Authority
2310 Broening Highway
Baltimore, Maryland 21224
Attention: Executive Director
Telephone: (410) 537-1001

To the Trustee: Manufacturers and Traders Trust Company
Corporate Trust Services
25 South Charles Street MD2-Cs58
Baltimore, Maryland 21201
Attention: Donald C. Hargadon
Telephone: (410) 244-4224

Any person may, by written notice to the other person listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent.

SECTION 16. Beneficiaries. This Disclosure Agreement shall inure solely to the benefit of the Authority, the Trustee and owners and Beneficial Owners from time to time of the Bonds, and shall create no rights in any other person or entity.

SECTION 17. Counterparts. This Disclosure Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[The remainder of this page left blank intentionally.]

IN WITNESS WHEREOF this Continuing Disclosure Agreement is being executed on behalf of Maryland Transportation Authority and the Trustee and the seal of the Authority and the Trustee are being impressed hereon attested to, as of the date and year first above written.

(SEAL)

**MARYLAND TRANSPORTATION
AUTHORITY**

Attest: _____

By: _____
Acting Executive Director

(SEAL)

**MANUFACTURERS AND TRADERS
TRUST COMPANY, as Trustee**

Attest: _____

By: _____
Authorized Officer

Approved for Form and Legal Sufficiency

Principal Counsel
Maryland Transportation Authority

EXHIBIT A

NOTICE TO NATIONAL REPOSITORY OF FAILURE TO FILE ANNUAL INFORMATION

Name of Issuer: Maryland Transportation Authority

Name of Bond Issue: \$_____ Maryland Transportation Authority Passenger Facility Charge Revenue Bonds, Series 2019, Baltimore/Washington International Thurgood Marshall Airport (Qualified Airport Bonds - AMT)

Dated Date of Bonds: June ____, 2019

NOTICE IS HEREBY GIVEN that the above-named Issuer has not provided a report of Annual Information with respect to the above-named Bonds as required by the Continuing Disclosure Agreement between the Issuer and Manufacturers and Traders Trust Company, as Trustee.

Dated: _____

MANUFACTURERS AND TRADERS TRUST COMPANY

cc: Maryland Transportation Authority

EXHIBIT B

- (i) Debt service reserves for the prior fiscal year calculated in accordance with Section 4.09 of the Trust Agreement;
- (ii) PFC rate for such fiscal year; and
- (iii) PFC collections.

NOTICE OF SALE

\$122,290,000*

**MARYLAND TRANSPORTATION AUTHORITY
Passenger Facility Charge Revenue Bonds, Series 2019
Baltimore/Washington International Thurgood Marshall Airport
(Qualified Airport Bonds - AMT)**

SALE DATE: June 5, 2019

SALE TIME: 11:00 a.m., LOCAL BALTIMORE, MARYLAND, TIME

Electronic bids only will be received by the Chief Financial Officer of the Maryland Transportation Authority (the "Authority") or other officer of the Authority designated by the Authority (either such officer being the "Designated Officer") at the offices of the Executive Director of the Authority via *PARITY*® for the purchase of the above described revenue bonds of the Authority (the "Series 2019 Bonds"), in the aggregate principal amount of \$122,290,000*, all dated the date of delivery and bearing interest from the date of delivery payable on December 1, 2019, and semiannually thereafter on each December 1 and June 1 until maturity or prior redemption as hereinafter set forth.

INTEREST ON THE SERIES 2019 BONDS WILL BE EXCLUDABLE FROM GROSS INCOME FOR FEDERAL INCOME TAX PURPOSES EXCEPT, WITH RESPECT TO ANY SERIES 2019 BOND, DURING ANY PERIOD THAT SUCH SERIES 2019 BOND IS OWNED BY A "SUBSTANTIAL USER" OF THE PROJECT OR A "RELATED PERSON" (AS SUCH TERMS ARE USED IN SECTION 147(A) OF THE INTERNAL REVENUE CODE OF 1986, AS AMENDED) AND, AS DESCRIBED IN THE PRELIMINARY OFFICIAL STATEMENT, INTEREST EARNED ON THE SERIES 2019 BONDS WILL BE INCLUDABLE IN THE ALTERNATIVE MINIMUM TAXABLE INCOME OF INDIVIDUALS AS AN ENUMERATED ITEM OF TAX PREFERENCE OR OTHER SPECIFIC ADJUSTMENT. BIDDERS SHOULD CONSULT THEIR TAX ADVISORS REGARDING TAX ADVICE WITH RESPECT TO THE SERIES 2019 BONDS.

The Series 2019 Bonds will mature, subject to prior redemption as hereinafter set forth, on June 1 in the following years and in the following principal amounts:

Maturity Schedule of the Series 2019 Bonds

Maturing <u>June 1</u>	Principal <u>Amount*</u>	Maturing <u>June 1</u>	Principal <u>Amount*</u>
2021	4,185,000	2031	6,720,000
2022	4,395,000	2032	6,955,000
2023	4,615,000	2033	7,195,000
2024	4,845,000	2034	7,450,000
2025	5,085,000	2035	7,710,000
2026	5,340,000	2036	7,980,000
2027	5,605,000	2037	8,260,000
2028	5,890,000	2038	8,545,000
2029	6,180,000	2039	8,845,000
2030	6,490,000		

* Preliminary, subject to change.

Book-Entry Only

The Series 2019 Bonds shall be issued only in fully registered form without coupons. One bond representing each maturity will be issued to and registered in the name of Cede & Co., as nominee for The Depository Trust Company, New York, New York or its successor (“DTC”), as registered owner of the Series 2019 Bonds and each such bond shall be immobilized in the custody of DTC. DTC will act as securities depository for the Series 2019 Bonds. Individual purchases will be made in book-entry form only, in the principal amount of \$5,000 or any integral multiple thereof. Purchasers will not receive physical delivery of certificates representing their interest in the Series 2019 Bonds purchased. The winning bidder, as a condition to delivery of the Series 2019 Bonds, will be required to deposit the bond certificates representing each maturity with DTC.

General Information

The Series 2019 Bonds are authorized pursuant to Title 4 of the Transportation Article of the Annotated Code of Maryland, as amended, and by resolutions of the Authority.

The proceeds of the Series 2019 Bonds will be used to: (i) finance a portion of the costs of construction of certain airport facilities projects (the “Project”) located at Baltimore/Washington International Thurgood Marshall Airport (“BWI Marshall Airport”), (ii) fund the 2012/14/19 Debt Service Reserve Fund, and (iii) pay certain costs of issuance of the Series 2019 Bonds.

The Series 2019 Bonds are limited obligations of the Authority payable, as to principal and interest, solely from the revenues and funds pledged therefor under the Trust Agreement dated as of December 1, 2003, as amended and supplemented (the “Trust Agreement”), by and between the Authority and Manufacturers and Traders Trust Company, as trustee (the “Trustee”), and are not and shall not be deemed (i) to be general obligations of the Authority, (ii) to constitute obligations of the Department of Transportation of Maryland (the “Department”), (iii) to constitute obligations of the Maryland Aviation Authority (the “MAA”), or (iv) to constitute a debt or pledge of the faith and credit of the State of Maryland (the “State”) or any political subdivision thereof.

Security for the Series 2019 Bonds

The principal of and interest on the Series 2019 Bonds are payable solely from the Pledged Revenues (as defined in the Trust Agreement) pledged and assigned by the Authority to the Trustee pursuant to the Trust Agreement. The Series 2019 Bonds are limited obligations of the Authority and do not constitute a debt or a pledge of the faith and credit of the State, the Department or the MAA, and neither the faith and credit nor the taxing power of the State nor the revenues of the Department, the MAA or the Authority (other than the Pledged Revenues) are pledged to the payment of the principal of or the interest on the Series 2019 Bonds. Neither the Authority nor the Department nor the MAA has taxing power.

The Trust Agreement does not convey title to or mortgage the Project or any other property. The Authority, the Department and the MAA have no obligation to rebuild any damaged or destroyed airport facilities projects at BWI Marshall Airport regardless of the existence of insurance proceeds. The Series 2019 Bonds are not secured by a pledge of revenues of any facilities (other than the Pledged Revenues), and no such revenues will be available to pay debt service on the Series 2019 Bonds.

Optional Redemption

The Series 2019 Bonds maturing on or after June 1, 2030 are subject to redemption on or after June 1, 2029 in whole or in part at any time at the option of the Authority at a redemption price equal to 100% of the principal amount thereof, together with interest accrued to the date of redemption.

Mandatory Sinking Fund Redemption

The successful bidder for the Series 2019 Bonds may designate Series 2019 Bonds maturing on and after June 1, 2030 as term bonds (“Term Bonds”) in accordance with the section of this Notice of Sale captioned “Right to Specify Term Bonds.” Term Bonds shall be subject to mandatory sinking fund redemption by the Authority at a

redemption price equal to 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption at the rate stated in the Term Bonds to be redeemed. Each such mandatory sinking fund redemption shall be made on the date on which a sequential maturity included as part of a Term Bond would otherwise have been payable and in the amount of the maturing principal such maturity, determined as described in this Notice of Sale, due on such payment date.

Electronic Bidding and Bidding Procedures

Notice is hereby given that electronic proposals will be received via *PARITY*®, in the manner described below at the Sale Time on the Sale Date.

Bids may be submitted electronically pursuant to this Notice of Sale until the Sale Time on the Sale Date, but no bid will be received after the time for receiving bids specified above. To the extent any instructions or directions set forth in *PARITY*© conflict with this Notice of Sale, the terms of this Notice of Sale shall control. For further information about *PARITY*©, potential bidders may contact *PARITY*© at i-Deal, LLC, at 1359 Broadway, 2nd Floor, New York, NY 10018 and by telephone at (212) 849-5021.

Electronic bids must be submitted for the purchase of the Series 2019 Bonds (all or none) via *PARITY*©. Bids will be communicated electronically to the Authority at the Sale Time on the Sale Date. Prior to that time, a prospective bidder may (1) submit the proposed terms of its bid via *PARITY*©, (2) modify the proposed terms of its bid, in which event the proposed terms as last modified will (unless the bid is withdrawn as described herein) constitute its bid for the Series 2019 Bonds or (3) withdraw its proposed bid. Once the bids are communicated electronically via *PARITY*© to the Authority, each bid will constitute an irrevocable offer to purchase the Series 2019 Bonds on the terms therein provided. For purposes of the electronic bidding process, the time as maintained on *PARITY*© shall constitute the official time.

Disclaimer

Each prospective electronic bidder shall be solely responsible to submit its bid via *PARITY*© as described above. Each prospective electronic bidder shall be solely responsible to make necessary arrangements to access *PARITY*© for the purpose of submitting its bid in a timely manner and in compliance with the requirements of this Notice of Sale. Neither the Authority nor *PARITY*© shall have any duty or obligation to provide or assure access to *PARITY*© to any prospective bidder, and neither the Authority nor *PARITY*© shall be responsible for proper operation of, or have any liability for any delays or interruptions of, or any damages caused by, *PARITY*©. The Authority is using *PARITY*© as a communication mechanism, and not as the Authority's agent, to conduct the electronic bidding for the Series 2019 Bonds. The Authority is not bound by any advice and determination of *PARITY*© to the effect that any particular bid complies with the terms of this Notice of Sale and in particular the "Bid Specifications" hereinafter set forth. All costs and expenses incurred by prospective bidders in connection with their submission of bids via *PARITY*© are the sole responsibility of the bidders; and the Authority is not responsible, directly or indirectly, for any of such costs or expenses. If a prospective bidder encounters any difficulty in submitting, modifying, or withdrawing a bid for the Series 2019 Bonds, the bidder should telephone *PARITY*® at i-Deal, LLC, (212) 849-5021 and notify the financial advisor, PFM Financial Advisors, LLC by telephone at (212) 809-4212.

Good Faith Deposit

The successful bidder for the Series 2019 Bonds is required to submit a good faith deposit (the "Good Faith Deposit") in the amount of \$1,100,000 payable to the order of the Authority in the form of a wire transfer in federal funds as instructed by the Authority's financial advisor. The successful bidder shall submit the Good Faith Deposit not more than two hours after verbal award is made. The successful bidder should provide, as quickly as it is available, evidence of wire transfer by providing the Authority the federal funds reference number. If the Good Faith Deposit is not received in the time allotted, the bid of the successful bidder may be rejected and the Authority may direct the next lowest bidder to submit a Good Faith Deposit and thereafter may award the sale of the Series 2019 Bonds to such bidder. If the successful bidder fails to comply with the Good Faith Deposit requirement as described herein, that bidder is nonetheless obligated to pay to the Authority the sum of \$1,100,000 as liquidated damages due to the failure of the successful bidder to timely deposit the Good Faith Deposit. If the successful bidder fails to comply with the

terms of its bid, the Good Faith Deposit may be retained by the Authority as full liquidated damages; otherwise the amount thereof will be applied to the purchase price of the Series 2019 Bonds at the time of delivery. No interest on the Good Faith Deposit will accrue to the successful bidder.

Bid Specifications

Proposals for purchase of the Series 2019 Bonds must be for all of the Series 2019 Bonds herein described and must be submitted electronically pursuant to this Notice of Sale until the Sale Time on the Sale Date. In their proposals, bidders are requested to specify the annual rate or rates of interest to be borne by the Series 2019 Bonds. Bidders are requested to name the interest rate or rates in multiples of 1/8 or 1/20 of 1%. Bidders may specify more than one rate of interest to be borne by the Series 2019 Bonds, but all Series 2019 Bonds maturing on the same date must bear interest at the same rate. Series 2019 Bonds on successive maturity dates may bear the same interest rate. No Series 2019 Bond shall bear more than one rate of interest, which rate shall be uniform for the life of the Series 2019 Bond. The maximum difference between the high and low coupon may not exceed four percent (4%). No bid of less than 99.5% of par will be considered. After selecting the winning bid, the Authority will determine the final aggregate principal amount of the Series 2019 Bonds (the "Final Aggregate Principal Amount") and each final annual principal amount of the Series 2019 Bonds (the "Final Annual Principal Amounts," together with the Final Aggregate Principal Amount, the "Final Amounts"). In determining the Final Amounts, the Authority reserves the right to reduce or increase the aggregate principal amount of the Series 2019 Bonds by up to 15%, and any maturity or mandatory sinking fund installment by up to 15% of the corresponding amount set forth in the winning bid.

Right to Specify Term Bonds

Each bidder may designate in its proposal any two or more sequential maturities of the Series 2019 Bonds maturing on or after June 1, 2030 as mandatory sinking fund installments due on a Term Bond maturing on the maturity date of the last maturity of the sequence. Each such Term Bond shall be issued in a principal amount equal to the sum of the principal amount of Series 2019 Bonds in each year of such sequence. The bidder shall name a single rate of interest to be borne by each such Term Bond. Each bidder may designate more than one Term Bond.

Adjustments to Principal Amounts

The preliminary aggregate principal amount of the Series 2019 Bonds and the preliminary principal amount of each maturity of the Series 2019 Bonds as set forth in this Notice of Sale (the "Preliminary Aggregate Principal Amount" and the "Preliminary Principal Amount", respectively, collectively, the "Preliminary Amounts") may be revised before the receipt of electronic bids for their purchase. ANY REVISIONS TO THE PRELIMINARY AMOUNTS (the "Revised Aggregate Principal Amount" and the "Revised Principal Amount" of each maturity of the Series 2019 Bonds, respectively, the "Revised Amounts") WILL BE PUBLISHED ON THE THOMSON MUNICIPAL MONITOR ("TM3") (www.tm3.com) NEWS SERVICE NOT LATER THAN 9:30 A.M. (LOCAL BALTIMORE, MARYLAND TIME) ON THE DATE OF SALE. In the event that no such revisions are made, the Preliminary Amounts will constitute the Revised Amounts. Bidders shall submit bids based on the Revised Amounts and the Revised Amounts will be used to compare bids and select a winning bidder.

Award of Bonds

The award, if made, will be made as promptly as possible after the bids are opened to the bidder naming the lowest true interest cost for all the Series 2019 Bonds in any legally acceptable proposal. The lowest true interest cost will be determined with respect to each proposal by doubling the semiannual interest rate, compounded semiannually, necessary to discount the debt service payments to the date of the Series 2019 Bonds and to the price bid. Each bidder shall include in its bid a statement of the true interest cost offered in its bid, but this statement shall not be deemed to be part of the bid. Where the proposals of two or more bidders result in the same lowest true interest cost, the Series 2019 Bonds may be apportioned between such bidders, but if this shall not be acceptable to the Authority, the Designated Officer shall have the right to award all of such Series 2019 Bonds to one bidder. **THE RIGHT IS RESERVED TO THE DESIGNATED OFFICER TO REJECT ANY OR ALL PROPOSALS AND TO WAIVE ANY IRREGULARITIES IN ANY OF THE PROPOSALS.** The judgment of the Designated Officer shall be final and binding upon all bidders with respect to the form and adequacy of any proposal received and as to its conformity to the terms of this Notice of Sale.

After selection of the winning bid, the Authority will determine the final aggregate principal amount of the Series 2019 Bonds (the “Final Aggregate Principal Amount”) and each final annual principal amount of the Series 2019 Bonds (the “Final Annual Principal Amounts,” and together with the Final Aggregate Principal Amount, the “Final Amounts”). In determining the Final Amounts, the Authority reserves the right to reduce or increase the aggregate principal amount of Series 2019 Bonds by up to 15% from the amount bid upon to take into account any premium bid and to provide for approximately level annual debt service savings. The dollar amount bid by the successful bidder will be adjusted to reflect any adjustments in the aggregate principal amount and individual maturity amounts of the Series 2019 Bonds. Such adjusted bid price will reflect changes in the dollar amount of the underwriters’ discount and original issue discount/premium, if any, but will not change the underwriters’ discount per \$1,000 of par amount of the Series 2019 Bonds from the underwriters’ discount that would have been received based on the purchase price in the winning bid and the initial public offering prices. The interest rates specified by the successful bidder for each maturity in its bid for the Series 2019 Bonds will not change. **ALL BIDS SHALL REMAIN FIRM UNTIL 4:00 P.M. ON THE SALE DATE.** An award of the Series 2019 Bonds, if made, will be made by the Designated Officer within such five (5) hour period of time. The Final Amounts will be communicated to the successful bidder as soon as possible, but not later than 4:00 p.m., local Baltimore, Maryland time on the Sale Date. **THE SUCCESSFUL BIDDER MAY NOT WITHDRAW ITS BID OR CHANGE THE INTEREST RATES BID OR THE INITIAL REOFFERING PRICES AS A RESULT OF ANY CHANGES MADE WITHIN THESE LIMITS.**

Issue Price Determination

The Authority expects and intends that the bid for the Series 2019 Bonds will satisfy the federal tax requirements for a qualified competitive sale of bonds, including, among other things, receipt of bids for the Series 2019 Bonds from at least three underwriters, who have established industry reputations for underwriting new issuances of municipal bonds (a “Qualified Competitive Bid”). The Designated Officer will advise the successful bidder as promptly as possible after the bids are opened whether the bid constitutes a Qualified Competitive Bid, or, in the alternative, a bid that fails to satisfy such requirements (a “Nonqualified Competitive Bid”).

If the bid is a Qualified Competitive Bid, as promptly as possible after the bids are opened, the Designated Officer will notify the successful bidder, and such bidder, upon such notice, shall advise the Designated Officer of the reasonably expected Initial Offering Price to the public of each maturity of the Bonds. In addition, the winning bidder shall be required to provide to the Authority information to establish the Initial Offering Prices for each maturity of the Bonds for federal income tax purposes by completing a certificate acceptable to Bond Counsel to the Authority, on or before the date of issuance of the Bonds, substantially in the form set forth in Appendix F-1 to the Preliminary Official Statement, with appropriate completions, amendments and attachments.

If the bid is a Nonqualified Competitive Bid, as promptly as possible after the bids are opened, the Designated Officer will notify the successful bidder, and such bidder, upon such notice, shall advise the Designated Officer of the initial sale price or Initial Offering Price to the public, as applicable, of each maturity of the Bonds. In addition, the winning bidder shall be required to provide to the Authority information and assurances to establish the initial sale price or the Initial Offering Price to the public, as applicable, for each maturity of the Bonds for federal income tax purposes by completing a certification acceptable to Bond Counsel in substantially the form set forth in Appendix F-2 to the Preliminary Official Statement, with appropriate completions, omissions and attachments. **It is noted that procedures for a Nonqualified Competitive Bid may require the winning bidder and, if applicable, other underwriters of the Bonds, to hold the Initial Offering Prices for certain maturities of the Bonds for up to 5 business days after the sale date, as further specified in the form of such certification.**

Closing and Miscellaneous

Legal Opinions

The Series 2019 Bonds will be issued and sold subject to approval as to legality by McKennon Shelton & Henn LLP of Baltimore, Maryland, Bond Counsel to the Authority. Copies of the approving opinion of McKennon Shelton & Henn LLP will be delivered, upon request, to the purchaser or purchasers of the Series 2019 Bonds, without

charge. Such opinion shall be substantially in the form included in Appendix B to the Preliminary Official Statement referred to below.

Continuing Disclosure

In order to assist bidders in complying with SEC Rule 15c2-12(b)(5), the Authority will execute and deliver a continuing disclosure agreement on or before the date of issuance of the Series 2019 Bonds pursuant to which it will undertake to provide certain information annually and notices of certain events. A description of this agreement is set forth in the Preliminary Official Statement and will also be set forth in the Official Statement.

Delivery of the Series 2019 Bonds

When delivered, one bond representing each maturity of the Series 2019 Bonds shall be duly executed and authenticated and registered in the name of Cede & Co., as nominee of DTC, as registered owner of the Series 2019 Bonds.

It is anticipated that CUSIP identification numbers will be printed on the Series 2019 Bonds, but neither the failure to print such numbers on any bond nor any error with respect thereto shall constitute cause for a failure or refusal by the successful bidder to accept delivery of and pay for the Series 2019 Bonds in accordance with the terms of this Notice of Sale.

Not later than seven (7) business days after the date of sale, the Authority will deliver to the successful bidder an Official Statement, which is expected to be substantially in the form of the Preliminary Official Statement referred to below. If so requested by the purchaser or purchasers at or before the close of business on the date of the sale, the Authority will include in the Official Statement such pricing and other information with respect to the terms of the reoffering of the Series 2019 Bonds by the successful bidder (“Reoffering Information”), if any, as may be specified and furnished in writing by such bidder. If no Reoffering Information is specified and furnished by the successful bidder, the Official Statement will include the interest rates on the Series 2019 Bonds resulting from the bid of the successful bidder and the other statements with respect to reoffering contained in the Preliminary Official Statement. The successful bidder shall be responsible to the Authority and its officials for the Reoffering Information, and for all decisions made by such bidder with respect to the use or omission of the Reoffering Information in any reoffering of the Series 2019 Bonds, including the presentation or exclusion of any Reoffering Information in any documents, including the Official Statement. The successful bidder will also be furnished, with an electric link of the Official Statement (and any amendments or supplements thereto).

Delivery of the Series 2019 Bonds, without expense, will be made by the Authority to DTC on June 19, 2019 or as soon as practicable thereafter, and, thereupon, the purchaser or purchasers will be required to accept delivery of the Series 2019 Bonds purchased and pay, in federal funds, the balance of the purchase price due. Such Series 2019 bonds will be accompanied by the customary closing documents, including a no-litigation certificate, effective as of the date of delivery, stating that there is no litigation pending affecting the validity of the Series 2019 Bonds. It shall be a condition to the obligation of such purchaser or purchasers to accept delivery of and pay for the Series 2019 Bonds that, simultaneously with or before delivery and payment for the Series 2019 Bonds, such purchaser or purchasers shall be furnished a certificate or certificates of a Designated Officer of the Authority to the effect that, to the best of their knowledge and belief, the Official Statement and any amendment or supplement thereto (except for the Reoffering Information provided by the purchaser and information regarding DTC and DTC’s book-entry system provided by DTC, as to which no view will be expressed), as of the date of sale and as of the date of delivery of the Series 2019 Bonds, does not contain any untrue statement of a material fact and does not omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, except as reflected or contemplated in the Official Statement.

SIMULTANEOUSLY WITH OR BEFORE DELIVERY OF THE SERIES 2019 BONDS, THE SUCCESSFUL BIDDER SHALL FURNISH TO THE AUTHORITY A CERTIFICATE ACCEPTABLE TO BOND COUNSEL TO THE EFFECT THAT (I) THE SUCCESSFUL BIDDER HAS MADE A *BONA FIDE* PUBLIC OFFERING OF THE SERIES 2019 BONDS AT THE INITIAL REOFFERING PRICES, (II) AS OF THE DATE OF THE SALE OF THE SERIES 2019 BONDS, THE SUCCESSFUL BIDDER REASONABLY EXPECTED TO SELL A SUBSTANTIAL AMOUNT OF THE SERIES 2019 BONDS AT THE INITIAL

OFFERING PRICES AND (III) A SUBSTANTIAL AMOUNT OF THE SERIES 2019 BONDS WAS SOLD TO THE PUBLIC (EXCLUDING BOND HOUSES, BROKERS AND OTHER INTERMEDIARIES) AT SUCH INITIAL REOFFERING PRICES OR SUCH OTHER FACTS REGARDING THE ACTUAL SALE OF THE SERIES 2019 BONDS AS BOND COUNSEL SHALL REQUEST. Bond Counsel advises that (i) such certificate must be made on the best knowledge, information and belief of the successful bidder, (ii) the sale to the public of ten percent (10%) or more in par amount of the Series 2019 Bonds of each maturity at (or below) the Initial Reoffering Prices would be sufficient to certify as to the sale of a substantial amount of the Series 2019 Bonds, and (iii) reliance on other facts as a basis for such certification would require evaluation by Bond Counsel to assure compliance with the statutory requirement to avoid the establishment of an artificial price for the Series 2019 Bonds.

A Preliminary Official Statement, together with this Notice of Sale, may be obtained from Allen Garman, Maryland Transportation Authority, 2310 Broening Highway, Baltimore, Maryland 21224, (410) 537-5710 or Milly Lee, PFM Financial Advisors, LLC, 40 Wall Street, 49th Floor, New York, New York 10005, (212) 809-4212. Such Preliminary Official Statement is deemed final by the Authority as of its date for purposes of SEC Rule 15c2-12, but is subject to revision, amendment and completion in the Official Statement referred to above.

Right to Change Notice of Sale and Postpone Offering

The Authority reserves the right to change this Notice of Sale and to postpone, from time to time, the date established for the receipt of bids. In the event of a postponement, the new date and time of sale will be announced via TM3-News Service at least twenty-four (24) hours prior to the time proposals are to be submitted. On any such alternative Sale Date, bidders may submit electronic bids for the purchase of the Series 2019 Bonds in conformity with the provision of this Notice of Sale, except for any changes to this Notice of Sale, the change of the date of sale and the changes described in the next sentence. If the date fixed for receipt of bids is postponed, the expected date of delivery of the Series 2019 Bonds also may be postponed. Such changes, if any, will be announced via TM3-News Service at the time any alternative Sale Date is announced.

MARYLAND TRANSPORTATION AUTHORITY

By: _____
John J. O'Neill
Acting Executive Director

Appendix E

REPORT OF THE AIRPORT CONSULTANT
on the proposed issuance of
MARYLAND TRANSPORTATION AUTHORITY
PASSENGER FACILITY CHARGE REVENUE BONDS
Series 2019

Prepared for

Maryland Department of Transportation
Maryland Transportation Authority
Maryland Aviation Administration

Prepared by

LeighFisher
Burlingame, California

May 22, 2019

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May 22, 2019

Mr. John J. O'Neill
Acting Executive Director
Maryland Transportation Authority
2400 Broening Highway, Suite 115
Baltimore, Maryland 21224

Mr. Ricky D. Smith, Sr.
Executive Director
Maryland Aviation Administration
Baltimore/Washington International Thurgood Marshall Airport
P.O. Box 8766
BWI Airport, Maryland 21240-0766

Re: **Report of the Airport Consultant**
Maryland Transportation Authority
Passenger Facility Charge Revenue Bonds, Series 2019
Baltimore/Washington International Thurgood Marshall Airport

Dear Mr. O'Neill and Mr. Smith:

We are pleased to submit this Report of the Airport Consultant on certain aspects of the proposed issuance by the Maryland Transportation Authority (Authority) of its Passenger Facility Charge Revenue Bonds, Series 2019 (2019 PFC Bonds). The 2019 PFC Bonds are to be issued on behalf of the Maryland Aviation Administration (MAA), a unit of the Maryland Department of Transportation (Department or MDOT) and operator of the Baltimore/Washington International Thurgood Marshall Airport (Airport or BWI). This letter and the accompanying attachment and financial exhibits constitute our report.

The proceeds of the proposed 2019 PFC Bonds are to be used to fund certain of the costs of constructing a five-gate expansion of Concourse A at the passenger terminal and other capital improvements at the Airport (collectively, the 2019 PFC Project). Such use of PFC revenues was approved by the Federal Aviation Administration (FAA) under a federal agency decision issued in March 2019 on MAA's PFC Application 13.

PFC Trust Agreement

The proposed 2019 PFC Bonds are to be issued pursuant to the provisions of the Authority's Trust Agreement with the Trustee dated December 1, 2003, as subsequently amended and supplemented (PFC Trust Agreement), authorizing the issuance of bonds payable from certain revenues derived from the collection of a

Mr. John J. O'Neill
Mr. Ricky D. Smith, Sr.
May 22, 2019

PFC from eligible passenger enplaning at the Airport. Except as otherwise defined in this report, capitalized terms used herein are as defined in the PFC Trust Agreement.

The 2019 PFC Bonds are to be limited obligations of the Authority secured by and payable solely from Pledged Revenues as defined in the PFC Trust Agreement. Such Pledged Revenues include all revenues derived from the imposition of a PFC of up to \$4.50 per eligible passenger, any additional PFC revenues that may be pledged by the Authority, and interest earnings on the funds and accounts created by the PFC Trust Agreement. The 2019 PFC Bonds are to be secured by and payable from the Pledged Revenues on a parity with the Authority's outstanding 2012A PFC Bonds, 2012B PFC Bonds, 2012C PFC Bonds, and 2014 PFC Bonds.

Additional Bonds Test

Section 2.05 of the PFC Trust Agreement sets forth requirements that must be satisfied before Additional Bonds may be issued. Among these is a requirement that there be delivered to the Trustee a Certificate of the Authority to the effect that:

- (1) The amount of the Pledged Revenues actually collected in the most recent Bond Year was not less than 150% of the Debt Service Requirements of Outstanding Bonds for such Bond Year, and
- (2) During each of the five Bond Years immediately succeeding the later of the date of delivery of such Additional Bonds and the date to which interest on such Additional Bonds has been funded, estimated Pledged Revenues are projected to be not less than 150% of the Debt Service Requirements of Outstanding Bonds for each such Bond Year, taking into account the Additional Bonds to be issued.

These requirements are referred to in this report as the Additional Bonds Test. Bond Years are defined in the PFC Trust Agreement as the 12 months ending June 1. MAA's Fiscal Year (FY) is the 12 months ending June 30. For the calculations presented in this report, Bond Years and Fiscal Years are assumed to coincide.

The applicable years for the Additional Bonds Test for the proposed 2019 PFC Bonds are FY 2018 (historical requirement) and FY 2020 through FY 2024 (forecast requirement).

Mr. John J. O'Neill
 Mr. Ricky D. Smith, Sr.
 May 22, 2019

Scope of Study

This report was prepared to evaluate the ability of MAA to generate sufficient Pledged Revenues to meet the requirements of the Additional Bonds Test. In preparing the report, we analyzed:

- Future airline traffic demand at the Airport, giving considerations to the demographic and economic characteristics of the region served, historical trends in airline traffic, the role of the Airport as a key airport for Southwest Airlines, and other factors that may affect future passenger traffic.
- Historical relationships among PFC revenues and passenger traffic at the Airport and other factors that may affect future Pledged Revenues.
- The funding plan for Airport capital improvement projects that are to be funded in whole or in part with PFC revenues, either through the payment of PFC Bond debt service or through the payment of project costs pay-as-you-go.

We also identified key factors upon which future airline traffic and PFC revenues may depend and formulated assumptions about those factors. On the basis of these assumptions, we assembled the financial forecasts presented in the exhibits at the end of the report. Estimates of project costs, project financing, and annual debt service requirements were provided by the sources noted in the exhibits.

Financial Forecasts

As shown in Exhibit C and the following table, MAA is in compliance with the historical and forecast coverage ratio requirements of the Additional Bonds Test.

Fiscal Year	Pledged Revenues [A]	Debt Service Requirements (a) [B]	Coverage ratio [C=A/B]
2019	\$51,479,000	\$17,018,000	3.02
2020	53,770,000	22,630,000	2.38
2021	54,916,000	26,416,000	2.08
2022	56,062,000	26,391,000	2.12
2023	57,208,000	26,370,000	2.17
2024	58,353,000	26,367,000	2.21

(a) Debt Service Requirements of Series 2012A Bonds, Series 2012B-C Bonds, Series 2014 Bonds, and proposed Series 2019 Bonds.

Mr. John J. O'Neill
Mr. Ricky D. Smith, Sr.
May 22, 2019


The forecasts are based on information and assumptions that were provided by, or reviewed with and agreed to by, Airport management. The forecasts reflect management's expected course of action during the forecast period and, in management's judgment, present fairly the expected financial results of the Airport. Those key factors and assumptions that are significant to the forecasts are set forth in the attachment, "Background, Assumptions, and Rationale for the Financial Forecasts." The attachment should be read in its entirety for an understanding of the forecasts and the underlying assumptions.

In our opinion, the underlying assumptions provide a reasonable basis for the forecasts. However, any forecast is subject to uncertainties. Inevitably, some assumptions will not be realized, and unanticipated events and circumstances may occur. Therefore, there will be differences between the forecast and actual results, and those differences may be material. Neither LeighFisher nor any person acting on our behalf makes any warranty, express or implied, with respect to the information, assumptions, forecasts, opinions, or conclusions disclosed in this report. We have no responsibility to update the report for events and circumstances occurring after the date of the report.

* * * * *

We appreciate the opportunity to serve as Airport Consultant to the Authority and MAA.

Respectfully submitted,


LEIGHFISHER

Attachment

BACKGROUND, ASSUMPTIONS, AND RATIONALE
FOR THE FINANCIAL FORECASTS

REPORT OF THE AIRPORT CONSULTANT

on the proposed issuance of

MARYLAND TRANSPORTATION AUTHORITY

PASSENGER FACILITY CHARGE REVENUE BONDS
Series 2019

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AIRPORT FACILITIES AND CAPITAL IMPROVEMENTS

AIRPORT FACILITIES

Baltimore/Washington International Thurgood Marshall Airport occupies a 3,596-acre site in Anne Arundel County approximately 9 miles by road south of central Baltimore, Maryland, and 32 miles northeast of central Washington, D.C. Access to the Airport is provided by, among other roads, Interstate 95, which bounds the Airport site to the north. Light rail service is provided by the Maryland Transit Administration (MTA) from a station at the Airport passenger terminal north to central Baltimore and Hunt Valley (approximately 22 miles north of central Baltimore), and south to Cromwell (approximately 5 miles south of the Airport). Amtrak and MTA Maryland Area Regional Commuter (MARC) trains provide service from the BWI Marshall Rail Station to Penn Station in Baltimore and Union Station in Washington, D.C. MAA provides free shuttle service between the Amtrak/MARC station and the Airport passenger terminal.

Airfield

The Airport has three runways and an associated system of taxiways. The runways are east-west Runway 10-28, 10,502 feet long, northwest-southeast Runway 15R-33L, 9,500 feet long, and northwest-southeast Runway 15L-33R, 5,000 feet long.

Passenger Terminal

The passenger terminal complex provides approximately 2.4 million square feet of space and 72 active loading-bridge-equipped aircraft gates at five concourses. Table 1 shows the distribution and use of gates by airline.

Concourse A provides 11 gates and Concourse B provides 14 gates, all used by Southwest Airlines. Concourse C provides 14 gates used mainly by American Airlines and Southwest. Concourse D provides 22 gates used mainly by Alaska Airlines, Air Canada, Delta Air Lines, JetBlue, Spirit Airlines, and United Airlines. Three of the 22 Terminal D gates are connected by a sterile corridor to the international arrivals hall and may be used for domestic or international flight arrivals. Concourse E provides 11 international-capable gates, five of which can accommodate widebody aircraft.

Concourse E gates are used for all international flight arrivals and for departures by military charter flights of Air Mobility Command, British Airways, Condor Airlines, and other charter and foreign flag airlines. Four of the 11 Concourse E gates do not have holdrooms and are used only for arriving flights (mainly by domestic airlines that operate their flight departures from gates at other concourses). In July 2018, there were approximately 1.3 daily international arrivals per gate on the 14 common use gates at Concourses D and E (versus 0.3 daily international departures). The

terminal complex has recently been developed and modernized in phases in accordance with a 2011 update to the Airport master plan.

Table 1
DISTRIBUTION OF GATES AND USE BY AIRLINE
 Baltimore/Washington International Thurgood Marshall Airport
 As scheduled for July 2018

	Number of gates (a)					Total	Average daily departures		Average daily departing seats	
	Concourse						Number	Per gate	Number	Per gate
	A	B	C	D	E (b)					
Preferentially leased										
Southwest Airlines (c)	11	14	7	--	--	32	221	69	33,811	1,056.6
Spirit Airlines (c)	--	--	--	5	--	5	28	56	4,833	966.7
Delta Air Lines	--	--	--	5	--	5	27	54	3,571	714.2
American Airlines	--	--	6	--	--	6	24	40	3,021	503.5
United Airlines	--	--	--	3	--	3	15	50	1,897	632.3
Alaska Airlines (c)	--	--	--	1	--	1	5	50	821	820.7
JetBlue Airways	--	--	--	<u>1</u>	--	<u>1</u>	<u>6</u>	65	<u>745</u>	745.2
Subtotal	11	14	13	15	--	53	327	62	48,699	918.8
Common use										
International (e)	--	--	--	3	11	14	4	03	806	57.6
Domestic (d)	--	--	<u>1</u>	<u>4</u>	--	<u>5</u>	<u>20</u>	40	<u>773</u>	154.6
Subtotal	--	--	<u>1</u>	<u>7</u>	<u>11</u>	<u>19</u>	<u>24</u>	12	<u>1,579</u>	83.1
Airport total	11	14	14	22	11	72	350	49	50,277	698.3

Note: Columns may not add to totals shown because of rounding.

(a) Active loading-bridge-equipped aircraft parking positions.

(b) Four gates at Concourse E do not have holdrooms and are used for arriving (but not departing) international flights.

(c) Includes departures and departing seats to both domestic and international destinations.

(d) Gates used for departures by Air Mobility Command, British Airways, and other foreign flag airlines and international arrivals by all airlines.

(e) Three gates at Concourse D are "swing gates," available for domestic and international departures and arrivals. Common use gates are used regularly by Air Canada, Allegiant Airlines, and Contour Airlines.

Sources: Average daily departures and seats: OAG Aviation Worldwide Ltd, OAG Analyser database, accessed February 2019.

Number of gates by airline and concourse: Maryland Aviation Administration records.

As the first phase of master plan development, "B-C Connector" projects were approved for PFC Application 9 and funded in part with the proceeds of the 2012A PFC Bonds (also PFC revenues pay-as-you-go). An expanded passenger security screening checkpoint was constructed to serve Concourses B and C and a connector was constructed post-security-screening to allow passengers to move between Concourses A, B, and C without having to be rescreened. Also as part of the B-C

Connector projects, Concourse C was upgraded and widened to provide larger holdrooms at three gates. The B-C Connector projects were completed in 2014.

As the second phase of master plan development, “D-E Connector” projects were approved for PFC Application 11 and funded in part with the proceeds of the 2014 PFC Bonds (also PFC revenues pay-as-you-go). The D-E Connector projects included construction of a consolidated passenger security screening checkpoint to serve Concourses D and E, a post-security screening corridor between Concourse D and E, and a sterile corridor from three Concourse D gates to the international arrivals hall allowing the gates to be used for international or domestic flights. Also, a 90-foot extension to Concourse E was constructed as the first phase of a project to provide additional international gates (as described in the following paragraph). The D-E Connector projects were completed in 2017.

Among “International Concourse” projects approved for PFC Application 12 and funded in part with PFC revenues pay-as-you-go, Concourse E was extended by another 150 feet and six additional international-capable gates were constructed. Also included were the construction of the aircraft parking apron and acquisition of passenger loading bridges for the additional gates. The International Concourse projects were completed in 2018.

Public Parking Facilities

Public parking facilities provide approximately 24,800 spaces at an hourly garage located adjacent to the terminal, a daily garage, an express parking lot, and remote long-term lots served by shuttle buses. The hourly parking garage is connected directly to the terminal by three enclosed walkways and an underground tunnel.

Rental Car Facility

Rental car services are provided from a consolidated rental car facility that opened in 2003. The facility accommodates the operations of all the national rental car companies and is managed and operated by a consortium of the companies. It provides approximately 8,300 rental car ready-return spaces, as well as maintenance and storage facilities, and is accessible by a ten-minute shuttle bus ride from the terminal.

Cargo and Other Aviation Facilities

Ten air cargo buildings together provide approximately 427,000 square feet of cargo space.

General and business aviation facilities are located on 22 acres on the northeast side of the Airport. Commercial fixed base operator services are provided by Signature Flight Support. Approximately 50 general aviation aircraft are based at the Airport and approximately 12,300 general aviation operations (landings and takeoffs) occurred in 2018.

PROPOSED 2019 PFC PROJECT

MAA maintains a six-year capital improvement program for the Airport. The program for FY 2019 through FY 2024 includes projects with estimated costs totaling \$604.0 million. Funding is to be provided from the State Transportation Trust Fund (TTF), a loan from the Authority, PFC revenues, federal grants, and rental car customer facility charge revenues. Only projects to be funded in whole or in part with PFC revenues, as approved by the FAA for PFC Application 13, are discussed in this report. Such projects account for \$232.4 million of project costs, or approximately 40% the six-year capital improvement program total.

Exhibit A summarizes the proposed funding plan for the approved PFC Application 13 projects. Projects to be funded in whole or part with the proceeds of the proposed 2019 PFC Bonds, referred to collectively in this report as the 2019 PFC Project, are as described in the following paragraphs. Planned funding sources are discussed in the later section "Sources of Funding."

Concourse A Improvements Phase II

Concourse A is to be extended by approximately 230 feet to provide approximately 55,000 square feet of additional space on two levels. The extension will provide five gates with holdrooms sized to accommodate 175-seat B-737 MAX 8 aircraft. Additional restrooms and concession facilities will also be provided. (Phase I comprised Concourse A improvements completed in 2003, which included construction of the apron for the five-gate phase II extension.)

MAA expects to lease the five gates to Southwest on a preferential-use basis. When the gates are brought into service, estimated in June 2020, MAA intends to take five other Concourse A gates out of service to allow construction of an upgraded outbound baggage handling system (not discussed further in this report).

Restroom Improvement Program

Under a multi-year program of improvements, 64 public restrooms in the terminal complex are to be renovated and nursing stations installed. (Remaining restrooms were recently renovated as part of the D-E Connector projects.)

FIS Hall Reconfiguration

The existing approximately 60,000 square-foot international arrivals hall accommodating federal inspection services (FIS) is to be enlarged to approximately 72,000 square feet to accommodate increased numbers of arriving international passengers. The FIS Hall is also to be reconfigured to accommodate new passenger screening processes and technologies. The project is estimated to be completed in June 2021.

Concourse A/B Modifications for B-737-800

Holdrooms serving six gates at Concourses A and B are to be enlarged to address capacity deficiencies resulting from Southwest's introduction into service of 175-seat B-737-800 and B-737 MAX 8 aircraft, to replace earlier-generation B-737 aircraft, typically with 137 seats. A new egress stair is also to be constructed to comply with life safety codes. The project is estimated to be completed in December 2019.

Concourse D HVAC Replacement

Heating, ventilation, air-conditioning, and cooling (HVAC) systems and equipment serving portions of Concourse D are to be replaced and upgraded as they have reached and exceeded their useful lives. The project is estimated to be completed in November 2020.

ECONOMIC BASIS FOR AIRLINE TRAFFIC DEMAND

AIRPORT SERVICE REGION

As shown on Figure 1, the primary region served by the Airport consists of the counties of Anne Arundel, Baltimore, Baltimore City, Carroll, Harford, Howard, and Queen Anne's in Maryland (the Baltimore-Columbia-Towson Metropolitan Statistical Area or Baltimore MSA). According to the U.S. Department of Commerce, Bureau of the Census, the population of the Baltimore MSA was 2.8 million in 2017, accounting for approximately 47% of Maryland's population of 6.0 million. The Baltimore MSA was the 20th largest MSA in the nation in 2017.

The secondary region served by the Airport consists of the District of Columbia and 18 counties and 6 cities in the states of Maryland, Virginia, and West Virginia (the Washington-Arlington-Alexandria, DC-VA-MD-WV MSA or Washington, D.C., MSA). The population of the Washington, D.C., MSA was 6.2 million in 2017.

According to recent studies prepared for MAA, approximately 30% of passengers originating their air journeys at the Airport were from the secondary service region. Because economic activity within both the Baltimore and Washington, D.C., MSAs determines passenger demand at the Airport, demographic and economic data for both MSAs are presented and discussed in the following sections, although the emphasis of the discussion is on the Baltimore MSA.

The Airport's secondary service region is also served by Reagan National Airport (DCA or Reagan) and Washington Dulles International Airport (IAD or Dulles), 40 and 57 road miles, respectively, from central Baltimore. Air service provided at the three regional airports is discussed in the later section, "Airport Role." Other factors influencing the use of BWI by passengers from the secondary service region are the relative ease of access to and cost of parking at the three airports.

HISTORICAL SOCIOECONOMIC INDICATORS

In general, the population and economy of an airport's service region are the primary determinants of originating passenger numbers at the airport. Connecting passenger numbers are primarily determined by airline decisions to provide connecting service at the airport. As discussed in the later section "Historical Airline Traffic," approximately 72% of the Airport's enplaned passengers are originating and 28% are connecting between flights. Approximately 55% of originating passengers are residents of the Baltimore MSA and 45% are visitors.

Table 2 shows historical data on population, nonagricultural employment, per capita income, and GDP for the Baltimore MSA, the Washington, D.C., MSA, and the nation. The following subsections provide a discussion of the economic basis for passenger traffic at the Airport in terms of historical socioeconomic data and the employment profile of the Baltimore MSA by industry sector.

Population

As shown in Table 2, the population of the Baltimore MSA was 2.808 million in 2017, up from 2.668 million in 2007 (an increase of 5.3%). The increase in population was less than for the nation (7.9%).

Nonagricultural Employment

As shown in Table 2, from 2007 to 2017, nonagricultural employment in the Baltimore MSA increased 6.2%, an increase similar to that for the nation (6.3%). Employment in the MSA increased 5.4% between 2000 and 2007 (compared with a 4.5% increase for the nation) and was less affected by the 2008-2009 recession, decreasing 3.3% between 2007 and 2010 (compared with a 5.5% decrease for the nation). Between 2010 and 2017 employment growth slowed in the MSA, increasing an average of 1.3% per year (compared with an average of 1.7% per year for the nation).

Employment by industry sector is discussed in the later section “Economic Profile by Industry Sector.”

Unemployment Rates

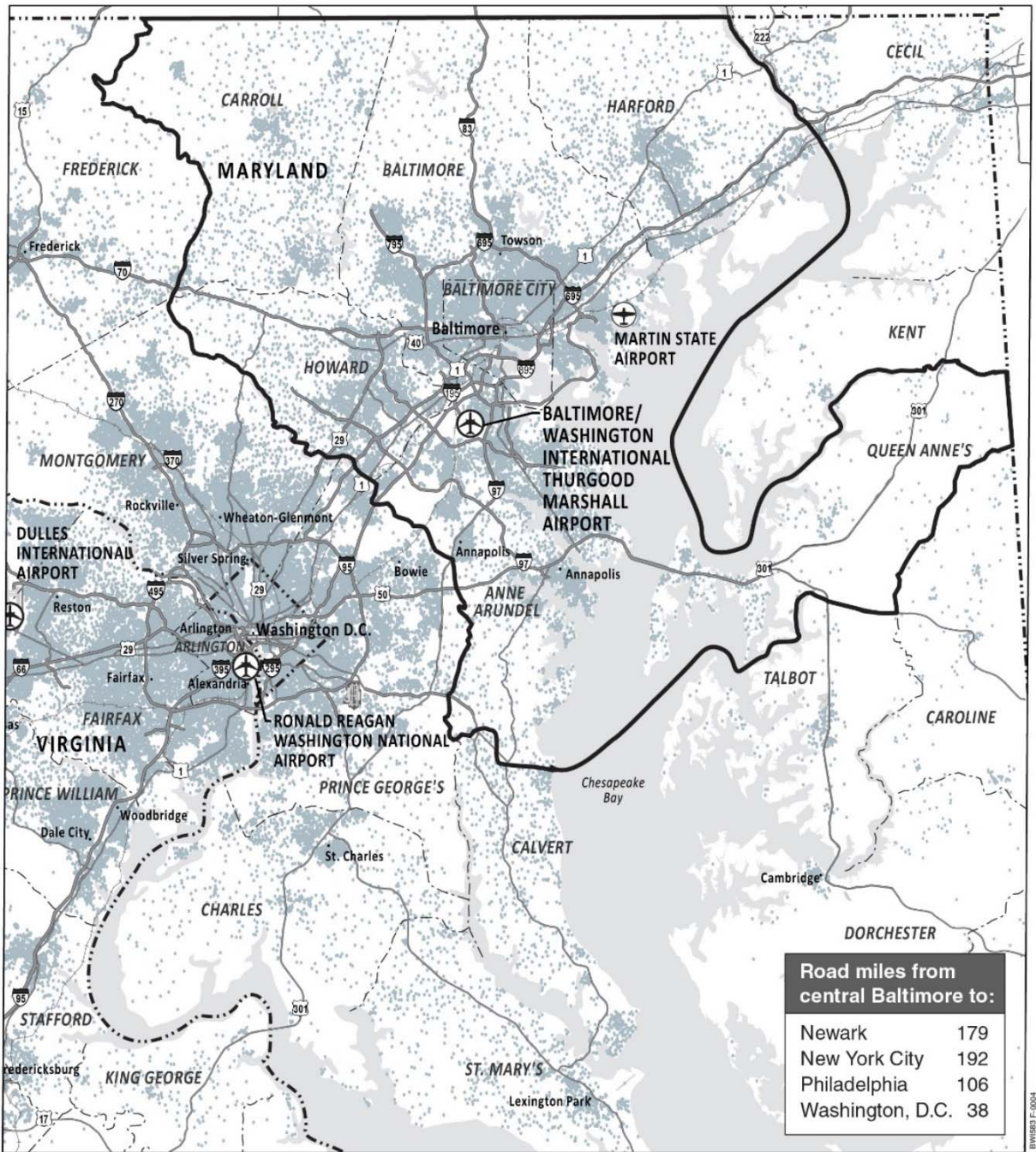
As shown on Figure 2, the unemployment rate for the Baltimore MSA has historically been lower than that for the United States. Since 2014, the unemployment rate in the Baltimore MSA has closely followed the national trend.

Per Capita Income

As shown in Table 2, in 2007, per capita personal income in the Baltimore MSA (in 2018 dollars) was \$56,565, 17.2% higher than for the nation (\$48,254). From 2007 to 2017, per capita income in the Baltimore MSA increased 8.3% compared with an increase of 9.6% for the nation. The Baltimore MSA’s 2017 per capita personal income of \$61,258 was 15.8% higher than for the nation (\$52,901).

Gross Domestic Product

Between 2007 and 2017, per capita GDP for the Baltimore MSA increased 8.8% compared with an increase of 5.6% for the nation. In 2017, per capita GDP for the Baltimore MSA was \$70,017, 14% greater than the nation (\$61,392).



- Major commercial service airport
- General aviation airport
- Primary service region
- Population density: 1 dot equals 100 people
- Major highways
- State boundary
- County boundary

Source: U.S. Census Bureau, 2010 Census data.

Figure 1
AIRPORT SERVICE REGION
 Baltimore/Washington International Thurgood Marshall Airport
 March 2019

Table 2
HISTORICAL SOCIOECONOMIC DATA

	Population (thousands)			Nonagricultural employment (thousands)			Per capita personal income (2018 dollars)			Per capita gross domestic product (2018 dollars)		
	Baltimore MSA	Wash D.C. MSA	United States	Baltimore MSA	Wash D.C. MSA (a)	United States	Baltimore MSA (b)	Wash D.C. MSA (b)	United States	Baltimore MSA	Wash D.C. MSA	United States
2000	2,558	4,876	282,162	1,248	2,693	132,024	50,027	62,013	44,705	n.a.	n.a.	52,985
2001	2,575	4,983	284,969	1,256	2,734	132,087	50,803	61,966	44,789	56,038	77,034	52,651
2002	2,597	5,069	287,625	1,250	2,743	130,649	51,554	61,599	44,432	57,414	78,744	53,073
2003	2,614	5,137	290,108	1,250	2,798	130,347	52,084	62,533	44,600	58,154	80,943	53,901
2004	2,631	5,213	292,805	1,263	2,868	131,787	53,409	64,856	45,530	60,330	84,503	55,449
2005	2,644	5,287	295,517	1,285	2,933	134,051	54,353	66,287	46,093	62,741	86,422	56,721
2006	2,658	5,332	298,380	1,304	2,984	136,453	55,714	67,559	47,474	63,675	87,039	57,668
2007	2,668	5,386	301,231	1,316	3,008	137,999	56,565	68,208	48,254	64,411	87,668	58,103
2008	2,680	5,458	304,094	1,312	3,021	137,241	56,232	67,639	47,706	63,010	86,084	56,428
2009	2,696	5,561	306,772	1,272	2,970	131,313	55,503	65,984	45,980	64,067	86,433	55,129
2010	2,716	5,679	309,326	1,272	2,981	130,362	55,944	67,122	46,690	64,725	87,454	55,813
2011	2,735	5,789	311,580	1,294	3,024	131,932	56,721	68,406	47,698	64,554	85,611	55,686
2012	2,756	5,885	313,874	1,315	3,064	134,175	56,834	68,578	48,759	64,590	84,410	56,439
2013	2,772	5,976	316,058	1,333	3,091	136,381	56,035	65,802	48,318	65,054	82,844	57,245
2014	2,784	6,043	318,386	1,343	3,108	138,958	57,302	66,832	49,880	65,931	82,723	58,374
2015	2,795	6,105	320,743	1,366	3,164	141,843	59,478	69,702	51,849	67,809	85,348	60,180
2016	2,801	6,164	323,071	1,385	3,223	144,352	60,425	70,536	52,136	69,795	86,500	60,582
2017	2,808	6,230	325,147	1,398	3,274	146,624	61,258	71,231	52,901	70,107	87,150	61,392
Average annual percent increase (decrease)												
2000-2007	0.6%	1.4%	0.9%	0.8%	1.6%	0.6%	1.8%	1.4%	1.1%	n.c.	n.c.	1.3%
2007-2010	0.6	1.8	0.9	(1.1)	(0.3)	(1.9)	(0.4)	(0.5)	(1.1)	0.2	(0.1)	(1.3)
2010-2017	0.5	1.3	0.7	1.3	1.3	1.7	1.3	0.9	1.8	1.1	0.0	1.4

n.a. = not available; n.c. = not calculated.

Baltimore MSA = Metropolitan Statistical Area comprising Baltimore City and the 6 counties shown on Figure 1 for all years.

Washington, D.C., MSA = Metropolitan Statistical Area comprising the 24 counties shown on Figure 1 for all years.

Notes: Population numbers are estimated as of July 1 each year.

Calculated percentages may not match those shown because of rounding.

(a) 2000 income data and all years of employment exclude data for Madison County, due to data unavailability.

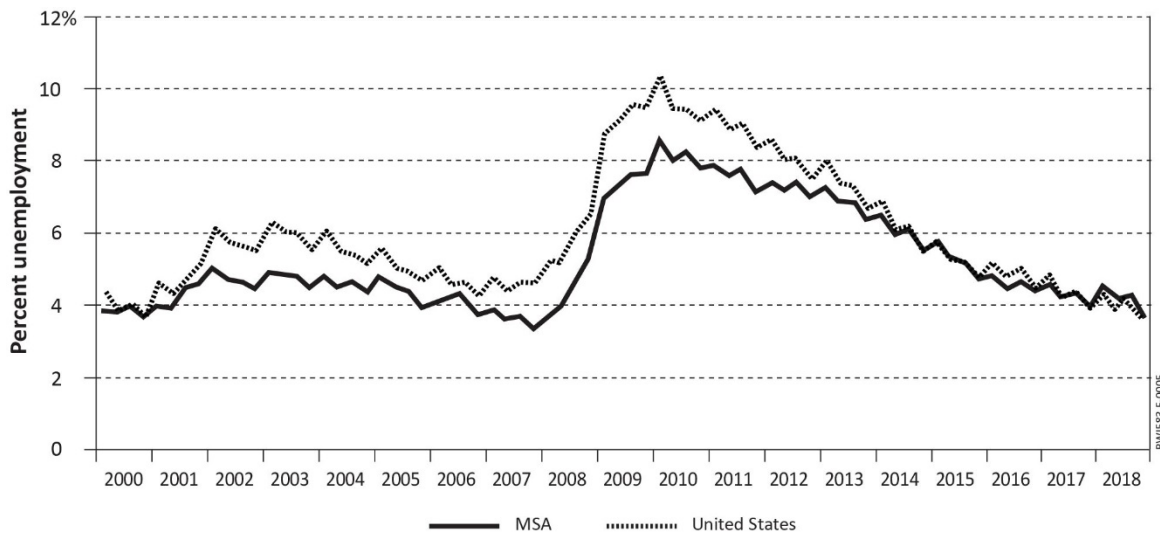
(b) Data for 2000 is no longer available from the Bureau of Economic Analysis at the MSA level. Data shown here is based on previously published data.

Sources: Population: U.S. Department of Commerce, Bureau of the Census website, www.census.gov, accessed February 2019.

Income and GDP: U.S. Department of Commerce, Bureau of Economic Analysis website, www.bea.gov, accessed February 2019.

Employment: U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov, accessed February 2019.

Figure 2
TRENDS IN UNEMPLOYMENT RATES



Note: Data shown are quarterly averages of monthly unemployment rate data, not seasonally adjusted.

Source: U.S. Department of Labor, Bureau of Labor Statistics, www.bls.gov, accessed February 2019.

ECONOMIC PROFILE BY INDUSTRY SECTOR

Table 3 presents data on the percentage distribution of nonagricultural employment by industry sector in the Baltimore MSA, the Washington, D.C., MSA, and the nation for 2017 and changes between 2007 (before the 2008-2009 economic recession), 2010 (after the recession), and 2017.

Table 4 lists the largest private employers in the Baltimore MSA as of July 2018. The companies listed accounted for approximately 13% of total nonagricultural employment in the MSA in 2018, with the remaining 87% accounted for by smaller businesses and organizations and public sector employers. The following subsections provide a summary of employment in each industry sector, discussed in descending order of Baltimore MSA employment share.

Services

As in the United States as a whole, the services sector (professional, business, education, health, leisure, hospitality, and other services combined) is the largest industry sector in the Baltimore MSA. The sector accounted for 49.6% of Baltimore MSA employment in 2017, an increase from 41.2% in 2000.

The services sector accounted for higher overall growth than any other industry sector between 2007 and 2017. The sector added 108,000 jobs in the Baltimore MSA between 2007 and 2017 and accounted for all the net increase in employment. The

service sector was one of two industry sectors that did not lose jobs between 2007 and 2010 (the other being the government sector). After the recession, employment in the services sector steadily increased between 2010 and 2017 at an average rate of 2.4% per year.

Education and Health Services. The education and health services sector was the fastest growing industry sector between 2007 and 2017 and accounted for the largest share of Baltimore MSA employment in 2017. The sector became increasingly important over the decade, increasing its share of employment in the Baltimore MSA from 14.5% in 2007 to 19.7% in 2017. In 2017, the education and health services sector accounted for a larger share of employment in the Baltimore MSA (19.7%) than in the United States as a whole (15.8%), evidencing the MSA's high concentration of universities, hospitals, and bioscience firms.

Notwithstanding the economic recession, 16,400 jobs were added in the education and health services sector between 2007 and 2010 and a further 37,100 were added between 2010 and 2017.

Approximately 75% of the 275,000 jobs in the education and health services sector in 2017 were in the health care and social assistance subsector. This includes health care services (physicians' offices, surgery centers, hospitals, nursing and residential care facilities) and social assistance services (family services organizations and child care centers). The remaining 65,000 jobs were in the educational services subsector.

Major health care employers in the MSA include Johns Hopkins Health System, University of Maryland Medical System, MedStar Health, LifeBridge Health, Mercy Health Services, and Greater Baltimore Medical Center (GBMC) Healthcare.

The Baltimore MSA is home to over 30 colleges and universities. The University of Maryland in College Park is the largest university in the MSA with a student population of 41,200 and employs 4,600 faculty and staff. Towson University and Johns Hopkins University are the next two largest universities in the MSA. Towson, is a public university with a student population of 23,000 and employs 3,600 faculty and staff. Johns Hopkins is a private university with a student population of 25,000 and employs 7,800 faculty and staff.

Other major institutions of higher learning in the MSA include the United States Naval Academy, Morgan State University, Loyola University, University of Maryland, Baltimore, and University of Baltimore.

Table 3
NONAGRICULTURAL EMPLOYMENT BY INDUSTRY SECTOR
 Baltimore-Columbia-Towson MSA, Washington-Arlington-Alexandria MSA, and United States
 Calendar years

Industry sector	Share of total 2017			Average annual percent increase (decrease)					
	Baltimore MSA	Wash. D.C. MSA	United States	2007-2010			2010-2017		
				Baltimore MSA	Wash. D.C. MSA	United States	Baltimore MSA	Wash. D.C. MSA	United States
Services									
Education and health services	19.7%	13.4%	15.8%	2.4%	2.9%	2.3%	2.1%	2.7%	2.2%
Professional and business services	16.5	22.8	14.0	(1.3)	0.3	(2.3)	3.3	1.3	2.9
Leisure and hospitality	9.8	10.0	10.9	(1.0)	0.7	(0.9)	2.8	3.3	3.0
Other services	<u>3.6</u>	<u>6.3</u>	<u>3.9</u>	(0.7)	0.1	(1.0)	(1.2)	2.1	1.1
Subtotal services	49.6%	52.5%	44.7%	0.2%	0.9%	(0.3)%	2.4%	2.1%	2.5%
Trade, transportation, and utilities	17.6	12.4	18.7	(3.0)%	(2.2)%	(2.6)%	1.3%	0.9%	1.6%
Government	16.1	21.4	15.2	1.7	2.1	0.4	(0.5)	0.2	(0.1)
Financial activities	5.8	4.8	5.8	(3.3)	(2.8)	(2.7)	1.6	1.1	1.3
Mining, logging, and construction	5.6	4.9	5.2	(7.4)	(8.9)	(9.3)	2.0	1.8	3.0
Manufacturing	4.0	1.7	8.5	(4.1)	(5.7)	(6.0)	(1.9)	0.2	1.1
Information	<u>1.3</u>	<u>2.3</u>	<u>1.9</u>	(5.3)	(5.0)	(3.7)	(1.8)	(1.3)	0.6
Total	100.0%	100.0%	100.0%	(1.1)%	(0.3)%	(1.9)%	1.3%	1.3%	1.7%
Total MSA employment	1,397,600	3,274,100							

Note: Percent shares may not add to 100.0% because of rounding.

Source: U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov, accessed February 2019.

Table 4
LARGEST PRIVATE SECTOR EMPLOYERS
 Baltimore-Columbia-Towson MSA
 July 2018

Rank	Company	Local employment	Type of business
1	Johns Hopkins University	27,700	Education
2	Johns Hopkins Health System	22,800	Health care
3	University of Maryland Medical System	22,000	Health care
4	MedStar Health	11,770	Health care
5	LifeBridge Health	10,670	Health care
6	Northrop Grumman	10,500	Aerospace and defense
7	Wal-Mart Stores	7,500	Retail
8	Giant Food	6,020	Retail grocer
9	Exelon Corp.	5,230	Energy provider
10	T. Rowe Price Group (a)	5,000	Financial services
11	Southwest Airlines	4,840	Airline
12	Amazon.com	4,500	Retail
13	Mercy Health Services	3,970	Health care
14	Abacus Corp	3,930	Staffing services
15	GBMC HealthCare	3,900	Health care
16	Under Armour (a)	3,700	Apparel manufacturer
17	Allegis Group	3,590	Staffing services
18	Towson University	3,540	Education
19	Sheppard Pratt Health System	3,490	Health care
20	Anne Arundel Health System	3,350	Health care
21	CareFirst BlueCross BlueShield	3,150	Insurance
22	Y in Central Maryland	3,100	Recreation facilities
22	Erickson Living	3,070	Retirement community
24	UnitedHealthcare	3,050	Insurance
25	Saint Agnes Healthcare	2,920	Health care

Note: Data are self-reported by companies to the Baltimore Business Journal. Such self-reporting or lack thereof, affects companies' inclusion in the list.

(a) Fortune 500 company (based on 2018 revenue) headquartered in Baltimore.

Sources: Baltimore Business Journal, *2018-2019 Book of Lists*; Fortune 500 website, www.fortune.com.

Professional and Business Services. Of the 180,700 services sector jobs added in the Baltimore MSA between 2007 and 2017, 40,100 were in the professional and business services sector, an increase of 21.0%. Job losses in the professional and business services subsector between 2007 and 2010 (-7,400) were more than offset by gains between 2010 and 2017 (+47,500). The share of professional and business services jobs in the MSA increased from 13.8% in 2007 to 16.5% in 2017.

Many of these jobs were in the professional, scientific, and technical subsector and included jobs in such fields as engineering, computer science, software development, information technology, biosciences, and health technology that support key goods-producing and service-providing industries.

Leisure and Hospitality Services. Employment in leisure and hospitality services was the third fastest growing sector between 2007 and 2017, increasing a net of 17.8%. Job losses in the subsector between 2007 and 2010 (-3,600) were more than offset by gains between 2010 and 2017 (+24,300).

The Baltimore Convention Center (BCC), with over 1.2 million square feet of meeting and exhibition space, hosted 513,700 attendees at 122 conventions, events, and shows in 2017. The BCC is accessible from the Airport via the City's light-rail with a stop located across the street.

Tourist attractions in Baltimore include the National Aquarium, the Maryland Zoo, the Baltimore Museum of Art, Fort McHenry National Monument, the Edgar Allan Poe House, and Mount Vernon. The second horse race of the Triple Crown, The Preakness Stakes, is held each May at Pimlico Race Course in Baltimore.

Professional sports franchises in Baltimore include the Ravens (National Football League), Orioles (Major League Baseball), Brigade (Arena Football League) and the Blast (Major Arena Soccer League).

Tourism is an important contributor to the Airport's secondary service region economy. According to Destination-DC, a nonprofit organization that promotes tourism, Washington, D.C., attracted 22.8 million visitors in 2017. Among visitors to Washington, D.C., approximately 59% were leisure travelers and 41% were business travelers*.

Trade, Transportation, and Utilities

The trade, transportation, and utilities sector accounted for a smaller share of employment in the Baltimore MSA than in the nation as a whole in 2017 (17.6% versus 18.7%). There was virtually no net growth in the sector between 2007 and 2017, with jobs lost during the recession (-21,400) being not quite regained between 2010 and 2017 (+20,500).

*D.K. Shifflet & Associates, as reported by Destination DC, www.washington.org.

International trade is an important component of the MSA economy. More than 50% of exports from the MSA are from the chemical, transportation, and computer and electronic product industries. Several foreign trade zones cover the MSA and provide for the establishment of secure sites to allow qualifying export-import businesses to defer or avoid U.S. Customs duties and certain other taxes.

Government

The government sector accounted for the third largest share of employment in the Baltimore MSA in 2017 (16.1%) a greater percentage than that of the nation (15.2%). Employment by federal, state, and local government agencies increased 1.7% between 2007 and 2017 in the MSA, greater than the 0.6% increase for the nation. In the MSA, 3,700 jobs were added in the government sector between 2007 and 2010 and a further 11,500 were added between 2010 and 2017. Annapolis, the capital of Maryland is located in the MSA as is the headquarters of the Social Security Administration.

Fort Meade, located approximately ten miles south of the Airport, employs approximately 52,000 military personnel and civilian employees and is home to more than 115 government agencies and organizations including the National Security Agency. Fort Meade is Maryland's largest employer and has the third-largest workforce of any U.S. Army installation.

Financial Activities

The financial activities sector accounted for 5.8% of both Baltimore MSA and national employment in 2017. As a result of the national banking and credit crisis, between 2007 and 2010, the sector lost 7,700 jobs. Between 2010 and 2017, the sector fully recovered, gaining 8,300 jobs. Financial sector employers include T. Rowe Price Group, Bank of America, M&T Bank, and Wells Fargo.

Mining, Logging, and Construction

The mining, logging, and construction sector accounted for 5.6% of Baltimore MSA employment in 2017, a higher share than that of the nation (5.2%). The construction sector is disproportionately affected by economic cycles, and between 2007 and 2010, the sector lost 17,700 jobs in the MSA as the credit crisis depressed construction activity and the issuance of housing permits fell to a record low. As the MSA economy recovered following the recession, between 2010 and 2017, construction sector employment increased by 10,000 jobs, for an overall reduction of 7,700 between 2007 and 2017.

Manufacturing

Between 2007 and 2017, manufacturing employment in the Baltimore MSA decreased 22.9%. Over the decade the manufacturing sector experienced the largest employment losses of any industry sector. The share of manufacturing employment

in the MSA decreased from 7.7% in 2000 to 4.0% in 2017, a lower share than for the nation (8.5%). The number of Baltimore MSA jobs in the manufacturing sector decreased by 8,600 between 2007 and 2010, and by an additional 8,000 jobs between 2010 and 2017.

Key manufacturers in the Baltimore MSA are those in the aerospace and defense industry. MSA employers in this industry include Northrup Grumman, Textron Systems, Middle River Aircraft Systems, Lockheed Martin, and Rockwell Collins.

Information

The information sector accounted for 1.3% of Baltimore MSA employment in 2017, lower than its share of national employment (1.9%). Between 2007 and 2017, the number of employees in the sector decreased by 25.2%. Of the 5,900 jobs lost over the decade, 4,600 jobs were lost in the telecommunications subsector. Employers in the information sector are Verizon, Comcast, and The Agora Companies.

ECONOMIC OUTLOOK

Outlook for the U.S. Economy

Between the fourth quarter of 2007 and the second quarter of 2009, the U.S. economy, as measured by real gross domestic product (GDP), contracted 4.1%. National GDP growth resumed in the second half of 2009, job growth began in 2010, but not until 2014 did total employment exceed pre-recession levels.

Real (inflation-adjusted) gross domestic product (GDP) grew 2.4% in 2014, 2.6% in 2015, 1.6% in 2016, 2.3% in 2017, and 2.9% in 2018 (estimated). The Congressional Budget Office forecasts real GDP growth of 2.7% in 2019, 1.9% in 2020, and an average of 1.7% per year thereafter.

Continued U.S. economic growth will depend on, among other factors, stable financial and credit markets, a stable value of the U.S. dollar versus other currencies, stable energy and other commodity prices, the ability of the federal government to reduce historically high fiscal deficits, inflation remaining within the range targeted by the Federal Reserve, growth in the economies of foreign trading partners, and stable trading relationships.

As shown in Table 5, between 2017 and 2024, both population and nonagricultural employment are forecast to increase an average of 0.7%.

Outlook for the Economy of the Baltimore MSA

The economic outlook for the MSA generally depends on the same factors as those for the nation. Population in the Baltimore MSA is projected to increase an average of 0.8% per year between 2017 and 2024, slower than the Washington, D.C., MSA (average of 1.3%). Nonagricultural employment in the Baltimore MSA is projected

to increase an average of 1.5% per year between 2017 and 2024, similar to the projected growth for the Washington, D.C., MSA (average of 1.6%).

Table 5
SOCIOECONOMIC FORECASTS
 Baltimore-Columbia-Towson MSA, Washington-Arlington-Alexandria MSA, and United States

	Average annual percent increase (decrease)	
	Historical 2007-2017	Forecast 2017-2024
Baltimore MSA		
Population	0.5%	0.8%
Nonagricultural employment	0.6	1.5
Washington, D.C., MSA		
Population	1.5%	1.3%
Nonagricultural employment	0.9	1.6
United States		
Population	0.8%	0.7%
Nonagricultural employment	0.6	1.5

Sources:

Population:

Historical—U.S. Department of Commerce, Bureau of the Census website, www.census.gov. accessed February 2019.

Forecast—Woods & Poole Economics, Inc. accessed May 2018.

U.S. Department of Commerce, Bureau of the Census, *Projected Population Size and Births, Deaths, and Migration: 2016 to 2060*, March 2018, www.census.gov.

Nonagricultural employment:

Historical—U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov. accessed February 2019.

Forecast—Woods & Poole Economics, Inc. accessed May 2018.

AIRLINE TRAFFIC ANALYSIS

AIRPORT ROLE

The importance of the Airport is reflected in its origin and destination (O&D) passenger base, its role as a connecting hub, and the second busiest airport in Southwest's system, and its status of one of three large-hub airports serving the Baltimore and Washington, D.C., MSAs.

Rankings Among U.S. Airports

Table 6 lists the 30 busiest U.S. airports ranked by numbers of enplaned passengers in the 12 months ended June 30. By this measure, the Airport was the 22nd busiest airport in the United States. Between 2007 and 2018, passenger numbers at the Airport increased 31.2%, compared with increase of 22.0% for the other top 29 airports listed.

Table 7 lists the 30 busiest U.S. airports ranked by numbers of originating passengers, i.e., passengers who began their air journeys at each airport rather than connected between flights, in the 12 months ended June 30, 2018. By this measure, the Airport ranked 23rd.

Table 8 lists the 30 busiest U.S. airports ranked by numbers of connecting passengers in the 12 months ended June 30, 2018. By this measure, the Airport ranked 19th. Much of the increase in enplaned passenger numbers at the Airport between 2007 and 2018 is attributable to connections. The Airport's role as a key airport for Southwest is discussed in the following section.

Airport's Role in Southwest's System

In May 2011, Southwest Airlines closed on its acquisition of AirTran Airways. The combined airline adopted Southwest's branding and service policies and was issued a single operating certificate by the FAA in March 2012. Full integration of Southwest and AirTran operations was completed in December 2014.

Table 9 presents data on historical airline service provided by Southwest and AirTran at their principal airports, ranked by daily scheduled departing seats in July 2018. In July 2018, the Airport accounted for 5.7% of the total scheduled departing seats in Southwest's system, making it the second busiest airport in the system.

In July 2018, Southwest accounted for 67.2% of total scheduled departing seats at the Airport, less than its share at Chicago Midway (94.1%) but more than its share at Las Vegas (39.0%).

Table 6
ENPLANED PASSENGERS AT BUSIEST U.S. AIRPORTS
 Years ended June 30

2018 Rank	City (airport)	Enplaned passengers (millions)					Percent increase (decrease)		
		2000	2007	2012	2017	2018	2000-2007	2007-2012	2012-2018
1	Atlanta	39.0	41.8	45.3	50.4	50.9	7.2%	8.3%	12.4%
2	Los Angeles (International)	30.7	29.6	31.2	40.6	42.2	(3.5)	5.2	35.5
3	Chicago (O'Hare)	34.0	36.7	32.3	37.9	39.3	7.9	(12.0)	21.7
4	Dallas/Fort Worth	28.2	28.3	27.9	31.3	32.5	0.1	(1.4)	16.8
5	Denver	17.9	23.4	25.7	29.3	30.5	30.2	9.9	18.7
6	New York (Kennedy)	15.8	22.4	24.1	29.5	29.9	41.8	7.8	23.7
7	San Francisco	18.8	16.6	20.8	26.1	27.8	(12.0)	25.6	33.6
8	Las Vegas	15.7	22.2	19.9	22.9	23.5	41.4	(10.1)	17.9
9	Seattle	13.6	14.9	16.1	22.3	23.2	9.7	7.9	44.8
10	Orlando (International)	13.8	17.0	17.3	20.9	22.4	22.6	2.0	29.1
11	Newark	17.0	18.0	17.2	20.8	22.3	5.4	(4.3)	29.8
12	Charlotte	9.8	15.6	19.5	21.7	22.2	60.4	24.6	13.9
13	Phoenix (Sky Harbor)	17.0	20.7	19.7	21.0	21.4	22.1	(5.1)	8.6
14	Miami	16.3	15.7	19.0	20.8	20.9	(3.9)	20.9	10.2
15	Houston (Bush)	15.8	20.7	19.3	20.0	20.0	30.7	(6.6)	3.7
16	Boston	12.8	13.7	14.3	18.4	19.3	7.1	4.8	34.7
17	Minneapolis-St. Paul	16.1	17.1	16.0	18.3	18.4	5.9	(6.7)	15.5
18	Detroit	17.1	17.5	15.8	16.9	17.2	2.4	(10.1)	9.1
19	Fort Lauderdale	7.0	10.4	11.4	15.1	16.7	48.6	9.0	46.9
20	New York (LaGuardia)	11.5	12.7	12.3	14.5	14.9	10.1	(2.9)	21.3
21	Philadelphia	10.9	15.4	14.8	14.3	14.8	41.7	(4.1)	(0.3)
22	Baltimore	9.3	10.3	11.3	12.9	13.5	11.1	9.9	19.3
23	Salt Lake City	8.7	10.5	9.6	11.4	11.9	19.8	(7.9)	23.4
24	San Diego	7.6	8.8	8.6	10.6	11.8	16.8	(2.7)	36.9
25	Washington, D.C. (Reagan)	6.7	9.0	9.1	11.5	11.4	34.3	1.5	25.6
26	Washington, D.C. (Dulles)	8.0	11.6	11.1	10.9	11.3	45.8	(5.0)	1.9
27	Chicago (Midway)	6.6	9.0	9.3	11.0	10.9	35.0	3.7	16.8
28	Tampa	7.4	9.2	8.2	9.3	10.0	24.8	(11.3)	22.2
29	Honolulu	10.3	10.1	8.9	9.8	9.8	(2.4)	(12.1)	10.0
30	Portland, Oregon	6.6	7.1	6.9	9.3	9.6	7.4	(2.5)	39.2
	Top 30 airports						14.6%	1.3%	20.6%

Notes: Airports shown are the top 30 U.S. airports ranked by numbers of passengers for the 12 months ended June 30, 2018.

Percentages were calculated using unrounded numbers.

Source: U.S. DOT, Schedules T100 and 298C T1, except Baltimore, Maryland Aviation Administration records.

Table 7
ORIGINATING PASSENGERS AT BUSIEST U.S. AIRPORTS
 Years ended June 30

2018 Rank	City (airport)	Originating passengers (millions)					Percent increase (decrease)		
		2000	2007	2012	2017	2018	2000- 2007	2007- 2012	2012- 2018
1	Los Angeles (International)	22.8	23.0	23.7	32.5	34.3	0.5%	3.2%	44.8%
2	New York (Kennedy)	12.3	17.9	19.2	24.3	25.1	45.1	7.6	30.3
3	Chicago (O'Hare)	16.2	17.8	16.5	21.3	22.8	9.7	(6.9)	37.6
4	San Francisco	14.4	12.1	16.3	20.4	21.7	(16.0)	34.6	33.1
5	Orlando (International)	12.9	16.1	16.2	19.9	21.3	24.1	0.9	31.3
6	Las Vegas	13.6	18.3	17.1	19.8	20.5	34.9	(6.8)	20.1
7	Denver	9.2	12.6	13.7	17.6	19.4	36.4	9.0	41.7
8	Atlanta	14.9	14.8	14.0	18.1	19.3	(0.4)	(5.1)	37.4
9	Boston	11.7	13.0	13.7	17.3	18.2	10.7	5.5	32.8
10	Newark	13.2	13.8	12.2	16.0	17.5	4.7	(11.6)	43.5
11	Seattle	10.1	11.2	11.6	15.4	16.4	10.6	3.4	41.2
12	Dallas/Fort Worth	11.4	12.2	11.5	13.9	14.9	6.9	(5.4)	29.2
13	Fort Lauderdale	6.8	10.0	10.5	13.2	14.3	45.9	5.4	36.1
14	Phoenix (Sky Harbor)	10.6	12.8	11.2	13.6	14.2	21.5	(12.4)	26.3
15	Miami	9.9	9.3	10.8	13.7	13.9	(6.1)	16.8	28.0
16	New York (LaGuardia)	10.7	11.7	11.2	13.1	13.5	10.1	(4.2)	20.5
17	San Diego	7.3	8.5	8.2	10.0	11.1	17.3	(3.9)	35.3
18	Minneapolis-St. Paul	7.7	8.6	8.3	10.5	11.1	11.4	(4.1)	34.0
19	Houston (Bush)	6.7	8.8	7.9	9.9	10.2	31.0	(10.5)	29.6
20	Philadelphia	6.5	9.9	8.6	9.9	10.2	51.5	(13.2)	18.4
21	Washington, D.C. (Reagan)	5.8	7.4	7.5	10.1	10.1	27.0	1.6	33.6
22	Detroit	8.4	8.9	7.7	9.3	10.0	6.0	(13.4)	29.4
23	Baltimore	8.0	8.5	8.4	9.1	9.7	7.3	(1.2)	15.6
24	Tampa	6.9	8.7	7.6	9.0	9.6	26.3	(12.7)	26.3
25	Portland, Oregon	5.5	6.0	5.9	8.1	8.5	10.2	(2.0)	43.8
26	Honolulu	8.3	8.3	7.2	8.0	8.1	0.3	(13.2)	12.3
27	Washington, D.C. (Dulles)	4.9	7.2	6.4	7.2	7.6	45.8	(10.6)	19.3
28	Salt Lake City	4.1	5.5	5.1	6.7	7.3	35.9	(7.3)	42.4
29	Chicago (Midway)	5.5	6.4	5.8	7.0	7.1	15.9	(9.2)	20.9
30	Austin	3.3	3.8	4.3	6.1	6.9	15.9	11.3	62.5
	Top 30 airports						15.0%	(1.4)%	32.3%

Notes: Airports shown are the top 30 U.S. airports ranked by originating passengers for the 12 months ended June 30, 2018.

Percentages were calculated using unrounded numbers.

Includes a small number of passengers on foreign-flag airlines making connections between international flights.

Source: U.S. DOT, Schedules T100 and 298C T1; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedules T100 and 298C T1.

Table 8
CONNECTING PASSENGERS AT BUSIEST U.S. AIRPORTS
 Years ended June 30

2018 Rank	City (airport)	Connecting passengers (millions)					Percent increase (decrease)		
		2000	2007	2012	2017	2018	2000-2007	2007-2012	2012-2018
1	Atlanta	24.1	27.0	31.2	32.4	31.6	12.0%	15.6%	1.1%
2	Dallas/Fort Worth	16.8	16.1	16.3	17.4	17.6	(4.4)	1.6	8.0
3	Chicago (O'Hare)	17.8	18.9	15.8	16.6	16.6	6.3	(16.6)	5.1
4	Charlotte	7.8	10.8	14.4	15.3	15.5	39.6	33.1	7.6
5	Denver	8.7	10.8	11.9	11.6	11.0	23.7	10.8	(7.7)
6	Houston (Bush)	9.1	11.9	11.4	10.1	9.8	30.4	(3.8)	(14.2)
7	Los Angeles (International)	7.9	6.7	7.5	8.1	7.9	(15.1)	12.0	6.0
8	Minneapolis-St. Paul	8.4	8.5	7.7	7.8	7.3	0.9	(9.3)	(4.4)
9	Detroit	8.7	8.6	8.1	7.5	7.2	(1.0)	(6.7)	(10.4)
10	Phoenix (Sky Harbor)	6.4	7.9	8.5	7.5	7.2	23.2	6.7	(15.0)
11	Miami	6.4	6.4	8.1	7.1	7.0	(0.4)	26.8	(13.4)
12	Seattle	3.4	3.6	4.4	6.9	6.9	6.8	21.9	54.2
13	San Francisco	4.4	4.5	4.5	5.6	6.1	0.8	1.3	35.4
14	New York (Kennedy)	3.5	4.5	4.9	5.2	4.8	30.2	8.8	(2.0)
15	Newark	3.9	4.2	5.0	4.9	4.8	8.0	19.7	(3.6)
16	Salt Lake City	4.7	5.0	4.5	4.7	4.6	5.9	(8.5)	1.9
17	Philadelphia	4.4	5.5	6.2	4.4	4.6	27.0	12.1	(26.2)
18	Chicago (Midway)	1.1	2.5	3.5	3.9	3.8	131.9	36.4	10.0
19	Baltimore	1.3	1.8	2.9	3.8	3.8	33.9	63.5	30.3
20	Washington, D.C. (Dulles)	3.1	4.5	4.7	3.7	3.6	45.7	4.0	(22.1)
21	Las Vegas	2.1	3.9	2.9	3.1	3.0	83.1	(25.6)	4.8
22	Dallas (Love)	0.7	0.9	1.1	2.4	2.5	29.4	30.0	120.3
23	Fort Lauderdale	0.2	0.5	0.9	1.8	2.4	140.4	85.6	176.8
24	Houston (Hobby)	1.0	1.1	1.3	2.2	2.3	2.3	26.2	71.8
25	St. Louis	9.5	1.4	1.0	1.6	1.8	(84.9)	(27.5)	71.3
26	Honolulu	2.1	1.8	1.7	1.8	1.7	(13.2)	(7.4)	(0.1)
27	Washington, D.C. (Reagan)	0.8	1.6	1.6	1.5	1.4	85.6	1.3	(12.6)
28	New York (LaGuardia)	0.8	0.9	1.0	1.4	1.4	10.1	13.9	30.7
29	Portland, Oregon	1.1	1.1	1.0	1.2	1.2	(6.0)	(4.9)	12.6
30	Boston	1.1	0.7	0.7	1.1	1.2	(31.7)	(8.1)	72.1
	Top 30 airports						7.1%	6.2%	3.0%

Notes: Airports shown are the top 30 U.S. airports ranked by number of connecting passengers for the 12 months ended June 30, 2018.

Percentages were calculated using unrounded numbers.

Includes a small number of passengers on foreign-flag airlines making connections between international flights.

Source: U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedules T100 and 298C T1.

Table 9
SOUTHWEST SERVICE AT ITS PRINCIPAL AIRPORTS
 As scheduled for July of years shown

City (airport)	2000	2004	2008	2012	2016	2017	2018	2000-2008	Increase (decrease)	
									2008-2016	2016-2018
Average daily departures										
Chicago (Midway)	125	141	231	248	256	255	252	106	26	(5)
Baltimore/Washington	102	190	213	240	220	227	221	110	8	1
Las Vegas	148	190	246	226	215	209	209	98	(31)	(6)
Denver	--	3	86	168	193	203	205	86	107	12
Dallas (Love)	122	115	130	119	169	173	174	8	40	5
Phoenix (Sky Harbor)	168	175	193	178	169	167	170	25	(24)	1
Houston (Hobby)	142	137	141	146	153	157	164	(1)	12	10
Orlando (International)	59	95	167	157	124	127	126	108	(43)	2
Los Angeles	115	115	132	116	118	122	121	17	(14)	4
Atlanta	135	184	264	209	120	117	118	129	(144)	(2)
Average daily departing seats										
Chicago (Midway)	16,427	19,088	31,345	34,206	38,520	38,568	38,391	14,918	7,175	(129)
Baltimore/Washington	13,930	25,132	28,234	32,500	32,783	34,147	33,811	14,304	4,549	1,028
Las Vegas	19,927	25,972	33,536	31,569	32,315	31,248	31,792	13,609	(1,222)	(523)
Denver	--	408	11,719	22,995	29,149	30,852	31,592	11,719	17,430	2,443
Dallas (Love)	15,789	14,541	17,566	16,281	24,272	25,291	26,064	1,777	6,706	1,792
Phoenix (Sky Harbor)	22,669	23,775	26,272	24,462	25,061	25,040	25,707	3,604	(1,212)	646
Houston (Hobby)	18,598	17,971	18,981	20,011	22,404	23,480	24,749	383	3,422	2,345
Orlando (International)	7,571	12,469	22,140	20,697	18,632	19,015	19,477	14,569	(3,508)	846
Los Angeles	15,541	15,576	17,928	16,026	17,173	17,911	18,151	2,388	(755)	978
Atlanta	14,747	21,769	32,511	25,663	17,371	17,461	17,630	17,764	(15,140)	260

Notes: Airports shown are the 10 busiest U.S. airports as ranked by departing seats on Southwest for July 2018.

Source: OAG Aviation Worldwide Ltd, OAG Analyser database, accessed February 2019.

Airport's Role in the Baltimore-Washington Region

The extent of the region served by the Airport is defined, in part, by the availability of airline service at Washington Reagan and Washington Dulles airports. The extent to which the Airport is successful in competing with these airports for passengers depends, among other factors, on air service frequency and airline fares at the three airports.

Table 10 provides data on airline service at the three airports serving the region.

As scheduled for July 2018, nonstop domestic service was provided from BWI to 66 destinations, 55 of them served by Southwest. Nonstop domestic service was provided from Reagan and Dulles to 82 and 71 destinations, respectively. (Some destinations are served by more than one airport.) In July 2018, BWI was the busiest of the three regional airports in terms of departing seats. Sixty-three percent of aircraft departures at Reagan were operated with regional jets (aircraft with fewer than 100 seats) whereas only 7% of departures at BWI were operated with regional jets.

Between 2007 and 2018, the number of flights and seats offered at BWI and Reagan increased, while at Dulles they decreased. (Southwest's increased seat capacity at Reagan resulted largely from its acquisition of additional landing and takeoff slots).

Table 11 provides historical data on numbers of average daily enplaned passengers at the three airports for MAA's Fiscal Year ended June 30. In FY 2018, BWI accounted for 36.9% of regional enplaned passengers, up from 33.2% in FY 2007. Between FY 2007 and FY 2018, the number of enplaned passengers at the three airports together increased by 14.2 million combining an increase of 8.4 million at BWI, an increase of 6.8 million at Reagan, and a decrease of 1.0 million at Dulles.

Dulles is the primary airport for international travel, accounting for 83.7% of international enplaned passengers at the three regional airports. BWI accommodates only limited international airline service, ranking 25th among U.S. airports by international enplaned passengers. Reagan does not provide FIS facilities for the inspection of arriving international flights, so international service is offered only to and from those locations where inbound passengers are precleared at their point of departure (Canada, the Bahamas, and Bermuda).

In FY 2018, BWI accounted for 38.4% of domestic originating passengers in the region versus 42.0% at Reagan and 19.6% at Dulles.

Figure 3 presents domestic airline yield (average airfare expressed in cents per revenue-passenger-mile) at the three regional airports and for the nation from FY 2007 through FY 2018. Due largely to service by Southwest, airfares at BWI historically have been lower than airfares at either Reagan or Dulles. In FY 2018,

average domestic airfares at Reagan and Dulles were 42.7% and 15.8% higher, respectively, than at BWI.

Since FY 2014, airfares at BWI have decreased in part as a result of increased service competition, as discussed in the later section “Domestic Originating passengers and Airline Yields”.

Table 10
DOMESTIC AIRLINE SERVICE AT REGIONAL AIRPORTS
Baltimore/Washington International, Reagan National, and Dulles International Airports
As scheduled for July of years shown

	Number of destinations served nonstop (a)			Average daily departures			Average daily departing seats		
	2007	2018	Change	2007	2018	Change	2007	2018	Change
By airport									
BWI	57	66	9	333	332	(1)	41,484	47,431	5,947
Reagan	67	82	15	373	394	22	35,761	39,916	4,155
Dulles	73	71	(2)	368	262	(106)	32,818	27,617	(5,201)
By airline									
American									
BWI	11	7	(4)	45	24	(21)	4,785	3,021	(1,764)
Reagan	49	69	20	239	230	(9)	20,838	19,912	(926)
Dulles	11	4	(7)	33	16	(17)	2,806	1,819	(987)
Delta									
BWI	8	7	(1)	37	27	(10)	4,047	3,548	(499)
Reagan	18	11	(7)	73	46	(27)	7,957	5,591	(2,366)
Dulles	6	6	--	25	18	(8)	2,560	1,833	(727)
Southwest									
BWI	49	55	6	218	213	(5)	29,238	32,425	3,187
Reagan	2	16	14	6	42	36	775	6,235	5,460
Dulles	5	4	(1)	19	7	(12)	2,416	1,044	(1,372)
United									
BWI	7	6	(1)	27	15	(12)	3,200	1,891	(1,309)
Reagan	5	6	1	35	36	1	3,706	3,597	(109)
Dulles	68	68	--	267	206	(61)	21,973	20,879	(1,094)
All other airlines									
BWI	2	26	24	4	53	49	214	6,546	6,332
Reagan	8	17	9	20	41	21	2,485	4,581	2,097
Dulles	9	8	(1)	24	15	(9)	3,063	2,043	(1,020)

(a) Some destinations are served by more than one airport and some airports are served by more than one airline. Includes only destinations with an average of at least 4 flights per week.

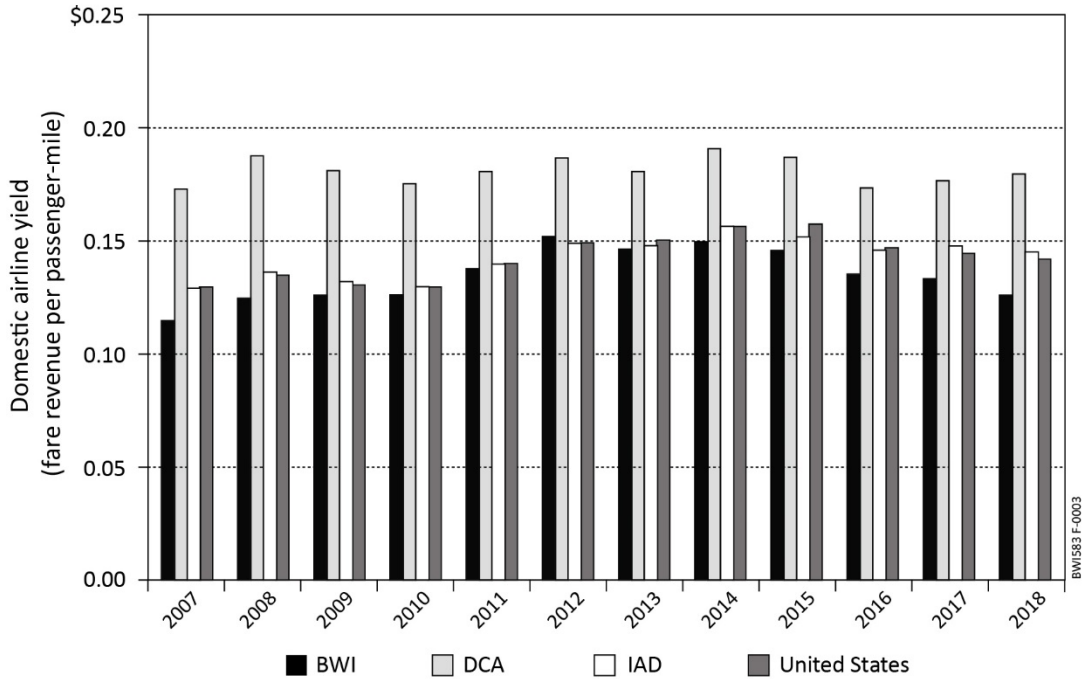
Source: OAG Aviation Worldwide Ltd., OAG Analyser database, accessed February 2019.

Table 11
HISTORICAL TRENDS IN ENPLANED PASSENGERS AT REGIONAL AIRPORTS
 Baltimore/Washington International, Reagan National, and Dulles International Airports
 12 months ended June 30

Year	Average daily enplaned passengers					
	BWI	Reagan	Dulles	Share of three-airport region total		
				BWI	Reagan	Dulles
2007	28,022	24,593	31,914	33.2%	29.1%	37.8%
2012	30,426	24,968	30,321	35.5	29.1	35.4
2013	30,282	27,012	29,019	35.1	31.3	33.6
2014	29,941	26,925	28,553	35.1	31.5	33.4
2015	30,610	29,068	28,344	34.8	33.0	32.2
2016	33,086	31,405	28,421	35.6	33.8	30.6
2017	34,563	31,569	29,811	36.0	32.9	31.1
2018	36,381	31,365	30,884	36.9	31.8	31.3
Year	Average daily international enplaned passengers					
	BWI	Reagan	Dulles	Share of three-airport region total		
				BWI	Reagan	Dulles
2007	743	471	7,314	8.7%	5.5%	85.8%
2012	675	414	8,670	6.9	4.2	88.8
2013	855	597	8,974	8.2	5.7	86.1
2014	954	460	9,371	8.8	4.3	86.9
2015	1,173	541	9,523	10.4	4.8	84.7
2016	1,492	527	9,603	12.8	4.5	82.6
2017	1,476	506	10,095	12.2	4.2	83.6
2018	1,535	502	10,480	12.3	4.0	83.7
Year	Average daily domestic originating passengers					
	BWI	Reagan	Dulles	Share of three-airport region total		
				BWI	Reagan	Dulles
2007	21,604	18,766	14,524	39.4%	34.2%	26.5%
2012	21,129	18,902	11,432	41.1	36.7	22.2
2013	20,492	20,183	10,444	40.1	39.5	20.4
2014	19,919	20,251	10,130	39.6	40.3	20.1
2015	19,802	22,607	11,002	37.1	42.3	20.6
2016	20,849	25,082	10,928	36.7	44.1	19.2
2017	22,165	25,868	11,510	37.2	43.4	19.3
2018	23,481	25,721	11,990	38.4	42.0	19.6

Sources: U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100; U.S. DOT, Schedule T100.

Figure 3
DOMESTIC AIRLINE YIELDS FOR REGIONAL AIRPORTS AND UNITED STATES
 Baltimore/Washington International, Reagan National, and Dulles International Airports



Notes: Yields for outbound originating domestic passengers.
 Yields exclude taxes, fees, passenger facility charges, and charges for optional services.

Source: U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedules T100 and 298C T1.

HISTORICAL AIRLINE SERVICE

Domestic Airline Service

As of July 2018, an average of 332 daily departures were provided from the Airport to 66 domestic destinations, including all major U.S. cities. With the exception of Frontier and Hawaiian, all major U.S. airlines served the Airport. In July 2018, Southwest accounted for 68.4% of domestic departing seats (versus 70.1% in 2008). The other legacy carriers (Alaska, American, Delta, and United) together accounted for 19.5% (versus 28.5% in 2008).^{*} New entrant low-cost carriers (Allegiant, JetBlue, and Spirit) together accounted for 11.7% (versus none in 2008). Other airlines accounted for less than 0.5%.

Between July 2007 and July 2018, the number of daily departures at the Airport remained virtually unchanged, but the number of daily departing seats increased 14.3%. The increase in the average number of seats per departure, from 123.6 in 2008 to 143.0 in 2018, reflects the phasing out by American, Delta, and United of small regional jet and turboprop aircraft and their replacement with larger regional and narrowbody jet aircraft and the introduction into service of larger aircraft types by Southwest. Alaska, Allegiant, Southwest, and Spirit operate only narrowbody aircraft at the Airport.

Figure 4 shows domestic airports with scheduled nonstop service from the Airport in July 2018. Of the 72 airports served nonstop, 47 (65.3%) were served by only one airline (nearly all Southwest) and 25 (34.7%) were served by two or more airlines.

^{*}In all discussions of historical airline service and passenger traffic by airline in this report, unless otherwise noted, data for merged airlines are accounted for with the surviving airline (i.e., America West Airlines, Trans World Airlines, and US Airways with American Airlines; Northwest Airlines with Delta Air Lines; Continental Airlines with United Airlines; Midwest Airlines with Frontier Airlines; AirTran Airways with Southwest Airlines; and Virgin America with Alaska Airlines). Also, data for affiliated regional airlines are accounted for with data for the mainline airline. Regional airlines operating at the Airport as code-sharing affiliates of mainline U.S. airlines as of July 2018 included CommutAir (United Express), Endeavor Air (Delta Connection), Envoy Air (American Eagle), ExpressJet Airlines (United Express), Piedmont (American Eagle), and PSA (American Eagle).

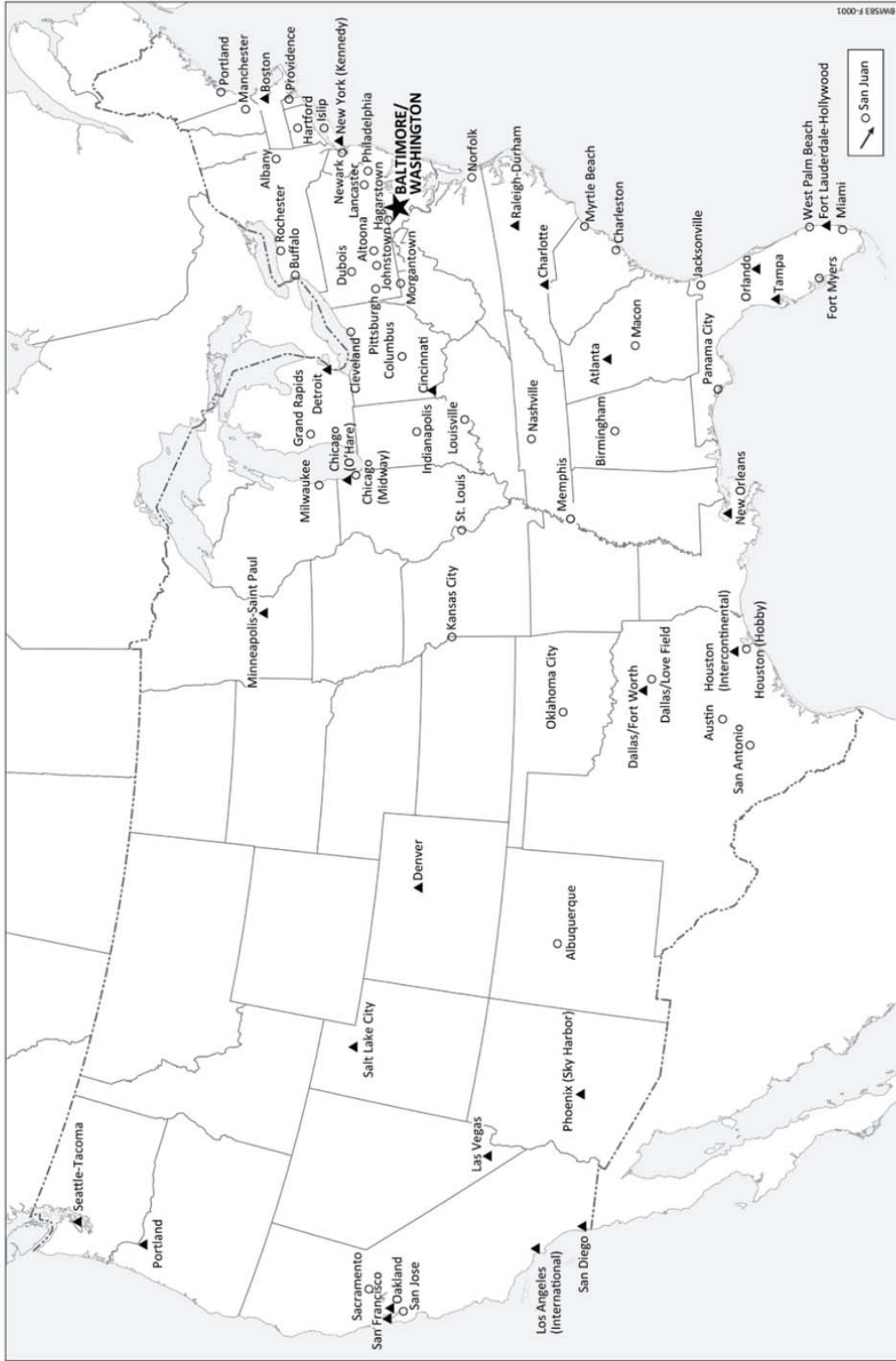


Figure 4
DOMESTIC AIRPORTS SERVED FROM BALTIMORE/WASHINGTON
 Baltimore/Washington International Thurgood Marshall Airport
 As scheduled for July 2018

LEGEND
 ○ = Airports with scheduled service by only one airline.
 ▲ = Airports with scheduled service by more than one airline.
 Source: OAG Aviation Worldwide Ltd, OAG Analyser database, accessed February 2019.

Domestic Airline Service by Destination

Table 12 presents data on domestic passengers and airline service from the Airport to the 26 destinations accounting for 1.0% or more of domestic originating passengers at the Airport in FY 2018. Also shown are the numbers of average daily scheduled seats and departures as scheduled for July 2008 and July 2018 and the airlines providing nonstop service. The top five destinations—Miami, Boston, Orlando, Atlanta, and Chicago—accounted for 31.4% of originating passengers in FY 2018. In July 2018, Southwest provided daily nonstop flights from the Airport to all 26 destinations. Competing service by two or more airlines was provided to 22 of the 26 destinations.

In July 2008, only 14 of the top 26 destinations had competing service. The increase in service competition between 2008 and 2018 is largely attributable to new service by Spirit. Spirit began serving the Airport in September 2012 with flights to Dallas/Fort Worth and Ft. Lauderdale (competing with Southwest only to Fort Lauderdale). In July 2018, Spirit served 18 domestic destinations (including Myrtle Beach, not shown in Table 12) and competed with Southwest on all 18. Frontier Airlines began service to Denver in March 2019 and Orlando in April 2019.

Domestic Originating Passengers and Airline Yields

The average domestic airline yield for the Airport has historically been lower than the national average and has decreased slightly since 2014 (see Figure 3). Between FY 2014 and FY 2018 average domestic yield decreased 13.4% as airlines competed for passengers and lowered fares.

Figure 5 shows historical trends in domestic airline yields at the Airport for Southwest and other airlines. Southwest's average domestic yield has decreased each year since FY 2012 (coinciding with the start of service by JetBlue in FY 2012, Spirit in FY 2013, Alaska in FY 2015, and Allegiant in FY 2016).

The average yields shown on Figures 3 and 5, as reported by the airlines to the U.S. DOT, exclude charges for optional services, such as checked baggage, preferred seating, in-flight meals, entertainment, and ticket changes. Such charges have become widespread in the airline industry since 2006. As a result, the average yields shown understate the amount actually paid by airline passengers for their travel. Optional service charges that were previously included in the ticket price are not all separately reported to the U.S. DOT. They have been estimated by industry analysts to amount to an effective average surcharge on domestic airfares of approximately 5% of ticket fare revenues, although the percentage varies widely by airline.

International Airline Service

As of July 2018, an average of 18 daily departures were provided to 13 international destinations. Most of the international seating capacity was on flights to the Caribbean and Latin America (61.7%, 8 destinations), followed by Europe (28.3%, 3 destinations), and Canada (10.0%, 2 destinations). The average number of scheduled international departing seats at the Airport increased three-fold between July 2008 (856 per day) and July 2018 (2,846 per day) and the number of destinations served nonstop increased from 6 to 13. The increase was primarily attributable to Southwest, which accounted for two-thirds of the increase in departing seats.

Southwest provided 48.7% of the seats to international destinations in July 2018, with nonstop service to 8 international destinations. The airline continued service to 5 of the 6 Caribbean destinations served by AirTran (Aruba, Cancun, Montego Bay, Nassau, and Punta Cana) and added destinations in Costa Rica (Liberia and San Jose) and Mexico (Los Cabos).

As of July 2018, eight other airlines provided year-round international service from the Airport -- British Airways to London Heathrow, Air Canada to Montreal and Toronto, Spirit to Cancun and Montego Bay, and Wow Air and Icelandair to Reykjavik. (Icelandair and Wow Air ended Reykjavik service in January 2019 and March 2019, respectively.) In 2018, seasonal international service was provided by Condor to Frankfurt and by Alaska and Delta to Cancun. Norwegian operated seasonal service to Pointe-a-Pitre and Fort de France until March 2017.

Table 12
DOMESTIC AIRLINE SERVICE BY DESTINATION
 Baltimore/Washington International Thurgood Marshall Airport
 As scheduled for July of years shown

Rank	Destination <i>Airport</i>	Air miles from BWI (b)	2018 (a)		July 2008 (b)		July 2018 (b)		Airlines providing nonstop service (b)	
			Originating passengers	Percent of originating passengers	Average daily departures	Average daily seats	Average daily departures	Average daily seats	July 2008	July 2018
1	Miami									
	Fort Lauderdale-Hollywood	926	498,847	5.8%	7	882	14	2,213	WN	B6, NK, WN
	Miami	947	90,521	1.1	18	406	18	485	AA, WN	AA
	Palm Beach	885	<u>82,899</u>	1.0	<u>11</u>	<u>407</u>	<u>11</u>	<u>337</u>	WN	N
	Subtotal		672,267	7.8%	36	1,695	42	3,036		
2	Boston									
	Boston	368	409,669	4.8%	14	1,270	15	2,123	DL, WN	B6, NK, WN
	Providence	327	106,058	1.2	11	1,502	8	1,128	WN	WN
	Manchester	375	<u>100,646</u>	1.2	<u>10</u>	<u>1,361</u>	<u>6</u>	<u>962</u>	WN	WN
	Subtotal		616,373	7.2%	35	4,133	30	4,213		
3	Orlando	788	535,095	6.2%	13	1,756	12	1,958	WN	B6, NK, WN
4	Atlanta	575	440,370	5.1	17	2,439	19	2,905	DL, WN	DL, NK, WN
5	Chicago									
	Midway	609	224,905	2.6%	8	1,069	7	1,046	WN	WN
	O'Hare	619	<u>204,295</u>	2.4	<u>11</u>	<u>1,272</u>	<u>10</u>	<u>1,260</u>	AA, UA	AA, NK, UA
	Subtotal		429,200	5.0%	19	2,342	17	2,307		
6	Los Angeles									
	Los Angeles	2,322	309,663	3.6%	4	546	6	1,000	UA, WN	AS, NK, UA, WN
	Orange County	2,307	25,265	0.3	--	--	--	--	--	--
	Ontario	2,283	21,298	0.2	--	--	--	--	--	--
	Burbank	2,320	10,124	0.1	--	--	--	--	--	--
	Long Beach	2,318	<u>2,103</u>	0.0	--	--	--	--	--	--
	Subtotal		368,453	4.3%	4	546	6	1,000		
7	Las Vegas	2,100	269,257	3.1%	5	690	7	1,171	AA, WN	NK, WN
8	Dallas									
	Dallas/Fort Worth	1,214	139,451	1.6%	8	1,041	5	743	AA, WN	AA, NK
	Love Field	1,206	<u>127,105</u>	1.5	--	--	<u>4</u>	<u>653</u>	--	WN
	Subtotal		266,556	3.1%	8	1,041	9	1,395		

Table 12 (page 2 of 2)

DOMESTIC AIRLINE SERVICE BY DESTINATION

Baltimore/Washington International Thurgood Marshall Airport
As scheduled for July of years shown

Rank	Destination Airport	Air miles from BWI (b)	2018 (a)		July 2008 (b)		July 2018 (b)		Airlines providing nonstop service (b)	
			Originating passengers	Percent of originating passengers	Average daily departures	Average daily seats	Average daily departures	Average daily seats	July 2008	July 2018
9	Houston									
	Hobby	1,243	137,903	1.6%	4	513	4	635	WN	WN
	Intercontinental	1,232	<u>125,456</u>	1.5	<u>5</u>	<u>602</u>	<u>3</u>	<u>492</u>	UA	NK, UA
	Subtotal		263,359	3.1%	9	1,116	7	1,126		
10	San Francisco									
	San Francisco	2,450	113,883	1.3%	1	123	3	425	UA	AS, UA
	Oakland	2,439	93,429	1.1	--	--	3	458	-	NK, WN
	San Jose	2,431	<u>55,892</u>	0.7	--	--	<u>1</u>	<u>168</u>	-	WN
	Subtotal		263,204	3.1%	1	123	7	1,051		
11	Tampa	843	252,315	2.9%	10	1,276	9	1,330	WN	NK, WN
12	San Diego	2,288	210,706	2.5	2	274	5	854	WN	AS, NK, WN
13	Detroit	407	208,308	2.4	9	1,351	9	1,320	DL, WN	DL, NK, WN
14	Denver	1,486	193,170	2.3	7	957	9	1,530	UA, WN	NK, UA, WN
15	Minneapolis-St. Paul	933	184,156	2.1	3	446	7	1,104	DL	DL, NK, WN
16	New Orleans	997	164,012	1.9	1	159	5	732	WN	NK, WN
17	Phoenix	1,992	158,913	1.9	6	766	5	842	AA, WN	AA, WN
18	Charlotte	360	154,768	1.8	12	1,449	9	1,420	AA, WN	AA, WN
19	Seattle-Tacoma	2,327	152,645	1.8	2	274	3	539	WN	AS, NK, WN
20	Nashville	585	127,202	1.5	7	917	6	860	WN	WN
21	Fort Myers	920	120,594	1.4	3	391	3	510	WN	WN
22	Raleigh-Durham	255	99,699	1.2	6	800	8	1,032	WN	DL, WN
23	Salt Lake City	1,858	94,354	1.1	2	320	4	575	DL, WN	DL, WN
24	Cincinnati	428	94,276	1.1	4	272	5	571	DL	DL, G4, WN
25	St. Louis	735	88,506	1.0	7	745	4	650	AA, WN	WN
26	San Antonio	1,404	<u>86,782</u>	<u>1.0</u>	<u>2</u>	<u>270</u>	<u>3</u>	<u>452</u>	WN	WN
	Top 26 destinations		6,514,540	76.0%	229	26,546	248	34,483		
	Other destinations (c)		<u>2,056,167</u>	<u>24.0</u>	<u>93</u>	<u>13,265</u>	<u>84</u>	<u>12,948</u>		
	Total all destinations		8,570,707	100.0%	322	39,812	332	47,431		

Notes: Columns may not add to totals shown because of rounding.

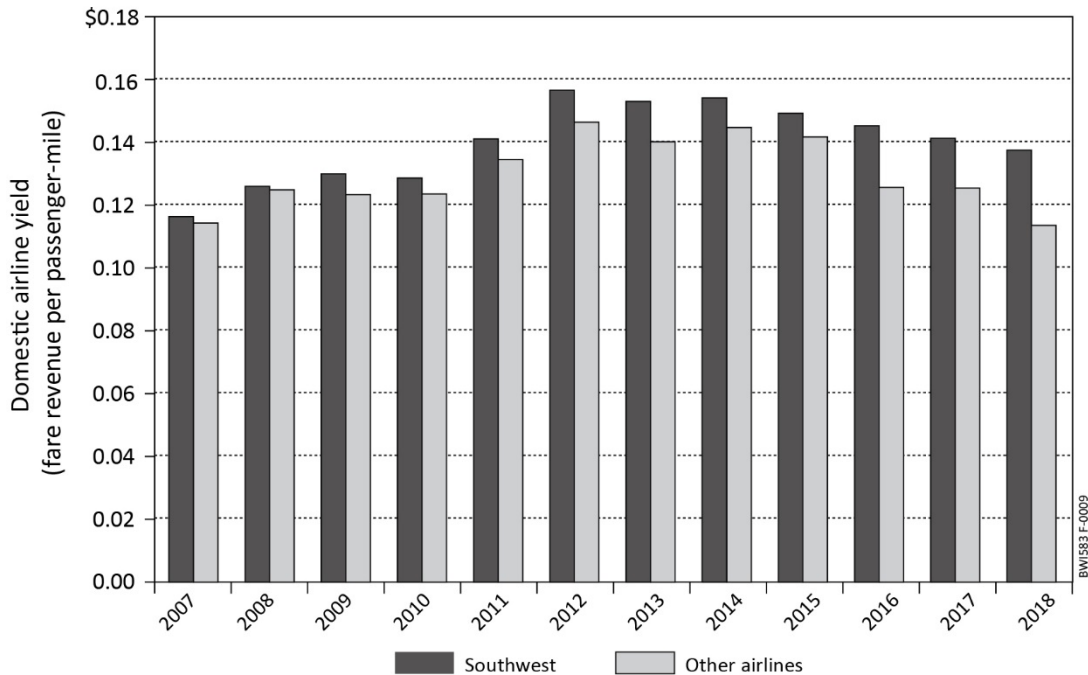
AA=American Airlines, AS=Alaska Airlines, B6=JetBlue Airways, DL=Delta Air Lines, G4=Allegiant, NK=Spirit Airways, UA=United Airlines, WN=Southwest Airlines.

(a) U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100. Originating passengers for the 12 months ended June 30, 2018.

(b) OAG Aviation Worldwide Ltd, OAG Analyser database, accessed February 2019.

(c) Destinations that individually accounted for less than 1.0% of originating passengers.

Figure 5
DOMESTIC AIRLINE YIELDS FOR AIRPORT BY AIRLINE
 Baltimore/Washington International Thurgood Marshall Airport



Notes: Yields for outbound originating domestic passengers.
 Yields exclude taxes, fees, passenger facility charges, and charges for optional services.

Source: U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedules T100 and 298C T1.

HISTORICAL AIRLINE TRAFFIC

Enplaned Passengers

Table 13 presents historical data on enplaned passengers at the Airport by sector (domestic, international, charter) and by component (originating, connecting).

Between FY 2000 and FY 2008, the number of passengers enplaned at the Airport increased at an average rate of 1.7% per year through a period that included the 2001 economic recession, the decline in airline travel following the September 11 attacks, and the abandonment of the Airport as a base of operations for US Airways' MetroJet operations in 2001. Between FY 2008 and FY 2009, enplaned passenger numbers at the Airport decreased 5.6% as the airlines reduced seat capacity in response to the contraction of demand during the 2008-2009 recession and increases in operating expenses.

With the resumption of economic growth, enplaned passenger numbers at the Airport increased an average of 3.3% per year between FY 2009 and FY 2018, with

the passenger number in FY 2018 exceeding the FY 2007 pre-recession number by 31.2%.

The increase in enplaned passenger numbers between FY 2009 and FY 2018 of 34.5% (average 3.3% per year), combined an increase in originating passengers of 18.5% (average 1.9% per year) and an increase in connecting passengers of 105.6% (average 8.3% per year). Between FY 2014 and FY 2018, originating passengers at the Airport increased 20.7% (average 4.8% per year) as the national and Baltimore economies grew, new entrant airlines began service, and airfares were reduced.

International Passengers

Passengers enplaned on international flights represent a small, but growing share of traffic at the Airport. Between FY 2009 and FY 2018 the number of international enplaned passengers increased an average of 14.2% per year, compared with an average increase of 3.1% per year in domestic passengers. In FY 2018, international passengers represented 4.1% of all enplaned passengers.

Airline Shares of Enplaned Passengers

Table 14 presents data on the shares of originating passengers by airline group for FY 2018 and shows the distribution of originating passengers between residents and visitors.

Originating passengers accounted for 72.0% of enplaned passengers at the Airport in FY 2018, with the remaining 28.0% connecting between flights. Essentially all of the connecting traffic at the Airport is between Southwest flights. The originating passenger percentage decreased from 85.7% in FY 2000, reflecting Southwest's increased reliance on BWI as a connecting airport in its system. Residents of the Airport service region accounted for approximately 55% of originating passengers and visitors to the region for 45%.

Table 15 presents historical enplaned passengers at the Airport by airline for selected years between FY 2009 and FY 2018. In FY 2018, Southwest accounted for 67.6% of enplaned passengers, followed by Spirit with 8.2%, Delta with 7.7%, American with 6.5%, and United with 3.9%. Southwest accounted for 56.1% of originating passengers.

Table 13
HISTORICAL ENPLANED PASSENGERS BY COMPONENT
 Baltimore/Washington International Thurgood Marshall Airport
 Fiscal Years ended June 30

Year	Domestic	International	Charter	Total	Originating (a)	Connecting
2000 (b)	8,876,142	406,769	--	9,282,911	7,953,888	1,329,023
2001 (b)	9,911,401	464,639	--	10,376,040	8,814,489	1,561,551
2002	9,248,881	213,458	163,458	9,625,797	8,195,037	1,430,683
2003	9,064,371	252,476	150,428	9,467,275	8,101,085	1,366,190
2004	9,885,008	329,572	166,438	10,381,018	8,836,430	1,554,588
2005	9,348,855	320,791	113,176	9,782,822	8,255,603	1,527,219
2006	9,819,882	291,591	69,523	10,180,996	8,454,943	1,726,053
2007	9,994,702	277,598	43,255	10,315,555	8,536,616	1,778,939
2008	10,376,288	224,558	61,350	10,662,196	8,672,236	1,989,926
2009	9,841,566	167,659	56,937	10,066,162	8,222,643	1,843,519
2010	10,448,769	176,080	60,398	10,685,247	8,433,573	2,251,674
2011	11,006,063	199,877	61,285	11,267,225	8,538,423	2,728,802
2012	11,046,277	232,189	61,798	11,340,264	8,431,631	2,908,633
2013	10,923,624	301,385	63,141	11,288,150	8,279,714	3,008,436
2014	10,746,552	321,631	71,400	11,139,583	8,073,270	3,066,313
2015	10,917,876	419,178	75,541	11,412,595	8,077,398	3,335,197
2016	11,743,738	525,268	62,935	12,331,941	8,606,722	3,725,219
2017	12,297,659	523,430	54,865	12,875,954	9,123,052	3,752,902
2018	12,930,208	555,753	48,072	13,534,033	9,743,824	3,790,209
Average annual percent increase (decrease)						
2000-2008	2.0%	n.c.	n.c.	1.7%	1.1%	5.2%
2008-2009	(5.2)	(25.3)	(7.2)	(5.6)	(5.2)	(7.4)
2009-2018	3.1	14.1	(2.2)	3.3	1.9	8.3
2014-2018	4.8	11.9	(9.4)	5.0	4.8	5.4
Annual percent increase (decrease)						
2015-2016	7.6%	25.3%	(16.7%)	8.1%	6.6%	11.7%
2016-2017	4.7	(0.3)	(12.8)	4.4	6.0	0.7
2017-2018	5.1	6.2	(12.4)	5.1	6.8	1.0
Share of Airport total						
2000	95.6%	4.4%	--	100.0%	85.7%	14.3%
2009	97.8	1.7	0.6	100.0	81.7	18.3
2018	95.5	4.1	0.4	100.0	72.0	28.0

n.c. = not calculated.

Notes: Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

(a) Calculated by subtracting connecting passengers from total enplaned passengers. Includes domestic and international O&D passengers traveling on U.S. and foreign-flag airlines, passengers making connections between two international flights, passengers on nonscheduled (charter) flights, and nonrevenue passengers.

(b) The number shown for international passengers includes passengers on charter flights.

Sources: Maryland Aviation Administration records; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedules T100 and 298C T1.

Table 14
ENPLANED PASSENGERS BY AIRLINE GROUP
 Baltimore/Washington International Thurgood Marshall Airport
 Fiscal Year ended June 30, 2018

	Average daily enplaned passengers			Distribution by airline group		
	Southwest	All other airlines	All Airlines	Southwest	All other airlines	All Airlines
By sector						
Domestic	24,249	11,177	35,425	96.7%	93.1%	95.5%
International	820	703	1,523	3.3	5.8	4.1
Charter	--	<u>132</u>	<u>132</u>	<u>0.0</u>	<u>1.1</u>	<u>0.4</u>
Total	25,069	12,011	37,080	100.0%	100.0%	100.0%
By type of passenger						
Originating - resident (a)	9,249	5,529	14,778	36.9%	46.0%	39.9%
Originating - visitor (b)	<u>5,733</u>	<u>6,184</u>	<u>11,917</u>	<u>22.9</u>	<u>51.5</u>	<u>32.1</u>
Subtotal originating	14,982	11,714	26,695	59.8%	97.5%	72.0%
Connecting	<u>10,087</u>	<u>297</u>	<u>10,384</u>	<u>40.2</u>	<u>2.5</u>	<u>28.0</u>
Total	25,069	12,011	37,080	100.0%	100.0%	100.0%
Share of passengers						
Originating	56.1%	43.9%	100.0%			
Connecting	97.1	2.9	100.0			
Total	67.6	32.4	100.0			

Notes: Rows and columns may not add to totals shown because of rounding.
 Percentages were calculated using unrounded numbers.

(a) Originating-resident passengers are defined as those passengers whose flight itineraries began at BWI.

(b) Originating-visitor passengers are defined as those passengers whose flight itineraries began at airports other than BWI.

Sources Maryland Aviation Administration records; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.

Table 15
AIRLINE MARKET SHARES OF ENPLANED PASSENGERS
 Baltimore/Washington International Thurgood Marshall Airport
 Fiscal Years ended June 30

Airline	FY 2009	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Domestic scheduled								
Southwest	6,695,173	7,937,057	7,829,606	7,634,857	7,847,410	8,278,543	8,632,719	8,850,763
Spirit	--	--	150,056	258,626	337,311	587,150	823,536	1,104,570
Delta	1,152,812	1,096,045	1,078,935	1,033,396	994,716	1,047,350	1,028,406	1,048,574
American	1,089,818	1,167,674	1,081,481	1,072,996	1,048,690	1,007,490	880,180	875,283
United	893,731	709,153	642,571	570,660	504,362	510,232	482,260	529,636
JetBlue	--	126,796	138,122	143,433	143,339	213,927	271,098	258,668
Alaska	--	--	--	--	46,450	100,955	128,266	191,805
Allegiant	--	--	--	--	1,677	12,205	46,966	50,044
All other (a)	<u>10,032</u>	<u>9,552</u>	<u>2,853</u>	--	--	--	<u>4,228</u>	<u>20,865</u>
Subtotal domestic	9,841,566	11,046,277	10,923,624	10,713,968	10,923,955	11,757,852	12,297,659	12,930,208
International scheduled								
Southwest	4,692	142,442	208,757	260,284	308,140	338,253	304,247	299,322
Wow Air	--	--	--	--	6,574	49,547	74,223	77,300
British Airways	53,147	53,813	54,351	55,762	54,970	57,189	62,308	62,733
Air Canada	29,124	29,619	29,185	29,660	33,659	42,261	48,693	54,822
Spirit	--	--	--	--	--	--	--	35,834
Other (b)	<u>80,696</u>	<u>6,315</u>	<u>9,092</u>	<u>8,509</u>	<u>11,433</u>	<u>23,904</u>	<u>33,959</u>	<u>25,742</u>
Subtotal international	167,659	232,189	301,385	354,215	414,776	511,154	523,430	555,753
Charter airlines	<u>56,937</u>	<u>61,798</u>	<u>63,141</u>	<u>71,400</u>	<u>73,864</u>	<u>62,935</u>	<u>54,865</u>	<u>48,072</u>
Total	10,066,162	11,340,264	11,288,150	11,139,583	11,412,595	12,331,941	12,875,954	13,534,033

Table 15 (page 2 of 2)

AIRLINE MARKET SHARES OF ENPLANED PASSENGERS

Baltimore/Washington International Thurgood Marshall Airport
Fiscal Years ended June 30

Airline	FY 2009	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Percent of total								
Domestic scheduled								
Southwest	66.5%	70.0%	69.4%	68.5%	68.8%	67.1%	67.0%	65.4%
Spirit	--	--	1.3	2.3	3.0	4.8	6.4	8.2
Delta	11.5	9.7	9.6	9.3	8.7	8.5	8.0	7.7
American	10.8	10.3	9.6	9.6	9.2	8.2	6.8	6.5
United	8.9	6.3	5.7	5.1	4.4	4.1	3.7	3.9
JetBlue	--	1.1	1.2	1.3	1.3	1.7	2.1	1.9
Alaska	--	--	--	--	0.4	0.8	1.0	1.4
Allegiant	--	--	--	--	0.0	0.1	0.4	0.4
All other	<u>0.1</u>	<u>0.1</u>	<u>0.0</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>0.0</u>	<u>0.2</u>
Subtotal domestic	97.8%	97.4%	96.8%	96.2%	95.7%	95.3%	95.5%	95.5%
International scheduled								
Southwest	0.0%	1.3%	1.8%	2.3%	2.7%	2.7%	2.4%	2.2%
Wow Air	--	--	--	--	0.1	0.4	0.6	0.6
British Airways	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Air Canada	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
Other (c)	<u>0.8</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>	<u>0.2</u>	<u>0.3</u>	<u>0.2</u>
Subtotal international	1.7%	2.0%	2.7%	3.2%	3.6%	4.1%	4.1%	4.1%
Charter airlines	<u>0.6%</u>	<u>0.5%</u>	<u>0.6%</u>	<u>0.6%</u>	<u>0.6%</u>	<u>0.5%</u>	<u>0.4%</u>	<u>0.4%</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(a) Includes Cape Air, Contour Airlines, Southern Airways, Boutique Air, and Via Air.

(b) Includes Air Jamaica, Alaska, Bahamasair, Condor, Frontier, Icelandair, Norwegian, Sunwing, USA 3000, and Vision.

Source: Maryland Aviation Administration records.

KEY FACTORS AFFECTING FUTURE AIRLINE TRAVEL

In addition to the demographics and economy of the Baltimore-Washington, D.C., region, as discussed earlier, key factors that will affect future airline traffic at the Airport include:

- Economic, political, and security conditions
- Financial health of the airline industry
- Airline service and routes
- Airline competition and airfares
- Availability and price of aviation fuel
- Aviation safety and security concerns
- Capacity of the national air traffic control system
- Capacity of the Airport

Economic, Political, and Security Conditions

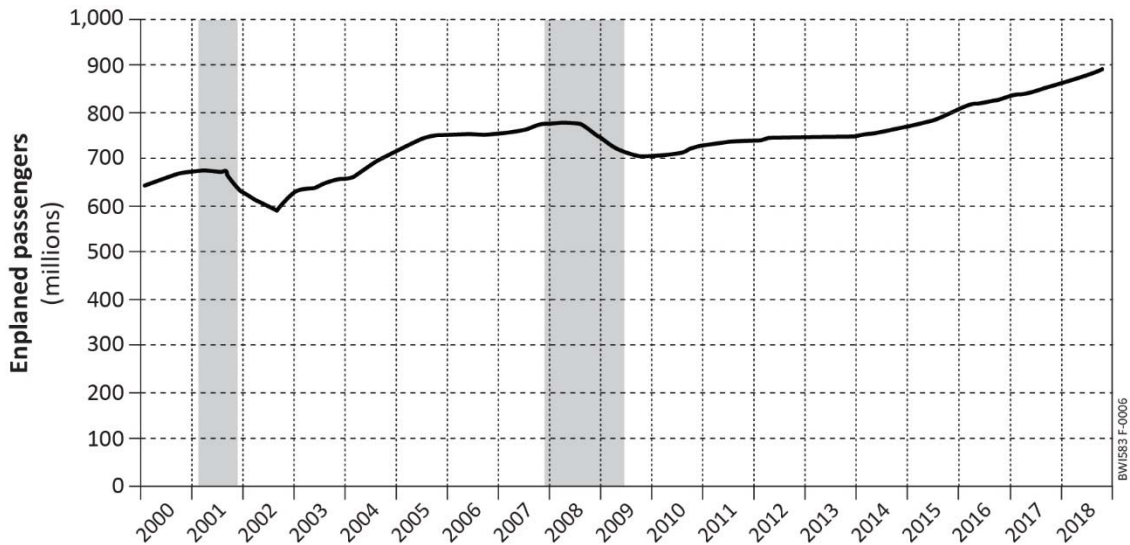
Historically, airline passenger traffic nationwide has correlated closely with the state of the U.S. economy and levels of real disposable income. As illustrated on Figure 6, recessions in the U.S. economy in 2001 and 2008-2009 and associated high unemployment reduced discretionary income and resulted in reduced airline travel. Future increases in domestic passenger traffic at the Airport will depend partly on national economic growth.

Passenger traffic at U.S. airports is also influenced by the globalization of business and increased importance of international trade and tourism, international economics, trade balances, currency exchange rates, government policies, and geopolitical relationships.

Concerns about hostilities, terrorist attacks, and other perceived security and public health risks, and associated travel restrictions also affect travel demand to and from particular international destinations. Beginning in March 2017, the Trump administration issued various orders seeking to restrict travel to the United States from certain countries, mainly in the Middle East and Africa. Following court challenges, in June 2018, the U.S. Supreme Court upheld the administration's most recent travel restrictions. As the restrictions are implemented, increased scrutiny by U.S. Customs and Border Protection could prevent or discourage some airline travel.

Future increases in international passenger traffic will depend partly on global economic growth, a stable and secure international travel environment, and government policies that do not unreasonably restrict or deter travel.

Figure 6
HISTORICAL ENPLANED PASSENGERS ON U.S. PASSENGER AIRLINES



Notes: Data shown are 12-month moving averages of enplaned passengers on scheduled and non-scheduled flights to domestic and international destinations. Shaded areas indicate months of economic recession.

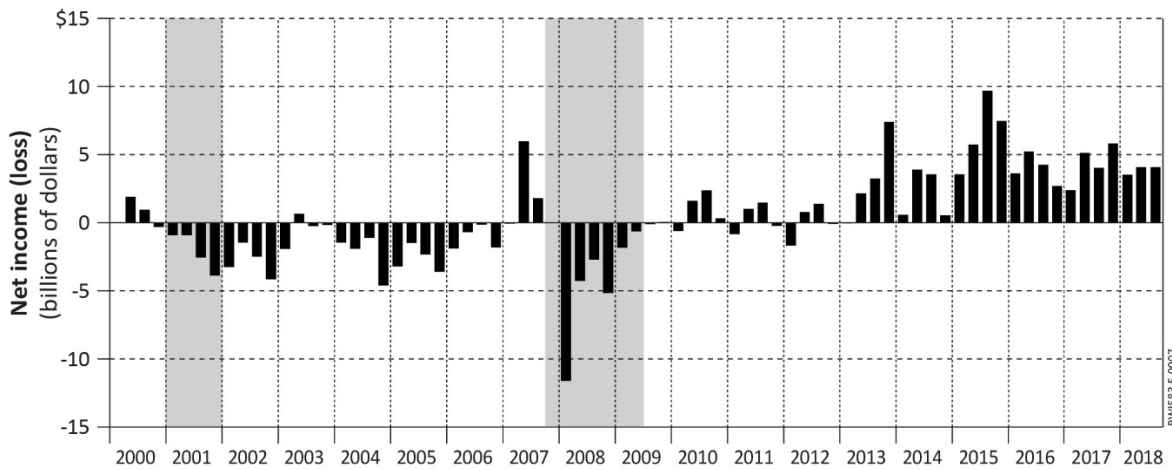
Sources: U.S. DOT, Bureau of Transportation Statistics, T100 Market and segment, www.transtats.bts.gov, accessed February 2019; National Bureau of Economic Research, US Business Cycle Expansions and Contractions, www.nber.org.

Financial Health of the Airline Industry

The number of passengers at the Airport will depend partly on the profitability of the U.S. airline industry and the associated ability of the industry and individual airlines to make the investments necessary to provide service. Figure 7 shows historical net income for U.S. airlines.

As a result of the 2001 economic recession, the disruption of the airline industry that followed the September 2001 attacks, increased fuel and other operating costs, and price competition, the industry experienced financial losses. From 2001 through 2006, the major U.S. passenger airlines collectively recorded net losses of approximately \$46 billion. To mitigate those losses, the major network airlines restructured their route networks and flight schedules and reached agreements with their employees, lessors, vendors, and creditors to cut costs. Between 2002 and 2005, Delta, Northwest, United, and US Airways filed for bankruptcy protection and restructured their operations.

Figure 7
NET INCOME FOR U.S. AIRLINES



Notes: Includes scheduled service on U.S. carriers only.
Shaded areas indicate quarters of economic recession.

Source: U.S. DOT, Bureau of Transportation Statistics, Net Income, F41 Schedule P12, www.transtats.bts.gov, accessed February 2019.

In 2007, the U.S. passenger airline industry was profitable, recording net income of approximately \$7 billion, but, in 2008, as oil and aviation fuel prices increased to unprecedented levels and the U.S. economy contracted, the U.S. passenger airline industry recorded net losses of approximately \$26 billion. The industry responded by grounding less fuel-efficient aircraft, eliminating unprofitable routes and hubs, reducing seat capacity, and increasing airfares. Between 2007 and 2009, U.S. passenger airlines collectively reduced domestic available seat-mile capacity by approximately 10%.

From 2010 to 2013, the U.S. passenger airline industry recorded net income of approximately \$18 billion, notwithstanding sustained high fuel prices, by controlling capacity and nonfuel expenses, increasing airfares, achieving high load factors, and increasing ancillary revenues. Between 2009 and 2013, the airlines collectively increased domestic seat-mile capacity by an average of 1.0% per year. American filed for bankruptcy protection in 2011.

In 2014, the U.S. passenger airline industry reported net income of \$9 billion, assisted by reduced fuel prices. In 2015, the industry achieved record net income of \$26 billion as fuel prices decreased further, demand remained strong, and capacity control allowed average fares and ancillary charges to remain high. Strong industry profitability continued in 2016 through 2018.

Recent agreements between the major airlines and their unionized employees have resulted in increased labor costs. According to Airlines for America, U.S. airlines increased wages and benefits per full-time employee by 28% between 2013 and 2018. Contributing to the increased costs, a shortage of qualified airline pilots resulting from retirements and changed FAA qualification standards and duty and rest rules has required the airlines to increase salaries and improve benefits to attract and retain pilots.

Sustained industry profitability will depend on, among other factors, economic growth to support airline travel demand, continued capacity control to enable increased airfares, and stable fuel prices and labor costs.

Consolidation of the U.S. airline industry resulted from the acquisition of Trans World by American (2001), the merger of US Airways and America West (2005), the merger of Delta and Northwest (2009), the merger of United and Continental (2010), the acquisition of AirTran by Southwest (2011), the merger of American and US Airways (2013), and the acquisition of Virgin America by Alaska (2016).

Such consolidation has resulted in four airlines (American, Delta, Southwest, and United) and their regional affiliates now accounting for approximately 80% of domestic seat-mile capacity. The consolidation has contributed to industry profitability. However, any resumption of financial losses could cause one or more U.S. airlines to seek bankruptcy protection or liquidate. The liquidation of any of the large network airlines would drastically affect airline service at certain connecting hub airports and change airline travel patterns nationwide.

Airline Service and Routes

The Airport accommodates travel demand to and from the Baltimore-Washington, D.C., region and serves as a connecting hub. The number of origin and destination passengers at the Airport depends primarily on the intrinsic attractiveness of the region as a business and leisure destination, the propensity of its residents to travel, and the airfares and service provided at the Airport and at other competing airports. By contrast, the number of connecting passengers depends almost entirely on the airline service provided.

The large airlines have developed hub-and-spoke systems that allow them to offer high-frequency service to many destinations. Because most connecting passengers have a choice of airlines and intermediate airports, connecting traffic at an airport depends primarily on the route networks and flight schedules of the airlines serving that airport and competing hub airports. Since 2003, as the U.S. airline industry consolidated, airline service has been reduced at many former connecting hub airports, including those serving St. Louis (American, 2003-2005), Dallas-Fort Worth (Delta, 2005), Pittsburgh (US Airways, 2006-2008), Las Vegas (US Airways, 2007-2010), Cincinnati (Delta, 2009-2012), Memphis (Delta, 2011-2013), and Cleveland (United, 2014).

As discussed in earlier sections, the Airport serves as a connecting airport for Southwest. As a result, much of the connecting passenger traffic at the Airport results from the route network and flight schedule of Southwest, rather than the economy of the Airport service region. If Southwest were to reduce connecting service at the Airport, such service would not necessarily be replaced by other airlines, although reductions in service by any airline would create business opportunities for others. Hypothetical reductions in passenger traffic as a result of reduced connecting airline service at the Airport are addressed in the later section “Stress Test Forecast.”

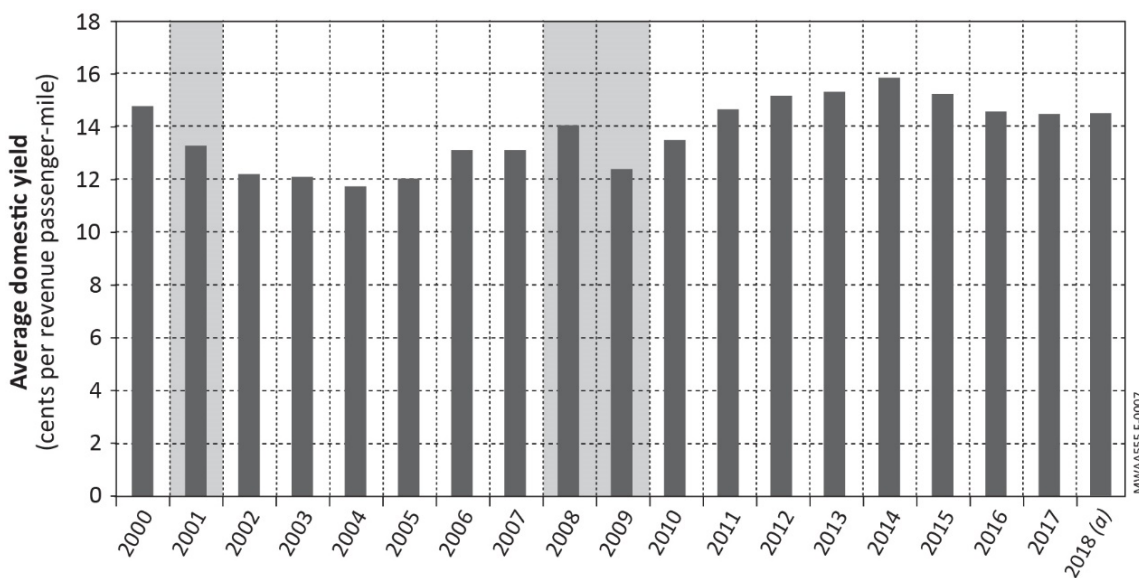
Airline Competition and Airfares

Airline fares have an important effect on passenger demand, particularly for relatively short trips for which automobile and other surface travel modes are potential alternatives, and for price-sensitive “discretionary” travel. The price elasticity of demand for airline travel increases in weak economic conditions when the disposable income of potential airline travelers is reduced. Airfares are influenced by airline capacity and yield management; passenger demand; airline market presence; labor, fuel, and other airline operating costs; taxes, fees, and other charges assessed by governmental and airport agencies; and competitive factors. Future passenger numbers, both nationwide and at the Airport, will depend in part on the level of airfares.

Figure 8 shows the historical average domestic yield (airfare per passenger-mile) for U.S. airlines. Overcapacity in the industry, the ability of consumers to compare airfares and book flights easily via the Internet, and the 2001 recession combined to reduce the average yield between 2000 and 2004. The average yield then increased between 2004 and 2008 before again decreasing during the 2008-2009 recession. The average yield then increased between 2009 and 2014 as airline travel demand strengthened and the airlines collectively reduced available seat capacity and were able to sustain airfare increases. Since 2014, the average yield has been fairly stable.

Beginning in 2006, charges were introduced by most airlines for optional services such as checked baggage, preferred seating, in-flight meals, and entertainment, thereby increasing the effective price of airline travel more than yield figures indicate.

Figure 8
HISTORICAL DOMESTIC YIELD FOR U.S. AIRLINES



Notes: Average yields shown are net of taxes, fees, and PFCs, and exclude ancillary fees charged by the airlines. Shaded areas indicate quarters of economic recession.

(a) Data are for the 12 months ended September 30, 2018, the most recent available.

Source: U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.

Availability and Price of Aviation Fuel

The price of aviation fuel is a critical and uncertain factor affecting airline operating economics. Figure 9 shows the historical fluctuation in aviation fuel prices caused by the many factors influencing the global demand for and supply of oil.

Between 2011 and 2014, aviation fuel prices were relatively stable, partly because of increased oil supply from U.S. domestic production made possible by the hydraulic fracturing of oil-bearing shale deposits and other advances in extraction technologies. As of mid-2014, average fuel prices were approximately three times those at the end of 2003 and accounted for between 30% and 40% of expenses for most airlines.

Beginning in mid-2014, an imbalance between worldwide demand and supply resulted in a precipitous decline in the price of oil and aviation fuel through the end 2015. Fuel prices have since increased, but the average price of aviation fuel at the end of 2018 was still approximately 30% below the price at mid-2014. Lower fuel prices have a positive effect on airline profitability as well as far-reaching implications for the global economy.

Figure 9
HISTORICAL AVIATION FUEL PRICES



Note: Shaded areas indicate months of economic recession.

Source: U.S. DOT, Bureau of Transportation Statistics, Airline Fuel Cost and Consumption, F41 Schedule P12A, www.transtats.bts.gov, accessed February 2019.

Airline industry analysts hold differing views on how oil and aviation fuel prices may change in the near term, although, absent unforeseen disruptions, prices are expected to remain stable. There is widespread agreement that fuel prices are likely to increase over the long term as global energy demand increases in the face of finite oil supplies that are becoming more expensive to extract. Some economists predict that the development of renewable sources of energy, pressures to combat global climate change, the widespread use of electric cars, and other trends will eventually result in a decline in the demand for oil and resulting downward pressure on fuel prices.

Aviation fuel prices will continue to affect airfares, passenger numbers, airline profitability, and the ability of airlines to provide service. Airline operating economics will also be affected as regulatory costs are imposed on the airline industry as part of efforts to reduce aircraft emissions contributing to climate change.

Aviation Safety and Security Concerns

Concerns about the safety of airline travel and the effectiveness of security precautions influence passenger travel behavior and airline travel demand.

Anxieties about the safety of flying and the inconveniences and delays associated with security screening procedures lead to both the avoidance of travel and the switching from air to surface modes of transportation for short trips.

Safety concerns in the aftermath of the September 2001 attacks were largely responsible for the steep decline in airline travel nationwide in 2002. Since 2001, government agencies, airlines, and airport operators have upgraded security measures to guard against changing threats and maintain confidence in the safety of airline travel. These measures include strengthened aircraft cockpit doors, changed flight crew procedures, increased presence of armed federal air marshals, federalization of airport security functions under the Transportation Security Administration (TSA), more effective dissemination of information about threats, more intensive screening of passengers and baggage, and deployment of new screening technologies. The TSA has introduced “pre-check” service to expedite the screening of passengers who have submitted to background checks.

Following the fatal crashes of B-737 MAX aircraft that are suspected to have been caused by the malfunction of the aircraft’s automated flight control system, all B-737 MAX aircraft were grounded in March 2019. Among North American airlines, Air Canada, American, Southwest, and United are being affected. At the time of the grounding, B-737 MAX aircraft accounted for approximately 1.5% of U.S. airline seat capacity.

Southwest has the largest MAX fleet of any airline and its flight operations are being particularly affected by the grounding. At BWI, where Southwest has the largest share of seat capacity, before the grounding, operations by MAX aircraft accounted for 8.7% of seat capacity on Southwest and 5.9% of seat capacity on all airlines. Before the grounding, daily departing seats (on all airlines) as scheduled for May 2019 averaged 49,000, compared with 47,300 as now scheduled, a 3.5% reduction. It is expected that the grounding will last several months while the flight control system software is updated and approved by the FAA and pilot training is completed.

Historically, airline travel demand has recovered after temporary decreases stemming from terrorist attacks or threats, hijackings, aircraft crashes, and other aviation safety concerns. Provided that precautions by government agencies, airlines, and airport operators serve to maintain confidence in the safety of commercial aviation without imposing unacceptable inconveniences for airline travelers, future demand for airline travel will depend primarily on economic, not safety or security, factors.

Capacity of the National Air Traffic Control System

Demands on the national air traffic control system have, in the past, caused delays and operational restrictions affecting airline schedules and passenger traffic. The FAA is gradually implementing its Next Generation Air Transportation System (NextGen) air traffic management programs to modernize and automate the

guidance and communications equipment of the air traffic control system and enhance the use of airspace and runways through improved air navigation aids and procedures. Since 2007, airline traffic delays have decreased because of reduced numbers of aircraft operations (down approximately 15% between 2007 and 2018) but, as airline travel increases in the future, flight delays and restrictions can be expected.

Capacity of the Airport

In addition to any future constraints that may be imposed by the capacity of the national air traffic control and airport systems, future growth in airline traffic at the Airport will depend on the capacity of the Airport itself. BWI's airfield and terminal capacity are expected to be sufficient to accommodate future growth in airline traffic at the Airport well beyond the forecast period covered in this report.

AIRLINE TRAFFIC FORECASTS

Forecasts of airline traffic at the Airport through 2024 were developed on the basis of the economic outlook for the airport service region, trends in historical airline traffic, and key factors likely to affect future traffic, all as discussed earlier in this report. Forecasts for the Airport included in the FAA's *Terminal Area Forecast* (TAF), issued in January 2019, were also reviewed.

In developing the passenger forecast in this report, it was assumed that, over the long term, airline traffic at the Airport will increase as a function of growth in the economy of the Airport service region and increased airline service. It was assumed that airline service at the Airport will not be constrained by the availability of aviation fuel, the capacity of the air traffic control system or the Airport, charges for the use of aviation facilities, or government policies or actions that restrict growth.

The traffic forecasts were developed on the basis of the assumptions that:

1. The U.S. economy will experience sustained growth in GDP averaging between 2.0% and 2.5% per year, an average rate of GDP growth generally consistent with that projected by the Congressional Budget Office, as described in the earlier section "Economic Outlook."
2. The economy of the Airport service region will grow at approximately the same rate as the national economy.
3. Airlines will add service to meet travel demand at the Airport and competition among airlines will ensure competitive airfares for flights from the Airport.
4. Competition among airlines serving the Airport, Reagan, and Dulles will ensure the continued availability of competitive airfares for flights from the Airport. The respective historical roles of the three airports in

accommodating domestic and international airline service will be generally unchanged.

5. A generally stable international political environment and safety and security precautions will ensure airline traveler confidence in aviation without imposing unreasonable inconveniences.
6. There will be no major disruption of airline service or airline travel behavior due to international hostilities, terrorist acts or threats, concerns about the safety of airline travel, or government policies restricting or deterring travel.
7. Reduced airline seat capacity caused by the grounding of B-737 MAX aircraft will be temporary and not have a material effect on numbers of enplaned passengers forecast at the Airport for FY 2020 and beyond.

Enplaned Passenger Forecast

As shown in Table 16 and on Figure 10, the number of enplaned passengers at the Airport is forecast to decrease by 1.0% between FY 2018 and FY 2019, largely as a result of the B 737 MAX grounding. An average increase of 2.0% per year is forecast between FY 2018 and FY 2024, a similar rate of growth (1.9%) as forecast for the Airport by the FAA between FY 2019 and FY 2024 in its January 2019 *Terminal Area Forecast* (TAF).

Stress Test Forecast

A stress test forecast of enplaned passengers was developed to provide the basis for conducting a test of the Airport's financial results to hypothetical reductions in passenger numbers, such as could occur under conditions of weak economic growth or recession, restricted seat capacity, high airfares, and reduced connecting airline service resulting from changes in airline network strategies. Relative to the base forecast for 2021, originating passenger numbers were forecast to be 10% lower and connecting passenger numbers were forecast to be 30% lower.

The number of enplaned passengers forecast for the stress test in 2024 is 13.2 million, compared with 15.5 million for the base forecast. Connecting passengers would account for approximately 23% of the 2024 total for the stress test forecast, compared with 28% for the base forecast.

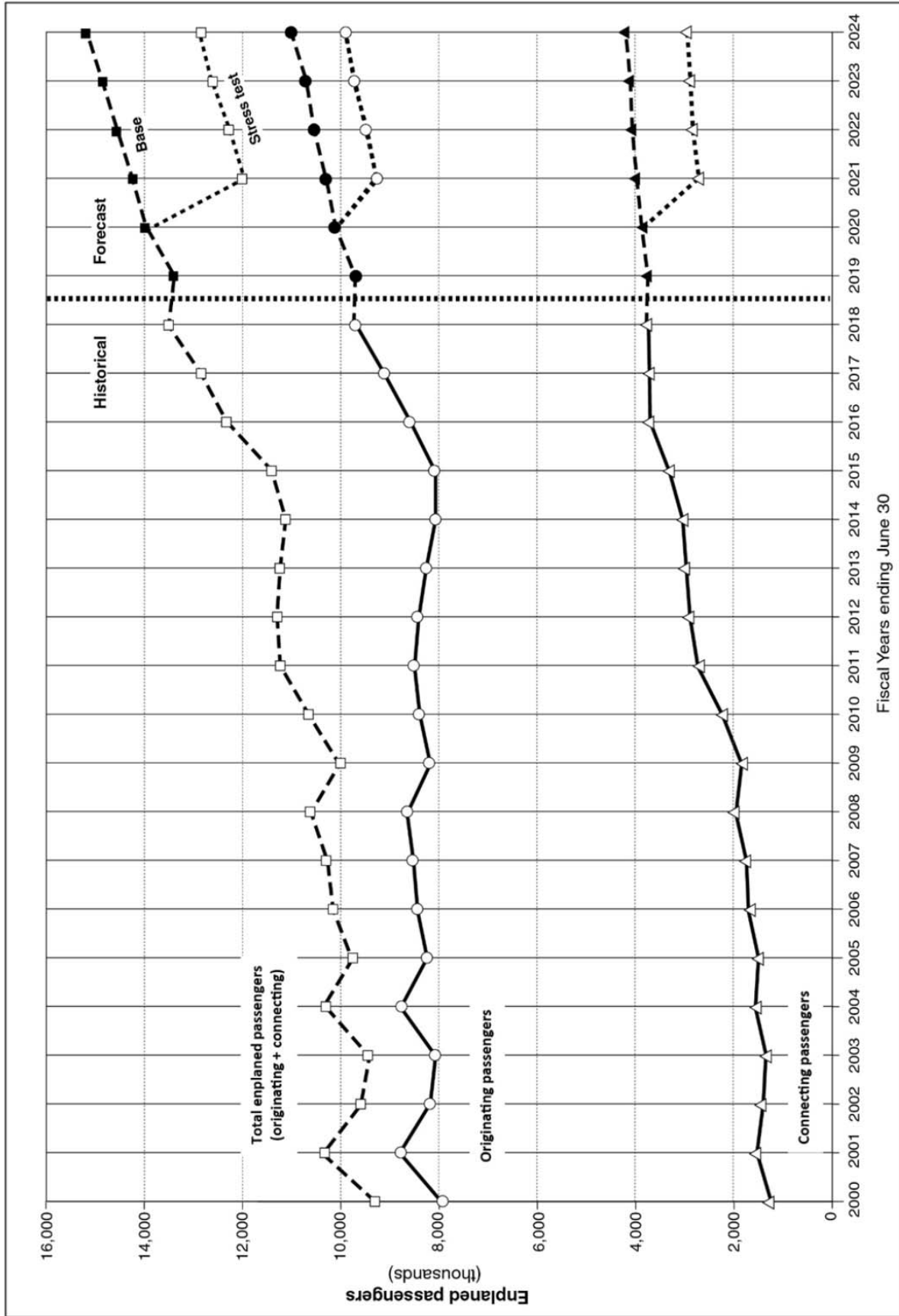
Figure 10 depicts the stress test forecast relative to the base forecast. The stress test enplaned passenger number forecast for 2024 is close to the number for 2017.

Table 16
ENPLANED PASSENGER FORECAST
 Baltimore/Washington International Thurgood Marshall Airport
 Fiscal Years ended June 30
 (in thousands)

The forecasts presented in this table were prepared using the information and assumptions described in the accompanying text. Inevitably, some of the assumptions will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecast, and the variations could be material.

	Historical			Forecast						Average annual increase 2018-2024
	2016	2017	2018	2019	2020	2021	2022	2023	2024	
Domestic										
Southwest	8,278,543	8,632,719	8,850,763	8,450,000	8,900,000	9,050,000	9,200,000	9,350,000	9,500,000	1.2%
All other	<u>3,479,309</u>	<u>3,664,940</u>	<u>4,079,445</u>	<u>4,250,000</u>	<u>4,350,000</u>	<u>4,460,000</u>	<u>4,570,000</u>	<u>4,680,000</u>	<u>4,790,000</u>	2.7%
Subtotal	11,757,852	12,297,659	12,930,208	12,700,000	13,250,000	13,510,000	13,770,000	14,030,000	14,290,000	1.7%
International										
Southwest	338,253	304,247	299,322	300,000	330,000	350,000	370,000	390,000	410,000	5.4%
All other	<u>172,901</u>	<u>219,183</u>	<u>256,431</u>	<u>350,000</u>	<u>370,000</u>	<u>390,000</u>	<u>410,000</u>	<u>430,000</u>	<u>450,000</u>	9.8%
Subtotal	511,154	523,430	555,753	650,000	700,000	740,000	780,000	820,000	860,000	7.5%
Charter	<u>62,935</u>	<u>54,865</u>	<u>48,072</u>	<u>50,000</u>	<u>50,000</u>	<u>50,000</u>	<u>50,000</u>	<u>50,000</u>	<u>50,000</u>	0.7%
Total	12,331,941	12,875,954	13,534,033	13,400,000	14,000,000	14,300,000	14,600,000	14,900,000	15,200,000	2.0%
Percent increase (decrease)	8.1%	4.4%	5.1%	(1.0)%	4.5%	2.1%	2.1%	2.1%	2.0%	
Annual increase (decrease)	919,346	544,013	658,079	(134,033)	600,000	300,000	300,000	300,000	300,000	
Originating	8,606,722	9,123,052	9,743,824	9,700,000	10,120,000	10,340,000	10,560,000	10,780,000	11,000,000	2.0%
Connecting	<u>3,725,219</u>	<u>3,752,902</u>	<u>3,790,209</u>	<u>3,700,000</u>	<u>3,880,000</u>	<u>3,960,000</u>	<u>4,040,000</u>	<u>4,120,000</u>	<u>4,200,000</u>	1.7%
Total	12,331,941	12,875,954	13,534,033	13,400,000	14,000,000	14,300,000	14,600,000	14,900,000	15,200,000	2.0%
Percent originating	69.8%	70.9%	72.0%	72.4%	72.3%	72.3%	72.3%	72.3%	72.4%	
Percent connecting	30.2%	29.1%	28.0%	27.6%	27.7%	27.7%	27.7%	27.7%	27.6%	

Sources Historical: Maryland Aviation Administration records, U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.
 Forecast: LeighFisher, April 2019.



BWI583-F-0002

Figure 10
AIRLINE PASSENGER FORECASTS
 Baltimore/Washington International Thurgood Marshall Airport

The forecasts presented on this figure were prepared using the information and assumptions described in the accompanying text. Inevitably, some of the assumptions will not be realized and unanticipated events and circumstances could occur. Therefore, the actual results will vary from those forecast, and the variations could be material.

Sources: Historical: Maryland Aviation Administration records, U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedules T100 and 298C T-1.
 Base forecast and stress test: LeighFisher, April 2019.

FINANCIAL ANALYSIS

FRAMEWORK FOR AIRPORT DEVELOPMENT AND FUNDING

Roles of Maryland Aviation Administration and Transportation Authority

The Maryland Aviation Administration, an agency of the State of Maryland and a unit of the Maryland Department of Transportation, is responsible for fostering and developing aviation activity and facilities in the State and for operating, maintaining, and developing airports in the State. MAA operates the Baltimore/Washington International Thurgood Marshall Airport, as well as Martin State Airport, a joint civilian-military airport and designated reliever airport for BWI.

The Maryland Transportation Authority, also an agency of the State, is responsible for the financing, development, and operation of certain revenue-producing transportation facilities projects, including the financing and development of Airport projects, and is authorized to issue revenue bonds to finance the costs of such projects.

The Authority is issuing the proposed 2019 PFC Bonds on behalf of MAA to finance certain of the costs of the 2019 PFC Project and has entered into an agreement with MAA under which MAA agrees to develop, construct, operate, and maintain the capital improvements as the agent of the Authority.

PFC Trust Agreement

The proposed 2019 PFC Bonds are to be issued as Additional Bonds under the provisions of the PFC Trust Agreement, which defines Pledged Revenues pledged as security for PFC Bonds and specifies the requirements that must be met for the issuance of Additional Bonds. Such requirements are discussed in the letter at the beginning of this report.

The PFC Trust Agreement also creates certain funds and specifies priorities for the deposit of Pledged Revenues into such funds. All Pledged Revenues are required to be deposited into the PFC Revenue Fund and then transferred in the following order of priority:

1. **Bond Fund.** Deposit into the Bond Funds for each series of PFC Bonds to meet the Debt Service Requirements for each such series.
2. **Administrative Expenses.** Payment of certain expenditures reasonably and necessarily incurred by the Authority by reason of its issuance and administration of any PFC Bonds.

3. **Debt Service Reserve Fund.** Deposit into the Debt Service Reserve Funds for each series of PFC Bonds to cure any deficiency in the Debt Service Reserve Fund Requirement for each such series.
4. **Termination Payments.** Payment of any termination payment due and any amounts other than regularly scheduled hedge payments under any Qualified Hedging Transaction.
5. **Facility Improvements Fund.** Remaining Pledged Revenues are to be deposited into the Facility Improvements Fund.

Amounts in the Facility Improvements Fund may be used for capital improvements or other lawful Airport purposes for which the MAA has FAA-approved PFC Authority, consistent with maintenance of the Sufficiency Covenant. Satisfaction of the Sufficiency Covenant, requires that Unspent PFC Authority is at least equal to 105% of Projected Aggregate Principal and Interest Requirements of all outstanding PFC Bonds.

For the forecast of sources and uses of PFC revenues presented in Exhibit C, Pledged Revenues were assumed to be used for the payment of PFC Bond debt service, project costs on a pay-as-you-go basis, and financing costs, with remaining amounts being retained in the PFC Revenue Fund.

Airline Agreement

MAA has entered into a new Use and Lease Agreement (Airline Agreement) with the airlines accounting for substantially all the passengers enplaned at the Airport. The new Airline Agreement, which will become effective July 1, 2019 and extend through June 30, 2026, will replace an agreement that has been in effect since July 1, 2014.

The Airline Agreement provides for the calculation of terminal rentals under a commercial-compensatory rate-making methodology and landing fees under a residual rate-making methodology. The Airline Agreement establishes procedures through which signatory airlines are notified and may disapprove certain capital expenditures that are to be included in the calculation of terminal rentals and landing fees. The 2019 PFC Project was approved by the signatory airlines through the PFC consultation process. None of the Debt Service Requirements of the proposed 2019 PFC Bonds are to be included in the calculation of terminal rentals or landing fees.

SOURCES AND USES OF PROJECT FUNDS

Exhibit A presents the estimated sources and uses of funds for the 2019 PFC Project and other projects approved by the FAA for PFC funding under the federal agency decision for PFC Application 13.

Sources of funds are proceeds from the sale of the proposed 2019 PFC Bonds, PFC revenues used pay-as-you-go, federal grants-in-aid under the Airport Improvement Program (AIP), contributions from the TTF, and a loan from the Authority.

Passenger Facility Charge Revenues

MAA has approval from the FAA to impose a passenger facility charge per eligible enplaned passenger at the Airport. The PFC was first imposed in 1992, at \$3.00, and was increased to \$4.50 in 2002. Since inception of the PFC program (and following the FAA's approval of PFC Application 13 in March 2019), MAA has received approvals to impose a PFC and use PFC revenues for projects totaling \$1.631 billion. Through FY 2018, MAA had expended \$1.095 billion of PFC revenues. MAA's authority to impose a PFC is estimated by the FAA to expire in May 2037.

As described in the letter at the beginning of this report, the MAA is authorized to use PFC revenues to pay Debt Service Requirements of certain PFC Bonds and has pledged PFC revenues to those PFC Bonds. PFC revenues deposited into the Facility Improvements Fund after all other requirements of the Trust Agreement have been met may be used on a pay-as-you-go basis for FAA-approved capital projects.

As shown in Exhibit A, MAA expects to use \$30.8 million of PFC revenues to pay certain of the costs of Application 13 projects pay-as-you-go.

While the proposed 2019 PFC Bonds are outstanding, MAA may submit PFC applications to the FAA for additional projects or amendments to extend the estimated expiration date of MAA's authority to impose and use PFC revenues.

Federal Grants

MAA is eligible to receive federal AIP grants for up to 75% of the costs of airfield and other approved projects (80% for aircraft noise compatibility projects).

As shown in Exhibit A, MAA expects to receive \$27.5 million in federal AIP funding for its residential sound mitigation program.

Transportation Trust Fund

The TTF is a special fund dedicated to funding the State's varying highway, transit, and other transportation service and infrastructure needs. MDOT activities supported by the TTF include the funding of capital projects; the payment of bond debt service; and expenditures for operations, maintenance, and administration. Sources of funds for the TTF include motor vehicle fuel taxes, titling taxes, licensing fees, and registration fees; a portion of the proceeds of the State's corporation income tax; operating revenues from the State's aviation, port, and transit administrations; federal aid; and bond proceeds.

As shown in Exhibit A, MAA expects that it will receive \$15.3 million from the TTF as a source of funds for the FIS Hall reconfiguration and Concourse D HVAC replacement projects.

Maryland Transportation Authority Loan

The Authority has agreed to lend to MAA a principal amount of \$40.7 million to pay certain of the costs of the Concourse A Improvements Phase II project. Repayment of the loan will be made through annual appropriations from MAA to the Authority over a 15-year term at 3% interest. Such repayment amounts will be from MAA's annual TTF appropriation, not PFC revenues.

SOURCES AND USES OF 2019 BOND FUNDS

Exhibit B summarizes the estimated sources and uses of funds for the 2019 PFC Bonds, as provided by PFM Financial Advisors, LLC, the Authority's independent registered municipal advisor. Key financing assumptions are noted in Exhibit B.

Sources of funds were assumed to be only the proceeds of the 2019 Bonds. No investment earnings were assumed.

Uses of funds were assumed to be the estimated costs of the 2019 PFC Bond Project, a deposit to the Debt Service Reserve Fund to meet the Debt Service Reserve Requirement for the 2019 PFC Bonds, and issuance costs.

DEBT SERVICE REQUIREMENTS

The annual Debt Service Requirements of the outstanding 2012A PFC Bonds, 2012B PFC Bonds, 2012C PFC Bonds (variable interest rate), and 2014 PFC Bonds are shown in Exhibit C. The variable rate for the 2012C PFC Bonds for forecast years was assumed to be 5.0%, the applicable fixed rate required by the PFC Trust Agreement, as provided by Public Financial Management.

The Debt Service Requirements of the proposed 2019 PFC Bonds are as estimated by Public Financial Management, using the assumptions noted in Exhibit B.

SOURCES AND USES OF PLEDGED PFC REVENUES

Exhibit C presents historical and forecast sources and uses of PFC revenues. In FY 2016 through FY 2018, an average of 87.6% of enplaned passengers at the Airport paid the \$4.50 PFC. For the forecasts, it was assumed that 87.0% of enplaned passengers will pay the PFC. Interest earnings were forecast to be approximately the same as in recent years.

Forecast PFC pay-as-you-go payments for PFC Application 12 (International Concourse project) represent the repayment of an interim financing loan from MDOT to MAA. Forecast PFC pay-as-you-go amounts for PFC Application 13 projects are the total approved amounts as shown in Exhibit A. The amount forecast

for future PFC applications reflects MAA's expectation that it will submit future applications to the FAA for authority to use PFC revenues for Airport capital improvements.

Historical pay-as-you go PFC expenditures shown in Exhibit C are as recorded in MAA's quarterly reports to the FAA using an accrual basis of accounting. The amounts were derived by subtracting PFC Bond principal payments from reported expenditures for project costs. Historical financing costs are as recorded in the quarterly reports and were derived by subtracting PFC Bond interest payments from reported expenditures for financing and interest costs. Year-end PFC Revenue Fund balances are as recorded by MAA on a cash basis. The historical accrual-to-cash adjustments shown in Exhibit C are the amounts required to reconcile the amounts recorded under the different accounting bases.

DEBT SERVICE COVERAGE

Exhibit C presents the calculation of debt service coverage as required to demonstrate compliance with the requirements of the Additional Bonds Test. As shown, (1) Pledged Revenues for FY 2018 were not less than 150% of the Debt Service Requirements of Outstanding Bonds for such Fiscal Year and (2) Pledged Revenues for FY 2020 through FY 2024 are forecast to be not less than 150% of the Debt Service Requirements of Outstanding Bonds and the proposed 2019 Bonds in each Fiscal Year.

STRESS TEST PROJECTIONS

Projections of the sources and uses of PFC revenues calculated assuming the stress test forecasts of enplaned passengers discussed in the earlier section, "Stress Test Passenger Forecasts," show that debt service coverage would still exceed the 150% requirement of the Additional Bonds Test while maintaining a positive balance in the PFC Revenue Fund.

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Exhibit A

FUNDING PLAN FOR 2019 PFC PROJECT

Baltimore/Washington International Thurgood Marshall Airport
For Fiscal Years ending June 30

PFC project	Project costs	PFC revenues pay-as-you-go	Proposed 2019 PFC Bonds	PFC subtotal	Federal AIP grants	Transportation Trust Fund	Authority loan
Concourse A improvements phase II	\$ 76,690,000	\$ -	\$ 36,000,000	\$ 36,000,000	\$ -	\$ -	\$ 40,690,000
Midfield cargo apron deicing expansion	8,870,000	8,870,000	-	8,870,000	-	-	-
Residential sound mitigation program	34,380,000	6,876,000	-	6,876,000	27,504,000	-	-
Restroom improvement program	54,000,000	-	54,000,000	54,000,000	-	-	-
Terminal electronic wayfinding signage	2,469,000	2,469,000	-	2,469,000	-	-	-
FIS Hall reconfiguration	20,000,000	-	9,780,000	9,780,000	-	10,220,000	-
Concourse A/B modifications for B-737-800	3,793,000	-	3,793,000	3,793,000	-	-	-
Concourse D HVAC replacement	19,535,000	-	14,450,000	14,450,000	-	5,085,000	-
Public safety communication improvements	6,508,000	6,508,000	-	6,508,000	-	-	-
Integrated Airport security network upgrades	3,303,000	3,303,000	-	3,303,000	-	-	-
Mobile lounge refurbishment	1,580,000	1,580,000	-	1,580,000	-	-	-
Glycol recovery vehicle replacement	1,230,000	1,230,000	-	1,230,000	-	-	-
Total	\$ 232,358,000	\$ 30,836,000	\$ 118,023,000	\$ 148,859,000	\$ 27,504,000	\$ 15,305,000	\$ 40,690,000

Source: Maryland Aviation Administration.

SOURCES AND USES OF 2019 PFC BOND FUNDS

Baltimore/Washington International Thurgood Marshall Airport

	<u>2019 PFC Bonds</u>
Sources of Bond Funds	
Bond proceeds	
Principal amount of Bonds	\$ 113,990,000
Original issue premium (discount)	14,150,000
Net proceeds	<u>\$ 128,140,000</u>
Uses of Bond Funds	
Project costs	\$ 118,023,000
Capitalized Interest Account	-
Debt Service Reserve Fund	\$ 9,434,000
Bond insurance premium	-
Other issuance costs	683,000
Total uses of Bond funds	<u>\$ 128,140,000</u>

Key financing assumptions

Bond interest rate	3.73%
Issuance date (beginning of FY)	2020
Capitalized interest period (years)	-
Interest-only period thereafter (years)	1
Principal amortization period (years)	19
Interest-only payment	\$ 5,700,000
Level annual principal and interest payment	\$ 9,434,000

Source: PFM Financial Advisors, LLC, April 10, 2019.

SOURCES AND USES OF PFC REVENUES AND DEBT SERVICE COVERAGE
 Baltimore/Washington International Thurgood Marshall Airport
 For Fiscal Years ending June 30

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airport management as described in the accompanying text. Inevitably, some assumptions used to develop the forecasts will not be realized and unanticipated event and circumstances may occur. Therefore, there will be differences between the forecast and actual results, and those differences may be material

	Historical (a)					Forecast				
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	
Base passenger forecast										
Sources of PFC Revenues										
Enplaned passengers	12,331,941	12,875,954	13,534,033	13,400,000	14,000,000	14,300,000	14,600,000	14,900,000	15,200,000	
Percent PFC-eligible	88.8%	86.7%	87.2%	87.0%	87.0%	87.0%	87.0%	87.0%	87.0%	
Net PFC collection per eligible passenger (b)	\$4.39	\$4.39	\$4.39	\$4.39	\$4.39	\$4.39	\$4.39	\$4.39	\$4.39	
PFC collections	\$ 48,055,243	\$ 49,033,158	\$ 51,781,426	\$ 51,179,000	\$ 53,470,000	\$ 54,616,000	\$ 55,762,000	\$ 56,908,000	\$ 58,053,000	
Interest earnings	358,563	270,812	291,116	300,000	300,000	300,000	300,000	300,000	300,000	
Total PFC Pledged Revenues	\$ 48,413,806	\$ 49,303,970	\$ 52,072,542	\$ 51,479,000	\$ 53,770,000	\$ 54,916,000	\$ 56,062,000	\$ 57,208,000	\$ 58,353,000	
Annual change	7.7%	1.8%	5.6%	-1.1%	4.5%	2.1%	2.1%	2.0%	2.0%	
Uses of PFC Revenues										
Bond debt service										
2012A PFC Bonds	\$ 4,043,725	\$ 4,008,475	\$ 3,970,225	\$ 3,929,000	\$ 3,905,000	\$ 3,886,000	\$ 3,864,000	\$ 3,841,000	\$ 3,839,000	
2012B PFC Bonds	7,968,925	7,968,525	7,968,025	7,967,000	7,966,000	7,971,000	7,970,000	7,968,000	7,969,000	
2012C PFC Bonds	46,237	287,000	490,824	2,170,000	2,170,000	2,170,000	2,170,000	2,170,000	2,170,000	
2014 PFC Bonds	2,956,544	2,955,744	2,952,744	2,952,000	2,953,000	2,955,000	2,953,000	2,957,000	2,955,000	
Proposed 2019 PFC Bonds	-	-	-	-	5,636,000	9,434,000	9,434,000	9,434,000	9,434,000	
Total PFC Debt Service Requirements	\$ 15,015,431	\$ 15,219,744	\$ 15,381,818	\$ 17,018,000	\$ 22,630,000	\$ 26,416,000	\$ 26,391,000	\$ 26,370,000	\$ 26,367,000	
Pay-as-you-go expenditures										
PFC Applns 5-8 (Apron and terminal projects)	379,916	5,024,690	276,681	-	-	-	-	-	-	
PFC Appln 9 (B-C Connector projects)	1,802,394	-	129,989	-	-	-	-	-	-	
PFC Appln 10 (Airfield RSA projects)	43,026,933	21,871,810	5,544,684	-	-	-	-	-	-	
PFC Appln 11 (D-E Connector projects)	59,216,101	12,805,107	26,990,612	21,700,000	-	-	-	-	-	
PFC Appln 12 (International Concourse projects)	-	12,710,407	7,263,923	-	-	17,928,000	33,250,000	33,250,000	-	
PFC Appln 13 (Projects per Exhibit A)	-	-	-	9,811,000	11,216,000	7,517,000	2,292,000	-	-	
Future PFC applications	-	-	-	-	-	-	-	-	30,000,000	
Financing costs	\$ 104,045,428	\$ 47,387,324	\$ 39,929,208	\$ 31,511,000	\$ 11,216,000	\$ 25,445,000	\$ 35,542,000	\$ 33,250,000	\$ 30,000,000	
Total PFC expenditures	321,214	583,564	770,740	500,000	500,000	500,000	500,000	500,000	500,000	
Net PFC revenues over (under) expenditures:	\$ 119,382,073	\$ 63,190,632	\$ 56,081,766	\$ 49,029,000	\$ 34,346,000	\$ 52,361,000	\$ 62,433,000	\$ 60,120,000	\$ 56,867,000	
Accrual-to-cash-adjustment (c)	\$ (70,968,267)	\$ (13,886,662)	\$ (4,009,224)	\$ 2,450,000	\$ 19,424,000	\$ 2,555,000	\$ (6,371,000)	\$ (2,912,000)	\$ 1,486,000	
PFC Revenue Fund ending balance	48,319,880	1,331,551	128,454	-	-	-	-	-	-	
Required minimum coverage	\$ 41,985,810	\$ 24,406,009	\$ 20,248,558	\$ 22,698,064	\$ 42,121,420	\$ 44,675,626	\$ 38,304,432	\$ 35,391,932	\$ 36,876,532	
Debt service coverage	322%	324%	339%	302%	238%	208%	212%	217%	221%	
Required minimum coverage	150%	150%	150%	150%	150%	150%	150%	150%	150%	

(a) Source: Maryland Aviation Administration.
 (b) PFC of \$4.50 net of airline collection fee of \$0.11.
 (c) Adjustment to reconcile fund balances as recorded in PFC quarterly reports to FAA and in MAA cash-basis financial records

FORM OF ISSUE PRICE CERTIFICATE FOR
 QUALIFIED COMPETITIVE BID

\$ _____
MARYLAND TRANSPORTATION AUTHORITY
Passenger Facility Charge Revenue Bonds
Series 2019
Baltimore/Washington International Thurgood Marshall Airport
(Qualified Airport Bonds-AMT)

ISSUE PRICE CERTIFICATE

The undersigned, on behalf of [NAME OF WINNING BIDDER] (“[SHORT FORM NAME OF WINNING BIDDER]”), hereby certifies as set forth below with respect to the sale of the above-captioned obligation (the “Bonds”).

1. Reasonably Expected Initial Offering Price.

(a) As of the Sale Date, the reasonably expected initial offering prices of the Bonds to the Public by [SHORT FORM NAME OF WINNING BIDDER] are the prices listed in Schedule A (the “Expected Offering Prices”). The Expected Offering Prices are the prices for the Bonds used by [SHORT FORM NAME OF WINNING BIDDER] in formulating its bid to purchase the Bonds. Attached as Schedule B is a true and correct copy of the bid provided by [SHORT FORM NAME OF WINNING BIDDER] to purchase the Bonds.

(b) [SHORT FORM NAME OF WINNING BIDDER] was not given the opportunity to review other bids prior to submitting its bid.

(c) The bid submitted by [SHORT FORM NAME OF WINNING BIDDER] constituted a firm bid to purchase the Bonds.

2. Defined Terms.

(a) *Issuer* means Maryland Transportation Authority.

(b) *Maturity* means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(c) *Public* means any person (including an individual, trust, estate, partnership, association, company or corporation) other than an Underwriter or a related party to an Underwriter. The term “related party” for purposes of this Certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

(d) *Sale Date* means the first day on which there is a binding contract in writing for the sale or exchange the Bonds. The Sale Date of the Bonds is [_____, 2019].

(e) *Underwriter* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax and Section 148 Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by McKennon Shelton & Henn LLP, as Bond Counsel to the Issuer in connection with rendering their respective opinions that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that they may give to the Issuer from time to time relating to the Bonds.

[NAME OF WINNING BIDDER],

By: _____

Title: _____

Dated: June 5, 2019

SCHEDULE A

Expected Initial Offering Prices of the Bonds

[Insert]

SCHEDULE B
Copy of Bid

[See Attached]

FORM OF ISSUE PRICE CERTIFICATE FOR
NONQUALIFIED COMPETITIVE BID

\$ _____
MARYLAND TRANSPORTATION AUTHORITY
Passenger Facility Charge Revenue Bonds
Series 2019
Baltimore/Washington International Thurgood Marshall Airport
(Qualified Airport Bonds-AMT)

ISSUE PRICE CERTIFICATE

The undersigned, on behalf of [NAME OF THE WINNING BIDDER] (“[SHORT FORM NAME OF WINNING BIDDER]”), [on behalf of itself and [NAMES OF MEMBERS OF THE UNDERWRITING SYNDICATE] (together, the “Underwriting Group”),] hereby certifies as set forth below with respect to the sale and issuance of the above-captioned obligations (the “Bonds”).

1. ***Sale of the General Rule Maturities.*** As of the date of this Certificate, for each Maturity of the General Rule Maturities, the first price at which 10% of such Maturity was sold by [SHORT FORM NAME OF WINNING BIDDER] [the Underwriting Group] to the Public is the respective price listed in Schedule A.

2. ***Initial Offering Price of the Hold-the-Offering-Price Maturities.***

(a) [SHORT FORM NAME OF WINNING BIDDER]/ [The members of the Underwriting Group] offered the Hold-the-Offering Price Maturities to the Public for purchase at the respective initial offering prices listed in Schedule A (the “Initial Offering Prices”) on or before the Sale Date. A copy of the pricing wire or equivalent communication for the Bonds is attached to this Certificate as Schedule B.

(b) As set forth in the Notice of Sale and bid award, the [SHORT FORM NAME OF WINNING BIDDER] / [members of the Underwriting Group] [has] [have] agreed in writing that, (i) for each Maturity of the Hold-the-Offering-Price Maturities, [it] [they] would neither offer nor sell any of the Bonds of such Maturity to any person at a price that is higher than the Initial Offering Price for such Maturity during the Holding Period for such Maturity (the “hold-the-offering-price rule”), and (ii) any selling group agreement shall contain the agreement of each dealer who is a member of the selling group, and any retail distribution agreement shall contain the agreement of each broker-dealer who is a party to the retail distribution agreement, to comply with the hold-the-offering-price rule. Pursuant to the foregoing, no Underwriter has offered or sold any Maturity of the Hold-the-Offering Price Maturities at a price that is higher than the respective Initial Offering Price for that Maturity of the Bonds during the Holding Period.

3. ***Defined Terms.***

(a) ***General Rule Maturities*** means those Maturities of the Bonds shown in Schedule A hereto as the “General Rule Maturities.”

(b) ***Hold-the-Offering-Price Maturities*** means those Maturities of the Bonds listed in Schedule A hereto as the “*Hold-the-Offering-Price Maturities*.”

(c) *Holding Period* means, with respect to a Hold-the-Offering-Price Maturity, the period starting on the Sale Date and ending on the earlier of (i) the close of the fifth business day after the Sale Date, or (ii) the date on which [SHORT FORM NAME of WINNING BIDDER] [the members of the Underwriting Group] [has] [have] sold at least 10% of such Hold-the-Offering-Price Maturity to the Public at prices that are no higher than the Initial Offering Price for such Hold-the-Offering-Price Maturity.

(d) *Issuer* means Maryland Transportation Authority.

(e) *Maturity* means Bonds with the same credit and payment terms. Bonds with different maturity dates, or Bonds with the same maturity date but different stated interest rates, are treated as separate maturities.

(f) *Public* means any person (including an individual, trust, estate, partnership, association, company, or corporation) other than an Underwriter or a related party to an Underwriter. The term “related party” for purposes of this Certificate generally means any two or more persons who have greater than 50 percent common ownership, directly or indirectly.

(g) *Sale Date* means the first day on which there is a binding contract in writing for the sale of a Maturity of the Bonds. The Sale Date of the Bonds is [_____, 2019].

(h) *Underwriter* means (i) any person that agrees pursuant to a written contract with the Issuer (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the Public, and (ii) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (i) of this paragraph to participate in the initial sale of the Bonds to the Public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the Public).

The undersigned understands that the foregoing information will be relied upon by the Issuer with respect to certain of the representations set forth in the Tax and Section 148 Certificate and with respect to compliance with the federal income tax rules affecting the Bonds, and by McKennon Shelton & Henn LLP, as Bond Counsel to the Issuer, in connection with rendering their respective opinions that the interest on the Bonds is excluded from gross income for federal income tax purposes, the preparation of the Internal Revenue Service Form 8038-G, and other federal income tax advice that they may give to the Issuer from time to time relating to the Bonds.

[NAME OF WINNING BIDDER], as
[_____]

By: _____

Title: _____

Dated: June 5, 2019

SCHEDULE A

Sale Prices of the General Rule Maturities

[Insert]

Initial Offering Prices of the Hold-The-Offering-Price Maturities

[Insert]

SCHEDULE B

Pricing Wire or Equivalent Communication

[See Attached]