#### **NEW ISSUE / BOOK-ENTRY ONLY**

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law, (i) assuming continuing compliance with certain covenants and the accuracy of certain representations, interest on the Series 2023A Bonds is excluded from gross income for federal income tax purposes, except interest on any Series 2023A Bond for any period during which it is held by a "substantial user" of the facilities financed or a "related person" of such substantial user, as those terms are used in Section 147(a) of the Internal Revenue Code of 1986, as amended (the "Code"), and is an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals, and (ii) the Series 2023A Bonds and interest on the Series 2023A Bonds are exempt from income taxation by the Commonwealth of Virginia and are exempt from all taxation by the District of Columbia except estate, inheritance and gift taxes. Interest on the Series 2023A Bonds may be subject to certain federal taxes imposed only on certain corporations. For a more complete discussion of the tax aspects, see "TAX MATTERS" herein.



\$436,225,000 Airport System Revenue and Refunding Bonds, Series 2023A (AMT)

**Dated: Date of Delivery** 

Due: October 1, in the years as shown herein

Interest on the Metropolitan Washington Airports Authority's (the "Airports Authority") Airport System Revenue and Refunding Bonds, Series 2023A, in the principal amount of \$436,225,000 (the "Series 2023A Bonds") will be payable on October 1, 2023, and semiannually thereafter on each April 1 and October 1. The Series 2023A Bonds are issuable only in fully registered form in denominations of \$5,000 or any integral multiple thereof. When issued, the Series 2023A Bonds will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"), to which payments of principal and interest will be made. Purchasers will acquire beneficial interests in the Series 2023A Bonds, in principal amounts shown on the inside cover page hereof, in book-entry form only. DTC will remit such payments to its participants who will be responsible for remittance to beneficial owners. See "THE SERIES 2023A Bonds – Book-Entry Only System."

Proceeds of the Series 2023A Bonds, along with other available funds, will be used to (i) pay a portion of the costs of certain capital projects at the Airports and capitalized interest, (ii) refund the Airports Authority's outstanding Airport System Revenue and Refunding Bonds, Series 2013A (AMT) (the "Refunded Bonds"), (iii) refund the outstanding \$1,000,000 in principal amount of the Airports Authority's Airport System Revenue Revolving Loan Note, Subseries A (AMT) (the "Refunded Revolving Loan Note"), (iv) fund a deposit to the Common Reserve Account in the Debt Service Reserve Fund to satisfy the debt service reserve requirement for the Series 2023A Bonds, and (v) pay costs of issuing the Series 2023A Bonds.

The Series 2023A Bonds will be issued under and secured by the Amended and Restated Master Indenture of Trust dated as of September 1, 2001, as amended (the "Master Indenture") and the Fifty-sixth Supplemental Indenture of Trust dated as of July 1, 2023 (the "Fifty-sixth Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), each between the Airports Authority and Manufacturers and Traders Trust Company, as the trustee (the "Trustee"). Except to the extent payable from any other moneys available for such payment, the Series 2023A Bonds are payable from, and secured by a pledge of, Net Revenues of the Airports Authority, as described herein, which pledge is on a parity with the pledge of Net Revenues made to secure the Airports Authority's outstanding Bonds, and other Bonds which may be issued in the future under the Indenture, as further supplemented. The Series 2023A Bonds will not be subject to acceleration upon an event of default or otherwise.

THE SERIES 2023A BONDS SHALL NOT CONSTITUTE A DEBT OF THE DISTRICT OF COLUMBIA OR OF THE COMMONWEALTH OF VIRGINIA OR OF ANY POLITICAL SUBDIVISION THEREOF, NOR A PLEDGE OF THE FAITH AND CREDIT OF THE DISTRICT OF COLUMBIA OR OF THE COMMONWEALTH OF VIRGINIA OR OF ANY POLITICAL SUBDIVISION THEREOF. THE ISSUANCE OF THE SERIES 2023A BONDS UNDER THE PROVISIONS OF THE DISTRICT ACT AND THE VIRGINIA ACT SHALL NOT DIRECTLY, INDIRECTLY, OR CONTINGENTLY OBLIGATE THE DISTRICT OF COLUMBIA OR THE COMMONWEALTH OF VIRGINIA OR ANY POLITICAL SUBDIVISION THEREOF TO ANY FORM OF TAXATION WHATSOEVER. THE AIRPORTS AUTHORITY HAS NO TAXING POWER.

The Series 2023A Bonds will mature on October 1 in the years and in the principal amounts, and will bear interest at the rates, as shown herein. The Series 2023A Bonds are subject to redemption prior to maturity, as more fully described herein.

The Series 2023A Bonds are offered when, as and if issued and received by the Underwriters. Legal matters with respect to the issuance of the Series 2023A Bonds are subject to the approval of Squire Patton Boggs (US) LLP, Bond Counsel to the Airports Authority. Certain legal matters will be passed upon for the Airports Authority by Johnna S. Spera, Esquire, Senior Vice President and General Counsel to the Airports Authority, and by Squire Patton Boggs (US) LLP, as Disclosure Counsel. Certain legal matters will be passed upon for the Underwriters by their Counsel, Orrick Herrington & Sutcliffe LLP. It is expected that the Series 2023A Bonds will be available for delivery through the facilities of DTC in New York, New York, on or about July 12, 2023.

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

## **Barclays**

Morgan Stanley Ramirez & Co., Inc. Siebert Williams Shank & Co., LLC Blaylock Van, LLC Stern Brothers & Co.

# **Metropolitan Washington Airports Authority**

\$436,225,000 Airport System Revenue and Refunding Bonds Series 2023A (AMT)

Year October 1	Principal Amount	Interest Rate	Yield	Price	CUSIP <sup>†</sup> No. 592647
2024	\$ 1,930,000	5.000%	3.880%	101.315	LG4
2025	11,660,000	5.000	3.840	102.439	LH2
2026	13,980,000	5.000	3.790	103.629	LJ8
2027	15,645,000	5.000	3.750	104.830	LK5
2028	16,655,000	5.000	3.750	105.870	LL3
2029	17,570,000	5.000	3.780	106.699	LM1
2030	18,460,000	5.000	3.790	107.574	LN9
2031	19,385,000	5.000	3.790	108.471	LP4
2032	20,355,000	5.000	3.800	109.254	LQ2
2033	21,375,000	5.000	3.810	$109.172^*$	LR0
2034	10,430,000	5.000	3.830	$109.010^*$	LS8
2035	10,950,000	5.000	3.930	$108.202^*$	LT6
2036	11,500,000	5.000	4.040	$107.322^*$	LU3
2037	12,075,000	5.000	4.160	106.371*	LV1
2038	12,680,000	5.000	4.250	105.665*	LW9
2039	13,310,000	5.250	4.250	107.555*	LX7
2040	14,015,000	5.250	4.290	$107.240^*$	LY5
2041	14,750,000	5.250	4.320	$107.004^*$	LZ2
2042	15,520,000	5.250	4.350	$106.768^*$	MA6
2043	16,335,000	5.250	4.370	106.612*	MB4

\$64,605,000 5.250% Term Bond due October 1, 2048, priced to yield 4.450%\* CUSIP No. 592647MC2 \$58,040,000 5.250% Term Bond due October 1, 2053, priced to yield 4.500%\* CUSIP No. 592647MD0 \$25,000,000 4.500% Term Bond due October 1, 2053, priced to yield 4.750% CUSIP No. 592647ME8

<sup>\*</sup> Priced at the stated yield to the first optional redemption date of October 1, 2032.

CUSIP® is a registered trademark of the American Bankers Association. CUSIP Global Services (CGS) is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. Copyright© 2023 CUSIP Global Services. All rights reserved. CUSIP® data herein is provided by CUSIP Global Services. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers are provided for convenience of reference only. None of the Authority, the Underwriters or their agents or counsel assume responsibility for the accuracy of such numbers.

## METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

1 Aviation Circle Washington, D.C. 20001-6000 (703) 417-8700

## MEMBERS OF THE AIRPORTS AUTHORITY\*

William E. Sudow, Chairperson
Thorn Pozen, Vice Chairperson
Judith N. Batty
John A. Braun
Sean O. Burton
Taylor Chess
Albert J. Dwoskin
Brett Gibson

Michele Hagans
Honorable Katherine K. Hanley
Mamie W. Mallory
Timothy Poole
Honorable J. Walter Tejada
Mark Uncapher
Joslyn N. Williams

## SENIOR MANAGEMENT

President and Chief Executive Officer				
Executive Vice President and Chief Revenue Officer				
Vice President for Communications and Government Affairs	David Mould			
Vice President for Airline Business Development	Paul B. Bobson			
Vice President for Marketing and Concessions	Jaimini Erskine			
Executive Vice President and Chief Information and Digital Strategy Officer	Goutam Kundu			
Senior Vice President and General Counsel	Johnna S. Spera			
Senior Vice President for Finance and Chief Financial Officer	Andrew T. Rountree			
Senior Vice President and Chief Engineer and Development Officer	Roger Natsuhara			
Vice President for Engineering	Thomas Beatty			
Vice President for Engineering Support and Dulles Corridor Metrorail Project				
Vice President for Real Estate Development	Steve Stoycos			
Senior Vice President and Chief Human Resources and Administrative				
Services Officer	Anthony Vegliante			
Vice President for Diversity, Inclusion and Social Impact				
Vice President and Secretary of the Board of Directors				
Vice President for Audit				
Vice President for Supply Chain Management				
Vice President and Airport Manager – Reagan National Airport	J. Paul Malandrino, Jr.			
Vice President and Airport Manager – Dulles International Airport	Richard Golinowski			
Vice President for Public Safety	Bryan Norwood			
Vice President for Strategy and Operational Performance	Christopher Paolino			
AIRPORTS AUTHORITY CONSULTANTS				
Bond Counsel	itton Boggs (US) LLP			
Disclosure Counsel	itton Boggs (US) LLP			
Financial AdvisorFrase	ca & Associates, LLC			
Airport ConsultantLeighFisher and Dk	CMG Consulting LLC			
_	=			

Presently, two of the three seats appointed by the President of the United States are vacant.

This Official Statement is provided in connection with the issuance of the Series 2023A Bonds referred to herein and may not be reproduced or be used, in whole or in part, for any other purpose. The information contained in this Official Statement has been derived from information provided by the Airports Authority and other sources which are believed to be reliable.

The Underwriters have provided the following sentence for inclusion in this Official Statement. The Underwriters have reviewed the information in this Official Statement in accordance with, and as part of, their respective responsibilities to investors under the federal securities law as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

No dealer, broker, salesperson or other person has been authorized by the Airports Authority or the Underwriters to give any information or to make any representations other than those contained in this Official Statement, and, if given or made, such information or representations must not be relied upon as having been authorized by any of the foregoing. 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 Series 2023A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The information and expressions of opinion herein speak as of their date unless otherwise noted and are subject to change without notice. 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 Airports Authority since the date hereof.

Neither the United States Securities and Exchange Commission ("SEC") nor any state securities commission has approved or disapproved of the Series 2023A Bonds or passed upon the adequacy or accuracy of this Official Statement. Any representation to the contrary is a criminal offense.

The order and placement of information in this Official Statement, including the appendices, are not an indication of relevance, materiality or relative importance, and this Official Statement, including the appendices, must be read 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 in this Official Statement.

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE SERIES 2023A BONDS AT A LEVEL ABOVE THAT WHICH OTHERWISE MIGHT PREVAIL IN THE OPEN MARKET. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this final official statement for purposes of, and as that term is defined in, SEC rule 15c2-12.

# TABLE OF CONTENTS

<u>Page</u>		Page
SUMMARY STATEMENT i INTRODUCTION	ESTIMATED SOURCES AND USES OF FUNDSRefinancing Plan	
Prospective Financial	DEBT SERVICE SCHEDULE	. 31
Information	THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER	
THE AIRPORTS AUTHORITY       3         General       3         The Airports       4         Board of Directors       5	PLAN Facilities at Reagan National Airport and Dulles	
Senior Management	International Airport The Airports Authority's Master Plans	
Lease of the Airports to the Airports Authority	Environmental, Social and Governance Efforts and Initiatives	
Affecting the Airports	CAPITAL CONSTRUCTION PROGRAM (CCP) The CCP Environmental Approvals for	. 40 . 41
Road and Completion of the Dulles Metrorail Project	the CCPPLAN OF FUNDING FOR THE	
THE SERIES 2023A BONDS	Funding Source: Bond Proceeds Funding Source: Federal and	. 49
Redemption Provisions	State Grants Funding Source: PFCs AIRPORTS AUTHORITY	
Notice of Redemption21 SECURITY AND SOURCE OF	INDEBTEDNESS FOR THE AVIATION ENTERPRISE	52
PAYMENT FOR THE BONDS 21 General	FUND Outstanding Bonds of the Airports Authority for the Aviation Enterprise Fund	
Rate Covenant	Subordinated Bonds for the Aviation Enterprise Fund  Revolving Loan Note Program	
Flow of Funds	for the Aviation Enterprise Fund Commercial Paper Program for	. 52
Remedies; No Acceleration or Cross Defaults	the Aviation Enterprise Fund	. 53

# TABLE OF CONTENTS

<u>Page</u>	<u>Page</u>
Credit Facilities Relating to	Baltimore/Washington
Bonds53	International Thurgood
Interest Rate Swaps for the	Marshall Airport84
Aviation Enterprise Fund 53	FINANCIAL CONDITION OF
Special Facility Bonds55	CERTAIN AIRLINES
COVID-19 GLOBAL PANDEMIC	SERVING THE AIRPORTS 85
IMPACTS ON THE	
AIRPORTS AUTHORITY55	General
General	Information Concerning the Airlines85
	Affilies 83
Impacts on Enplanements at the	CERTAIN INVESTMENT
Airports55 Federal Relief Efforts57	CONSIDERATIONS 87
rederal Relief Efforts	General87
AIRPORTS AUTHORITY	COVID-19 Related Matters88
HISTORICAL FINANCIAL	Public Health Risks
INFORMATION 58	National and Global Economic
General58	Conditions 89
Net Remaining Revenue64	Airlines Serving the Airports89
The Aviation Enterprise Fund	Airline Consolidations90
Budget65	Cost and Supply of Aviation
Aviation Enterprise Fund Fiscal	Fuel90
Year 2023 Budget65	Geopolitical Considerations91
AIRPORTS AUTHORITY	Aviation Safety and Security
CURRENT FINANCIAL	Concerns 91
INFORMATION67	Aviation Security Requirements
	and Related Costs and
CERTAIN AGREEMENTS FOR	Restrictions92
USE OF THE AIRPORTS69	Regulations and Other
Airport Use Agreement and	Restrictions Affecting the
Premises Lease	Airports93
Terminal Concession	Risks from Unexpected Events
Agreements74	and Global Climate Change 93
Parking Facility Agreements	Federal Funding94
Rental Car Facility Agreements74	Effect of Signatory Airline
Agreements with Transportation	Bankruptcy on the Airline
Network Companies75	Agreement96
Agreements with Fixed Base	Availability of PFC Revenues 97
Operators76	Airports Authority Insolvency 97
THE AIRPORTS SERVICE	Counterparty and Liquidity
REGION AND AIRPORTS	Provider Exposure
ACTIVITY76	Limitations on Bondholders'
The Airports Service Region76	Remedies
Airlines Serving the Airports78	Expiration and Possible
Airports Activity	Termination of Airline
Historical Enplanement Activity 79	Agreement

# TABLE OF CONTENTS

<u>Page</u>	Page
Cost and Schedule of Capital	INDEPENDENT ACCOUNTANTS 103
Construction Program98	TAX MATTERS104
Competition	LEGAL MATTERS 107
Alternative Travel Modes and	LITIGATION107
Travel Substitutes 100 Industry Workforce Shortages 101	RATINGS 108
Changes in Federal Tax Law 101	UNDERWRITING 108
Other Key Factors	VERIFICATION AGENT109
Forward Looking Statements 102	RELATIONSHIP OF PARTIES109
REPORT OF THE AIRPORT CONSULTANT103	CONTINUING DISCLOSURE109
FINANCIAL ADVISOR 103	CONCLUDING STATEMENT 110
APPENDICES	
APPENDIX A – Report of the Airport	
Consultant	
APPENDIX B – Definitions and Summary of Certain Provisions of	
the IndentureB-1	
APPENDIX C – Summary of Certain	
Provisions of the Airport Use Agreement and Premises Lease	
APPENDIX D – Book-Entry Only	
SystemD-1 APPENDIX E – Form of Opinion of	
Bond CounselE-1	
APPENDIX F – Form of Amended and	
Restated Continuing Disclosure	
AgreementF-1 APPENDIX G – Schedule of Refunded	
BondsG-1	

#### SUMMARY STATEMENT

This Summary Statement is qualified in its entirety by reference to the information appearing elsewhere in this Official Statement. Capitalized terms used in this Summary Statement and not defined herein or in the Official Statement shall have the meanings set forth in APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture."

## The Airports Authority

The Airports Authority is a public body politic and corporate, created with the consent of the Congress of the United States by the District of Columbia Regional Airports Authority Act of 1985, as amended, codified at D.C. Official Code § 9-901 *et seq.* (2001) (the "District Act"), and Chapter 598 of the Acts of Virginia General Assembly of 1985, as amended, codified at Va. Code § 5.1-152 *et seq.* (2001) (the "Virginia Act" and, together with the District Act, the "Acts"). Pursuant to an Agreement and Deed of Lease effective June 7, 1987, as amended (the "Federal Lease"), the Airports Authority assumed operating responsibility for Ronald Reagan Washington National Airport ("Reagan National Airport") and Washington Dulles International Airport ("Dulles International Airport" and, together with Reagan National Airport, the "Airports") upon the transfer of an initial 50-year leasehold interest in the Airports from the United States federal government to the Airports Authority in accordance with the Metropolitan Washington Airports Act of 1986 (Title VI, P.L. 99-500, as reenacted in P.L. 99-591, effective October 18, 1986, as amended, codified at 49 U.S.C. § 49101 *et seq.*) (the "Federal Act"). The Federal Lease was amended in 2003 to extend its term to 2067. See "THE AIRPORTS AUTHORITY – Lease of the Airports to the Airports Authority."

The Airports Authority operates two enterprises – the Aviation Enterprise, under which it operates and maintains the Airports, and the Dulles Corridor Enterprise, under which it operates and maintains the Dulles Toll Road and constructed the Dulles Metrorail Project. See "THE AIRPORTS AUTHORITY – Operation of the Dulles Toll Road and Completion of the Dulles Metrorail Project." The Airports Authority accounts for the two enterprises separately through the Aviation Enterprise Fund and the Dulles Corridor Enterprise Fund. The Net Revenues of the Aviation Enterprise Fund secure the Bonds (as defined below). Dulles Toll Road Revenues are treated as "Released Revenues" under the Indenture (as defined below) and therefore are not part of the Net Revenues that secure the Bonds. In addition, Net Revenues of the Aviation Enterprise Fund do not secure Dulles Toll Road Revenue Bonds, which are secured solely by the net revenues of the Dulles Corridor Enterprise Fund. The Series 2023A Bonds are being issued solely to finance and refinance capital projects at the Airports, and this Official Statement pertains to the Airports and the Airports Authority's operation of the Aviation Enterprise.

## The Airports

Reagan National Airport was opened for service in 1941. It is located on approximately 860 acres along the Potomac River in Arlington County, Virginia, approximately three miles from downtown Washington, D.C. In calendar year 2022, enplanements totaled approximately 12.0 million, nearly all on flights to domestic destinations, which is 100.2% of 2019 enplanement levels. For 2022, origin-destination ("O&D") passengers accounted for 79.3% of enplanements at Reagan National Airport, as compared to 88.5% in 2019. American Airlines, along with its code-sharing

affiliate carriers enplaned 54.8% of all commercial enplanements in 2022, as compared to 50.2% in 2019.

Dulles International Airport was opened for service in 1962. It is located on approximately 11,184 acres (exclusive of the Dulles International Airport Access Highway) in Fairfax and Loudoun Counties, Virginia, approximately 26 miles west of Washington, D.C. In calendar year 2022, enplanements totaled approximately 10.6 million, 34.6% on flights to international destinations, as compared to 12.3 million with 33.7% on flights to international destinations in 2019. For 2022, O&D passengers accounted for 68.1% of enplanements at Dulles International Airport, as compared to 69.4% in 2019. United Airlines, along with its code-sharing affiliate carriers, accounted for 83.4% of domestic enplanements and 41.7% of international enplanements at Dulles International Airport in 2022 (as compared to 80.3% of domestic enplanements and 37.7% of international enplanements in 2019), while foreign-flag scheduled airlines accounted for virtually all of the remaining 58.3% of international enplanements (as compared to 62.3% in 2019). For 2022, domestic enplanements at Dulles International Airport were 6.9 million, 85.0% of 2019 enplanement levels, and international enplanements at Dulles International Airport were 3.7 million, 87.7% of 2019 enplanement levels. See "COVID-19 GLOBAL PANDEMIC IMPACTS ON THE AIRPORTS AUTHORITY."

See "THE AIRPORTS AUTHORITY – The Airports," "THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER PLANS – Facilities at Reagan National Airport and Dulles International Airport," "THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY," "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS," and "CERTAIN INVESTMENT CONSIDERATIONS – Airline Consolidations."

## **The Airline Agreement**

The Airports Authority and certain airlines entered into an Airport Use Agreement and Premises Lease (the "Airline Agreement"), which became effective on January 1, 2015. The airlines that have executed the Airline Agreement are the "Signatory Airlines." For airlines operating at Reagan National Airport, the term of the Airline Agreement is 10 years, starting on January 1, 2015, and expiring on December 31, 2024. The Airports Authority and airlines operating at Dulles International Airport signed a First Universal Amendment to the Airline Agreement on July 27, 2016 (the "First Universal Amendment"), extending the term of the Airline Agreement from December 31, 2017 to December 31, 2024 and a Second Universal Amendment to the Airline Agreement on September 10, 2018 (the "Second Universal Amendment") in connection with the use of proceeds from the sale of the 424-acre parcel that was part of Dulles International Airport, known as the Western Lands (the "Western Lands"). In anticipation of the December 31, 2024 expiration of the Airline Agreement, the Airports Authority has commenced discussions with the Signatory Airlines regarding the future Airline Agreement.

The Airline Agreement provides for the use and occupancy of facilities at the Airports and establishes the rentals, fees and charges, including landing fees and terminal rents, to be paid by the Signatory Airlines. The Airline Agreement also provides for the allocation of Net Remaining Revenue between the Airports Authority and the Signatory Airlines and for the Airports Authority to utilize its share of Net Remaining Revenue derived from Reagan National Airport at Dulles International Airport, up to certain specified maximum annual amounts. In addition, the Airline

Agreement provides for "Extraordinary Coverage Protection Payments" by authorizing the Airports Authority to make immediate rate adjustments at an Airport in the event that Net Revenues in any Fiscal Year at the Airport are projected to be less than 125% of the Annual Debt Service Allocated to the Airport.

The Airline Agreement approves the funding of a capital construction program (the "Capital Construction Program" or the "CCP") for Reagan National Airport and Dulles International Airport, as described below.

For a description of the Airline Agreement, the First Universal Amendment and the Second Universal Amendment, see "CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS" and APPENDIX B – "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease."

## **Capital Construction Program**

Pursuant to its CCP, the Airports Authority is constructing and will continue to construct many of the principal elements of the Reagan National Airport and Dulles International Airport Master Plans, as defined herein, which are necessary for the operation and development of the Airports, and has renovated and will renovate certain existing facilities. See "THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER PLANS."

CCP projects that were approved by the Signatory Airlines as part of the Airline Agreement and the First Universal Amendment at Reagan National Airport include a new regional airline concourse; moving security areas outside of the main National Hall; preliminary planning and design work on the redevelopment of Terminal 1; a new parking garage; and various airfield, roadway, utility and other improvements. Portions of these CCP projects at Reagan National Airport are referred to by the Airports Authority as "Project Journey." Concourse E and secure National Hall, the largest components of Project Journey, became operational in April and November of 2021, respectively. Project Journey was fully completed in March 2023. CCP projects that were approved by the Signatory Airlines as part of the Airline Agreement and the First Universal Amendment at Dulles International Airport include the renewal and replacement of the existing infrastructure of buildings, airfield facilities, roadways and utilities. In April 2022 the Signatory Airlines provided Majority In Interest (MII) approval of the new Tier 2 concourse at Dulles International Airport with an estimated cost of \$769 million. The CCP currently is estimated to cost approximately \$3.7 billion (including allowances for inflation), with approximately \$1.6 billion having been spent from 2015 to 2022. See "CAPITAL CONSTRUCTION PROGRAM (CCP)" and "PLAN OF FUNDING FOR THE CCP."

#### **Funding of the Capital Construction Program for the Airports**

The Airports Authority has financed and plans to complete the financing of the CCP for the Airports with a combination of approximately \$2.1 billion of additional Bonds (as defined below), representing approximately \$1.8 billion of project costs, PFC revenues, federal and state grants and other available Airports Authority funds. See "PLAN OF FUNDING FOR THE CCP."

#### The Series 2023A Bonds

The Airports Authority expects to issue its Airport System Revenue and Refunding Bonds, Series 2023A, in the principal amount of \$436,225,000 (the "Series 2023A Bonds"). The Series 2023A Bonds will be issued under and secured by the Amended and Restated Master Indenture of Trust dated as of September 1, 2001, as previously supplemented and amended (the "Master Indenture"), and the Fifty-sixth Supplemental Indenture of Trust dated as of July 1, 2023 (the "Fifty-sixth Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), each between the Airports Authority and Manufacturers and Traders Trust Company, as the trustee (the "Trustee"). The Series 2023A Bonds, the Airports Authority's outstanding bonds previously issued under the Master Indenture, and any additional bonds and revolving loans to be issued under the Indenture, as may be further supplemented, are referred to collectively in this Official Statement as the "Bonds." See "THE SERIES 2023A Bonds." See also APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture" for the full definition of "Bonds."

#### **Use of the Series 2023A Bond Proceeds**

Proceeds of the Series 2023A Bonds, along with other available funds, will be used to (i) pay a portion of the costs of certain capital projects at the Airports and capitalized interest, (ii) refund the Airports Authority's outstanding Airport System Revenue and Refunding Bonds, Series 2013A (AMT) (the "Refunded Bonds"), (iii) refund the outstanding \$1,000,000 in principal amount of the Airports Authority's Airport System Revenue Revolving Loan Note, Subseries A (AMT) (the "Refunded Revolving Loan Note"), (iv) fund a deposit to the Common Reserve Account in the Debt Service Reserve Fund to satisfy the debt service reserve requirement for the Series 2023A Bonds, and (v) pay costs of issuing the Series 2023A Bonds.

The Refunded Bonds will be legally defeased upon issuance of the Series 2023A Bonds.

#### **Security and Source of Payment**

The Series 2023A Bonds are secured on a parity with other Bonds issued under the Indenture by a pledge of the Net Revenues derived by the Airports Authority from the operation of the Airports, all as described in the Indenture. The principal sources of Net Revenues are the rentals, fees and charges received from the Signatory Airlines under the Airline Agreement, fees received from non-signatory airlines using the Airports and payments under concession contracts at the Airports. Upon the issuance of the Series 2023A Bonds and the defeasance of the Refunded Bonds, approximately \$4.4 billion aggregate principal amount of Bonds will be outstanding. In addition, the Airports Authority at any time can draw up to \$200 million from its revolving line of credit program, which was established in March 2022 ("Revolving Loan Note Program"). See "AIRPORTS AUTHORITY INDEBTEDNESS FOR THE AVIATION ENTERPRISE FUND — Outstanding Bonds of the Airports Authority for the Aviation Enterprise Fund" and "— Revolving Loan Note Program for the Aviation Enterprise Fund." For a description of the Airline Agreement and the First Universal Amendment, see "CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS — Airport Use Agreement and Premises Lease."

The Series 2023A Bonds shall not constitute a debt of the District of Columbia or of the Commonwealth of Virginia or of any political subdivision thereof, nor a pledge of the faith and credit of the District of Columbia or of the Commonwealth of Virginia or of any political subdivision thereof. The issuance of the Series 2023A Bonds under the provisions of the District Act and the Virginia Act shall not directly, indirectly, or contingently obligate the District of Columbia or the Commonwealth of Virginia or any political subdivision thereof to any form of taxation whatsoever. The Airports Authority has no taxing power. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – General," and APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture" hereto.

#### **Debt Service Reserve Fund**

Under the Indenture, the Airports Authority has covenanted to maintain in the Common Reserve Account (the "Common Reserve Account") in the Debt Service Reserve Fund an amount equal to the Common Debt Service Reserve Requirement for the Series 2023A Bonds and any other Common Reserve Bonds Outstanding (the "Common Debt Service Reserve Requirement"). "Common Reserve Bonds" means any other Series of Bonds issued under the Indenture and designated in writing to the Trustee by an Authority Representative as being secured by amounts on deposit in the Common Reserve Account on a parity with the Series 2023A Bonds, and any other Common Reserve Bonds. The Common Debt Service Reserve Requirement means an amount equal to the least of (i) 10% of the stated principal amount of the Series 2023A Bonds and any other Common Reserve Bonds; (ii) the Maximum Annual Debt Service on the Series 2023A Bonds and any other Common Reserve Bonds in any Fiscal Year; or (iii) 125% of the average Annual Debt Service for the Series 2023A Bonds and any other Common Reserve Bonds. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Debt Service Reserve Fund."

#### **Rate Covenant**

In the Indenture, the Airports Authority has covenanted that it will take all lawful measures to fix and adjust from time to time the fees and other charges for the use of the Airports, including services rendered by the Airports Authority, pursuant to the Airline Agreement or otherwise, calculated to be at least sufficient to produce Net Revenues to provide for the larger of either:

- (a) The amounts needed for making the required deposits in each fiscal year to the Principal Accounts, the Interest Accounts, and the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund and the Emergency Repair and Rehabilitation Fund; or
- (b) An amount not less than 125% of the Annual Debt Service with respect to Bonds for such fiscal year.

See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Rate Covenant."

## **Redemption of the Series 2023A Bonds**

The Series 2023A Bonds are subject to redemption prior to maturity as described under "THE SERIES 2023A Bonds – Redemption Provisions."

#### **Certain Investment Considerations**

The Series 2023A Bonds may not be suitable for all investors. Prospective purchasers of the Series 2023A Bonds should read this entire Official Statement and give careful consideration to certain factors affecting the air transportation industry and the Airports, including public health risks such as COVID-19, national and global economic conditions, geopolitical risks, financial condition of airlines serving the Airports, cost of aviation fuel, air transportation security concerns, regulations and restrictions affecting the Airports, cost and schedule of the CCP, provisions of the Airline Agreement, limitations on Bondholders' remedies, competition and other key factors impacting the Airports. See "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS" and "CERTAIN INVESTMENT CONSIDERATIONS."

## **Report of the Airport Consultant**

The Airports Authority retained LeighFisher to serve as the Airport Consultant in connection with the issuance and sale of the Series 2023A Bonds. The Airport Consultant, together with its subconsultant, DKMG Consulting LLC, prepared the Report of the Airport Consultant dated May 11, 2023 (the "Report of the Airport Consultant"). The Report of the Airport Consultant has not been updated to reflect the final pricing terms of the Series 2023A Bonds or other changes that may have occurred since May 11, 2023. The Report of the Airport Consultant presents forecasts of passenger numbers and financial results through 2028. The Airport Consultant has provided its consent to include the Report of the Airport Consultant as APPENDIX A hereto. See "REPORT OF THE AIRPORT CONSULTANT" and APPENDIX A – "Report of the Airport Consultant."

## Debt Service Coverage Projections

The following table sets forth forecasts of the Airports Authority's Net Revenues and debt service coverage through 2028. The minimum debt service coverage required by the rate covenant set forth in the Indenture is 1.25x. Debt service coverage is calculated as the ratio of Net Revenues available annually to pay debt service to the Annual Debt Service requirement for the Bonds. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Rate Covenant." The forecasts are based on assumptions regarding debt service on: the Series 2023A Bonds; other Bonds to be outstanding following the issuance of the Series 2023A Bonds; and additional Bonds that the Airports Authority plans to issue from 2024 through 2027 to provide additional funding for the CCP. The Net Revenues of the Airports Authority are forecasted to exceed the rate covenant requirement in each year of the forecast period. For information regarding the Airports Authority's actual Annual Debt Service requirements on Outstanding debt, see "DEBT SERVICE SCHEDULE." See also "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Application of Designated Passenger Facility Charges" and "PLAN OF FUNDING FOR THE CCP – Funding Source: PFCs."

# Forecast Debt Service Coverage (\$000's)

					Intended	Intended		
		Planned		COVID-19	PFCs	PFCs		Debt
		Additional	Outstanding	Relief Grants	Currently	Currently	Net Bonds	Service
	Net	Bonds Debt	Bonds Debt	Applied to	Approved	Approved	Debt	Coverage
Year	Revenues	Service <sup>1</sup>	Service <sup>2</sup>	Debt Service	$IAD^3$	$DCA^4$	Service	Ratio <sup>5</sup>
2023	\$557,753	\$ -	\$369,554	\$(44,889)	\$(50,400)	\$(21,188)	\$253,216	2.20x
2024	\$574,224	\$ 536	\$393,062	\$(50,740)	\$(51,000)	\$(20,542)	\$273,067	2.10x
2025	\$605,732	\$ 10,463	\$353,793	\$ -	\$(51,300)	\$(21,919)	\$298,965	2.03x
2026	\$667,315	\$ 45,169	\$371,323	\$ -	\$(51,800)	\$(20,679)	\$359,975	1.85x
2027	\$736,532	\$101,710	\$376,573	\$ -	\$(53,800)	\$(20,623)	\$424,147	1.74x
2028	\$765,232	\$117,694	\$381,819	\$ -	\$(55,900)	\$(21,174)	\$443,724	1.72x

- 1 Additional Bonds that the Airports Authority plans to issue from 2024 through 2027 to fund the CCP.
- 2 Excludes the Refunded Bonds to be defeased by the Series 2023A Bonds. Series 2023A Bonds Debt Service has not been updated to reflect final pricing terms of the Series 2023A Bonds.
- 3 PFC revenues generated at Dulles International Airport approved under existing PFC applications that the Airports Authority intends to use to pay Bond debt service.
- 4 PFC revenues generated at Reagan National Airport approved under existing PFC applications that the Airports Authority intends to use to pay Bond debt service.
- 5 The Report of the Airport Consultant assumes that PFC revenues will be used to pay a portion of the debt service on Outstanding Bonds as well as debt service on planned additional Bonds. Consequently, such portion of the debt service on those Bonds is excluded from the calculation of the Rate Covenant in the Report of the Airport Consultant.

Totals may not add due to rounding. Source: Report of the Airport Consultant.

The forecasts set forth in the Report of the Airport Consultant are based on assumptions as discussed in APPENDIX A – "Report of the Airport Consultant." The Report of the Airport Consultant should be read in its entirety for an understanding of the forecasts and the underlying assumptions. The Report of the Airport Consultant has been included herein in reliance upon the knowledge and experience of LeighFisher as the Airport Consultant and DKMG Consulting LLC, its subconsultant. As stated in the Report of the Airport Consultant, any forecast is subject to uncertainties and therefore there will be differences between the forecast and actual results, which differences may be material. See "INTRODUCTION – Prospective Financial Information," "CERTAIN INVESTMENT CONSIDERATIONS," "REPORT OF THE AIRPORT CONSULTANT" and APPENDIX A – "Report of the Airport Consultant" for a discussion of factors, data and information that may affect the forecasts.

## Ratings

Fitch Ratings, Moody's Investors Service, Inc. and S&P Global Ratings have assigned the Series 2023A Bonds the ratings of "AA-" (Stable Outlook), "Aa3" (Stable Outlook) and "AA-" (Stable Outlook), respectively.

## **OFFICIAL STATEMENT**

relating to

## METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

\$436,225,000 Airport System Revenue and Refunding Bonds, Series 2023A (AMT)

#### INTRODUCTION

This Official Statement is furnished in connection with the issuance of the Metropolitan Washington Airports Authority's (the "Airports Authority") Airport System Revenue and Refunding Bonds, Series 2023A, to be issued in the principal amount of \$436,225,000 (the "Series 2023A Bonds").

#### The Series 2023A Bonds

The Series 2023A Bonds will be issued under and secured by the Amended and Restated Master Indenture of Trust dated as of September 1, 2001, as previously supplemented and amended (the "Master Indenture"), and the Fifty-sixth Supplemental Indenture of Trust dated as of July 1, 2023 (the "Fifty-sixth Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), each between the Airports Authority and Manufacturers and Traders Trust Company, as the trustee (the "Trustee"). The Series 2023A Bonds, the Airports Authority's outstanding bonds previously issued under the Master Indenture, and any additional bonds to be issued under the Indenture, as may be further supplemented, are referred to collectively in this Official Statement as the "Bonds."

Proceeds of the Series 2023A Bonds, along with other available funds, will be used to (i) pay a portion of the costs of certain capital projects at the Airports and capitalized interest, (ii) refund the Airports Authority's outstanding Airport System Revenue and Refunding Bonds, Series 2013A (AMT) (the "Refunded Bonds"), (iii) refund the outstanding \$1,000,000 in principal amount of the Airports Authority's Airport System Revenue Revolving Loan Note, Subseries A (AMT) (the "Refunded Revolving Loan Note"), (iv) fund a deposit to the Common Reserve Account in the Debt Service Reserve Fund to satisfy the debt service reserve requirement for the Series 2023A Bonds, and (v) pay costs of issuing the Series 2023A Bonds.

The Refunded Bonds will be legally defeased upon issuance of the Series 2023A Bonds.

## **Prospective Financial Information**

Airports Authority management believes that the prospective financial information from its 2023 Budget (see "AIRPORTS AUTHORITY FINANCIAL INFORMATION – Aviation Enterprise Fiscal Year 2023 Budget") and the Report of the Airport Consultant (see APPENDIX A) have been prepared on a reasonable basis, reflecting best estimates and judgments, and represent, to the best of management's knowledge and opinion, the Airports Authority's expected course of action and future financial performance. However, any prospective financial

information is subject to uncertainties. Inevitably, some assumptions underlying the prospective financial information will not be realized and unanticipated events and circumstances will occur. Therefore, there will be differences between the prospective financial information and actual results and those differences may be material.

#### Miscellaneous

This Official Statement consists of the cover page, the inside cover pages, the table of contents, the Summary Statement, the body of this Official Statement and the appendices, all of which should be read in their entirety. This Official Statement contains, among other things, descriptions of the Series 2023A Bonds, the Airports Authority, including certain financial information, the Airport Use Agreement and Premises Lease (the "Airline Agreement"), the Airports Service Region and airline activity, certain factors affecting the air transportation industry, the financial condition of certain airlines serving the Airports, the Airports Authority's capital construction program (the "Capital Construction Program" or "CCP") for Ronald Reagan Washington National Airport ("Reagan National Airport") and Washington Dulles International Airport ("Dulles International Airport" and, together with Reagan National Airport, the "Airports"), the plan of funding for the CCP and certain investment considerations. Such descriptions do not purport to be comprehensive or definitive.

Unless otherwise defined herein, all terms used in this Official Statement shall have the meanings set forth in APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture."

All references in this Official Statement to documents are qualified in their entirety by reference to such actual documents, and references to the Series 2023A Bonds are qualified in their entirety by reference to the forms of the Series 2023A Bonds included in the Fifty-sixth Supplemental Indenture.

The audited financial statements of the Airports Authority for the year ended December 31, 2022, which include financial statements and management's discussion and analysis thereof and footnotes thereto, are contained in the Airports Authority's Annual Comprehensive Financial Report of 2022 ("2022 Financial Report"), which was filed with the Municipal Securities Rulemaking Board under its Electronic Municipal Market Access System ("EMMA") and can also be found at <a href="https://www.mwaa.com">www.mwaa.com</a> and <a href="https://www.mwaa.com">www.dacbond.com</a> and are hereby incorporated into this Official Statement by reference. The financial statements as of December 31, 2022 set forth in the 2022 Financial Report have been audited by Crowe LLP, independent auditor, as stated in their report appearing therein. Crowe LLP has not been engaged to perform and has not performed, since the date of its report included therein, any procedures on the financial statements addressed in that report. Additionally, the Crowe LLP report does not cover any other information in this Official Statement and should not be read to do so.

Definitions and a summary of certain provisions of the Indenture are included in APPENDIX B. A summary of certain provisions of the Airline Agreement between the Airports Authority and the Signatory Airlines is included in APPENDIX C. A description of the bookentry system maintained by The Depository Trust Company, New York, New York ("DTC") is included in APPENDIX D. The proposed form of the opinion to be delivered to the Airports

Authority by Bond Counsel, Squire Patton Boggs (US) LLP, in connection with the issuance of the Series 2023A Bonds is included in APPENDIX E. A schedule of the Refunded Bonds is included in APPENDIX G.

The Airports Authority has executed an Amended and Restated Continuing Disclosure Agreement, dated as of July 3, 2019 (the "Disclosure Agreement") with Digital Assurance Certification LLC ("DAC"), the form of which is included in APPENDIX F, to assist the Underwriters in complying with the provisions of Rule 15c2-12 ("Rule 15c2-12"), promulgated by the SEC under the Securities Exchange Act of 1934, as amended, and as in effect as of the date hereof, by providing annual financial and operating data and specified event notices required by Rule 15c2-12. See "CONTINUING DISCLOSURE" and APPENDIX F – "Form of Amended and Restated Continuing Disclosure Agreement."

The information in this Official Statement is 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 Airports Authority or the Airports since the date hereof. This Official Statement is not to be construed as a contract or agreement between the Airports Authority or the Underwriters and purchasers or owners of any of the Series 2023A Bonds.

Inquiries regarding information about the Airports Authority and its financial matters contained in this Official Statement may be directed to Andrew T. Rountree, Senior Vice President for Finance and Chief Financial Officer, at (703) 417-8700, or submitted by email at <a href="mailto:bondholders.information@mwaa.com">bondholders.information@mwaa.com</a>. Certain financial information with respect to the Airports Authority, including the Master Indenture, also may be obtained through the Airports Authority's website at <a href="www.mwaa.com">www.mwaa.com</a> and through the website of DAC at <a href="www.dacbond.com">www.dacbond.com</a>. DAC serves as Disclosure Dissemination Agent for the Airports Authority. See "CONTINUING DISCLOSURE."

#### THE AIRPORTS AUTHORITY

#### General

The Airports Authority is a public body politic and corporate, created with the consent of the Congress of the United States by the District of Columbia Regional Airports Authority Act of 1985, as amended, codified at D.C. Official Code § 9-901 et seq. (2001) (the "District Act"), and Chapter 598 of the Acts of Virginia General Assembly of 1985, as amended, codified at Va. Code § 5.1-152 et seq. (2001) (the "Virginia Act" and, together with the District Act, the "Acts"), for the purpose of operating, maintaining and improving the Airports. In the Federal Act (as defined below), Congress authorized the Secretary of Transportation (the "Secretary") to lease the Airports to the Airports Authority. Pursuant to an Agreement and Deed of Lease effective June 7, 1987 (the "Lease Effective Date"), as amended (the "Federal Lease"), the Airports Authority assumed operating responsibility for Reagan National Airport and Dulles International Airport upon the transfer of an initial 50-year leasehold interest in the Airports from the United States to the Airports Authority in accordance with the Metropolitan Washington Airports Act of 1986 (Title VI, P.L. 99-500, as reenacted in P.L. 99-591, effective October 18, 1986, as amended, codified at 49 U.S.C.

§ 49101 *et seq.* (the "Federal Act")). The Federal Lease was amended in 2003 to extend its term to 2067. See "THE AIRPORTS AUTHORITY – Lease of the Airports to the Airports Authority."

The Airports Authority is independent of the District of Columbia, the Commonwealth of Virginia and the federal government. The Airports Authority has the powers set forth in the Acts, including the authority: (a) to plan, establish, operate, develop, construct, enlarge, maintain, equip and protect the Airports; (b) to issue revenue bonds for any of the Airports Authority's purposes payable solely from the rentals, fees and charges from the Airports pledged for their payment; (c) to fix, revise, charge and collect rates, fees, rentals and other charges for the use of the Airports; (d) to make covenants and to do such things as may be necessary, convenient or desirable in order to secure its bonds; and (e) to do all things necessary or convenient to carry out its express powers. The Airports Authority has no taxing power.

The Airports Authority operates two enterprises – the Aviation Enterprise, under which it operates and maintains the Airports, and the Dulles Corridor Enterprise, under which it operates and maintains the Dulles Toll Road and constructed the Dulles Metrorail Project. The Dulles Toll Road is an eight-lane limited access highway 13.4 miles in length that begins just inside Interstate 495 (the Capital Beltway) and terminates near Dulles International Airport. The newly completed Dulles Metrorail Project is a 23.1 mile extension of the existing Metrorail system from the West Falls Church station to Dulles International Airport and beyond into Loudoun County, Virginia. The Dulles Metrorail Project was accepted and conveyed to the Washington Metropolitan Area Transit Authority ("WMATA") in November 2022 and subsequently opened for passenger service. The Airports Authority accounts for the two enterprises separately through the Aviation Enterprise Fund and the Dulles Corridor Enterprise Fund. Dulles Toll Road Revenues are treated as "Released Revenues" under the Indenture and therefore are not part of the Net Revenues of the Aviation Enterprise Fund that secure the Bonds. In addition, such Net Revenues do not secure Dulles Toll Road Revenue Bonds, which are secured solely by the net revenues of the Dulles Corridor Enterprise Fund. See "THE AIRPORTS AUTHORITY - Operation of the Dulles Toll Road and Completion of the Dulles Metrorail Project." The Series 2023A Bonds are being issued solely to finance and refinance projects at the Airports, and this Official Statement pertains to the Airports and the Airports Authority's operation of the Aviation Enterprise.

The Airports Authority also is empowered to adopt rules and regulations governing the use, maintenance and operation of its facilities. Regulations adopted by the Airports Authority governing aircraft operations and maintenance, motor vehicle traffic and access to Airports Authority facilities have the force and effect of law. The Airports Authority also is empowered to acquire real property or interests therein for construction and operation of the Airports. It has the power of condemnation, in accordance with Title 25 of the Code of Virginia, for the acquisition of property interests for airport and landing field purposes.

## The Airports

Reagan National Airport was opened for service in 1941. It is located on approximately 860 acres along the Potomac River in Arlington County, Virginia, approximately three miles from downtown Washington, D.C. It has three runways and three interconnected terminal buildings with 58 loading bridge-equipped aircraft gates. As of March 1, 2023, Reagan National Airport was served by seven mainline U.S. airlines, seven affiliated regional airlines and one foreign flag

carrier. In 2022, enplanements totaled approximately 12.0 million, nearly all on flights to domestic destinations, 100.2% of 2019 enplanement levels. For 2022, origin-destination ("O&D") passengers accounted for 79.3% of enplanements at Reagan National Airport, as compared to 88.5% in 2019. Preliminary year-to-date enplanements at Reagan National Airport through March 2023 were approximately 2.8 million, which was 107.5% of enplanements from the same period in 2019. See APPENDIX A – "Report of the Airport Consultant."

Dulles International Airport was opened for service in 1962. It is located on approximately 11,184 acres (exclusive of the Dulles International Airport Access Highway) in Fairfax and Loudoun Counties, Virginia, approximately 26 miles west of Washington, D.C. In addition to a main terminal, it has four midfield concourses (A, B, C and D) and four runways. As of March 1, 2023, Dulles International Airport had 127 aircraft gates and 95 passenger boarding bridges. The gate count refers to the number of marked aircraft parking positions, including both hardstand parking positions for regional aircraft and gates equipped with two loading bridges to accommodate large wide-body aircraft. As of March 1, 2023, Dulles International Airport was served by seven mainline U.S. airlines, seven regional airlines (operating as affiliates of mainline airlines), 32 foreign flag airlines, and four all-cargo carriers. In 2022, enplanements totaled approximately 10.6 million, 34.6% on flights to international destinations, as compared to 12.3 million in 2019 with 33.7% on flights to international destinations. For 2022, O&D passengers accounted for 68.1% of enplanements at Dulles International Airport, as compared to 69.4% in 2019. For 2022, domestic enplanements at Dulles International Airport were 6.9 million, 85.0% of 2019 enplanement levels, and international enplanements at Dulles International Airport were 3.7 million, 87.7% of 2019 enplanement levels. Preliminary year-to-date enplanements at Dulles International Airport through March 2023 were approximately 2.5 million (consisting of approximately 1.65 million domestic and approximately 806,000 international), which was 99.3% of enplanements from the same period in 2019. See "COVID-19 GLOBAL PANDEMIC IMPACTS ON THE AIRPORTS AUTHORITY." See APPENDIX A - "Report of the Airport Consultant."

See "THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER PLANS – Facilities at Reagan National Airport and Dulles International Airport," "THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY," "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS," and "CERTAIN INVESTMENT CONSIDERATIONS – Airline Consolidations."

## **Board of Directors**

The Acts provide that the Airports Authority shall consist of a 17-member Board of Directors (the "Board"). Seven members of the Board are appointed by the Governor of Virginia subject to confirmation by the Virginia General Assembly, four are appointed by the Mayor of the District of Columbia subject to confirmation by the Council of the District of Columbia, three are appointed by the Governor of Maryland, and three are appointed by the President of the United States with the advice and consent of the Senate. Presently, two of the three seats appointed by the President of the United States are vacant. Directors serve staggered six-year terms without compensation and may be reappointed to one additional term.

The members of the Airports Authority's Board of Directors are:

Name	<b>Appointing Authority</b>	<b>Term Expires</b>
Judith N. Batty	Mayor of the District of Columbia	October 4, 2024
John A. Braun	Governor of Virginia	November 23, 2024
Sean O. Burton	President of the United States	May 30, 2024
Taylor Chess	Governor of Virginia	November 23, 2026
Albert J. Dwoskin	Governor of Virginia	October 11, 2024
Michele Hagans	Mayor of the District of Columbia	January 5, 2029
Honorable Katherine K. Hanley	Governor of Virginia	November 23, 2026*
Mamie W. Mallory	Governor of Maryland	October 10, 2024
Timothy Poole	Governor of Maryland	November 30, 2026
Thorn Pozen, Vice Chairperson	Mayor of the District of Columbia	January 5, 2027*
Brett Gibson	Governor of Virginia	November 23, 2026
William E. Sudow, Chairperson	Governor of Virginia	October 11, 2024*
Honorable J. Walter Tejada	Governor of Virginia	November 23, 2024*
Mark Uncapher	Governor of Maryland	November 30, 2028*
Joslyn N. Williams	Mayor of the District of Columbia	January 5, 2025*
Vacant	President of the United States	
Vacant	President of the United States	

The Board operates through several committees that include the Committees of Business Administration, Dulles Corridor, Finance, and Strategic Development, and the Committees of Ethics Review, Executive and Governance, Human Resources, Nominations, Risk Management and ESG. Primary oversight over financing activities is provided by the Finance and the Risk Management Committees. All Board members are members of one or more Committees.

## **Senior Management**

Airports Authority operations are conducted under the supervision of the Airports Authority management. The current senior management of the Airports Authority are listed below.

JOHN E. POTTER. Mr. Potter is President and Chief Executive Officer of the Airports Authority. Prior to assuming this position in July 2011, Mr. Potter served as the Postmaster General of the United States for ten years where he worked to modernize management of the over 500,000 employee organization. Prior to serving as Postmaster General, Mr. Potter served in a number of positions at the United States Postal Service, including Manager of Washington—Baltimore—Northern Virginia Field Operations, Senior Vice President of Labor Relations, Senior Vice President of Operations Support, and Executive Vice President and Chief Operating Officer. Mr. Potter is a graduate of Fordham University (B.A., Economics, 1977) and Massachusetts Institute of Technology (M.S.M., Sloan Fellow, 1995).

CHRYSSA WESTERLUND. Ms. Westerlund is Executive Vice President and Chief Revenue Officer. Prior to assuming this position, Ms. Westerlund served as Vice President of Marketing and Consumer Strategy, which included marketing, digital strategy, revenue strategy and airport concessions, and was Deputy Vice President of Planning and Revenue Development. Before

Second term.

joining the Airports Authority in January of 2015, Ms. Westerlund served as a Global Alliance Director for Hewlett-Packard's IT services division and focused on growing revenue through the development of new partners and services. She also spent a number of years as a management consultant providing strategic advisory services to Fortune 500 companies. Ms. Westerlund is a graduate of the University of Texas in Austin (B.B.A., Accounting, 1992) and the University of Pennsylvania's Wharton School of Business (M.B.A., Marketing, 1997) and is a Certified Public Accountant in Texas.

JOHNNA S. SPERA. Ms. Spera is Senior Vice President and General Counsel for the Airports Authority. Since joining the Airports Authority in November 2009, she has served in numerous positions, including Associate General Counsel; Acting Vice President, Office of Supply Chain Management; and Deputy Vice President and Deputy General Counsel. Immediately prior to joining the Airports Authority, Ms. Spera was the Regional General Counsel for Toll Brothers, Inc. Before that, she spent 17 years within the Charles E. Smith Companies organization, where she served in various roles, including Vice President and Assistant General Counsel of Charles E. Smith Management, Inc. and Senior Vice President and General Counsel of Consolidated Engineering Services, Inc., which was acquired by EMCOR Facilities Services, Inc. in 2002. Ms. Spera has served on the boards of several non-profit organizations in Northern Virginia. She is a graduate of the University of Virginia (B.A., Government, 1985) and the University of Virginia School of Law (J.D., 1988).

ANDREW T. ROUNTREE. Mr. Rountree is Senior Vice President for Finance and Chief Financial Officer of the Airports Authority. Prior to assuming this position in December 2010, Mr. Rountree served as the Acting Vice President for Finance and Chief Financial Officer and was the Deputy Chief Financial Officer beginning in 2005. Prior to joining the Airports Authority, Mr. Rountree was appointed as the Director of Finance for the City of Richmond, Virginia in September 2000. While with the City of Richmond, he also served as Deputy Director of Finance from 1998 to 2000, and as the Chief of the License, Assessment, and Tax Audit beginning in 1996. Mr. Rountree served in a number of positions with the Commonwealth of Virginia, including Assistant Controller with the Department of Information Technology from 1990 to 1996 and Audit Director with the Auditor of Public Accounts, the legislatively appointed auditor for the Commonwealth, until 1990. Mr. Rountree served two terms on the Board Finance Committee for Airports Council International-North America (ACI-NA) and is a Past-Chair of the ACI-NA Finance Steering Committee on which he continues to serve. He was recognized in 2017 as ACI-NA Finance Professional of the Year for Large Hub Airports. Mr. Rountree is a graduate of Virginia Commonwealth University (B.S., Economics, 1982) and is a Certified Public Accountant in the Commonwealth of Virginia.

ROGER NATSUHARA. Mr. Natsuhara is Senior Vice President and Chief Engineer and Development Officer, responsible for the Airports Authority's Capital Construction Program, Capital Improvements Program, Environmental, Sustainability and Real Estate Development programs for the Airports Authority and the Dulles Metrorail Project. He joined the Airports Authority in October 2014. Mr. Natsuhara has managed large capital programs since 1989 when he was assigned as an Assistant Resident Officer in Charge of Construction at Marine Corps Air Station El Toro. Prior to joining the Airports Authority, he was the Acting Assistant and Principal Deputy Assistant Secretary of the Navy for Energy, Installations and Environment. His responsibilities included overseeing all world-wide construction policies for the Navy and the

Marine Corps. He is a graduate of the University of California, Berkeley (B.S., Civil Engineering, 1980) and Naval Postgraduate School (M.S., Financial Management, 1989).

ANTHONY VEGLIANTE. Mr. Vegliante is Senior Vice President and Chief Human Resources and Administrative Services Officer. He joined the Airports Authority in May 2013. Prior to joining the Airports Authority, Mr. Vegliante was the Chief Human Resources Officer for the United States Postal Service, where he managed the human resources function for more than 500,000 employees nationwide. Prior to that assignment, Mr. Vegliante was the Vice President for Labor Relations and participated in 20 national labor negotiations at the United States Postal Service. In 2010, Mr. Vegliante was elected a fellow of the National Academy of Human Resources, the first public sector executive to receive the honor. He is a graduate of the University of Rhode Island (B.S., Economics, 1974), the University of Southern California Executive Management Program, the University of Bridgeport (M.S., Business Education, 1979), and the University of New Haven (M.S., Industrial Relations, 1997).

ANDREW HASCALL. Mr. Hascall is Vice President for Engineering Support and Dulles Corridor Metrorail Project. He joined the Airports Authority in August 2020. Prior to joining the Airports Authority, Mr. Hascall held a variety of senior leadership positions with the Department of Navy managing design and construction projects in various U.S. and overseas locations. He is a graduate of Illinois Institute of Technology (B.S., Mechanical Engineering, 1992), and the Naval Postgraduate School (M.B.A., 2003). He is a registered Professional Engineer in the State of Missouri.

GOUTAM KUNDU. Mr. Kundu is Executive Vice President and Chief Information and Digital Strategy Officer. He joined the Airports Authority in June 2013. Prior to joining the Airports Authority, Mr. Kundu held the executive positions of Chief Information Officer at the United States Mint; Vice President at NIIT Technologies, a global IT service and software company; Chief Information Officer at the Washington Suburban Sanitary Commission; and Chief Technology Officer at Farm Bureau Insurance. He is a graduate of the University of Calcutta (B.S., Computer Engineering, 1993) and the Indiana University Kelley School of Business (M.B.A., 1998).

MONICA R. HARGROVE. Ms. Hargrove is Vice President and Secretary of the Airports Authority. Prior to assuming this position in March 2016, Ms. Hargrove served as Deputy General Counsel of the Airports Authority since November 2013. Before joining the Airports Authority, Ms. Hargrove served as General Counsel of Airports Council International-North America and as a corporate attorney with US Airways for more than 19 years, serving in the positions of Senior Attorney, Assistant General Counsel and Associate General Counsel. Ms. Hargrove began her legal career as a trial attorney in the Antitrust Division of the United States Department of Justice in 1979. She currently serves as a Past-Chair and on the Board of Governors of the American Bar Association's Forum on Air & Space Law, and she served as the 2013 Chair of the Federal Bar Association's Transportation & Transportation Security Law Section. She is a member of the District of Columbia and Virginia State Bars. Ms. Hargrove is a graduate of Dartmouth College (B.A., Government, 1976) and the University of Michigan Law School (J.D., 1979).

THOMAS BEATTY. Mr. Beatty is Vice President for Engineering, responsible for the planning, design, construction and project controls for all capital programs on Airports Authority property. Mr. Beatty joined the Airports Authority in January 1997 and previously held management

positions in the Building Codes and Environmental Departments. He was promoted to Deputy Vice President for Engineering in September 2019, and to Vice President for Engineering in December 2021. He also serves as the Safety Security Oversight Administrator for the Dulles AeroTrain and is the Airports Authority's Building Official. Prior to joining the Airports Authority, he served as a program manager for an engineering firm. Mr. Beatty is a graduate of Pennsylvania State University (B.S., Engineering and Science, 1988), a registered Professional Engineer in the Commonwealth of Virginia, a Certified Building Official and holds several environmental certifications.

CHARLES TURLEY. Mr. Turley is Vice President for Audit. He joined the Airports Authority in January of 2023. Prior to assuming this position, Mr. Turley provided assurance services as a Director with the accounting firm of Clifton Larson Allen, where he focused on federal government clients. He also held senior positions within the U.S. Postal Service Office of Inspectors General, serving as the Chief Data Officer and an Audit Executive during his tenor. Mr. Turley served as a Director with the accounting firm KPMG, with a focus on public-sector accounts, and held positions with the U.S. Department of Agriculture, Defense Contract Audit Agency, as well as being a veteran of the U.S. Marine Corps. He is a Certified Internal Auditor, Certified Fraud Examiner, and a graduate of the University of Illinois at Chicago (B.S., Accounting, 2002) and Strayer University (M.S., Accounting, 2005).

JULIA T. HODGE. Ms. Hodge is Vice President for Supply Chain Management, responsible for the Airports Authority's Procurement and Contracts and Supplier Diversity functions. She joined the Airports Authority in September 2009 and held leadership positions in the Office of Finance, Office of Audit and Office of Corporate Risk and Strategy, where she served as the Deputy Vice President responsible for organization-wide governance, compliance, and strategic planning. Ms. Hodge was an auditor and management consultant with PricewaterhouseCoopers, LLP for ten years prior to joining the Airports Authority. A Certified Public Accountant in the Commonwealth of Virginia, she is a graduate of Boston College (B.S., Accounting, 2000) and Georgetown University (E.M.L., 2012).

J. PAUL MALANDRINO, JR. Mr. Malandrino is Vice President and Airport Manager at Reagan National Airport. Mr. Malandrino was the Federal Security Director at Thurgood Marshall Baltimore/Washington International Airport for almost four years before assuming his current position in July 2006. Prior to that time, he served as Manager of the Operations Department at Dulles International for six years. He spent most of his Air Force career flying various models of the F-111 fighter bomber aircraft. One of his many assignments was serving as the Commanding Officer of the famed 380<sup>th</sup> Bombardment Wing in Plattsburgh, New York, flying FB-111 and KC-135 aircraft. Mr. Malandrino retired from the United States Air Force in 1996, after spending 30 years on active duty. Mr. Malandrino is a graduate of the Citadel (B.A. History, 1965), Golden Gate University (M.P.A., 1976) and the United States Air Force War College (1981).

RICHARD GOLINOWSKI. Mr. Golinowski is Vice President and Airport Manager at Dulles International, which includes the Airport, Dulles Toll Road and Dulles International Airport Access Highway. Prior to assuming this position in September 2021, he served as Vice President for Operations Support. He joined the Airports Authority in February 1995 and previously held management positions at Reagan National Airport for Resource Support, Engineering and Maintenance, and Airport Operations. Prior to joining the Airports Authority, he worked as a

consulting engineer and served as the manager of the facilities engineering group for his firm. Mr. Golinowski is a graduate of Virginia Tech (B.S. Engineering, 1987) and is a registered Professional Engineer in the Commonwealth of Virginia.

BRYAN NORWOOD. Mr. Norwood is Vice President for Public Safety. He joined the Airports Authority in April 2014. He began his law enforcement career in 1989 as a police officer in New Haven, Connecticut. After rising through the ranks to Assistant Chief in 2002, he was appointed Chief of Police in Bridgeport, Connecticut, in 2006, and Chief of Police in Richmond, Virginia, in 2008. Mr. Norwood also was a special agent for the United States Drug Enforcement Administration from 1998 to 1999. He was chairman of the Central Virginia Law Enforcement Chief Executive Association and is a member of the International Association of Chiefs of Police, the Virginia Association of Chiefs of Police, and the National Organization of Black Law Enforcement Executives. He is a graduate of Hampton University (B.A. in Psychology, 1988) and New Haven Police Academy (1989).

CHRISTOPHER PAOLINO. Mr. Paolino is Vice President for Strategy and Operational Performance. Mr. Paolino joined the Airports Authority in 2013 as the head of public affairs. He subsequently served as Director of IT Business Relationship Management, working to align business needs with technology objectives, and served as the project manager for the implementation of the full-suite ERP system, launching on-time and under budget in 2018. Prior to joining the Airports Authority, he served in a variety of public sector capacities, including in the Office of the Governor of Rhode Island, the Washington, D.C. office of a Member of Congress, and the Office of the Secretary of the U.S. Department of the Interior. Mr. Paolino is a graduate of Dartmouth College (B.A., Philosophy, 2000) and the Raymond A. Mason School of Business at the College of William & Mary (M.B.A., 2021).

TANISHA LEWIS. Ms. Lewis is Vice President for Diversity, Inclusion and Social Impact. Prior to assuming this position, she served in key human resources roles, most recently as manager of human capital management, performance and business readiness. Ms. Lewis has led the implementation of the Airports Authority's human capital management system, created robust succession planning and development programs for critical positions, and developed the Corporate Social Responsibility program. Ms. Lewis is a graduate of George Washington University (B.A. Liberal Arts 1999) and the Catholic University of America (M.A. Human Resource Management, 2015).

STEPHEN STOYCOS. Mr. Stoycos is Vice President for Real Estate Development. He joined the Airports Authority in January 2023. His experience includes ten years as a Managing Director for Choice Hotels International, Inc., where he led the company's global efforts in capital deployment and real estate and nine years as a Senior Vice President for Marriott International, Inc., where he led the company's real estate investment and development efforts. Mr. Stoycos is a graduate of Wittenberg University (B.A. Business Administration, 1979).

DAVID R. MOULD. Mr. Mould is Vice President for Communications and Government Affairs, which includes corporate communications, media relations, employee communications, government relations, corporate relations and noise information programs. He joined the Airports Authority in June 2012 after serving as chief of communications for government agencies, including NASA and the Tennessee Valley Authority, and energy corporations, including Southern

Company and PG&E National Energy Group. He has also served as senior policy advisor to the United States Secretary of Energy and as a public affairs consultant and lobbyist in the energy and aerospace industries. He was a journalist for three newspapers and the United Press International news agency. He is a graduate of Emory University (M.B.A., 1998) and the University of Tennessee (B.S. Communications, 1980).

PAUL B. BOBSON. Mr. Bobson is Vice President for Airline Business Development. He joined the Airports Authority in March 2022, after serving as the Director of Business Development and Marketing for Omni Air International where he directed all nontraditional commercial business and commercial marketing. Mr. Bobson is an award-winning aviation business development and marketing professional with over 15 years of experience. Over the course of his career, he has led airport teams and programs for Las Vegas and the State of Maryland. He has also led teams at multiple industry leading airlines. Mr. Bobson holds two degrees from Embry-Riddle Aeronautical University (B.S. Aviation Business Administration, 2009 and M.B.A. 2015).

JAIMINI M. ERSKINE. Ms. Erskine is Vice President for Marketing and Concessions. She joined the Airports Authority in May 2022 and was previously the Director of the Office of Commercial Management for the Maryland Aviation Administration, where she oversaw all commercial revenue-generating contracts at Baltimore/Washington International Thurgood Marshall and Martin State airports. With over 25 years of experience in the aviation sector, she continues to be actively engaged in leadership roles in industry associations, including serving as second vice chair on Airport Council International-North America's Commercial Management Steering Committee and Airport Minority Advisory Council's Corporate Development Committee. She is a graduate of University of Maryland (B.S. Marketing, 1993) and Hood College (M.B.A., 2005).

#### **Employees and Labor Relations**

As of April 1, 2022, the Airports Authority employed a total of approximately 1,576 full and part-time employees, 1,297 of whom were employed in aviation functions and 32 of whom were employed in Dulles Corridor functions (toll and rail), and, of the total, 247 of whom were employed in consolidated functions. Of the total employees of the Airports Authority, 753 are represented by labor unions in five bargaining units. The Airports Authority is not subject to the National Labor Relations Act and also is outside the jurisdiction of the Federal Labor Relations Authority. As required by the Federal Lease, the Board has adopted a Labor Code which establishes an Employee Relations Council (the "ERC"). The ERC consists of nine members who are named to two-year terms by mutual agreement between the President and Chief Executive Officer of the Airports Authority and the labor organizations representing Airports Authority employees. The ERC is composed of three panels: the Impasse Disputes Panel, the Representation Matters Panel and the Unfair Labor Practices Panel. Through these panels, the ERC acts on petitions for exclusive representation, resolves negotiation disputes and investigates unfair labor practice allegations. Pursuant to the Airports Authority's Labor Code, Airports Authority employees are prohibited from striking.

## Lease of the Airports to the Airports Authority

The Airports were transferred by the federal government to the Airports Authority on June 7, 1987, for an initial term of 50 years ending June 6, 2037. The term of the Federal Lease may be extended by mutual agreement and execution of a written extension by the Secretary of Transportation and the Airports Authority, and this was done in 2003 to extend the term to June 6, 2067. The Federal Lease transferred a leasehold interest in all of the Airports' then existing real property, including access highways and related facilities, and transferred title to all equipment, materials, furnishings and other personal property appurtenant to or located on the Airports' real property (other than particular property required for federal air traffic control responsibilities). Following the transfer, the Airports Authority acquired title to approximately 1,161 acres of land to accommodate new runways and related improvements at Dulles International Airport, as well as avigation easements over approximately 158 acres of land adjacent to Dulles International Airport. All land acquired after the transfer is not subject to the Federal Lease, except that any such land in the Airports Authority's possession upon expiration of the Federal Lease will revert to the federal government.

In November 2018, the Airports Authority finalized the sale of 424 acres of land that were part of Dulles International Airport, called the Western Lands, which had been acquired for future development, to Digital Realty Trust, LP for \$236.5 million. The Western Lands represent the acres that were not used as part of the construction of the fourth runway and additional support facilities at Dulles International Airport. The Airports Authority determined, as approved by the FAA, that there was no current or foreseeable need to use the Western Lands. In connection with the sale, the Airports Authority entered into the Second Universal Amendment relating to the application of the net proceeds to be received by the Airports Authority from the sale. See "CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS" and APPENDIX B – "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease."

The FAA Modernization and Reform Act of 2012 (the "2012 FAA Reauthorization Act") expanded the purposes for which the real property subject to the Federal Lease may be used to include any business activity that is consistent with the needs of aviation and has been approved by the United States Secretary of Transportation. Prior to that amendment, the real property subject to the Federal Lease could be used only for aviation business or activities, activities necessary or appropriate to serve passengers or cargo in air commerce, and nonprofit, public use facilities consistent with the needs of aviation. The Federal Lease has been amended to incorporate this provision of the 2012 FAA Reauthorization Act. In addition, the Federal Lease has been amended to provide that the Airports Authority will adopt, maintain and adhere to policies and procedures in the areas of "procurement and contracting, human resources (including hiring and adverse action), budget (as relates to federal funds), travel, ethics, governance, and transparency (including open meetings and executive sessions)" that are "substantially similar to those of similar public entities and strive to reflect a standard of 'best practices'." The amendment also provides that the Airports Authority will develop these policies and procedures in consultation with the United States Secretary of Transportation, or the Secretary's designee, and will obtain the concurrence of the same prior to adopting such policies and procedures.

The Federal Lease provides for an annual base rental payable to the United States Treasury, which was initially \$3.0 million for the one-year period that commenced June 7, 1987. This

amount is subject to annual adjustment for inflation and interest. The adjusted lease payment for the year ended June 6, 2022 was \$6.226 million, and the adjusted lease payment for the year ending June 6, 2023 is estimated to be \$6.549 million. The Airports Authority has made all rental payments on a timely basis.

The Airports Authority is required by the Master Indenture to deposit funds into a reserve for rental payments on a monthly basis and to make rental payments in semiannual installments. Any interest earned on the deposited funds also is required to be paid to the United States. Payments under the Federal Lease are to be made by the Airports Authority from funds legally available for such purpose, after the Airports Authority has satisfied its contractual obligations in respect of debt service on its bonds and other indebtedness, and paid or set aside the amounts required for payment of the operating and maintenance expenses of the Airports. The Airports Authority has made all rental deposits and payments on a timely basis.

Under the Federal Lease, the Airports Authority may not use certain revenues from one Airport for payment of operation and maintenance expenses at the other Airport. However, this restriction does not extend to debt service, amortization or depreciation expenses. The Federal Lease requires the Airports Authority to use the same basis in calculating general aviation landing fees at the Airports as is used in setting air carrier landing fees.

Under the Federal Lease, the Airports Authority has full power and dominion over, and complete discretion in the operation and development of, the Airports, subject to certain restrictions. For example, the Airports Authority may not (a) increase or decrease the number of Instrument Flight Rule takeoffs and landings permitted at Reagan National Airport by the FAA's High Density Rule as in effect on October 18, 1986, which limits, with certain exceptions, the number of air carrier flight arrivals and departures that can be scheduled to 37 per hour, and 11 regional air carrier flights and 12 general aviation flights scheduled per hour, (b) impose any limitation on the number of passengers taking off or landing at Reagan National Airport, or (c) change the hours of operation or the types of aircraft serving either of the Airports, except by regulation adopted after a public hearing. See "Regulations and Restrictions Affecting the Airports" below.

The Federal Lease requires the Airports Authority to maintain a risk financing plan for its casualty and property losses, covering such items as are customarily insured by enterprises of a similar nature. The Airports Authority's risk financing plan includes risk retention, risk transfer to commercial insurers or participation in group risk financing plans. The Airports Authority is required to consult with qualified actuaries and risk management consultants in developing its risk management plan. The Airports Authority has adopted a risk financing plan in accordance with the requirements of the Federal Lease. See "Insurance" below.

The following constitute "events of default" under the Federal Lease: (a) the failure of the Airports Authority to make rental payments for 30 days after their due date; (b) the continuation of the use of any of the leased property or any portion thereof for purposes other than airport purposes (for 30 days after notice of such noncompliant use from the Secretary, unless good faith efforts to remedy the default have been commenced and are being diligently pursued); and (c) the continuation of a breach of any other provision of the Federal Lease (for 30 days after notice of the breach from the Secretary, unless good faith efforts to remedy such default have been

commenced and are being diligently pursued). In the case of an event of default described in (a) or (c) above, the Secretary may request the United States Attorney General to bring an appropriate action to compel compliance with the Federal Lease by the Airports Authority. In the case of an event of default relating to a rental payment under the Federal Lease, the Secretary may assess penalties and interest at specified rates. In the case of an event of default described in (b) above, the Secretary is required to direct the Airports Authority to bring the use of Airport property into conformity with the Federal Lease and to retake that property if the Airports Authority does not comply within a reasonable period. It is only in this "event of default," where Airport property is used for non-airport purposes, that the Federal Lease, as to the property so used, may be terminated.

Although the Airports Authority is not required to follow federal contracting statutes and regulations, the Airports Authority is obligated under the terms of the Federal Lease to implement contracting procedures to achieve, to the maximum extent practicable, full and open competition. The Airports Authority has published a contracting manual that sets forth its procedures for full and open competition.

## **Regulations and Restrictions Affecting the Airports**

The operations of the Airports Authority and its ability to generate revenues are affected by a variety of legislative, legal, contractual and practical restrictions. These include, without limitation, restrictions in the Federal Act, limitations imposed by the Federal Lease and provisions of the Airline Agreement. Both Airports are subject to the extensive federal regulations applicable to all airports and, following the September 11, 2001 attacks, the FAA instituted additional special operating restrictions at Reagan National Airport. The following summarizes some of the regulations and restrictions applicable to the Airports.

#### Operating Restrictions at Reagan National Airport

Reagan National Airport is subject to the following federal statutory and regulatory restrictions that do not apply to most other airports in the United States:

- (i) The High Density Rule. The FAA regulation known as the High Density Rule limits the number of air carrier, regional air carrier and general aviation flights that can be scheduled at Reagan National Airport. The High Density Rule has been in effect since 1969, and is intended to promote air traffic efficiency and relieve congestion. The maximum number of air carrier flight arrivals and departures authorized by the High Density Rule is 37 per hour, with some exceptions. In addition to the air carrier flights, the rule allows 11 regional air carrier flights and 12 general aviation flights scheduled per hour.
- (ii) <u>The Perimeter Rule</u>. Under the Federal Act, nonstop flights to and from Reagan National Airport generally are limited to destinations no more than 1,250 miles away (the "Perimeter Rule").

Since 2000, Congress has authorized increases in flight activity at Reagan National Airport exceeding the number of flights authorized by the High Density Rule and the distance of flights under the Perimeter Rule. For example, the 2012 FAA Reauthorization Act increased the number of slot pairs (i.e., daily round trip flights) to points beyond the perimeter from 12 to 20. The Airports Authority cannot predict the impact of future changes to the High Density Rule or the

Perimeter Rule on the Airports, but such changes may increase flight activity at Reagan National Airport and may reduce flight activity at Dulles International Airport.

## Additional Security Restrictions at Reagan National Airport

Although general aviation is authorized at Reagan National Airport, it is subject to compliance with strict security requirements, including arrival from one of 147 "gateway" airports\*, advanced screening and background checks of crews and passengers, TSA inspection of crews, passengers and property and the presence of armed officers on each flight. General aviation activities at Reagan National Airport have no material effect on traffic and revenues at Reagan National Airport.

## Possible Future Restrictions at Reagan National Airport

For security reasons, the federal government could restrict future flights at, or close, Reagan National Airport for extended periods or permanently. If closure of the Airport or such restrictions were to occur, they would have a negative impact on enplanements at the Airport and, as a result, on Revenues. If this were to occur, the Airports Authority would expect to seek compensation from the federal government for the losses and damages incurred, as it did successfully when Reagan National Airport was temporarily closed as a result of the events of September 11, 2001. No assurances can be given, however, that any compensation would be forthcoming from the federal government in these circumstances.

## Federal Funding Regulations at the Airports

The FAA has the power to terminate the Airports Authority's authority to impose PFCs if (a) PFC revenues are not used for approved projects, (b) if project implementation does not commence within the time periods specified in the FAA's regulations or (c) if the Airports Authority otherwise violates FAA regulations. The Airports Authority's plan of funding for the CCP is premised on certain assumptions with respect to the approval by the FAA of the Airports Authority's PFC applications and the availability of PFC revenues to fund PFC-eligible portions of certain projects in the CCP. In the event that PFC revenues are lower than those expected, the Airports Authority may elect to delay certain projects or seek alternative sources of funding, including the possible issuance of additional Bonds. See "PLAN OF FUNDING FOR THE CCP - Funding Source: PFCs" and "CERTAIN INVESTMENT CONSIDERATIONS - Federal Funding; Impact of Federal Sequestration."

## **Noise Abatement Programs**

Since 1993, the Airports Authority has had an aircraft noise compatibility program at Reagan National Airport that was approved by the FAA under 14 C.F.R. Part 150, the FAA program for addressing noise issues involving airports and neighboring communities ("Part 150"). The Airports Authority's program includes noise abatement flight corridors, nighttime noise limits and nighttime engine run-up limitations. In accordance with FAA requirements, in December 2004, the Airports Authority completed and delivered to the FAA a Part 150 review of

The FAA uses the term "gateway" airport to refer to certain airports from which all flights to Reagan National Airport must complete TSA screening prior to landing at Reagan National Airport.

its noise compatibility program for Reagan National Airport which, in light of changes in the type and number of aircraft operating at Reagan National Airport, proposed certain modifications to the program. The Airports Authority received FAA approval of the Part 150 review in January 2008.

The Airports Authority also has an aircraft noise compatibility program for Dulles International Airport. All runways at Dulles International Airport have buffers between the runway ends and the airport boundary. The Airports Authority worked in conjunction with the planning departments in Fairfax County and Loudoun County (together, the "Counties") to provide for compatible land uses in the vicinity of Dulles International Airport, specifically in those areas projected to be adversely affected by significant aircraft noise in the future. The original Part 150 program for Dulles International Airport was completed by the FAA in 1985. In 1993, the noise exposure analysis was updated to reflect the phase-out of older, noisier aircraft as mandated by Congress. The Counties have adopted land-use plans that provide for development compatible with the predicted noise exposure from the planned five runways at Dulles International Airport.

The noise contours adopted by the Counties in 1993 were updated again in 2018 due to notice from the FAA that changes in approach procedures and the airspace were being proposed. The Airports Authority continues to brief officials and staff from the Counties on the new contours and recommend they be taken into consideration during land use planning and zoning decisions.

## **Risk Based Auditing**

The functions of the Airports Authority's Office of Audit include coordination of the annual financial statement audit performed by independent external auditors, as well as the provision of internal audits of internal controls. The Office of Audit conducts internal audits to provide the Airports Authority's management and Board with reasonable assurance that: (1) risks are being identified and managed; (2) management and delivery capacity are being maintained; (3) adequate control is being exercised; and (4) appropriate results are being achieved. The Office of Audit is to assess organization-wide risk to evaluate the allocation of internal audit resources and to develop annual audit plans in a manner that gives appropriate consideration to risks affecting the Airports Authority.

#### **Insurance**

The Airports Authority is required under the Federal Lease to have certain insurance in force on the Lease Effective Date and over the years has purchased and maintained various commercial property and casualty insurance policies with specified limits and exclusions, including airport liability insurance to protect its operations and terrorism/war risk when available. The Airports Authority also purchases and maintains an Aviation Owner Controlled Insurance Program ("Aviation OCIP") for selected airport construction projects to be included and insured under the Aviation OCIP. The coverage under the Aviation OCIP includes builders' risk, contractors' pollution liability, and general/excess liability insurance and insures the Airports Authority and eligible parties for work performed at the job site. The Aviation OCIP is designed to reduce claims conflict among contractors and insurance providers, provide continuous and uniform coverage and dedicated limits of insurance for all participants, increase participation of small local business enterprises, and eliminate redundant costs and contractor mark-ups of

insurance for and during construction. Additionally, under the Airport Use and Premises Lease, Signatory Airlines are required to maintain certain types and amounts of liability insurance.

## Operation of the Dulles Toll Road and Completion of the Dulles Metrorail Project

Under its Dulles Corridor Enterprise Fund, the Airports Authority operates and maintains the Dulles Toll Road ("DTR") and constructed the Dulles Metrorail Project. The Airports Authority accounts for these activities through the Dulles Corridor Enterprise Fund. Dulles Toll Road Revenues are treated as "Released Revenues" under the Indenture and therefore are not part of the Net Revenues of the Aviation Enterprise Fund that secure the Bonds. In addition, such Net Revenues do not secure Dulles Toll Road Revenue Bonds. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – General."

On November 1, 2008, the Virginia Department of Transportation ("VDOT") transferred operational and financial control of the DTR from VDOT to the Airports Authority for a term of 50 years, upon the terms and conditions set forth by the Master Transfer Agreement dated December 29, 2006, and the Permit and Operating Agreement dated December 29, 2006 (collectively, the "VDOT Agreements"), each entered into by and between VDOT and the Airports Authority. In exchange for the rights to the revenues from operation of the DTR and certain other revenues described in the VDOT Agreements (collectively, the "DTR Revenues"), the Airports Authority agreed to (i) operate and maintain the DTR, (ii) cause the design and construction of the Dulles Metrorail Project and (iii) make other improvements in the Dulles Corridor consistent with VDOT and regional plans.

The Dulles Toll Road is an eight-lane limited access highway 13.4 miles in length that begins just inside Interstate 495 (the Capital Beltway) and terminates near Dulles International Airport. The Dulles Metrorail Project is a 23.1 mile extension of the existing Metrorail system from the West Falls Church station to Dulles International Airport and beyond into Loudoun County, Virginia. The Dulles Metrorail Project was constructed in two phases and each phase was conveyed to and is operated by WMATA. The combined cost of both phases was \$6.0 billion.

The Dulles Metrorail Project was funded with a combination of Dulles Toll Road Revenue Bonds issued by the Airports Authority and secured by a pledge of DTR Revenues, federal grants and loans, grants from the Commonwealth of Virginia, contributions from local jurisdictions in the Commonwealth of Virginia, and a contribution from the Airports Authority totaling 4.1% of the total project cost. The Airports Authority's contribution was funded by the Aviation Enterprise Fund over the period of June 2015 to December 2022 mainly from PFCs. As of April 1, 2023, there are approximately \$3.5 billion of Dulles Toll Road Revenue Bonds outstanding.

#### THE SERIES 2023A BONDS

#### General

The Series 2023A Bonds are being issued under the Indenture. The Series 2023A Bonds will be dated as of their date of delivery, will bear interest from that date, payable beginning on October 1, 2023 and semiannually thereafter on each April 1 and October 1 at the interest rates, and will mature on October 1 in the years, set forth on the inside cover pages of this Official Statement. The Series 2023A Bonds will be issued in denominations of \$5,000 or integral

multiples thereof and will be subject to redemption prior to maturity as described below under "Redemption Provisions."

## **Book-Entry Only System**

The Series 2023A Bonds will be issued as fully registered bonds without coupons and are initially to be registered in the name of Cede & Co., as nominee for DTC as securities depository for the Series 2023A Bonds. Purchases by beneficial owners are to be made in book-entry form. If at any time the book-entry only system is discontinued for the Series 2023A Bonds, the Series 2023A Bonds will be exchangeable for other fully registered certificated Series 2023A Bonds in any authorized denominations, maturity and interest rate. Interest will be payable by check or draft mailed to the Holder as of the Record Date. The Trustee may impose a charge sufficient to reimburse the Airports Authority or the Trustee for any tax, fee or other governmental charge required to be paid with respect to such exchange or any transfer of a Series 2023A Bond. The cost, if any, of preparing each new Series 2023A Bond issued upon such exchange or transfer, and any other expenses of the Airports Authority or the Trustee incurred in connection therewith, will be paid by the person requesting such exchange or transfer. At the request of any Holder of at least \$1,000,000 principal amount of the Series 2023A Bonds, payment of interest will be made by wire transfer as directed by such Holder. Payment of principal of the Series 2023A Bonds will be made upon presentation and surrender of such Bonds at the principal corporate trust office of the Trustee. For more information regarding the Book-Entry Only System, see APPENDIX D -"Book-Entry Only System."

NONE OF THE AIRPORTS AUTHORITY, THE UNDERWRITERS, OR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DTC PARTICIPANTS, TO INDIRECT PARTICIPANTS, OR TO ANY BENEFICIAL OWNER WITH RESPECT TO: (i) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, CEDE & CO., ANY DTC PARTICIPANT, OR ANY INDIRECT PARTICIPANT; (ii) ANY NOTICE THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE SERIES 2023A BONDS; (iii) THE SELECTION BY DTC OR ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OF ANY PERSON TO RECEIVE PAYMENT IN THE EVENT OF A PARTIAL REDEMPTION OF ANY SERIES 2023A BONDS; (iv) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OR REDEMPTION PREMIUM, IF ANY, OR INTEREST DUE WITH RESPECT TO ANY SERIES 2023A BONDS; (v) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE OWNER OF THE SERIES 2023A BONDS; OR (vi) ANY OTHER MATTER RELATING TO DTC OR THE BOOK-ENTRY ONLY SYSTEM.

#### **Redemption Provisions**

Optional Redemption at Par for Series 2023A Bonds

The Series 2023A Bonds maturing on and after October 1, 2033 are subject to optional redemption prior to maturity by the Airports Authority, on and after October 1, 2032, in whole or in part, at any time, at 100% of the principal amount of the Series 2023A Bonds to be redeemed plus interest accrued to the date fixed for redemption.

## Mandatory Sinking Fund Redemption

The \$64,605,000 Series 2023A Bonds term bond maturing October 1, 2048, is subject to mandatory sinking fund redemption in part, by lot, prior to maturity on October 1, in the years set forth below (each a "Sinking Fund Redemption Date"), at a redemption price equal to the principal amount of such term bond called for redemption:

Year	
(October 1)	Principal Amount
2044	\$11,635,000
2045	12,245,000
2046	12,885,000
2047	13,565,000
2048*	14,275,000

\*Final Maturity

The \$58,040,000 Series 2023A Bonds term bond (5.250% rate) maturing October 1, 2053, is subject to mandatory sinking fund redemption in part, by lot, prior to maturity on October 1, in the years set forth below (each a "Sinking Fund Redemption Date"), at a redemption price equal to the principal amount of such term bond called for redemption:

Year (October 1)	Principal Amount
2049	\$10,025,000
2050	10,775,000
2051	11,565,000
2052	12,400,000
2053*	13,275,000

\*Final Maturity

The \$25,000,000 Series 2023A Bonds term bond (4.500% rate) maturing October 1, 2053, is subject to mandatory sinking fund redemption in part, by lot, prior to maturity on October 1, in the years set forth below (each a "Sinking Fund Redemption Date"), at a redemption price equal to the principal amount of such term bond called for redemption:

Year	
(October 1) Principal Amount	
2049 \$5,000,000	
2050 5,000,000	
2051 5,000,000	
2052 5,000,000	
2053* 5,000,000	

\*Final Maturity

## Credits on Sinking Fund Redemption Dates

At its option, to be exercised on or before the 45<sup>th</sup> day next preceding any such applicable Sinking Fund Redemption Date, the Airports Authority may: (i) cause to be paid to the Trustee for deposit in the Series 2023A Redemption Account such amount, or direct the Trustee to use moneys in the Series 2023A Principal Account and the Series 2023A Interest Account allocable to payments due on the Series 2023A Bonds on such Sinking Fund Redemption Date in such amount, as the Airports Authority may determine, accompanied by a certificate directing the Trustee to apply such amount to the purchase of the Series 2023A Bonds, and the Trustee will use all reasonable efforts to expend such funds as nearly as may be practicable in the purchase of such Series 2023A Bonds, at a price not exceeding the principal amount thereof plus accrued interest to such Sinking Fund Redemption Date; or (ii) receive a credit against its sinking fund redemption obligation for the Series 2023A Bonds which prior to such date have been purchased by the Airports Authority and presented to the Trustee for cancellation or redeemed (other than through the operation of the sinking fund) and canceled by the Trustee and, in either case, not theretofore applied as a credit against any sinking fund redemption obligation. Any such purchase in lieu of redemption (as described above) will occur no later than forty-five (45) days prior to the applicable Sinking Fund Redemption Date.

Each Series 2023A Bond so purchased, delivered or previously redeemed will be credited by the Trustee as provided above at 100% of the principal amount thereof against the obligation of the Airports Authority on such Sinking Fund Redemption Date. Any excess over such obligation will be credited, as directed in writing to the Trustee by an Authority Representative, against applicable future sinking fund redemption obligations, or deposits with respect thereto, and the principal amount of such Series 2023A Bonds to be redeemed by operation of the sinking fund will be accordingly reduced. Any funds received by the Trustee pursuant to clause (i) of the preceding paragraph, but not expended as provided therein for the purchase of Series 2023A Bonds on or before said 45<sup>th</sup> day will be retained in the Series 2023A Redemption Account and will thereafter be used only for the purchase of the Series 2023A Bonds, as a credit, as directed in writing to the Trustee by an Authority Representative, against future sinking fund obligations, or deposits with respect thereto.

## **Method of Selecting the Bonds for Redemption**

In the event that less than all of the outstanding Series 2023A Bonds of a Series are to be redeemed, the maturities to be redeemed and the method of their selection will be determined by the Airports Authority. In the event that less than all of any Series 2023A Bonds of a maturity are to be redeemed, the Series 2023A Bonds of such maturity to be redeemed will be selected by lot in such manner as the Trustee determines.

Upon the selection and call for redemption of, and the surrender of, any Series 2023A Bonds for redemption in part only, the Airports Authority will cause to be executed, authenticated and delivered to or upon the written order of the Holder thereof, at the expense of the Airports Authority, a new bond or bonds in fully registered form, of authorized denominations and like tenor, in an aggregate face amount equal to the unredeemed portion of the Series 2023A Bonds of the applicable Series.

## **Notice of Redemption**

Any notice of redemption of any Series 2023A Bonds must specify: (a) the date fixed for redemption, (b) the principal amount of the Series 2023A Bonds or portions thereof to be redeemed, (c) the applicable redemption price, (d) the place or places of payment, (e) that payment of the principal amount and premium, if any, will be made upon presentation and surrender to the Trustee or Paying Agent, as applicable, of the Series 2023A Bonds to be redeemed, (f) that interest accrued to the date fixed for redemption will be paid as specified in such notice, (g) that on and after the redemption date, interest on the Series 2023A Bonds which have been redeemed will cease to accrue, and (h) the designation, including Series, and the CUSIP and serial numbers of any Series 2023A Bonds to be redeemed and, if less than the face amount of any Series 2023A Bond is to be redeemed, the principal amount to be redeemed.

Any notice of redemption will be sent by the Trustee not less than 30 nor more than 60 days prior to the date set for redemption by first class mail (a) at the address shown on the Register, to the Holder of each Series 2023A Bond to be redeemed in whole or in part, (b) to all organizations registered with the SEC as securities depositories, (c) to the Municipal Securities Rulemaking Board, and (d) to at least two information services of national recognition which disseminate redemption information with respect to tax-exempt securities. Failure to give any notice specified in clause (a) of this paragraph, or any defect therein, will not affect the validity of any proceedings for the redemption of any Series 2023A Bonds with respect to which no such failure has occurred, and failure to give any notice specified in clause (b), (c) or (d) of this paragraph or any defect therein, will not affect the validity of any proceedings for the redemption of any Series 2023A Bonds with respect to which the notice specified in (a) is correctly given. Notwithstanding the foregoing, during any period that the securities depository or its nominee is the registered owner of the Series 2023A Bonds, notices will be sent to such securities depository or its nominee. During such period, the Trustee shall not be responsible for mailing notices of redemption to anyone other than such securities depository or its nominee.

If at the time of notice of any optional redemption of the Series 2023A Bonds there has not been deposited with the Trustee moneys available for payment pursuant to the Indenture and sufficient to redeem all of the Series 2023A Bonds called for redemption, the notice may state that it is conditional in that it is subject to the deposit of sufficient moneys by not later than the redemption date, and if the deposit is not timely made the notice shall be of no effect.

#### SECURITY AND SOURCE OF PAYMENT FOR THE BONDS

#### General

The Series 2023A Bonds are secured (i) on a parity with other Bonds issued by the Airports Authority under the Indenture by a pledge of Net Revenues derived by the Airports Authority from the operation of the Airports and (ii) by the Series 2023A Bond proceeds deposited in certain segregated funds held by the Trustee. Upon the issuance of the Series 2023A Bonds and the defeasance of the Refunded Bonds, approximately \$4.4 billion aggregate principal amount of Bonds will be Outstanding. In addition, the Airports Authority at any time can draw up to \$200 million of the Airport System Revenue Revolving Notes, Series One ("Revolving Loan Notes") under the revolving credit agreement it currently has in place. Revolving Loan Note repayments

are on parity with payment of debt service on Bonds. The Airports Authority currently has \$1,000,000 of Revolving Loan Notes outstanding, which will be refunded by a portion of the proceeds of the Series 2023A Bonds. See "AIRPORTS AUTHORITY INDEBTEDNESS FOR THE AVIATION ENTERPRISE FUND – Outstanding Bonds of the Airports Authority for the Aviation Enterprise Fund" and "– Revolving Loan Note Program for the Aviation Enterprise Fund." The principal sources of Net Revenues are the rentals, fees and charges generated under the Airline Agreement between the Airports Authority and airlines that have executed the Airline Agreement (the "Signatory Airlines"), fees received from non-signatory airlines using the Airports and payments under concession contracts at the Airports.

No property of the Airports Authority is subject to any mortgage for the benefit of the owners of the Series 2023A Bonds. Under the Indenture, Net Revenues means Revenues, plus transfers, if any, from the General Purpose Fund to the Revenue Fund, after provision is made for the payment of Operation and Maintenance Expenses. See APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture."

Revenues are generally defined in the Indenture as all revenues of the Airports Authority received or accrued except (a) interest income on, and any profit realized from, the investment of moneys in any fund or account to the extent that such income or profit is not transferred to, or retained in, the Revenue Fund or the Bond Fund; (b) interest income on, and any profit realized from, the investment of moneys in any fund or account funded from the proceeds of Special Facility Bonds; (c) amounts received by the Airports Authority from, or in connection with, Special Facilities unless such funds are treated as Revenues by the Airports Authority; (d) the proceeds of any passenger facility charge or similar charge levied by, or on behalf of, the Airports Authority, including PFCs, unless such funds are treated as Revenues by the Airports Authority; (e) grants-in-aid, donations, and/or bequests; (f) insurance proceeds which are not deemed to be revenues in accordance with generally accepted accounting principles; (g) the proceeds of any condemnation awards; (h) the proceeds of any sale of land, buildings or equipment; and (i) any other amounts which are not deemed to be revenues in accordance with generally accepted accounting principles or which are restricted as to their use. Unless otherwise provided in a supplemental indenture, there also shall be excluded from the term "Revenues" (a) any Hedge Termination Payments received by the Airports Authority and (b) any Released Revenues in respect of which the Airports Authority has filed with the Trustee the request of an Authority Representative, an Airport Consultant's or an Authority Representative's certificate, an Opinion of Bond Counsel and the other documents contemplated in the definition of the term "Released Revenues" set forth in the Indenture. The Airports Authority has completed the procedures necessary to treat the DTR Revenues as "Released Revenues" under the Indenture, thereby excluding DTR Revenues from Revenues and from the pledge and lien on the Net Revenues securing the Bonds. See "THE AIRPORTS AUTHORITY - Operation of the Dulles Toll Road and Completion of the Dulles Metrorail Project."

Under the Indenture, Operation and Maintenance Expenses generally means all expenses of the Airports Authority paid or accrued for the operation, maintenance, administration and ordinary current repairs of the Airports. Operation and Maintenance Expenses do not include (a) the principal of, premium, if any, or interest payable on any Bonds, Subordinated Bonds and Junior Lien Obligations; (b) any allowance for amortization or depreciation of the Airports; (c) any other expense for which (or to the extent to which) the Airports Authority is or will be paid or

reimbursed from or through any source that is not included or includable as Revenues; (d) any extraordinary items arising from the early extinguishment of debt; (e) rentals payable under the Federal Lease; and (f) any expense paid with amounts from the Emergency Repair and Rehabilitation Fund.

The Airports Authority is obligated to deposit all moneys from the Revenue Fund into the various funds and accounts created under the Indenture on a monthly basis. Amounts held by the Airports Authority in the Revenue Fund are not pledged to secure the Bonds. See "Flow of Funds" below.

The Series 2023A Bonds are secured by a pledge of and lien on certain proceeds of the sale of the Series 2023A Bonds and the earnings thereon, held in certain funds and accounts created under the Indenture. These funds and accounts include the Bond Fund and the applicable account in the Debt Service Reserve Fund, held by the Trustee, and the applicable account in the Construction Fund, if any, held by a custodian on behalf of the Trustee.

The Series 2023A Bonds shall not constitute a debt of the District of Columbia or of the Commonwealth of Virginia or any political subdivision thereof, nor a pledge of the faith and credit of the District of Columbia or of the Commonwealth of Virginia or any political subdivision thereof. Except to the extent payable from proceeds of the Series 2023A Bonds and investment earnings thereon, the Series 2023A Bonds shall be payable from Net Revenues of the Airports Authority pledged for such payment and certain funds established under the Indenture. The issuance of Bonds under the provisions of the Acts shall not directly, indirectly or contingently obligate the District of Columbia or the Commonwealth of Virginia or any political subdivision thereof to any form of taxation whatsoever. The Airports Authority has no taxing power.

## **Debt Service Reserve Fund**

Under the Indenture, the Airports Authority has covenanted to maintain in the Common Reserve Account (herein referred to as the "Common Reserve Account") in the Debt Service Reserve Fund an amount equal to the Common Debt Service Reserve Requirement for the Series 2023A Bonds and any other Common Reserve Bonds outstanding (the "Common Debt Service Reserve Requirement"). "Common Reserve Bonds" means any other Series of Bonds issued under the Indenture and designated in writing to the Trustee by an Authority Representative as being secured by amounts on deposit in the Common Reserve Account on a parity with the Series 2023A Bonds and any other Common Reserve Bonds. The Common Debt Service Reserve Requirement will be recalculated and funded in connection with such written designations. The Common Debt Service Reserve Requirement means an amount equal to the least of (i) 10% of the stated principal amount of the Series 2023A Bonds and any other Common Reserve Bonds; (ii) the Maximum Annual Debt Service on the Series 2023A Bonds and any other Common Reserve Bonds in any Fiscal Year; or (iii) 125% of the average Annual Debt Service for the Series 2023A Bonds and any other Common Reserve Bonds. After the issuance of the Series 2023A Bonds and the defeasance of the Refunded Bonds, the Common Debt Service Reserve Requirement will be \$231,639,080, and the term Common Reserve Bonds will include the following Series of outstanding Bonds of the Airports Authority: Series 2013B, Series 2014A, Series 2016A, Series 2016B, Series 2017A,

Series 2018A, Series 2019A, Series 2019B, Series 2020A, Series 2020B, Series 2021A, Series 2021B, Series 2022A and Series 2023A.

Under conditions specified in the Indenture, the Airports Authority may fund the Debt Service Reserve Requirement for any Series of Bonds, including the Series 2023A Bonds, by delivering a letter of credit ("LOC") or other credit facility to the Trustee in substitution for, or in lieu of, moneys to be held in the Debt Service Reserve Fund for such Series. The Indenture requires that the provider of any such credit facility have a credit rating in one of the two highest rating categories by two Rating Agencies (as defined therein). In the event the Debt Service Reserve Requirement is satisfied with an LOC or other credit facility (rather than satisfying the requirement by a cash deposit), there will be no interest earnings on the account in the Debt Service Reserve Fund for such Series of Bonds. See the description under the heading "Debt Service Reserve Fund Deposit" in APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture." Currently, no portion of the Common Debt Service Reserve Requirement is funded with a credit facility.

The Trustee is required to draw on the Common Reserve Account in the Debt Service Reserve Fund whenever the amount held in the Interest Account or the Principal Account for Common Reserve Bonds is insufficient to pay interest on or principal of the Common Reserve Bonds on the date such payments are due. To the extent not needed to maintain the balance therein equal to the Common Debt Service Reserve Requirement, earnings on investments of the Common Reserve Account in the Debt Service Reserve Fund shall be transferred after each Bond Payment Date to the Revenue Fund.

If the amount on deposit in the Common Reserve Account in the Debt Service Reserve Fund at any time is less than the Common Debt Service Reserve Requirement, such deficiency is required to be made up as set forth in "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Flow of Funds."

## **Rate Covenant**

Pursuant to the Indenture, the Airports Authority has covenanted that it will take all lawful measures to fix and adjust from time to time the fees and other charges for the use of the Airports, including services rendered by the Airports Authority, pursuant to the Airline Agreement or otherwise, calculated to be at least sufficient to produce Net Revenues to provide for the larger of either:

- (a) The amounts needed for making the required deposits in each fiscal year to the Principal Accounts, the Interest Accounts, and the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund and the Emergency Repair and Rehabilitation Fund; or
- (b) An amount not less than 125% of the Annual Debt Service with respect to Bonds for such fiscal year.

The Airports Authority has covenanted that if, upon the receipt of the audit report for a fiscal year, the Net Revenues in such fiscal year are less than the amount specified above, the Airports Authority will require the Airport Consultant to make recommendations as to the revision

of the Airports Authority's schedule of rentals, rates, fees and charges, and upon receiving such recommendations or giving reasonable opportunity for such recommendations to be made, the Airports Authority, on the basis of such recommendations and other available information, will take all lawful measures to revise the schedule of rentals, rates, fees and charges for the use of the Airports as may be necessary to produce the specified amount of Net Revenues in the fiscal year following the fiscal year covered by such audit report.

In the event that Net Revenues for any fiscal year are less than the amount specified, but the Airports Authority has promptly complied with these remedial requirements, there will be no Event of Default under the Indenture; provided, however, that if, after the Airports Authority has complied with these remedial requirements, Net Revenues remain insufficient to provide for the specified amount in the fiscal year in which such adjustments are required to be made (as evidenced by the audit report for such fiscal year), such failure will be an Event of Default under the Indenture. See APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture – Rate Covenant and Defaults and Remedies."

The Airline Agreement provides a mechanism for setting rentals, fees and charges for use by airlines of the Airports that is designed to ensure that the Airports Authority's debt service and related obligations under the Indenture are met. Under the Airline Agreement, the Airports Authority sets its airline rentals, fees and charges at each Airport to recover its costs in the airlinesupported cost centers. These costs include 100% of the debt service assigned to these cost centers, plus debt service coverage on such debt service in order to satisfy, with respect to that debt service, at least the 125% debt service coverage covenant included in the Indenture. In addition, under the Airline Agreement, if Net Revenues at an Airport in any Fiscal Year are projected to be less than 125% of the Annual Debt Service allocated to the Airport, then the Airports Authority can immediately adjust the rates on which airline rentals, fees and charges at the Airport are based in order to meet the 125% debt service coverage requirement at the Airport. These adjustments are referred to as "Extraordinary Coverage Protection Payments" under the Airline Agreement. The Airline Agreement will not be assigned or pledged to the Trustee as security for the Bonds. If for any reason the Airline Agreement is amended, expires or is terminated, the Airports Authority will set airline rentals, fees and charges in accordance with a successor agreement or regulations of the Board that are consistent with the United States Department of Transportation ("US DOT") requirements (including that such rentals, fees and charges be reasonable and non-discriminatory), and in an amount sufficient to meet the rate covenant under the Indenture. See APPENDIX C -"Summary of Certain Provisions of the Airport Use Agreement and Premises Lease" and "CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS."

## **Application of Designated Passenger Facility Charges**

The Airports Authority has paid Annual Debt Service in certain fiscal years with Designated Passenger Facility Charges (as described below). Pursuant to its 2023 Budget, the Airports Authority intends to deposit \$50.4 million of Designated Passenger Facility Charges in 2023 into the PFC Project Account and then to transfer such charges into the PFC Debt Service Account to pay debt service on certain PFC Eligible Bonds (as defined below). For purposes of calculating compliance with the rate covenant for those prior fiscal years and for 2023, in accordance with the provisions described in the following paragraphs, Annual Debt Service has been, and for 2023 will be, reduced by the amount of such debt service paid from Designated

Passenger Facility Charges. See APPENDIX B for detailed information regarding certain covenants and agreements that the Airports Authority has made with respect to the use of PFCs.

The definition of Revenues does not include, among other things, PFCs, except to the extent PFCs are designated as Revenues by the Airports Authority, which has not occurred to date. The definition of Annual Debt Service provides that in any computation relating to the issuance of additional Bonds under Section 213 of the Master Indenture or in any computation required by the rate covenant under Section 604 of the Master Indenture, there will be excluded from the computation of Annual Debt Service the principal of, and interest on, Bonds for which funds have been irrevocably committed to make such payments. Pursuant to the Thirty-fifth Supplemental Indenture of Trust, dated as of July 1, 2009 (the "Thirty-fifth Supplemental Indenture"), the Airports Authority has in the past caused, and may in the future cause, certain amounts of Designated Passenger Facility Charges to be irrevocably committed for specified years to pay principal and/or interest on certain Bonds ("PFC Eligible Bonds") issued to finance or refinance the cost of certain Authority Facilities authorized to be financed with PFCs. By causing such irrevocable commitments of Designated Passenger Facility Charges in specified years, the Airports Authority is able to reduce the amount of Annual Debt Service payable in such years for purposes of the additional bonds test and the rate covenant.

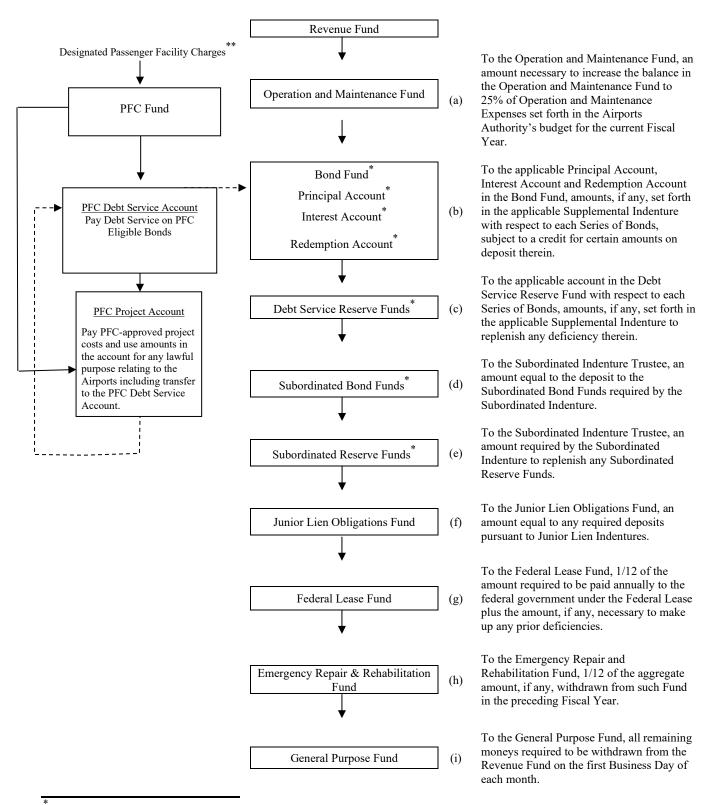
The term "Designated Passenger Facility Charges" is defined in the Thirty-fifth Supplemental Indenture to mean revenues received by the Airports Authority from the \$4.50 passenger facility charge imposed by the Airports Authority at Dulles International Airport under certain PFC applications, net of amounts that collecting air carriers are entitled to retain for collecting, handling and remitting PFC revenues. Currently, the Designated Passenger Facility Charges include all PFCs collected at Dulles International Airport and do not include the PFCs collected from Reagan National Airport. Although the Airports Authority has not included PFCs collected at Reagan National Airport in the definition of Designated Passenger Facility Charges, the Airports Authority does intend to use some of those PFCs to pay debt service on eligible Bonds. The Thirty-fifth Supplemental Indenture provides that it may be amended, without the consent of the Holders of the Outstanding Bonds, for purposes of making changes relating to the definition of Designated Passenger Facility Charges or the amounts of or Fiscal Years in which Designated Passenger Facility Charges are irrevocably committed to pay debt service on PFC Eligible Bonds, including a reduction of the amount of Designated Passenger Facility Charges, so long as such amendment is not reasonably expected to prevent the Airports Authority from complying with the rate covenant in the Master Indenture.

Under the Thirty-fifth Supplemental Indenture, any Designated Passenger Facility Charges received by the Airports Authority after 2016 are to be deposited in the PFC Project Account of the PFC Fund. Amounts on deposit in the PFC Project Account may be applied by the Airports Authority to any lawful purpose including (i) providing for the payment of the Cost of certain Authority Facilities authorized to be financed with PFCs, and/or (ii) transferring funds to the PFC Debt Service Account to pay principal and/or interest on PFC Eligible Bonds not otherwise paid, at which time they are irrevocably committed for such purpose. In 2023 and continuing through 2028, the Airports Authority intends to transfer Designated Passenger Facility Charges to the PFC Debt Service Account to pay principal and/or interest on such Bonds. See the column entitled "Intended PFCs Currently Approved IAD" in the Forecast Debt Service Coverage table in the Summary Statement.

## **Flow of Funds**

The Airports Authority is required to deposit all Revenues upon receipt, and may deposit amounts from any available source, in the Revenue Fund. On the first Business Day of each month, (1) amounts in the Revenue Fund, excluding any transfers from the General Purpose Fund during the current fiscal year, and (2) 1/12 of the amount of any transfers from the General Purpose Fund during the current fiscal year, are to be withdrawn from the Revenue Fund and deposited or transferred in the following amounts and order of priority:

#### FLOW OF FUNDS UNDER THE INDENTURE



Funds or Accounts held by the Trustee.

See "Application of Designated Passenger Facility Charges" above.

Amounts in the Revenue Fund are not pledged to secure the Bonds. Amounts in the Operation and Maintenance Fund are required to be used by the Airports Authority to pay Operation and Maintenance Expenses and are not pledged to secure the Bonds. Amounts transferred to the Subordinated Indenture Trustee, if any, will be pledged to secure the Subordinated Bonds, if any, and will not be subject to the pledge securing the Bonds. Amounts in the Junior Lien Obligations Fund secure the Junior Lien Obligations and are not pledged to secure the Bonds. Amounts deposited in the Federal Lease Fund are not and will not be pledged to secure the Bonds. Amounts in the Emergency Repair and Rehabilitation Fund may be used by the Airports Authority to pay the costs of emergency repairs and replacements to the Airports and are not pledged to secure the Bonds. Amounts in the General Purpose Fund will be available for use by the Airports Authority for any lawful purpose and are not pledged to secure the Bonds.

#### **Additional Bonds**

The Airports Authority has issued, and expects to issue in the future, additional Bonds. See "PLAN OF FUNDING FOR THE CCP" and APPENDIX B – "Definitions and Summary of Certain Provisions of the Indenture."

Under the Indenture, the Airports Authority is permitted to issue one or more Series of additional Bonds on a parity with the outstanding Bonds, if:

The Airports Authority has provided to the Trustee the following evidence indicating that, as of the date of issuance of such additional Bonds, the Airports Authority is in compliance with the rate covenant as evidenced by: (a) the Airports Authority's most recent audited financial statements, and the Airports Authority's unaudited statements for the period, if any, from the date of such audited statements through the most recently completed fiscal quarter, and (b) if applicable, evidence of compliance with the Indenture's requirement of remedial action (discussed under "Rate Covenant" above); and (c) either:

- (i) an Airport Consultant has provided to the Trustee a certificate stating that, based upon reasonable assumptions, projected Net Revenues will be sufficient to satisfy the rate covenant (disregarding any Bonds that have been or will be paid or discharged immediately after the issuance of the additional Bonds proposed to be issued) for each of the next three full fiscal years following issuance of the additional Bonds, or each full fiscal year from issuance of the additional Bonds through two full fiscal years following completion of the Projects financed by the additional Bonds proposed to be issued, whichever is later; provided that, if Maximum Annual Debt Service with respect to all Bonds to be outstanding following the issuance of the proposed Bonds in any fiscal year is greater than 110% of Annual Debt Service for such Bonds in any of the test years, then the last fiscal year of the test must use such Maximum Annual Debt Service; provided further, that if capitalized interest on any Bonds and proposed additional Bonds is to be applied in the last fiscal year of the period described in this sentence, the Airport Consultant must extend the test through the first full fiscal year for which there is no longer capitalized interest, or
- (ii) an Authority Representative has provided to the Trustee a certificate stating that Net Revenues in the most recently completed fiscal year were not less than the larger of (1) the amounts needed for making the required deposits to the Principal Accounts, the

Interest Accounts, and the Redemption Accounts in the Bond Fund, the Debt Service Reserve Fund, the Subordinated Bond Fund, the Subordinated Reserve Fund, the Junior Lien Obligations Fund, the Federal Lease Fund, and the Emergency Repair and Rehabilitation Fund or (2) 125% of (a) Annual Debt Service on Bonds Outstanding in such fiscal year (disregarding any Bonds that have been paid or discharged, or will be paid or discharged immediately after the issuance of such additional Bonds proposed to be issued), plus (b) Maximum Annual Debt Service with respect to such additional Bonds proposed to be issued.

With respect to additional Bonds proposed to be issued to refund outstanding Bonds, the Airports Authority may issue such refunding Bonds if either the test described in clause (c) above is met, or if the Airports Authority has provided to the Trustee evidence that (a) the aggregate Annual Debt Service in each fiscal year with respect to all Bonds to be outstanding after issuance of such refunding Bonds will be less than the aggregate Annual Debt Service in each such fiscal year through the last fiscal year in which Bonds are outstanding prior to the issuance of such refunding Bonds, and (b) the Maximum Annual Debt Service with respect to all Bonds to be outstanding after issuance of such refunding Bonds will not exceed the Maximum Annual Debt Service with respect to all Bonds outstanding immediately prior to such issuance.

#### Other Indebtedness

In addition to financing the CCP with the proceeds of Bonds, the Airports Authority is authorized under the Indenture to issue other debt to finance its capital needs. The Indenture permits the Airports Authority at any time to issue (a) bonds, notes or other obligations payable from and secured by revenues other than Revenues and Net Revenues, including, but not limited to, Special Facility Bonds, and (b) bonds, notes or other obligations payable from Net Revenues, including revenue anticipation notes, on a basis subordinate to the Bonds, including Subordinated Bonds. For a more detailed discussion on the Airports Authority's Subordinated Bonds, the Revolving Loan Note Program, interest rate swaps, and Special Facility Bonds, see "AIRPORTS AUTHORITY INDEBTEDNESS FOR THE AVIATION ENTERPRISE FUND."

## Events of Default and Remedies; No Acceleration or Cross Defaults

"Events of Default" and related remedies under the Indenture are described in the summary of certain provisions of the Indenture attached as APPENDIX B, in particular in the section "Defaults and Remedies." The occurrence of an Event of Default does not grant any right to accelerate payment of the Series 2023A Bonds to either the Trustee or the Holders of any Bonds. An Event of Default with respect to one Series of Bonds will not be an Event of Default with respect to any other Series unless such event or condition on its own constitutes an Event of Default with respect to such other Series. The Trustee is authorized to take certain actions upon the occurrence of an Event of Default, including initiating proceedings to enforce the obligations of the Airports Authority under the Indenture. Since (a) Net Revenues are Revenues net of all amounts needed to pay Operation and Maintenance Expenses, and (b) the Airports Authority is not subject to involuntary bankruptcy proceedings, the Airports Authority may continue collecting Revenues and applying them to the operation of the Airports, even if an Event of Default has occurred and no payments are being made on the Series 2023A Bonds.

#### ESTIMATED SOURCES AND USES OF FUNDS

The following table sets forth the estimated sources and uses of the proceeds of the Series 2023A Bonds and other available funds of the Airports Authority.

	Series 2023A Bonds
SOURCES:	
Par Amount of Bonds	\$436,225,000.00
Net Original Issue Premium	26,084,184.25
Airports Authority Funds <sup>1</sup>	10,482,019.81
Total Sources <sup>2</sup>	<u>\$472,791,204.06</u>
USES:	
Deposit to Construction Fund	\$265,000,000.00
Capitalized Interest <sup>3</sup>	28,439,448.79
Deposit to Redeem the Refunded Bonds	173,481,670.98
Repay Refunded Revolving Loan Note <sup>4</sup>	1,000,000.00
Deposit to Common Reserve Account	2,417,727.28
Underwriters' Discount and Costs of Issuance	<u>2,452,357.01</u>
Total Uses <sup>2</sup>	<u>\$472,791,204.06</u>

Amount released from the debt service account for the Refunded Bonds.

## **Refinancing Plan**

A portion of the proceeds of the Series 2023A Bonds will be deposited into the Series 2013A Redemption Account held by the Trustee to pay at maturity the Series 2013A Bonds maturing on October 1, 2023 and to redeem the Series 2013A Bonds maturing on and after October 1, 2024 on October 1, 2023 (the "Redemption Date"). Pursuant to a Refunding Agreement, dated as of July 1, 2023 (the "Refunding Agreement"), relating to Series 2013A Bonds, the Trustee will use the amounts deposited in the Redemption Account, together with other funds of the Airports Authority, to pay, as applicable, the principal of, and the redemption price and accrued interest on, the Series 2013A Bonds on the Redemption Date. The sufficiency of such amounts will be verified by Robert Thomas CPA, LLC, as verification agent. The Series 2013A Bonds will be legally defeased upon issuance of the Series 2023A Bonds. A schedule of the Refunded Bonds is included in APPENDIX G.

A portion of the proceeds of the Series 2023A Bonds will be used on the closing date of July 12, 2023 to prepay the principal amount of the Refunded Revolving Loan Note on that date.

#### **DEBT SERVICE SCHEDULE**

The following table sets forth (i) the debt service on the Series 2023A Bonds, (ii) the debt service on approximately \$4.4 billion of fixed rate Bonds to be outstanding immediately following the issuance of the Series 2023A Bonds and the defeasance of the Refunded Bonds, and (iii) the assumed debt service on outstanding variable rate debt consisting of approximately \$44.7 million

<sup>&</sup>lt;sup>2</sup> Totals may not add due to rounding.

<sup>&</sup>lt;sup>3</sup> Includes capitalized interest payable on other Bonds of the Airports Authority allocable to facilities not yet placed in service.

<sup>&</sup>lt;sup>4</sup> Accrued interest on the Refunded Revolving Loan Note will be paid from other funds of the Airports Authority.

of the outstanding Series 2009D Bonds, approximately \$48.7 million of the outstanding Series 2010C Bonds, approximately \$55.6 million of the outstanding Series 2010D Bonds, approximately \$32.9 million of the outstanding Series 2011A Bonds, and \$200 million of the Revolving Loan Notes, which is the maximum amount of the Revolving Loan Notes available to be drawn by the Airports Authority pursuant to the revolving credit agreement it currently has in place.

[Remainder of page intentionally left blank.]

Bond Year ending	Series 2		Outstanding Bonds Debt	Debt Service on Maximum Available Revolving Loan Notes**	Total
October 1 2023	Principal	Interest	Service*		Debt Service
2023	\$ 1,930,000	\$ 4,866,770 22,177,688	\$383,316,826	\$ 1,755,556	\$389,939,152
2024	11,660,000	22,081,188	390,706,657 346,773,541	11,566,020 11,566,020	426,380,365 392,080,748
2023	13,980,000	21,498,188			
	15,645,000	20,799,188	357,552,841	11,566,020	404,597,048
2027	16,655,000	20,016,938	361,012,091	11,566,020	409,022,298
2028	17,570,000	19,184,188	365,074,341	11,566,020	413,312,298
2029	18,460,000	18,305,688	367,957,153	11,566,020	416,277,361
2030	19,385,000	17,382,688	364,823,791	11,566,020	413,155,498
2031			360,052,541	11,566,020	408,386,248
2032	20,355,000	16,413,438	347,971,791	11,566,020	396,306,248
2033	21,375,000	15,395,688	332,478,791	11,566,020	380,815,498
2034	10,430,000	14,326,938	309,883,591	11,566,020	346,206,548
2035	10,950,000	13,805,438	315,910,912	11,566,020	352,232,369
2036	11,500,000	13,257,938	218,924,883	11,566,020	255,248,840
2037	12,075,000	12,682,938	152,049,867	11,566,020	188,373,824
2038	12,680,000	12,079,188	152,210,909	11,566,020	188,536,116
2039	13,310,000	11,445,188	154,248,026	11,566,020	190,569,233
2040	14,015,000	10,746,413	94,043,784	11,566,020	130,371,217
2041	14,750,000	10,010,625	83,171,900	11,566,020	119,498,545
2042	15,520,000	9,236,250	77,634,000	11,566,020	113,956,270
2043	16,335,000	8,421,450	77,637,500	11,566,020	113,959,970
2044	11,635,000	7,563,863	77,648,250	11,566,020	108,413,132
2045	12,245,000	6,953,025	70,879,000	11,566,020	101,643,045
2046	12,885,000	6,310,163	65,881,500	11,566,020	96,642,682
2047	13,565,000	5,633,700	65,876,500	11,566,020	96,641,220
2048	14,275,000	4,921,538	53,677,700	11,566,020	84,440,257
2049	15,025,000	4,172,100	40,178,300	11,566,020	70,941,420
2050	15,775,000	3,420,788	24,692,800	11,566,020	55,454,607
2051	16,565,000	2,630,100	24,689,600	11,566,020	55,450,720
2052	17,400,000	1,797,938	-	11,566,020	30,763,957
2053	18,275,000	921,938	-	11,566,020	30,762,957
Total***	\$436,225,000	\$358,459,158	\$6,036,959,383	\$348,736,150	\$7,180,379,961

<sup>\*</sup> Excluding Refunded Bonds. Hedged variable rate debt at the swap rate plus underlying variable rate support costs.

\*\* Assumes 30 year level debt service amortization at an interest rate of 4.000%.

\*\*\* Totals may not add due to rounding.

Source: Airports Authority records.

#### THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER PLAN

## Facilities at Reagan National Airport and Dulles International Airport

Reagan National Airport

Reagan National Airport has two terminals that are interconnected through a pedestrian walkway. As part of Project Journey (described below), National Hall, which connects all four concourses in Terminal 2, was successfully converted from a pre-security screening area to a post-security area in 2021. The original portion of Terminal 1 and the lobby building are listed on the National Register of Historic Places. Terminal 1 Concourse A has nine aircraft gates and approximately 250,000 square feet of floor space. With the opening of Concourse E in April 2021, Terminal 2 has 49 aircraft gates on four concourses and approximately 1.3 million square feet of floor space spread over three levels. There are three runways at Reagan National Airport: 1/19 – 7,169 feet; 15/33 – 5,204 feet; and 4/22 – 5,000 feet. Runway 1/19 and associated taxiways are capable of handling aircraft up to FAA Airplane Design Group IV, such as a B-767 aircraft. Runways 4/22 and 15/33 and associated taxiways are capable of handling aircraft up to Group III, such as the A-320 or B-737 aircraft.

Reagan National Airport currently includes five airline lounges that are operated by certain airlines. Three of the five lounges are operated by American Airlines including a new Admirals Club lounge which opened in 2022 and occupies over 13,000 square feet of space on the upper level of Concourse E. In addition, American Express is constructing a new Centurion Lounge adjacent to the ticketing level. This lounge is scheduled to open in the third quarter of 2023 and will occupy approximately 13,346 square feet of space. The estimated cost of \$20-24 million will be paid by American Express.

Reagan National Airport's ability to accommodate increased aviation activity is constrained to a significant extent by the High Density Rule and its physical location. Its proximity to Washington, D.C. also makes operations at Reagan National Airport subject to particularly restrictive federal legislation and regulation. See "THE AIRPORTS AUTHORITY – Regulations and Restrictions Affecting the Airports" and "CERTAIN INVESTMENT CONSIDERATIONS."

Ground transportation to Reagan National Airport is provided via Metrorail service, taxi, TNCs (including Uber, Lyft and ALTO), shared van services, which are provided by concessionaires and limousines, and on-campus bus transportation provided by the Airports Authority. Metrorail service to Reagan National Airport connects directly to a station adjacent to Terminal 2.

There are approximately 8,700 revenue-producing public parking spaces at Reagan National Airport. Terminal 2 is connected to the public parking garages through two enclosed pedestrian bridges. In addition, there are approximately 3,200 employee surface parking spaces.

## Dulles International Airport

Dulles International Airport has a main terminal (the "Main Terminal") and four midfield concourses (Concourses A, B, C and D) that may be reached via an Automated People Mover ("AeroTrain") system or mobile lounges that transport passengers to and from the Main Terminal.

The Main Terminal is eligible for listing on the National Register of Historic Places. There are four runways at Dulles International Airport: 1C/19C - 11,500 feet; 1R/19L - 11,500 feet; 12/30 - 10,500 feet; and 1L/19R - 9,400 feet. The runways and associated taxiways are capable of handling aircraft up to Group VI, such as an A-380 aircraft and B747-8 aircraft.

The Main Terminal at Dulles International Airport has a total of approximately 1.3 million square feet of floor space, seven aircraft gates (of which four are loading bridge equipped) referred to as the Z Gates, and the International Arrivals Building with a total floor space of nearly 268,000 square feet that provides customs, agriculture and immigration service facilities and can serve up to 2,400 passengers an hour. Concourses A and B are connected and together provide approximately 1.1 million square feet of floor space, and accommodate hardstand parking positions for 31 regional airline aircraft and 31 loading bridge equipped gates for international and domestic airlines. Concourse B gates are equipped with 41 loading bridges to accommodate large, wide-body aircrafts used primarily by international carriers.

Concourses C and D were constructed as separate buildings, but as passenger demand increased, more gates were constructed at both concourses and the two concourses eventually were joined. They now have a combined total of 923,064 square feet of floor space and 58 aircraft parking positions with 50 loading bridge-equipped aircraft gates operated by United Airlines.

Dulles International Airport has two gates that support the boarding and unloading of passengers from the upper and lower decks of the A-380 aircraft. The current runway/taxiway system operates under several FAA-approved Modification of Standards for Group VI aircraft. Group VI aircraft have specific operational requirements and routes that are approved by the FAA. As pavement along these routes is rehabilitated it is required to be brought up to Group VI standards.

Dulles International Airport currently includes nine airline lounges that are operated by certain airlines. In October 2021, United Airlines opened a new Polaris Lounge that occupies 23,000 square feet of space connected to Concourse C. In addition, TAV America is constructing a Capital One Lounge in 7,900 square feet of space at the base of the historic air traffic control tower at an estimated cost of \$7.5 million, to be paid by TAV America with an estimated opening in the third quarter of 2023.

Metrorail service to Dulles International Airport from the Washington, D.C. metropolitan area began serving the public in November 2022. An indoor pedestrian tunnel with moving sidewalks connects the Metrorail station to the main terminal's ticketing and baggage claim levels. Ground transportation to Dulles International Airport is provided via taxi, TNCs (including Uber, Lyft and ALTO), shared van services, which are provided by concessionaires and limousines. See "THE AIRPORTS AUTHORITY – Operation of the Dulles Toll Road and Completion of the Dulles Metrorail Project."

There are approximately 17,800 revenue-producing public parking spaces at Dulles International Airport. In addition, there are approximately 7,000 employee parking spaces.

There are six cargo buildings at Dulles International Airport, with a total of 552,000 square feet of cargo space.

United Airlines maintains an aircraft maintenance hangar of sufficient size to accommodate two B-767 aircraft or a single B-787 or A-350 aircraft on land it leases from the Airports Authority.

The Smithsonian operates the National Air and Space Museum Dulles Steven F. Udvar-Hazy Center (the "Center") at the Airport. The Airports Authority has title to, and is required to maintain, two roadways that were built by the Smithsonian and must allow Center patrons and invitees ingress to and egress from the Center.

## The Airports Authority's Master Plans

The Master Plan for each Airport establishes the framework for the CCP and may be amended from time to time by the Airports Authority. The Master Plans adopted by the Airports Authority's Board include the Airports' Land Use Plans and the Airports' Layout Plans (the "ALPs"). The ALPs have been approved by the FAA, and any future amendments to the ALPs also must be approved by the FAA. The ALPs are required by the FAA to show all existing and proposed improvements. All major improvements to the Airports are developed in accordance with the Master Plan for each Airport and the approved ALPs.

# Reagan National Airport

The Master Plan for Reagan National Airport became effective on April 15, 1988 and has been amended from time to time. Major improvements included in the CCP will accommodate changes in airline operations and enhance the level of service for passengers. These improvements include: Concourse E; moving security checkpoints to make National Hall a secure area; utility and infrastructure improvements including roadway modifications, boiler/chiller plant upgrades, sanitary sewer system upgrades and airfield electric vault improvements and relocation; R/W 1 hold apron expansion; and Pad B hold apron expansion, and other landside improvements.

The ALP was updated in 2022 to reflect changes in signage and wayfinding, renaming of terminals and gates and the proposed North Airfield improvements, which will be funded as part of a FAA Letter of Intent request. The purpose of the North Airfield improvements is to enhance capacity by improving the north airfield taxiway network and eliminating FAA-identified operational safety concerns as well as to maximize the efficiency/flexibility of the primary runway. These improvements correct existing geometric deficiencies and implement current design standards to modernize the north airfield and greatly enhance safety and operational efficiency. The improvements are needed to meet new FAA criteria and enable more efficient airfield flows.

Ongoing planning is underway to improve the road network and increase parking and rental car facilities near the terminals at Reagan National Airport, which could result in relocating several facilities to other parts of Reagan National Airport. Planning, required environmental reviews and ALP updates are anticipated to be completed by the end of 2023.

#### Dulles International Airport

The Master Plan for Dulles International Airport was adopted and approved by the FAA prior to the Lease Effective Date and included, by reference, the ALPs. The Master Plan is being updated to address the Airport's needs over the next 25 years and will result in an estimate of the

land requirements required to accommodate the aeronautical facilities and infrastructure necessary to achieve a balance with the capacity of the ultimate airfield configuration (five runways).

The Master Plan for Dulles International Airport includes: the future construction of a fifth runway and associated taxiways, permanent midfield concourses and an expansion of the AeroTrain system; the Dulles Metrorail Project; expansion of automobile parking facilities; construction of additional roads on Airport property; and enhancing the capacity of the existing road network. Additionally, future cargo, airport support, and cargo development is identified in the Airport Support Zone area west of Runway 1L/19R as well as the southern area. Long-term plans originally proposed development of areas within the Western Lands Area. However, the Western Lands Area was sold in September of 2018, and is no longer under the jurisdiction or control of the Airports Authority. Areas in the north terminal area have been evaluated for potential commercial development including hotel and retail uses in addition to several other parcels throughout the extents of the property. Approximately 835 acres of property have been identified for development of a large scale solar and battery storage facility and are the subject of a pending lease with Dominion Energy.

#### **Environmental, Social and Governance Efforts and Initiatives**

Environmental sustainability and corporate citizenship are central to the Airports Authority's mission of providing the best managed airports in the U.S. to the Airports Service Region. The Airports Authority focuses its corporate social responsibility efforts on being a leader in environmental initiatives, establishing supplier diversity programs, serving its surrounding communities and passengers, empowering its employees through various programs and creating a culture of safety and security at the Airports.

In 2021, the Airports Authority established its own Office of Diversity, Inclusion and Social Impact led by the Vice President for Diversity, Inclusion and Social Impact. The office is charged with aligning the Airports Authority's diversity, equity and inclusion initiatives with the overall business strategy.

#### Environmental Sustainability

The Airports Authority's commitment to the environment has resulted in operational improvements in management of waste, air emissions and water quality. At Reagan National Airport, Project Journey included several energy efficiency measures including electrochromic window glazing and "cool" roof membranes that reduce cooling demands in the summer and automated lighting controls and LED lighting to reduce energy demands. Throughout Project Journey's construction, the Airports Authority implemented construction material waste reduction and recycling initiatives resulting in recycling over 149,000 tons of waste. Project Journey eliminated the need for passenger buses and the accompanying fuel trucks previously required for flights from Gate 35X, resulting in the reduction of overall fuel consumption and greenhouse gas emission. As part of Project Journey, the Airports Authority installed water quality systems including a hydrant fuel leak detection system and oil/water separators on the apron. The Airports Authority installed glycol diversion vaults at both Airports to more efficiently collect aircraft deicing fluids, which, in combination with the use of glycol recovery vehicles, resulted in 1,198 tons of glycol recycled and diverted in 2022. On March 16, 2022, the Board authorized the

Airports Authority to execute a 37-year lease of 835 acres of land of Dulles International Airport property to Dominion Energy for the construction of a 100-megawatt solar farm project. Execution of the lease is dependent on approval by the Secretary of Transportation and a study period lease is currently in effect while approval is pending. After completion, the solar project is expected to reduce carbon dioxide emissions by an estimated 164,587 metric tons per year, which is the equivalent amount of the emissions of approximately 16,000 homes.

In September 2020, the Airports Authority finalized its Sustainability Plan through a partnership with the National Renewable Energy Laboratory (NREL). The Sustainability Plan includes six goals:

- Reducing fuel use through electrification of transportation systems;
- Increasing the efficiency of buildings;
- Increasing water use efficiency;
- Reducing the amount of municipal solid waste generated and sent to landfills;
- Developing and maintaining a culture of sustainable administration; and
- Encouraging more efficient use of public transportation.

As part of the Sustainability Plan, the Airports Authority and NREL revised the Airports Authority's Design Manual, which is the primary guide for construction projects. The revised Design Manual integrates sustainable design with the Sustainability Plans' six goals and sets minimum sustainable design standards. In furtherance of the Sustainability Plans's goals, the Airports Authority has invested in 58 hybrid vehicles and installed over 133 electric vehicle charging stations to public and employee parking areas. The Airports Authority applied for and was named a recipient of a \$3,970,000 grant from the Virginia Department of Environmental Quality's Clean Air Communities Program, which grant was used to replace five shuttle buses at Dulles International Airport with electric buses and chargers. In addition, the Airports Authority has developed a new Electrical Master Plan for Dulles International Airport, installed low flow water fixtures and is exploring alternative water treatment methods. Other Airports Authority sustainability efforts include new storm water management facilities, HVAC upgrades to reduce energy consumption, diversion of Municipal Solid Waste from landfills, stream restoration along the Dulles Toll Road and rainwater harvesting along the Silver Line project.

#### Social Initiatives

A core value of the Airports Authority is treating everyone fairly and embracing diversity. To this end, the Airports Authority recruits at various job fairs, partners with colleges and universities, sponsors events and participates in workshops and panels aimed at recruiting diverse candidates. In 2020, the Airports Authority launched its Understanding Unconscious Bias e-learning module, which examines personal biases and explores solutions on how to manage the impact of these biases. Employees participated in virtual discussions which highlighted employee experiences and methods to address personal biases. In 2022, the Airports Authority workforce was approximately 50% white, 29% African American or Black, 11% Asian and 8% Latino. The 2022 workforce was 79% male and 21% female.

In the summer of 2021 following the U.S. military's withdrawal from Afghanistan, Dulles International Airport served a key role in the federal government's efforts to evacuate American

citizens and Afghan refugees, known as Operation Allies Welcome. The Airports Authority facilitated and supported the arrival of more than 52,000 people at Dulles International Airport on more than 200 flights in a three-week period.

## Employee Development and Organizational Culture

The Airports Authority has implemented multiple training programs to support professional development and internal promotion. Efforts include the Leadership Development Program and the Supervisory Training Program, which are both comprehensive classroom and experiential learning programs. The Airports Authority's Professional Development Program is an entry-level employee development program created to recruit, hire, develop and retain the next generation of Airports Authority employees. Participants move through the program as a group of nine people within the functional areas of Airport Operations and Administration, Engineering, Information Technology and Human Resources. The Airports Authority's Trades Apprentice Employment Program offers apprenticeships in heating and air conditioning, electrical, plumbing, structural maintenance, heavy equipment mechanics, electro-mechanics, welding, metal fabrication, electronics and automatic equipment mechanics. As of December 31, 2022, training efforts have resulted in 260 internal promotions. In 2022, employees received more than 12,800 hours of job-related training.

The Airports Authority promotes an enterprise-wide responsibility to protect employees, customers, stakeholders and infrastructure. The Emergency Management and Preparedness Department coordinates preparedness, response and recovery from all types of hazards that may impact the Airports. The Airports Authority also has its own Police and Fire Departments that serve the airport communities and participate in mutual aid efforts throughout the region.

## Support for Small and Disadvantaged Business Enterprises

The Airports Authority routinely participates in outreach events promoting supplier diversity in the Airports Service Region through partnerships with business organizations, local governments and non-profit groups. Additionally, the Airports Authority encourages large prime contractors to conduct outreach and assists in matchmaking to help qualified small businesses become partners on contracts. In 2022, the Airports Authority spent over \$131.9 million with certified Disadvantaged Business Enterprises (DBE) and Small Local Business Enterprises (SLBE). In 2022, the Airports Authority exceeded its triennial (2020-2022) DBE participation goals of 25.29% and 24.84% at Dulles International Airport and Reagan National Airport, respectively.

In 2018, the Airports Authority launched its Small Business University to assist small business enterprises in various stages of growth achieve the next level of success and enhance contract readiness. Small Business University includes the Non-Credit Executive Certificate Program, designed to develop the potential and capability of SLBE contractors that are seeking to grow. Since inception, graduates of the program have successfully competed for and been awarded Airports Authority contracts worth over \$3 million.

The Airports Authority has been honored with recognition from the Federal Aviation Administration, the Maryland Washington Minority Companies Association, and the American

DBE Magazine with their "Civil Rights Advocate and Partner for DBE & ACDBE Programs," "Best Public Transportation Authority for Minority Business Enterprises," and "Diversity Inclusive Organization" awards, respectively, for its demonstrated commitment to local, small, minority- and women-owned businesses.

## Community Involvement

The Airports Authority's annual Dulles Day, featuring the Dulles Plane Pull in which teams compete to pull a Boeing 757 jet the fastest, has raised over \$2 million for charitable causes since 1992. Dulles Day, combined with the Airports Authority's other philanthropic events, raised over \$500,000 for Special Olympics Virginia and other charities in 2022. The Airports Authority's Fire Department partners with Operation Gratitude, a national non-profit that honors first responders, the military and veterans.

The Reagan National Airport Community Noise Working Group has been active since 2015 and is composed of citizen and airline representatives that meet regularly with FAA officials to explore possible opportunities to alleviate the impact of aircraft noise on their communities. Accomplishments since the group's formation include an agreement by airlines to remove a louder type of aircraft from their fleets serving Reagan National Airport, modification of an airline flight procedure to move planes away from a neighborhood in Washington, D.C. and an agreement by the FAA to adjust a flight path to move departing planes farther from residential areas.

#### Governance

The composition of the Airports Authority's Board is determined by federal statute. Of its 17 members, seven are appointed by the Governor of Virginia, four by the Mayor of the District of Columbia, three by the Governor of Maryland and three by the President of the United States with the advice and consent of the U.S. Senate. Geographical balance in the Airports Authority's governance is further ensured by all Board committees having two co-chairs from different jurisdictions. Directors may serve up to two consecutive six-year terms. The Board chair is elected each year by vote of the full Board and may serve up to two consecutive one-year terms. All Board members participate in annual ethics trainings and must complete formalized financial disclosures and interest declarations.

## CAPITAL CONSTRUCTION PROGRAM (CCP)

The majority of the projects in the Airports Authority's CCP were approved as part of the current Airline Agreement as amended by the First Universal Amendment, while some projects were approved by the prior Airline Agreement or by the majority in interest (MII) approval process pursuant to the Airline Agreement. Under the CCP, the Airports Authority is constructing and will continue to construct many of the principal elements of the Reagan National Airport and Dulles International Airport Master Plans, which are necessary for the operation and development of the Airports, and has renovated and will renovate certain existing facilities. See "THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER PLANS."

# The CCP

Overview

The CCP provides for planning, design, and construction of certain facilities at Reagan National Airport and Dulles International Airport that are included in the Master Plan.

[Remainder of page intentionally left blank.]

## The CCP includes the following projects:

# CCP Project Costs<sup>1</sup>

	Year of Substantial Completion	Project Costs (in 000s)
Reagan National Airport		
Concourse E	2021	\$ 364,114
Concourse E enabling projects	2021	156,375
Secure National Hall	2021	296,534
Terminal 1 rehabilitation	2026	86,610
New parking garage	2028	78,500
Terminal 2 redevelopment	2025	44,684
Roadway improvements	ongoing	14,910
Utility system upgrades	ongoing	99,185
Airfield pavement rehabilitation	ongoing	369,108
Other projects	ongoing	<u>199,184</u>
Subtotal		\$ 1,709,204
Dulles International Airport		
Tier 2 Concourse (East)	2026	\$ 769,078
Airfield improvements	ongoing	247,910
Contribution to Dulles Metrorail project	2023	243,494
Additional aircraft gates (Z gates)	2026	72,866
Main terminal improvements	2028	56,883
Upgrades to Concourse B	2028	29,013
Upgrades to Concourses C and D	2025	127,663
AeroTrain renewal and replacement	2027	66,593
Mobile lounge rehabilitation	2028	42,428
Utility system upgrades	ongoing	115,707
Access Highway improvements	2025	39,044
Parking and roadway projects	2022	12,794
Other projects	ongoing	150,976
Subtotal		\$ 1,974,449
Total CCP		\$ 3,683,653

The costs presented in this table represent projects in-progress and future project costs with inflation at 3.0% per annum.

## CCP Projects at Reagan National Airport

The CCP includes projects at Reagan National Airport estimated to cost approximately \$1.7 billion. The major work focuses on terminal/concourse development along with airfield, parking and utilities infrastructure. Projects include the design and construction of a new Concourse E and various related enabling projects; Terminal 2 redevelopment to secure National Hall as a post-security area, together with enabling projects; and preliminary planning and design to potentially rehabilitate, expand or replace Terminal 1. The authorization also includes various airfield, roadway, utility and other ancillary support projects and construction of a multi-level parking garage. Portions of the CCP at Reagan National Airport, including the projects to

<sup>&</sup>lt;sup>2</sup> Totals may not add due to rounding. Source: Airports Authority records.

construct Concourse E and secure National Hall, are referred to by the Airports Authority as "Project Journey." Project Journey was completed in March 2023.

The following is a brief summary of CCP projects estimated to cost \$50 million or more:

**Concourse E**. In April 2021, Concourse E became operational, providing 14 additional gates to replace hardstand parking positions used by regional airline aircraft. This project added approximately 230,000 square feet of floor space and includes additional airline operations space, an automated baggage handling system, expanded aircraft parking apron and extended hydrant fueling operations. Enabling projects demolished the Corporate Office Building, Hangars 11 and 12, relocated tenants and upgraded the utility plant and, special systems infrastructure. Post opening contractual work was completed in the third quarter of 2022.

**Secure National Hall**. Terminal 2 was improved to convert National Hall into a post-security area as part of Project Journey. Security screening check points were being constructed in the north and south areas of the Terminal. This project allows connecting passengers to flow freely between the Terminal's four concourses. Additionally, more food/beverage and other concessions are available to post-security passengers. Secure National Hall opened in the third quarter of 2021 and all post opening work, including removal of stairs, elevators and escalators from the ticketing level to the concourse, was completed in the first quarter of 2023.

Terminal 1 – Planning/Programming/Schematic Design, Enabling Projects. Planning and programming efforts are required in advance of Terminal 1 redevelopment. This includes design efforts for enabling projects including terminal improvements and reconfiguration, baggage improvements, ticket counter relocation, improved gates and boarding bridges, banjo demolition, utility/HVAC modifications, and asbestos abatement.

**Terminal 2 Redevelopment.** As a result of the completion of Project Journey and the subsequent changes to security and passenger flow, Terminal 2 facilities will be redeveloped to further enhance the passenger experience. Improvements will include the reconfiguration of existing and construction of new restrooms, infrastructure additions to support concessions expansion, and update National Hall and concourse holdroom seating and circulation areas.

**Parking Garage.** Construction of a new multi-level economy parking garage with approximately 1,600 spaces was planned in the original CCP, however upon further evaluation may be replaced by the construction of a relocatable parking structure to accommodate vehicle parking that may be impacted by other planned construction projects. The project also includes major utility relocations, soil remediation and storm water management. The Airports Authority is evaluating the need for this project and may reprogram these project costs for other purposes.

North Airfield Improvements/Hold Apron 1 Expansion/Hold Apron Pad B Expansion/Airfield Electric Vault Relocation/Airfield Pavement Rehabilitation. The north airfield taxiway network will be improved to enhance capacity and eliminate FAA-identified operational safety concerns as well as maximize the efficiency and flexibility of the primary runway. The hold aprons will be expanded to accommodate additional aircraft for departure holds and sequencing, parking, circulation and winter deicing operations. The electric vault will be relocated to improve electrical reliability and resiliency, and accommodate the apron expansion.

Additionally, various portions of the airfield-wide pavements need to be reconstructed due to deterioration from traffic and weathering effects.

## CCP Projects at Dulles International Airport

The CCP authorizes projects at Dulles International Airport estimated to cost approximately \$2.0 billion. The Airline Agreement initially approved \$142 million for 2015-2017 to provide for maintenance investment in existing infrastructure. The First Universal Amendment added \$445.6 million for terminal improvements including utility upgrades to Concourse C/D, capacity enhancements to the International Arrivals Building, baggage handling improvements, existing aircraft gates to accommodate additional international service, construction of additional domestic gates, airfield pavement, passenger conveyance systems, airport-wide utility systems, roads and other support projects. Each approved amount is escalated annually in accordance with the terms of the Airline Agreement and the First Universal Amendment.

The following is a brief summary of significant CCP projects at Dulles International Airport:

Tier 2 Concourse (East). In April 2022 the Airports Authority received Majority In Interest approval from the Signatory Airlines in accordance with the Airline Agreement for an additional project at Dulles International Airport. This new project is the first phase of a new two-level midfield concourse that is to be constructed south of Concourses C and D. The concourse is referred to as the Tier 2 Concourse (East) that will provide approximately 14 loading bridge-equipped gates for narrow body jet aircraft. This concourse will replace the single-level Concourse A that is currently used for ground loading of regional jet aircraft. Concourse A will be demolished and the site will be repurposed after completion of the Tier 2 Concourse (East). The Tier 2 Concourse (East) will be constructed over and connected to the AeroTrain station currently serving Concourse C. The Airports Authority received a federal grant of approximately \$167 million under the Infrastructure Investment and Jobs Act to partially fund the project. The total estimated project cost is approximately \$769.1 million and is expected to be paid from a combination of grant money, Airports Authority funds, the issuance of the Series 2023A Bonds and the issuance of additional Bonds.

**Access Highway Improvements**. Significant portions of the access highway will be overlayed and/or reconstructed due to deterioration from weather and traffic.

**Concourse C/D Rehabilitation**. The concourse will be improved to maintain and/or increase operational efficiencies, including electrical and utility upgrades, apron rehabilitation and equipment replacement.

**Aircraft Gate Expansion**. Up to six additional gates will be constructed to accommodate additional aircraft.

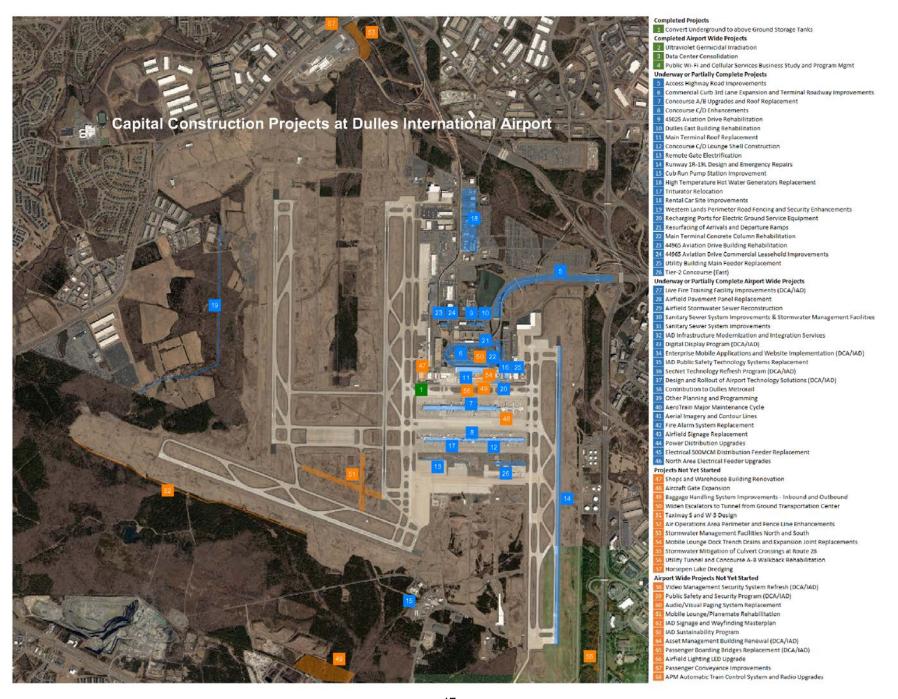
**Airfield Improvements**. Various parts of the airfield pavements will be reconstructed due to deterioration caused by traffic and weather.

**AeroTrain Renewal and Replacement**. Periodic major overall maintenance of the cars (brakes, tires, drive systems, etc.) will be performed, as required by the original equipment manufacturer.

**Dulles Metrorail Project**. The Airports Authority's contribution to the Dulles Metrorail Project to fund the Dulles International Airport Metrorail station, and certain related track and elevations on the Dulles International Airport property, was approved as part of the prior Airline Agreement. The project was completed and the Dulles International Airport Metrorail station successfully opened to the public on November 15, 2022. The Airports Authority's contribution totaled approximately \$230.7 million, paid primarily from Passenger Facility Charges ("PFCs") revenues.

[Remainder of Page Intentionally Left Blank]





## **Environmental Approvals for the CCP**

Portions of the CCP will require approval by the FAA in order to update the ALPs or use federal grant funds and are subject to environmental review and approval as required by the National Environmental Policy Act ("NEPA"). The nature of the review depends on the potential for a project or a group of interrelated projects to produce a significant impact on the natural or human environment. The four levels of NEPA review are (1) categorical exclusions, (2) short form environmental assessments, (3) environmental assessments and (4) environmental impact statements ("EIS").

A categorical exclusion is a determination by the FAA that the action or project falls into a category of actions that the FAA has identified, based on its experience, as having minimal likelihood of causing a significant environmental impact. Examples include replacement of airfield paving and extension of a taxiway. No additional environmental consideration is required for a project that falls within this category unless there are extraordinary circumstances that would cause the project to be reviewed further.

An environmental assessment is a formal, detailed evaluation of environmental conditions to determine whether a proposed action is likely to have a significant environmental impact. It involves a consideration of alternative actions and the process includes an opportunity for public review and comment. The two outcomes of an environmental assessment are a Finding of No Significant Impact ("FONSI") or a decision that an EIS is required.

A short form environmental assessment is a less detailed environmental assessment. It is used in situations when a project cannot be categorically excluded from formal environmental assessment, but when the environmental impacts of the proposed project are expected to be insignificant and a detailed environmental assessment would not be appropriate.

An EIS is prepared by the FAA when there is a federal action with a potentially significant impact on the environment. Public involvement is required to determine the scope of the environmental review and the issues and alternatives to be addressed. A draft EIS is published for public review and comment, including a public hearing. The FAA then prepares a final EIS and eventually makes a decision on the project.

NEPA documentation was completed for Concourse E and Secure National Hall projects at Reagan National Airport, with the FAA issuing a FONSI on November 9, 2016. Other planned improvements at Reagan National Airport, such as roadway improvements and a parking garage, also will require an environmental assessment and FONSI prior to approval by the FAA. Other smaller projects in the CCP at Reagan National Airport may require short form environmental assessments or may qualify for categorical exclusions.

NEPA documentation was completed for the Majority in Interest Tier 2 Concourse (East) project at Dulles International Airport, with the FAA issuing a FONSI on January 14, 2022. None of the other CCP projects at Dulles International Airport (excluding any deferred projects) are anticipated to result in any significant environmental impact. However, it is possible that the FAA will determine that terminal improvement or gate expansion projects would require environmental

documentation ranging from an environmental assessment and FONSI to a short form environmental assessment to a categorical exclusion prior to being approved.

#### PLAN OF FUNDING FOR THE CCP

The cost of the projects in the CCP through 2028 is expected to be approximately \$3.7 billion when adjusted for inflation. The Airports Authority plans to finance the CCP projects with the proceeds of Bonds, federal and state grants, PFCs and other available Airports Authority funds. As of March 31, 2023, the Airports Authority had approximately \$206.1 million in the Construction Fund. Pursuant to the most recent information available to the Airports Authority, the following table sets forth estimated funding sources for the CCP.

CCP Estimated Sources of Funding Through 2028 (in 000s)								
Prior Bonds	\$1,132,976							
Series 2023A Bonds (new money portion)	265,000							
Planned Future Bonds	1,504,762							
Subtotal	\$ 2,902,738							
Pay-as-you-go PFC Revenues	305,684							
WMATA	12,810							
FAA grants	248,893							
Bipartisan Infrastructure Law Grants	166,953							
Airports Authority Funds	46,575							
Total CCP	<u>\$3,683,653</u>							

Source: Airports Authority records.

## **Funding Source: Bond Proceeds**

The Airports Authority previously issued Bonds to fund approximately \$1.1 billion of the CCP project costs. Additional Bonds in the approximate amount of \$2.1 billion are expected to be issued to fund approximately \$1.8 billion of project costs to complete the CCP (adjusted for inflation).

## **Funding Source: Federal and State Grants**

The FAA's Airport Improvement Program ("AIP") consists of entitlement funds and discretionary funds. Entitlement funds are distributed through grants by a formula currently based on the number of enplanements and the amount of landed weight of arriving cargo at individual airports. Discretionary funds are distributed based on the FAA's assessment of national priorities. Through December 31, 2022, the Airports Authority received approximately \$986.1 million in entitlement, discretionary and American Recovery and Reinvestment Act (ARRA) grant funds.

The Commonwealth of Virginia, through the aviation portion of its Transportation Trust Fund, provides grants to Virginia airport operators on an annual basis. As of December 2022, the Airports Authority received approximately \$47.5 million in state grants since 1998. The Airports Authority expects to receive \$2 million in 2023.

The Airports Authority received approximately \$4.7 million of CARES Act grants from the portion of that program that raised the Federal AIP match to 100% for Federal Fiscal Year 2020. Those amounts must be applied to the Airports Authority's CCP by the end of 2024. See "COVID-19 GLOBAL PANDEMIC IMPACTS ON THE AIRPORTS AUTHORITY."

Amounts received by the Airports Authority pursuant to these federal and state grants are expressly excluded from the definition of "Revenues" under the Indenture and are not pledged to secure the Bonds.

## **Funding Source: PFCs**

The Airports Authority uses certain PFC revenues to pay debt service on PFC eligible Bonds that are issued to pay costs of the CCP. The Airports Authority began collecting a \$3.00 PFC at each Airport in 1994 and increased the PFC to \$4.50 (the maximum amount authorized by the FAA) in May 2001. An airport operator must apply to the FAA for the authority to impose a PFC and to use the PFC revenue collected for specific FAA-approved projects. Since Reagan National Airport and Dulles International Airport collect a \$4.50 PFC, federal entitlement grant moneys that otherwise would have been received under the AIP have been reduced by 75%.

The Airports Authority has three active PFC applications, with associated amendments, at Reagan National Airport and one at Dulles International Airport, which, in total, provide collection authority of approximately \$4.12 billion (\$1.68 billion at Reagan National Airport and \$2.44 billion at Dulles International Airport). As of March 31, 2023, the Airports Authority had collected \$965.1 million (including interest earned) under the applications at Reagan National Airport (including active and closed applications), compared to \$914.5 million as of March 31, 2022, and \$1.02 billion (including interest earned) under the applications at Dulles International Airport (including active and closed applications), compared to \$978.6 million as of March 31, 2022. The Airports typically receive PFCs 30 to 60 days after they are collected by the airlines. Authority for the collection of PFCs under the approved PFC applications at Reagan National Airport will expire on February 1, 2036, and at Dulles International Airport on December 31, 2038. If the amounts authorized to be collected have not been collected by the expiration dates, it is expected that the authorization to collect the PFCs will be extended.

The FAA is authorized to terminate the authority to impose PFCs if the Airports Authority's PFC revenues are not being used for FAA-approved projects, if project implementation does not commence within the time periods specified in the FAA's regulations, or if the Airports Authority otherwise violates FAA regulations. The authority to impose a PFC also may be terminated if the Airports Authority violates certain informal and formal procedural safeguards that must be followed. The Secretary of Transportation may authorize an airport operator, including the Airports Authority, to use PFC revenues to finance non-approved projects if such use is necessary due to the financial need of an airport. See also "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS – Effect of Airline Bankruptcies – PFCs."

The calculation of Net Revenues pledged under the Indenture expressly excludes the proceeds of any PFC or similar charge levied by or on behalf of the Airports Authority unless the Airports Authority takes action to treat these funds as Revenues under the Indenture. The Airports

Authority has not taken any such actions and, therefore, any PFC or similar charge collected by the Airports Authority currently is not included in the Net Revenues and is not pledged to secure the Bonds, including the Series 2023A Bonds.

The following table provides the annual collections of PFC revenue, plus interest income, from 2018 through 2022.

**PFC Revenue** 

Calendar Year	Reagan National Airport	Dulles International Airport	Total <sup>1</sup>
2018	\$46,656,493	\$46,696,483	\$93,352,976
2019	47,668,810	48,634,793	96,303,603
2020	14,875,543	15,671,071	30,546,614
2021	30,118,599	29,257,306	59,375,905
2022	47,340,381	42,022,159	89,362,540

Represents actual annual PFC collections and accruals. Source: Airports Authority records.

[Remainder of page intentionally left blank.]

# AIRPORTS AUTHORITY INDEBTEDNESS FOR THE AVIATION ENTERPRISE FUND

# Outstanding Bonds of the Airports Authority for the Aviation Enterprise Fund

The following table lists the Airports Authority's Bonds that will be outstanding upon the issuance of the Series 2023A Bonds. The table does not include the Revolving Loan Notes in the total authorized aggregate amount of \$200 million.

Series of Bonds	Originally Issued Par Amount	Total Bonds Outstanding as of July 12, 2023
2009D	\$ 136,825,000	\$ 44,660,000
2010C	170,000,000	48,655,000
2010D	170,000,000	55,625,000
2011A	233,635,000	32,920,000
2013B	27,405,000	1,085,000
2014A	539,250,000	366,370,000
2015A	163,780,000	163,780,000
2015B	279,235,000	238,330,000
2015C	35,975,000	16,445,000
2016A	362,655,000	362,655,000
2016B	23,370,000	19,615,000
2017A	522,135,000	391,660,000
2018A	558,430,000	500,595,000
2019A	287,930,000	270,000,000
2019B	100,090,000	80,640,000
2020A	283,385,000	242,995,000
2020B	72,165,000	62,755,000
2021A	891,210,000	872,865,000
2021B	8,415,000	5,210,000
2022A	205,280,000	205,280,000
2023A	436,225,000	436,225,000
Total	\$5,507,395,000	\$4,418,365,000

## **Subordinated Bonds for the Aviation Enterprise Fund**

Currently, there are no outstanding Subordinated Bonds. The Airports Authority, however, has the ability to issue additional debt on a subordinated basis to the Bonds. Under the Indenture, Subordinated Bonds are to be secured by a pledge of the Airports Authority's Net Revenues, which pledge is to be subordinated to the pledge of Net Revenues securing the Bonds.

## **Revolving Loan Note Program for the Aviation Enterprise Fund**

On March 31, 2022, the Airports Authority authorized the issuance of Airport System Revolving Loan Notes, Series One (the "Revolving Loan Notes") in an aggregate principal amount not to exceed \$200 million outstanding at any time, pursuant to the Fifty-fourth Supplemental Indenture dated as of March 1, 2022, by and between the Airports Authority and the Trustee and a Revolving Credit Agreement between the Airports Authority and U.S. Bank National

Association. The Revolving Loan Notes are structured as Program Bonds under the Indenture and are secured by certain pledged funds including Net Revenues on a parity with the Bonds. The Airports Authority's obligation to repay amounts advanced under the Revolving Loan Note Program is secured by and payable from Net Revenues on a parity with any Revolving Loan Notes that are issued, and Bonds, including the Series 2023A Bonds. The Airports Authority currently has \$1,000,000 of Revolving Loan Notes outstanding, which will be refunded by a portion of the Series 2023A Bonds.

## **Commercial Paper Program for the Aviation Enterprise Fund**

The Airports Authority has authorized a commercial paper notes program in an aggregate principal amount not to exceed \$500 million outstanding at any time (the "CP Notes Program"). However, the Airports Authority does not currently have in place a credit facility ("LOC") allowing the Airports Authority to support the issuance of CP Notes. The CP Notes Program has been suspended and there are no plans at this time to procure replacement LOC providers. If the Airports Authority were to again utilize the CP Notes Program, the Airports Authority's obligation to repay amounts drawn under an LOC for CP Notes would be secured by and payable from Net Revenues and other pledged funds on a parity with any CP Notes that are issued, and Bonds, including the Series 2023A Bonds.

## **Credit Facilities Relating to Bonds**

The Airports Authority has approximately \$181.9 million principal amount of variable rate Bonds outstanding that are secured by LOCs. The chart below provides summary information with respect to the credit facilities relating to certain of the Airports Authority's variable rate Bonds.

A • .	A 41	• 4 •	$\alpha$	• 4	•1•4•	C	D I
Airports	Autnor	itv′s	Crea	It Fa	acilities	tor	Bonds

	Series 2009D Bonds	<b>Series 2010C Bonds</b>	Series 2010D Bonds	Series 2011A Bonds
Principal Amount <sup>1</sup>	\$44,660,000	\$48,655,000	\$55,625,000	\$32,920,000
Expiration Date	February 28, 2024	February 28, 2024	September 29, 2027	September 29, 2027
LOC Provider	TD Bank, N.A.	TD Bank, N.A.	TD Bank, N.A.	TD Bank, N.A.
Ratings <sup>2</sup> (Fitch/Moody's/S&P)				
Short-Term	F1+/VMIG 1/A-1+	F1+/VMIG 1/A-1+	F1+/A-1+	F1+/VMIG 1/A-1+
Long-Term	AA+3/Aa13/AAA	AA+3/Aa13/AAA	AA+3/AAA	AA+3/Aa13/AAA

<sup>&</sup>lt;sup>1</sup> The principal amount as of July 1, 2023.

## **Interest Rate Swaps for the Aviation Enterprise Fund**

The Airports Authority has entered into a number of interest rate swap agreements (collectively, the "Swap Agreements") to hedge against potential future increases in interest rates.

<sup>&</sup>lt;sup>2</sup> Ratings as of May 2023.

<sup>&</sup>lt;sup>3</sup> Long-term ratings assigned are joint default analysis ratings.

All of the Airports Authority's Swap Agreements (i) were entered into in connection with the planned issuance of variable rate debt and represent floating-to-fixed rate agreements and (ii) were written on a forward-starting basis to either hedge future new money Bonds or to synthetically advance refund Bonds that could not be advance refunded on a tax-exempt basis. The chart below provides summary information with respect to the Airports Authority's current Swap Agreements.

## **Airports Authority's Swap Agreements**

Trade Date	Swap Provider	Ratings* Moody's/ S&P/Fitch	Hedged Series	Original Notional Amount	Outstanding Notional Amount as of April 2023	Fair Value as of April 2023	Rate Paid by Counterparty	Rate Paid by Airports Authority	Termination Date
06/15/2006	JPMorgan Chase Bank, N.A. Bank of America, N.A.	Aa2/A+/AA Aa1/A+/AA	2011A-3 2009D 2010C2	\$190,000,000 \$110,000,000	\$62,012,833 \$35,902,167	(\$12,250,132) (\$7,092,382)	72% LIBOR	4.099%	10/01/2039
06/15/2006	Wells Fargo Bank, National Association	Aa2/A+/ AA-	2010D	\$170,000,000	\$55,624,000	(\$11,669,513)	72% LIBOR	4.112%	10/01/2040
09/12/2007	Wells Fargo Bank, National Association	Aa2/A+/ AA-	2011A-1	\$125,000,000	\$28,318,750	(\$4,773,109)	72% LIBOR	3.862%	10/01/2039

<sup>\*</sup> Ratings as of May 2023.

Source: Airports Authority records.

The Board has adopted a policy governing the use of derivative products by the Airports Authority. A copy of the Board policy is available at <a href="www.mwaa.com">www.mwaa.com</a>. To manage its exposure to counterparty risk, the Airports Authority has entered into Swap Agreements only with counterparties having a rating of at least "A." Prior to the issuance of the Series 2023A Bonds and the defeasance of the Refunded Bonds, approximately 4% of the Airports Authority's outstanding Bonds are in a variable rate mode (synthetic fixed rate) and 96% of the Airports Authority's debt is conventional fixed rate.

In March 2021, the United Kingdom's (UK) Financial Conduct Authority, the UK market's regulator, set a cessation date of June 30, 2023 for LIBOR, which is the benchmark used for the Airports Authority's Swap Agreements. In anticipation of the cessation of LIBOR, the Airports Authority plans to adhere to protocols that will replace LIBOR with the Secured Overnight Financing Rate (SOFR) published by the Federal Reserve Bank of New York, commencing on July 1, 2023. Other than the Swap Agreements, the Airports Authority has no outstanding obligations with an interest rate determined by LIBOR.

The Airports Authority's regular hedge payments under the Swap Agreements constitute Junior Lien Obligations of the Airports Authority secured by a pledge of the Airports Authority's Net Revenues that is subordinate to the pledge of Net Revenues securing the Bonds, including the Series 2023A Bonds, and any Subordinated Bonds issued in the future. If any Swap Agreement is terminated prior to its scheduled termination date, depending on market conditions at the time of the termination, the Airports Authority may be required to make a termination payment to the counterparty or may receive a termination payment from a counterparty. Termination payments owed by the Airports Authority under the Swap Agreements, if any, would be payable solely from

legally available funds that would be subordinate to the payment of Bonds, including the Series 2023A Bonds, Revolving Loan Notes, Subordinated Bonds and Junior Lien Obligations.

## **Special Facility Bonds**

Special Facility Bonds are generally defined as any revenue bonds, notes or other obligations of the Airports Authority other than Bonds, Subordinated Bonds or Junior Lien Obligations, issued to finance any Special Facility, as defined in the Indenture, that are payable from and secured solely by the proceeds of such obligations and by rentals, payments and other charges payable by the obligor under the applicable Special Facility Agreement, as defined in the Indenture. As of the date of this Official Statement, no Special Facility Bonds of the Airports Authority are outstanding.

#### COVID-19 GLOBAL PANDEMIC IMPACTS ON THE AIRPORTS AUTHORITY

#### General

The COVID-19 pandemic and actions taken by international, national and local authorities to halt the spread of the virus resulted in a significant adverse effect on the airline industry and the Airports. Airlines experienced an unprecedented decrease in traffic, resulting in flight cancellations, route reductions and modifications, changes in aircraft used to service flights and airports and other operational changes instituted to mitigate and manage impacts of the pandemic.

Since late 2020, after multiple vaccines against COVID-19 were approved and made available, enplanements around the nation (including at the Airports) have significantly recovered. The U.S. government ended the COVID-19 national emergency and public health emergency and associated declarations on May 11, 2023. However, some countries continue to impose limitations on international travelers, such as requiring a negative COVID-19 test upon or within a certain time of entry. There can be no assurances that there will not be a resurgence of COVID-19, with new variants of the disease emerging and potential economic effects. Future public health concerns may result in some governments re-imposing travel restrictions, in particular as it relates to international air travel.

The Airports Authority cannot predict whether there may be any adverse impacts from future COVID-19 related public health measures on the Airports Authority or its financial condition or operations.

#### **Impacts on Enplanements at the Airports**

As a result of the various measures implemented by various authorities to curb the spread of the pandemic, the Airports experienced steep declines in enplanement volumes which in turn had an adverse effect on retail concessions, parking, TNCs (transportation network companies), ground transportation (such as taxi and limousine) and rental car revenues at the Airports. For 2020, system-wide enplanements were approximately 32.3% of 2019 levels.

Enplanements improved throughout 2021 and 2022 as a result of the development and subsequent approval of several COVID-19 vaccines. Throughout the course of 2021 and 2022, domestic air travel recovered at a faster pace than international travel nationwide due to continued

restrictions related to testing and quarantine requirements. For 2022, system-wide enplanements recovered to approximately 92.9% of 2019 levels. For 2022, enplanements at Reagan National Airport were 100.2% of 2019 levels, while enplanements at Dulles International Airport were 85.9% of 2019 levels.

In 2023, the Airports have continued to experience a recovery in enplanements from calendar year 2020 lows. Total enplanements for the first three months of 2023 represented approximately 103.5% of the total for the same period in 2019. For the first three months of 2023, combined domestic and international enplanements at Reagan National Airport were approximately 2.9 million compared to 2.7 million for the same period in 2019, domestic enplanements at Dulles International Airport were approximately 1.65 million compared to 1.69 million for the same period in 2019, and international enplanements at Dulles International Airport were 806,302 compared to 785,798 for the same period in 2019.

The following Monthly Enplanements tables provide a month-by-month comparison of air traffic data for each Airport and combined totals.

#### MONTHLY ENPLANEMENTS FOR REAGAN NATIONAL AIRPORT

			Per	cent of 2019 (	Same Month)	)			
	2019	2020	2021	2022	2023	2020	2021	2022	2023
Jan	789,540	858,159	161,663	592,056	870,239	108.7%	20.5%	75.0%	110.2%
Feb	820,573	872,397	156,843	692,284	861,566	106.3%	19.1%	84.4%	105.0%
Mar	1,041,578	455,740	298,512	997,589	1,117,492	43.8%	28.7%	95.8%	107.3%
Apr	1,044,111	35,045	453,594	1,073,921	-	3.4%	43.4%	102.9%	
May	1,103,142	66,507	559,621	1,114,446	-	6.0%	50.7%	101.0%	
Jun	1,061,564	184,979	668,127	1,089,996	-	17.4%	62.9%	102.7%	
Jul	1,040,328	227,873	751,001	1,116,478	-	21.9%	72.2%	107.3%	
Aug	1,043,285	222,341	714,756	1,061,572	-	21.3%	68.5%	101.8%	
Sep	948,021	202,054	649,263	1,031,634	-	21.3%	68.5%	108.8%	
Oct	1,072,317	226,188	765,050	1,139,667	-	21.1%	71.3%	106.3%	
Nov	971,467	210,531	902,286	1,050,306	-	21.7%	92.9%	108.1%	
Dec	1,013,114	205,723	968,247	1,009,536	-	20.3%	<u>95.6%</u>	99.6%	
Total	11,949,040	3,767,537	7,048,963	11,969,485	-	31.5%	59.0%	100.2%	

## MONTHLY ENPLANEMENTS FOR DULLES INTERNATIONAL AIRPORT

		Mont	hly Enplanen	Per	cent of 2019 (	(Same Month)	)		
	2019	2020	2021	2022	2023	2020	2021	2022	2023
Jan	774,081	856,759	297,677	546,471	791,895	110.7%	38.5%	70.6%	102.3%
Feb	728,391	765,594	261,232	566,652	722,695	105.1%	35.9%	77.8%	99.2%
Mar	971,614	433,708	399,126	794,170	941,416	44.6%	41.1%	81.7%	96.9%
Apr	1,000,383	48,269	428,628	893,151	-	4.8%	42.8%	89.3%	
May	1,132,554	95,345	537,846	970,831	-	8.4%	47.5%	85.7%	
Jun	1,220,533	138,255	654,135	1,050,210	-	11.3%	53.6%	86.0%	
Jul	1,218,537	209,808	849,169	1,067,902	-	17.2%	69.7%	87.6%	
Aug	1,165,068	243,867	817,519	988,144	-	20.9%	70.2%	84.8%	
Sep	998,394	267,817	739,031	928,217	-	26.8%	74.0%	93.0%	
Oct	1,077,888	342,392	817,222	958,702	-	31.8%	75.8%	88.9%	
Nov	979,843	314,365	765,034	877,728	-	32.1%	78.1%	89.6%	
Dec	1,059,640	367,258	818,404	943,833	-	34.7%	<u>77.2%</u>	89.1%	
Total	12,326,926	4,083,437	7,385,023	10,586,011	-	33.1%	59.9%	85.9%	

#### COMBINED MONTHLY ENPLANEMENTS FOR THE AIRPORTS

		Mont	hly Enplanen	Pe	rcent of 2019	(Same Month)	)		
	2019	2020	2021	2022	2023	2020	2021	2022	2023
Jan	1,563,621	1,714,918	459,340	1,138,527	1,662,134	109.7%	29.4%	72.8%	106.3%
Feb	1,548,964	1,637,991	418,075	1,258,936	1,584,261	105.7%	27.0%	81.3%	102.3%
Mar	2,013,192	889,448	697,638	1,791,759	2,058,908	44.2%	34.7%	89.0%	102.3%
Apr	2,044,494	83,314	882,222	1,967,072	-	4.1%	43.2%	96.2%	
May	2,235,696	161,852	1,097,467	2,085,277	-	7.2%	49.1%	93.3%	
Jun	2,282,097	323,234	1,322,262	2,140,206	-	14.2%	57.9%	93.8%	
Jul	2,258,865	437,681	1,600,170	2,184,380	-	19.4%	70.8%	96.7%	
Aug	2,208,353	466,208	1,532,275	2,049,716	-	21.1%	69.4%	92.8%	
Sep	1,946,415	469,871	1,388,294	1,959,851	-	24.1%	71.3%	100.7%	
Oct	2,150,205	568,580	1,582,272	2,098,369	-	26.4%	73.6%	97.6%	
Nov	1,951,310	524,896	1,667,320	1,928,034	-	26.9%	85.4%	98.8%	
Dec	2,072,754	572,981	1,786,651	1,953,369	-	27.6%	86.2%	94.2%	
Total	24,275,966	7,850,974	14,433,986	22,555,496	-	32.3%	59.5%	92.9%	

There has been a corresponding recovery in the demand for airport concessions as well as rental car transactions, parking, TNC and other ground transportation services, such as taxis and limousines. For the first three months of 2023, concession revenues were approximately 128.4% of 2020 concession revenues for the same period, and increased 32.8% year over year as compared to the same period in 2022. Terminal concession revenues for the first three months of 2023 represented 123.6% of the total for same period in 2020. Total rental cars and parking revenues for the first three months of 2023 represented 138.0% and 154.4% of the total for the same period in 2020, respectively. Total revenues from TNCs and other ground transportation services for the first three months of 2023 represented 106.4% and 100.0% of the total for the same period in 2020, respectively. See "AIRPORTS AUTHORITY CURRENT FINANCIAL INFORMATION."

#### **Federal Relief Efforts**

As a direct result of the COVID-19 pandemic, three separate laws were enacted by the U.S. Congress that provided or continue to provide financial aid to airports around the country, the airlines and other concessionaires.

The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), which became law on March 27, 2020, allocated the Airports Authority approximately \$229 million of grant assistance. As of December 31, 2022, the Airports Authority has used \$195.6 million of CARES Act funds to pay debt service obligations and operating expenses, leaving approximately \$33.5 million available to be drawn within the time period permitted by the CARES Act.

On February 12, 2021, additional airport specific funding under the Airports Coronavirus Recovery Grants Program, approved under the Coronavirus Response and Relief Supplemental Appropriation Act ("CRRSA"), was announced with Reagan National Airport to receive \$21.1 million and Dulles International Airport to receive \$21.7 million. In 2021, the Airports Authority used its full allocation of \$42.7 million of CRRSA funds to pay debt service obligations.

The American Rescue Plan Act of 2021 ("ARPA") became law on March 11, 2021. The Airports Authority was allocated a total of approximately \$71.8 million of grant assistance plus \$9.9 million for concession relief at Reagan National Airport and \$74.1 million of grant assistance plus \$10.2 million for concession relief at Dulles International Airport pursuant to ARPA. The Airports Authority intends to use ARPA funds to pay operating expenses and debt service and provide relief from rent and minimum annual guarantee obligations to eligible airport concessionaires, as authorized by the Act. As of December 31, 2022, the Airports Authority has used a total of \$103.8 million of ARPA funds to pay debt service obligations and operating expenses, leaving approximately \$62.1 million available to be drawn within the time period permitted by the ARPA.

The following table summarizes the federal COVID-19 relief grants received by the Airports Authority and application of such grants to date.

#### FEDERAL GRANT ASSISTANCE

Federal Grant Funding	CARES Act	CRSSA		ARPA		TOTAL
		General	Concessions	General	Concessions	
Grants Received						
System-Wide	\$229,103,264	\$ -	\$ -	\$ -	\$ -	\$229,103,264
Reagan National Airport	-	18,581,343	2,483,444	71,775,574	9,933,777	102,774,138
Dulles International Airport		19,129,040	2,545,268	74,082,574	10,181,074	105,937,956
<b>Total Grants Received</b>	\$229,103,264	\$37,710,383	\$ 5,028,712	\$ 145,858,148	\$20,114,851	\$437,815,358
Grants Applied						
<b>Total Grants Applied</b>	\$195,608,220	\$37,710,383	\$ 5,028,712	\$ 83,724,089	\$20,114,851	<u>\$342,186,255</u>
<b>Total Grants Remaining</b>	\$ 33,495,044	\$ -	\$ -	\$ 62,134,059	\$ -	\$ 95,629,103

#### AIRPORTS AUTHORITY HISTORICAL FINANCIAL INFORMATION

#### General

The Airports Authority's financial report as of, and for, the year ended December 31, 2022, is contained in the Airports Authority's 2022 Financial Report, which was filed with EMMA and can also be found at <a href="www.mwaa.com">www.mwaa.com</a> and <a href="www.mwaa.com">www.mwaa.com</a>, and includes three financial statements: the Statements of Net Position; the Statements of Revenues, Expenses and Changes in Net Position; and the Statements of Cash Flows. The financial statements are prepared in accordance with accounting principles generally accepted in the United States of America as promulgated by GASB.

The Airports Authority's financial statements for the year ended December 31, 2022 includes two Enterprise Funds. The Aviation Enterprise Fund encompasses the Airports. The Dulles Corridor Enterprise Fund encompasses the Dulles Toll Road and the Dulles Metrorail Project. The Management's Discussion of Financial Information provided in this Official Statement concerns only the Aviation Enterprise Fund.

## Aviation Enterprise Fund Fiscal Years Ended December 31, 2018 Through 2022

Historical Statements of Revenues, Expenses and Changes in Net Position for the Aviation Enterprise Fund for the five Fiscal Years ended December 31, 2018 through 2022, are set forth on the following table. The amounts set forth in the table were derived from the Airports Authority's audited historical financial statements.

[Remainder of page intentionally left blank]

# HISTORICAL FINANCIAL RESULTS STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION AVIATION ENTERPRISE FUND

	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/20221
OPERATING REVENUES					
Concessions	\$348,624,365	\$362,049,965	\$143,748,601	\$225,156,452	\$335,302,681
Rents	280,146,201	264,815,523	256,782,891	253,116,032	272,831,551
Leases		=			34,335,577
Landing fees	84,485,059	89,654,098	51,932,304	50,247,122	72,302,927
Utility sales	14,401,340	14,278,652	11,954,406	12,620,885	13,972,408
Passenger fees	24,317,733	23,511,540	8,227,742	9,561,426	24,943,139
Other	14,517,758	12,145,705	11,111,648	11,415,207	11,677,168
	766,492,456	766,455,483	483,757,592	562,117,124	765,365,451
OPERATING EXPENSES					
Materials, equipment, supplies,					
contract services, other	200,396,186	220,606,629	176,622,481	184,143,107	195,985,389
Salaries and related benefits	188,258,198	188,322,576	172,830,434	162,101,051	196,634,503
Utilities	25,878,626	26,553,298	22,343,266	22,451,284	31,200,236
Lease from U.S. Government	5,774,716	5,861,237	5,936,213	6,090,272	6,459,290
Depreciation and amortization	227,928,188	223,071,619	225,019,317	237,698,378	256,280,973
	648,235,914	664,415,359	602,751,711	612,484,092	686,560,391
OPERATING INCOME (LOSS)	118,256,542	102,040,124	(118,994,119)	(50,366,968)	78,805,060
					·
NON-OPERATING REVENUES					
(EXPENSES) Investment income	20,000,152	50 211 107	26 260 722	10 272 012	22 000 (40
	29,090,153	50,311,197	36,260,733	19,273,012	23,090,649
Net increase (decrease) in fair value of	4.000.756	2 440 112	11.046.142	5.020.200	(26 017 105)
investments	4,900,756	3,449,112	11,946,142	5,020,300	(36,017,105)
Investment income - leases	(100,600,250)	(170 152 079)	(161 202 001)	(145 422 402)	2,621,690
Interest expense	(190,690,350)	(170,152,978)	(161,292,981)	(145,422,492)	(142,262,718)
Passenger facility charges	93,352,976	96,303,603	30,546,615	59,375,905	89,362,540
Federal, state and local grants	26,071,447	1,161,473	76,475,733	173,311,432	100,028,474
Fair value gains (loss) on swaps	23,083,850	(26,941,477)	(28,717,450)	29,728,416	44,898,724
Contributions from other governments	(21.006.446)	(20.025.(10)	(10.755.4(2)	27,500,000	260,452,223
Contributions to other governments	(31,086,446)	(20,935,610)	(10,755,463)	(8,556,945)	(18,924,214)
Gain from sale of real estate	202,454,919	=	=	10,000,000	=
Other gain (loss)	157,177,305	(66 904 690)	(45,536,661)		323,250,263
	13/,1//,303	(66,804,680)	(43,330,001)	170,229,628	323,230,203
INCOME (LOSS) BEFORE CAPITAL					
CONTRIBUTIONS	275,433,847	35,235,444	(164,530,780)	119,862,660	402,055,323
CAPITAL CONTRIBUTIONS					
Net federal, state and local grants	23,169,964	23,185,566	11,104,961	34,871,512	9,728,372
	23,169,964	23,185,566	11,104,961	34,871,512	9,728,372
NET ASSETS					
Increase (decrease) in net assets	298,603,811	58,421,010	(153,425,819)	154,734,171	411,783,695
Total net assets, beginning of year	1,001,125,973	1,299,729,784	1,358,150,794	1,204,724,975	1,359,459,146
Cumulative effect of change in	1,001,123,773	1,2//,/2/,/07	1,000,100,774	1,201,121,213	1,557,157,110
accounting principle					2,694,746
Total net assets, end of year	\$1,299,729,784	\$1,358,150,794	\$1,204,724,975	\$1,359,459,146	\$1,773,937,587

As discussed in the Airports Authority's Annual Comprehensive Financial Report of 2022 ("2022 Financial Report"), the Airports Authority implemented GASB 87 and adjusted its opening net assets for 2022 to reflect the cumulative effect of the change impacting periods prior to 2022.

## Management's Discussion of Financial Information

The Aviation Enterprise Fund has activity-based revenues which include revenues derived from non-airline fees, such as parking and rental car concession fees, and cost recovery-based revenues derived from airline rentals, fees and charges, such as landing fees, international arrival fees and passenger conveyance fees. The Airports Authority's 2022 Budget reflected a 25.4% increase in operating revenues and a 7.0% increase in operating expenses, as compared to the 2021 Budget.

In 2022, operating revenue, which consists largely of concessions, rents, landing fees, passenger conveyance charges and international arrivals fees, totaled \$765.4 million, which was an increase of \$203.2 million or 36.2%, from 2021. In 2022, concession revenues including lease revenues and non-operating interest income (GASB 87) totaled \$360.2 million, which was an increase of \$135.1 million, or 60.0%, from 2021. In 2022, airline revenue, which consists of landing fees of \$72.3 million, terminal rents from airlines of \$226.0 million, other airline fees of \$24.0 million, and leases (GASB 87) of \$2.7 million for a total of \$325.0 million, an increase of \$68.3 million or 27.0% from the prior year. In 2021, airline revenue was \$256.6 million. In 2022, airline rent revenues including lease revenues and non-operating interest income (GASB 87) totaled \$228.9 million, an increase of \$31.1 million, or 16.0%, from 2021. In 2021, airline rent revenues totaled \$197.7 million. Landing fee revenues totaled \$72.3 million in 2022, an increase of \$22.1 million from 2021. Signatory landing fee rates paid per 1,000 pounds at Reagan National Airport decreased to \$3.03 in 2022 from \$3.86 in 2021. In 2022, signatory airline landing fee rates paid per 1,000 pounds at Dulles International Airport increased to \$1.39 from \$0.93 in 2021. Passenger fees, including passenger conveyance and international arrivals fees for the TSA, totaled \$24.0 million in 2022 and increased \$15.4 million, or 178.4%, from 2021.

As of December 31, 2022, the Aviation Enterprise Fund had \$2.0 billion of total cash and investments of which \$1.2 billion was unrestricted, compared to \$2.0 billion of total cash and investments of which \$1.1 billion was unrestricted as of December 31, 2021 and \$1.7 billion of total cash and investments of which \$1.0 billion was unrestricted as of December 31, 2020. As of December 31, 2022, the Aviation Enterprise Fund unrestricted cash and investments were equivalent to 985 days of operation and maintenance expenses, compared to 965 days as of December 31, 2021 and 992 days as of December 31, 2020.

The following table provides details of concession revenues by major category for the five Fiscal Years 2018 through 2022.

#### TOTAL CONCESSION REVENUES BY MAJOR CATEGORY AVIATION ENTERPRISE FUND (Audited)

	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/20221
Parking	\$124,505,333	\$126,319,935	\$39,070,631	\$79,649,385	\$142,675,603
Fixed base operator	31,522,590	32,381,287	25,067,906	33,443,022	35,633,425
Rental cars	43,842,314	46,154,615	21,838,009	39,119,965	52,293,809
Ground transportation	41,214,261	45,428,127	14,841,738	20,331,240	40,338,151
Terminal concessions					
Food and beverage	34,302,528	35,562,907	10,671,902	14,425,803	34,135,566
Display advertising	15,884,113	14,587,203	8,244,848	10,301,827	16,044,527
Newsstand and retail	14,687,109	14,847,508	4,843,791	6,208,080	11,145,366
Duty free	14,554,163	14,898,277	3,075,024	2,232,036	2,303,875
In-flight catering	18,070,530	19,422,751	9,681,692	12,538,917	17,491,907
All other	10,041,424	12,447,355	6,413,060	6,906,177	8,148,816
GASB 87 impact	-	-	-	-	(24,908,365)
Total	\$348,624,365	\$362,049,965	\$143,748,601	\$225,156,452	\$335,302,681

<sup>&</sup>lt;sup>1</sup> As discussed in the 2022 Financial Report, the Airports Authority implemented GASB 87 effective 1/1/2022. Source: Airports Authority records.

In 2022, concession revenues including lease revenue and non-operating interest income – leases (GASB 87) accounted for 46.9% of total operating revenues compared to 40.1% in 2021. The increase in concession revenue was attributable to increases in most categories primarily in parking, rental cars, ground transportation, fixed base operators, food and beverage, display advertising, newsstand and retail, and inflight caterers. Parking revenues continued to rank as the Airports Authority's largest concession in 2022, providing \$142.7 million in total revenues for the year, an increase of \$63.0 million, or 79.1% from \$79.6 million in 2021. In 2022, rental car revenues of \$52.3 million were higher by \$13.2 million compared to 2021.

Food and beverage revenue totaled \$34.1 million in 2022, which represented an increase of \$19.7 million from 2021. Food and beverage revenue totaled \$14.4 million in 2021.

Fixed base operator revenues of \$35.6 million in 2022 increased by \$2.2 million from the prior year. Fixed base operator revenues were \$33.4 million in 2021. Inflight catering revenues increased by \$5.0 million in 2022 compared to 2021. Revenue from inflight caterers was \$12.5 million in 2021. Ground transportation revenues increased \$20.0 million in 2022.

Other revenue, which primarily represents revenue from registered traveler programs, hotel, gas station, and other services increased by \$1.2 million in 2022 compared to 2021. In 2021, other revenue increased by \$0.5 million from 2020.

Non-airline rents including lease revenue and non-operating interest income – leases (GASB 87) totaled \$56.0 million in 2022. This was an increase from 2021 of \$0.6 million. In 2022, the Airports Authority received \$100.0 million in operating grants including \$22.5 million from the CARES Act, \$74.4 million from the ARP Act, \$2.5 million from other federal grants and \$0.5 million from the state of Virginia. The Airports Authority also received revenues from the TSA for reimbursement of expenses incurred by the Airports Authority's Public Safety personnel serving a support role to the TSA.

Operating expenses for the Aviation Enterprise Fund for the fiscal year ended December 31, 2022 totaled \$686.6 million, an increase of \$74.1 million or 12.1% from 2021. Operating expenses for 2021 increased by \$9.7 million compared to 2020. Materials, equipment, supplies, contract services and other expenses increased \$11.8 million or 6.4%, to \$196.0 million in 2022. The Airports Authority completed multiple capital asset construction and development projects in 2022 which included the new Security Hall, Concourse E, and the TV900 Airfield Electric Vault Relocation at Reagan National Airport and the Airfield Pavement Panel Replacement and Access Highway Road Improvements at Dulles International Airport.

Salaries and related benefit expenses increased \$34.5 million from 2021 to \$196.6 million in 2022 primarily due to mark to market adjustments for the Airports Authority's pension and Other Post-Employment Benefit (OPEB) plans. Employee compensation expense for Airports Authority employees increased \$5.7 million, or 4.1%, over 2021. The Airports Authority continued funding its Other Post-Employment Benefits (OPEB). The contribution percentages to the Airports Authority's pension plans decreased to 3.06% in 2022 from 6.94% of eligible earnings in 2021 for the General Employee Plan and decreased to 4.48% in 2022 from 12.21% of eligible earnings in 2021 for the Police and Firefighters' plan. The funded ratio as of the actuarial valuation date of December 31, 2022 was 90.7% for OPEB, 86.1% for the General Employee Plan and 86.2% for the Police and Firefighters' plan.

Depreciation and amortization expenses totaled \$256.3 million in 2022, an increase of \$18.6 million or 7.8% from 2021 resulting from several assets being placed into service and the amortization of right to use assets \$4.4 million (GASB 87). Depreciation and amortization expenses in 2021 were \$237.7 million.

In 2022, non-operating revenues increased \$160.2 million and non-operating expenses decreased by \$7.2 million from 2021. Investment income decreased \$34.6 million from 2021 primarily driven by unfavorable market conditions. PFC revenue for 2022 was \$89.4 million, which was an increase of \$30.0 million from 2021. PFC revenue for 2021 was \$59.4 million, which was an increase of \$28.8 million from 2020. Federal, state, and local operating grants decreased \$73.3 million in 2022 compared to 2021 resulting from lower COVID-19 related grant draws. Non-operating expenses, which included interest expense on the Aviation Enterprise Fund's \$4.6 billion bond debt, totaled \$161.2 million. Interest expense decreases were recognized in 2021 and 2022 primarily due to the refunding of prior issued bonds with more favorable interest rates. Contributions to the Dulles Corridor Enterprise totaled \$18.9 million which reflected the Aviation Enterprise's share of Phase 2 of the Dulles Metrorail Project and was driven by continued construction on Phase 2 of the Dulles Metrorail Project.

Capital contributions include federal, state, and local grants, and other capital property acquired. Federal, state, and local grants in support of capital programs were \$9.7 million in 2022 and \$34.9 million in 2021. In 2022 and 2021, the Airports Authority received \$7.5 million and \$31.3 million, respectively, in Airport Improvement Programs (AIP) grants primarily to reimburse for runway construction and rehabilitation, taxiway reconstruction, runway safety area improvements and installation of electric charging stations.

The change in net position is an indicator of the overall fiscal condition of the Aviation Enterprise Fund. Net position increased in 2022 by \$414.5 million which includes a cumulative

effect of a change in accounting principle \$2.7 million. Net position increased in 2021 by \$154.7 million. These changes reflect the sound management of the Airports Authority debt and investment programs as well as the impact of the COVID-19 pandemic on the air industry in 2021 and the continued recovery from the COVID-19 pandemic in 2022.

## **Net Remaining Revenue**

Set forth in the table below is the calculation of Net Remaining Revenue ("NRR") and debt service coverage for the five Fiscal Years ended December 31, 2018 through December 31, 2022.

# NET REMAINING REVENUE SCHEDULE AND CALCULATION OF DEBT SERVICE COVERAGE FOR AVIATION ENTERPRISE FUND (Unaudited)

	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
Airline Revenues <sup>1</sup>					
Landing and Apron Fees	\$156,827,841	\$158,177,302	\$121,617,735	\$73,406,176	\$111,839,789
Rentals	375,491,296	369,429,832	361,099,861	249,298,347	318,934,425
Passenger & Other Fees	934,130	934,400	936,960	934,400	927,080
Other Rents	42,853,978	44,882,321	47,047,670	52,058,304	52,692,207
Utility Reimbursements	9,121,071	8,617,279	11,759,747	12,438,260	13,808,696
Concessions <sup>2</sup>	320,815,472	333,306,916	143,748,601	225,156,451	360,211,046
Investment Earnings	28,948,971	41,559,111	28,111,643	11,454,513	16,331,610
Federal Relief Grants Concessions	0	0	0	5,028,712	0
Other	14,502,446	12,115,203	11,111,648	21,415,207	31,792,018
TOTAL REVENUES <sup>1</sup>	\$ <u>949,495,205</u>	\$ <u>969,022,364</u>	\$725,433,864	\$651,190,370	\$906,536,871
O&M Expenses <sup>1</sup>	346,312,345	353,108,624	363,788,136	\$356,078,087	\$385,634,565
Telecommunications					3,750,496
Federal Lease Payment					(6,459,290)
Federal Relief Grants Applied to O&M					
Expenses			7,601,205	3,620,679	(2,132,226)
Western Lands Applied Funds			4,570,563	4,116,292	(4,921,405)
NET REVENUES	\$ <u>603,182,860</u>	\$ <u>615,913,740</u>	\$ <u>373,817,496</u>	\$302,849,254	\$ <u>530,664,731</u>
Debt Service on Bonds Issued under					
Master Indenture <sup>3</sup>	331,795,825	300,809,778	334,651,368	314,869,466	309,121,622
TOTAL DEBT SERVICE	<u>\$331,795,825</u>	\$300,809,778	<u>\$334,651,368</u>	\$314,869,466	\$ <u>309,121,622</u>
O&M Reserve Requirement Increment	3,236,000	940,000	1,973,000	(1,285,000)	6,069,488
Federal Lease Payment	5,774,716	5,861,237	5,936,213	6,090,272	6,459,290
Federal Relief Grants Applied to Debt Service			66,769,988	162,221,937	(74,696,657)
NET REMAINING REVENUE <sup>4</sup>	\$ <u>262,376,319</u>	\$ <u>308,302,725</u>	\$ <u>98,026,903</u>	\$ <u>145,396,453</u>	\$ <u>283,710,989</u>
DEBT SERVICE COVERAGE <sup>4</sup>	1.82x	2.05x	1.40x	1.98x	2.26x

Includes credit for Signatory Airlines' share of NRR from the prior year, which offsets the amount of rentals, fees and charges that are due from the Signatory Airlines in the respective fiscal year.

Source: Airports Authority records.

Concession Revenue for Washington Flyer Ground Transportation is not included.

Reflects actual amount of debt service paid on outstanding Bonds in the respective fiscal year and excludes amount of debt service paid from PFC revenues.

<sup>4</sup> Calculations of NRR and coverage are made in conformance with provisions of the Indenture and the Airline Agreement and are not determined in accordance with GAAP.

## The Aviation Enterprise Fund Budget

The Aviation Enterprise Fund's annual budget is a financial planning tool outlining the estimated revenues and expenses for the Airports. The budget is not prepared according to GAAP. The President and Chief Executive Officer submits the Aviation Enterprise Fund's annual budget to the Board for approval. Budgetary controls and evaluations are managed by comparing actual interim and annual results with the budget, noting the actual level of passenger activity. The Airports Authority conducts quarterly reviews to ensure compliance with the provisions of the annual operating budget approved by the Board. The budget may be amended at any time during the year upon recommendation by the President and Chief Executive Officer and adoption by the Board.

The Airports Authority's 2022 Budget reflected a 25.4% increase in revenues and a 7.0% increase in expenses, as compared to the 2021 Budget. Operating revenues were 113.0% of budget authorization in 2022, compared to 103.7% of budget authorization in 2021. Operating expenses were 94.9% of budget authorization in 2022, while in 2021, expenses were 94.7% of budget authorization.

	Budget	Actual <sup>1</sup>	As a percentage of Budget
2022 Revenues	\$679,800,812	\$767,987,141	113.0%
2022 Expenses <sup>2</sup>	\$410,549,421	\$389,532,126	94.9%
2021 Revenues	\$542,125,233	\$562,057,145	103.7%
2021 Expenses <sup>2</sup>	\$383,812,980	\$363,492,081	94.7%

Actual results are stated on a budgetary basis for comparative purposes, which are not consistent with GAAP.

### **Aviation Enterprise Fund Fiscal Year 2023 Budget**

The prospective financial information in the section below has been prepared by, and is the responsibility of, the Airports Authority's management. The Airports Authority and its management believe that the budget information below has been prepared on a reasonable basis, reflecting the best estimates and judgments, and represents, to the best of management's knowledge and opinion, the Airports Authority's expected course of action. However, because this information is highly subjective, it should not be relied on as necessarily indicative of future results.

The Aviation Enterprise Fund's Budget, which includes the 2023 Operation and Maintenance Budget ("2023 O&M Budget") (funded from airline rentals, fees and charges and non-airline revenue, including concessions and other revenues), the 2023 Capital, Operating and Maintenance Investment Program Budget (funded with the Airports Authority's share of net remaining revenues from the prior year), and the 2023 CCP Budget (funded from Bond proceeds, PFCs and grants), was approved by the Board in December 2022 (the "2023 Budget"). The Airports Authority is committed to ensuring that adequate resources are available to efficiently and safely operate and maintain the Airports and believes that the 2023 Budget provides those resources.

<sup>&</sup>lt;sup>2</sup> Does not include depreciation expense or debt service.

The 2023 Budget is in line with the Airports Authority's strategic priorities and budget objectives of maintaining financial flexibility and competitive cost per enplanement through achieving projected passenger activity for the Airports, strategic application of federal relief grants, continued cost discipline in operational and capital plans, and prudent financial management, including execution of re-financing opportunities.

The 2023 O&M Budget includes a 12.0% increase in operating revenues (excluding transfers) from the 2022 O&M Budget. Budgeted revenues of \$761.2 million for 2023 reflect an \$81.4 million increase from 2022 budgeted revenues. Operating revenues received from the airlines are on a cost recovery basis.

Airline revenue in 2023 is projected to increase by 1.9% from the 2022 Budget due to the continued recovery in operations, increased passenger activity and an increase in the operating expenses budget related to inflationary pressures. Actions taken to mitigate airline rates and charges to the Airlines include the utilization of CARES Act revenue, application of a portion of Western Lands funding (including estimated interest earnings) as appropriate, and the deployment of ARPA funding. The Airports Authority's 2023 Budget for non-airline revenue is projected to increase by 20.4% above the 2023 Budget due to the increase in passenger activity and the impact of new concessions contracts and operations resulting from new facilities opened as part of Project Journey. See "THE AIRPORTS AUTHORITY – COVID-19 Global Pandemic."

The 2023 Budget for operating expenses was prepared with an emphasis on funding contract escalations, inflationary pressures on utilities and fuel supplies, streamlining current resource requirements, utilizing bottoms up transparency, and budgeting principles such as cost containment, cost efficiency, cost transparency, cost governance and cost accountability.

Budgeted operating expenses for 2023 are \$451.8 million, a \$41.2 million or 10.0% increase from 2022 budgeted expenses of \$410.5 million (excluding debt service and O&M Reserve Requirement). The total budgeted expenses for 2023, including debt service but excluding O&M Reserve Requirement are \$754.7 million, a \$30.6 million or 4.2% increase from 2022 budgeted expenses of \$724.0 million.

In the 2023 Budget, the amount of total NRR is estimated at \$255.0 million, a 46.7% increase from the 2022 Budget. Under the Airline Agreement, NRR is allocated between the Aviation Enterprise Fund and the Signatory Airlines according to an established formula. The Signatory Airlines' estimated share of NRR in 2022 (transfers included in the budgeted 2023 operating revenues) was \$139.9 million and the Airports Authority's estimated share of NRR in 2022 was \$96.1 million.

## AIRPORTS AUTHORITY CURRENT FINANCIAL INFORMATION

The unaudited Fiscal Year 2023 results through March 2023 for the Aviation Enterprise Fund are set forth below. This information has been prepared by management of the Airports Authority.

# FINANCIAL RESULTS STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION AVIATION ENTERPRISE FUND

(Unaudited)\*

	Three Month Period Ended March 2021	Three Month Period Ended March 2022	Percentage Change from 2021 to 2022	Three Month Period Ended March 2023	Percentage Change from 2022 to 2023
OPERATING REVENUES	Widten 2021	TVIATOR EVEE	2021 to 2022	Triaren 2025	2022 to 2023
Concessions	\$ 31,743,876	\$ 71,090,270	123.9%	\$ 94,440,240	32.8%
Rents	61,234,222	69,911,775	14.2%	68,663,130	(1.8%)
Landing fees	6,564,920	16,278,334	148.0%	18,411,161	13.1%
Utility sales	3,580,554	3,627,928	1.3%	3,699,865	2.0%
Passenger fees	1,377,072	4,387,153	218.6%	5,910,126	34.7%
Other	1,133,127	2,565,772	126.4%	2,770,254	8.0%
	\$105,633,771	\$167,861,232	58.9%	\$193,894,777	15.5%
OPERATING EXPENSES					
Materials, equipment, supplies, contract services, and other	44,399,144	48,326,237	8.8%	47,272,349	(2.2%)
Salaries and related benefits	47,561,388	44,589,981	(6.2%)	47,761,089	7.1%
Utilities	5,771,007	6,759,969	17.1%	9,373,103	38.7%
Lease from U.S. Government	1,501,500	1,583,750	5.5%	1,696,750	7.1%
Depreciation and amortization	55,626,146	63,055,366	13.4%	62,940,210	(0.24%)
	\$154,859,185	\$164,315,301	6.1%	\$169,043,501	2.9%
OPERATING INCOME (LOSS)	\$(49,225,414)	\$3,545,931	107.2%	\$24,851,276	600.8%
NON-OPERATING REVENUES (EXPENSES)					
Investment income (loss)	5,133,547	(12,909,443)	(351.5%)	27,784,284	315.2%
Interest expense	(36,778,058)	(35,752,817)	(2.8%)	(33,495,247)	(6.3%)
Passenger facility charges	6,733,851	20,502,317	204.5%	25,209,580	23.0%
Federal, state and local grants	212,261	377,268	77.7%	237,942	(36.9%)
Fair value gains (loss) on swaps	37,391,191	17,174,354	(54.1%)	(4,315,100)	(125.1%)
Contributions from other governments	27,500,000	_	N/A	_	N/A
Contributions to other governments	(1,961,731)	(1,651,376)	(15.8%)	(534,202)	(67.7%)
Other gain (loss)	$10,000,000^1$	-	N/A	_	N/A
	\$48,231,061	\$(12,259,697)	(125.4%)	\$14,887,257	(221.4%)
INCOME (LOSS) BEFORE CAPITAL CONTRIBUTIONS	(994,353)	(8,713,766)	(776.3%)	39,738,533	556.0%
CAPITAL CONTRIBUTIONS					
Net federal, state and local grants	2,321,259	1,411,774	(39.2%)	3,743,368	165.2%
	\$2,321,259	\$1,411,774	(39.2%)	\$3,743,368	165.2%
NET POSITION					
Increase (decrease) in net position	1,326,906	(7,301,993)	(650.3%)	43,481,902	695.5%
Total net position, beginning of period	1,204,724,975	1,359,459,146	12.8%	1,773,937,587	30.5%
Total net position, end of period	\$1,206,051,881	\$1,352,157,153	12.1%	\$1,817,419,489	34.4%

Totals may not add due to rounding.

<sup>\*</sup> The unaudited first quarter period 2023, 2022 and 2021 results included in this Official Statement have been prepared by, and are the responsibility of, the Airports Authority's management. Crowe LLP has not performed an audit, review, or compilation with respect to the accompanying unaudited first quarter 2023, 2022 and 2021 results. Accordingly, Crowe LLP does not express an opinion or any other form of assurance with respect thereto.

<sup>&</sup>lt;sup>1</sup> The Airports Authority realized a one-time gain from the sale of a non-real estate asset.

The Aviation Enterprise Fund's financial results for the first three months of Fiscal Year 2023 reflect a \$21.3 million, or 600.8%, increase in operating income, primarily due to higher rent, landing fee, passenger fee, and concession revenues as a result of higher passenger activity offset by higher costs. Operating revenue for the three months ended March 31, 2023 was \$193.9 million, an increase of \$26.0 million or 15.5% compared to the same period in 2022. The Airports Authority recognized \$0.2 million in non-capital grant revenues primarily for public safety and COVID-19 related expense reimbursements.

Operating expenses through March 2023 were \$169.0 million, an increase of \$4.7 million or 2.9%, compared to the same period in 2022. Materials, equipment, supplies, and contract services decreased \$1.1 million, or 2.2%. Salaries and related benefits increased \$3.2 million or 7.1% compared to the same period in 2022 due to an increase in salaries and benefits expense. Utilities expense increased \$2.6 million or 38.7% due to higher usage and utility rates. Depreciation and amortization expense decreased \$0.1 million or 0.2%.

For the three months ended March 31, 2023, non-operating expenses, including interest expense and investment losses, before capital contributions were \$38.3 million, a decrease of \$18.1 million compared to the same period in 2022. For the three months ended March 31, 2023, non-operating revenue was \$53.2 million, a \$45.3 million increase compared to the same period in 2022, primarily from an increase in investment income and passenger facility charges. For the three months ended March 31, 2023, PFC revenue was \$25.2 million, an increase of \$4.7 million, or 23.0%, compared to the same period in 2022. Outgoing contributions to the Dulles Corridor Enterprise for Phase 2 of the Dulles Metrorail Project were \$0.5 million, a decrease of \$1.1 million, or 67.7% compared to the same period in 2022. Incoming contributions for 2021 included the reversion of a building, with a fair market value of \$27.5 million, from a tenant back to the Airports Authority.

Capital contributions of \$3.7 million through March 31, 2023 included federal, state and local grants by the Aviation Enterprise Fund.

Through March 31, 2023, the Aviation Enterprise Fund's net position increased \$43.5 million, reflecting operating income of \$24.9 million, net non-operating revenues of \$14.9 million and capital contributions of \$3.7 million.

The following table provides details of unaudited concession revenues by major category for the three months ended March 31, 2023, March 31, 2022 and March 31, 2021.

#### TOTAL CONCESSION REVENUES BY MAJOR CATEGORY AVIATION ENTERPRISE FUND (Unaudited)

	Three Months Ended March 2021	Three Months Ended March 2022	Percentage Change from 2021 to 2022	Three Months Ended March 2023	Percentage Change from 2022 to 2023
Parking	\$7,982,067	\$26,652,941	233.9%	\$36,678,048	37.6%
Rental Cars	4,827,956	11,687,586	142.1%	12,236,318	4.7%
Fixed based operator	8,048,017	8,632,733	7.3%	10,108,702	17.1%
Terminal Concessions					
Food and beverage	1,158,959	6,461,098	457.5%	8,869,041	37.3%
Newsstand and retail	558,496	2,175,327	289.5%	2,907,993	33.7%
Duty free	325,577	669,235	105.6%	2,060,137	207.8%
Display advertising	2,275,000	3,291,667	44.7%	4,166,667	26.6%
In-flight catering	3,314,971	3,157,355	(4.8%)	4,417,343	39.9%
Ground Transportation	2,081,284	6,733,984	223.5%	10,715,295	59.1%
All other	1,171,549	1,628,344	39.0%	2,280,697	40.1%
Total <sup>1</sup>	\$31,743,876	\$71,090,270	123.9%	\$94,440,240	32.8%

<sup>&</sup>lt;sup>1</sup> Totals may not add due to rounding. Source: Airports Authority records.

The Aviation Enterprise Fund's concession revenues for the three months ended March 31, 2023 increased \$23.3 million, or 32.8%, compared to the same period in 2022. As a percentage of operating revenues, concession revenue increased to 48.7% compared to 42.4% for the same period in 2022. In the first three months of 2023, parking revenues were the Aviation Enterprise Fund's largest source of concession revenue, representing 38.8% of total concession revenues and 18.9% of operating revenues. Rental car revenues of \$12.2 million increased by \$0.5 million or 4.7% compared to the same period in 2022. For the three months ended March 31, 2023, fixed based operator revenue was \$10.1 million, an increase of \$1.5 million or 17.1% compared to the same period in 2022. For the three months ended March 31, 2023, food and beverage revenue at the Airports of \$8.9 million increased by \$2.4 million or 37.3% and newsstand and retail concession revenue increased \$0.7 million or 33.7% compared to the same period in 2022. Duty free revenue increased by \$1.4 million or 207.8% compared to the same period in 2022. Display advertising increased \$0.9 million or 26.6% compared to the same period in 2022. In-flight Catering revenue increased by \$1.3 million or 39.9% compared to the same period in 2022. Ground Transportation increased \$4.0 million, or 59.1% as compared to 2022. Of the total Ground Transportation revenue, approximately \$8.3 million or 77.7% is attributable to trip fee revenue from Transportation Network Companies ("TNCs") as compared to approximately \$5.5 million or 82.2% for the same period in 2022. Other concession revenue which includes registered traveler programs and luggage cart services increased by \$0.7 million or 40.1% compared to the same period in 2022.

## CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS

## **Airport Use Agreement and Premises Lease**

On January 1, 2015, the current Airline Agreement became effective with nearly all of the airlines providing service at Reagan National Airport and Dulles International Airport. For airlines operating at Reagan National Airport, the term of the agreement is 10 years, starting from the

effective date of the agreement to December 31, 2024. For airlines operating at Dulles International Airport, the term of the agreement was originally three years, starting from the effective date of the agreement to December 31, 2017; however, the Airports Authority and the airlines signed a First Universal Amendment to the Airline Agreement on July 27, 2016, extending the term of the agreement for Dulles International Airport to December 31, 2024 to be coterminous with the agreement at Reagan National Airport. In anticipation of the December 31, 2024 expiration of the Airline Agreement, the Airports Authority has commenced discussions with the Signatory Airlines regarding the future Airline Agreement.

The Airports Authority and the airlines operating at Dulles International Airport signed a Second Universal Amendment to the Airline Agreement, dated September 10, 2018, relating to the application of the net proceeds received by the Airports Authority from the sale of the Western Lands. See "THE AIRPORTS AUTHORITY – Lease of the Airports Authority." The Second Universal Amendment excludes from the definition of Revenues in the Airline Agreement all proceeds from the sale of the Western Lands, together with any interest income and profit realized from investment of those proceeds. Pursuant to the Second Universal Amendment, the Western Lands' sale proceeds and interest income and dividends are segregated in separate accounts and must be used solely to reduce costs that the Airports Authority would otherwise include in calculating the rentals, fees and/or charges that are assessed from airlines operating at Dulles International Airport. The Airports Authority is required to use, at a minimum, the interest income and dividends from the Western Lands' sale proceeds to make those reductions in rentals, fees and/or charges in each Fiscal Year through 2024.

The Airline Agreement provides for the use and occupancy of facilities at the Airports and establishes the rentals, fees and charges, including landing fees and terminal rents, to be paid by the Signatory Airlines. Airline rentals, fees and charges are calculated using a methodology where the Airports Authority costs, including debt service and debt service coverage, are allocated to separate cost centers at each Airport. Each Signatory Airline's rentals, fees and charges are based on its pro rata use of the facilities within the cost centers that cover Airport facilities utilized by the airlines. Each Signatory Airline's payment includes its pro rata share of the Airports Authority's total requirements in such airline-supported cost centers (including a component representing debt service plus debt service coverage), less transfers from the prior year. Airline payments of rents, fees and other charges pay for the costs assigned to the airline-supported cost centers. The Airports Authority's other revenues, principally concession revenue, pay for the costs assigned to other cost centers at the Airports, such as roadways, parking areas and non-airline revenue generating portions of the terminal. See APPENDIX C – "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease."

The current Airline Agreement is a hybrid agreement, which includes elements of both compensatory and residual rate-making methodologies. The Airline Agreement is compensatory to the extent that the costs are allocated to specified cost centers, and the users of those cost centers are responsible for paying the costs. Signatory Airlines agree to pay fees that allow the Airports Authority to recover the total cost requirement of the airline-supported cost centers, such as: airfield, terminal, equipment (e.g., loading bridges, baggage conveyors and devices), passenger conveyance, and the International Arrivals Building at Dulles International Airport. The Airports Authority is responsible for paying the costs for all non-airline cost centers, such as general aviation, ground transportation, and Dulles International cargo.

Airline rentals, fees and charges are established annually during the budget process and are based on projected activity and costs. The Airline Agreement provides for a mid-year adjustment to these rentals, fees and charges. In addition, at any time during the year if revenues fall 5% or more below projections, airline rentals, fees and charges may be adjusted to provide for full cost recovery plus debt service coverage.

The Airline Agreement has rate making features that are designed to ensure that the Airports Authority's debt service and related coverage obligations under the Indenture are met. The Indenture requires that there be a minimum 125% coverage on the debt service on the Bonds. Under the Airline Agreement, the Airports Authority sets its airline rentals, fees and charges at each Airport to recover its costs in the airline-supported cost centers. These costs include 100% of the debt service assigned to these cost centers, plus debt service coverage on that debt service at varying amounts, depending on the Airport and the year (as described in the following paragraph). In addition, the Airline Agreement authorizes the Airports Authority to make immediate rate adjustments at an Airport in the event that Net Revenues in any Fiscal Year at the Airport are projected to be less than 125% of the Annual Debt Service allocated to the Airport. These adjustments, which are referred to as "Extraordinary Coverage Protection Payments" under the Airline Agreement, are designed to increase the projected Net Revenues at the Airport to an amount equal to 125% of the Annual Debt Service that is allocated to the Airport.

During the first three years of the Airline Agreement (2015 through 2017), airline-funded debt service coverage at both Reagan National Airport and Dulles International Airport was 35% of debt service. In the fourth through ninth years of the Airline Agreement (2018 through 2023), airline-funded debt service coverage will be 30% of debt service at both Airports. In 2024, the final year of the Airline Agreement, airline-funded debt service coverage will be 25% of debt service at both Airports. Under the Airline Agreement, in the event that the 125% debt service coverage is not met at an Airport, an adjustment in the airlines rentals, fees and charges will occur at that Airport to produce compliance with the rate covenant. In the event that the Airports Authority is unable to adjust airline rates sufficiently at the Airport that failed to generate the required 125% debt service coverage, under the Airline Agreement, the Airports Authority shall adjust the rates at the other Airport as necessary to fulfill the Airports Authority's obligation to meet the debt service coverage covenant required by the Indenture. See APPENDIX C – "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease."

The Airline Agreement approved certain capital construction programs at each of the Airports including an approximately \$1.5 billion construction program at Reagan National Airport and an approximately \$588 million construction program at Dulles International Airport. Approximately \$445.6 million of the \$588 million CCP at Dulles International Airport was added as part of the First Universal Amendment. Each approved program amount is escalated annually in accordance with the terms of the Airline Agreement and the First Universal Amendment. Additional CCP projects may be approved by the MII approval process pursuant to the Airline Agreement. See "THE CCP."

An airline that files for bankruptcy has the right to reject its Airline Agreement with the Airports Authority. In the event the Airports Authority does not recover all of its costs pursuant to the Airline Agreement with a bankrupt carrier, the Airports Authority may adjust the rentals, fees and charges for all Signatory Airlines in a subsequent rate period to recover the rentals, fees

and charges due from the bankrupt carrier. As a result, if a Signatory Airline were to reject its lease of space at either Airport, the unrecovered rental costs could be allocated among the remaining airline tenants.

If an airline is not a Signatory Airline, it is required to pay rentals, fees and charges set by the Airports Authority in accordance with regulations adopted by the Board and US DOT requirements. While the Airports Authority believes that its rate-making methodologies, including its allocation of costs for purposes of establishing rentals, fees and charges, are reasonable, no assurance can be given that challenges by an airline will not be made to the rentals, fees and charges established by the Airports Authority or its methods of allocating particular costs. See "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS – Effect of Airline Bankruptcies."

The Airline Agreement is not assigned or pledged to the Trustee as security for the Bonds. The Airline Agreement may be amended at any time without the consent of the Holders of the Bonds. If for any reason the Airline Agreement is amended, expires or is terminated, the Airports Authority will set airline rentals, fees and charges in accordance with a successor agreement or regulations of the Board, consistent with US DOT requirements (including that such rentals, fees and charges be reasonable and non-discriminatory) and in an amount sufficient to satisfy the rate covenant in the Indenture. Such amendments, successor agreements or regulations could affect the calculation of future airline revenues. Projected Net Revenues are presented in the Report of the Airport Consultant, which are based on the assumed continuation of the provisions of the Airline Agreement. See APPENDIX A - "Report of the Airport Consultant" and APPENDIX C - "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease." The definition of "Toll Revenues" in the indenture securing the Dulles Toll Road Revenue Bonds excludes Revenues to ensure that no Revenues from the operation of the Airports will be used to support the operation of the Dulles Toll Road or finance Dulles Toll Road improvements or the Dulles Metrorail Project. See "THE AIRPORTS AUTHORITY - Operation of the Dulles Toll Road and Completion of the Dulles Metrorail Project."

The Airline Agreement also provides that, in accordance with a formula, the Airports Authority will share its revenue, after certain expenses, referred to as Net Remaining Revenues or NRR, with the Signatory Airlines. To calculate the Airports Authority's and the Signatory Airlines' respective shares of NRR, the total amount of NRR is first segregated by Airport. NRR at each Airport is then reduced by debt service coverage on Subordinated Bonds and coverage in the tenant equipment cost centers allocable to each Airport, if any, with the Signatory Airlines receiving 100% of an amount equal to the debt service coverage on any Subordinated Bonds and coverage in the tenant equipment cost centers and the Airports Authority receiving 100% of an amount equal to depreciation. The remaining NRR of each Airport is then shared between the Signatory Airlines and the Airports Authority in accordance with the Airline Agreement.

NRR at Reagan National Airport is shared under the Airline Agreement as shown in the table below:

Year in Which NRR is Generated	NRR Sharing at Reagan National Airport	Maximum Amount of Airports Authority Share Usable at Dulles International Airport in Year Following Year of Generation				
2014, 2015, 2016	100% Airports Authority/ 0% Signatory Airlines	\$40 million				
2017	55% Airports Authority/ 45% Signatory Airlines	\$35 million				
2018	55% Airports Authority/ 45% Signatory Airlines	\$30 million				
2019 through 2023	45% Airports Authority/ 55% Signatory Airlines	\$25 million				
2024	NRR allocation between the Airports Authority and the Airlines, as we as any limitation on the use of the Airports Authority's share at Dulle International Airport, to be described in a new airport use and leas agreement, which would be effective in 2025, or, if none, in accordance with the allocation for NRR generated in 2023, as described above.					

NRR at Dulles International Airport was divided equally between the Airports Authority and the Signatory Airlines up to a plateau of \$15.6 million (in 2014 dollars) escalated by the U.S. Implicit Price Deflator Index from the base date of January 1, 2016 through 2019. Currently, the remainder is split with 25% allocated to the Airports Authority and 75% allocated to the Signatory Airlines.

The Signatory Airlines' share of NRR is used to reduce airline rentals, fees and charges in the year following the year that the NRR is earned. The Airports Authority uses its share of NRR to finance its Capital, Operating and Maintenance Investment Program or for any other lawful purpose. Under the formula set forth in the Airline Agreement, through 2018 the Airports Authority retained a higher share of NRR from Reagan National Airport than under the prior agreement and has the ability to use its share to reduce the requirement for airline rentals, fees and charges at Dulles International Airport, including up to a maximum of \$30 million in 2018 and \$25 million in years 2019 through 2023.

Under the Airline Agreement, the Airports Authority may increase its share of NRR from Reagan National Airport in the event any new legislation is enacted which expands the Perimeter Rule by allowing additional flights in excess of the 1,250 mile perimeter. For each new pair of beyond-perimeter flights, the Airports Authority would be entitled to \$1.5 million from Reagan National Airport NRR, before any sharing of NRR occurs with the airlines. For additional information about the effect of an expansion or reduction of the Perimeter Rule on NRR, see "THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY – Airports Activity," "THE AIRPORTS AUTHORITY – Regulations and Restrictions Affecting the Airports" and APPENDIX C – "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease."

## **Terminal Concession Agreements**

The Airports Authority has agreements to lease space to certain concessionaires who provide food, beverages, specialty retail, news, gift and other products and services to users of the Airports. The Airports Authority has a management contract with MarketPlace Washington, LLC ("MarketPlace") for the food and beverage and retail concessions at the Airports that commenced on January 1, 2013 and expires on December 31, 2023. Under this contract, MarketPlace enters into leases for food and beverage and retail facilities at the Airports. MarketPlace receives a management fee from the Airports Authority for leasing and managing these facilities. Given the December 31, 2023 expiration date of the current contract, the Airports Authority has begun the solicitation process for a new concession fee manager contract with an expected effective date of January 1, 2024 and an expiration date of March 31, 2034.

Concession contracts generally obligate the concessionaire to pay the greater of a percentage of gross revenues or a minimal annual guarantee ("MAG") payment to the Airports Authority. Typically, these contracts extend for a period of five to ten years. The concession contracts are generally solicited and awarded in accordance with the competitive bid procedures outlined in the MarketPlace contract and/or the Airports Authority's Contracting Manual. Terminal concession revenue represented 17.7% of total concession revenue and 8.3% of total operating revenue in 2022.

## **Parking Facility Agreements**

The Airports Authority has established two separate management agreements (one for each Airport) with SP Plus Corporation to manage and operate the parking facilities at each of the Airports. Both management agreements commenced in October 2021 under a three-year base period with two one-year options that are exercisable by the Airports Authority at its sole discretion for both Airports; extending the contracts through September 2026. Under each management agreement, SP Plus Corporation receives an annual management fee (as bid) and reimbursement for defined reimbursable expenses incurred for the management and operation of the parking facilities.

There are approximately 8,700 public parking spaces at Reagan National Airport and approximately 17,800 public parking spaces at Dulles International Airport. Parking revenue represented 39.6% of concession revenue in 2022 and 18.6% of total operating revenue in 2022. See table entitled "TOTAL CONCESSION REVENUES BY MAJOR CATEGORY" herein.

## **Rental Car Facility Agreements**

In 2023, the Airports Authority awarded on-airport rental car concession contracts at Reagan National Airport to Enterprise RAC Company of Maryland, LLC (operating Alamo, Enterprise, and National brands), The Hertz Corporation (operating Hertz, Dollar and Thrifty brands), and Sixt Rent a Car, LLC (operating the Sixt brand). The base term of each contract expires on January 31, 2028. At the Airports Authority's discretion, the contracts may be extended for two (2) one-year option periods. The Airports Authority receives the greater of a MAG payment or 10% of the gross receipts of each on-airport rental car operator as a concession fee.

For the on-airport rental car companies, the MAG payment is contractually waived in any month in which the number of deplaning passengers at the Airport is less than 75% of the number of deplaning passengers in the same month of the preceding calendar year. Contractual MAG waiver periods occurred due to a decline in deplaning passengers because of the COVID-19 pandemic. During all such periods the rental car companies were still required to pay all other contractual obligations owed to the Airports Authority. In the last year of the previous contract, the terms of which ran from February 2022 through January 2023, the number of deplaning passengers was never less than 75% of the number of deplaning passengers in the same calendar month of the 2019 calendar year, and therefore, no waivers were issued.

Each on-airport rental car operator at Reagan National Airport assesses its customers and remits to the Airports Authority a daily Customer Contract Fee (CCF) of \$3.50 for each day of each rental. The fee is established by the Airports Authority to recover the cost of debt service and other costs associated with the rental car facilities.

An off-airport rental car permit was issued to Avis Budget Car Rental, LLC (operating Avis and Budget brands) effective March 24, 2023 to pick-up and discharge customers at designated airport locations. The Airports Authority receives 8% of the gross receipts that exceed \$300,000 per year for off-airport rental car operators as a privilege fee.

There currently are four groups of on-airport rental car operators at Dulles International Airport: Avis Budget Car Rental, LLC (operating Avis and Budget brands), Enterprise RAC Company of Maryland, LLC (operating Alamo, Enterprise and National brands), The Hertz Corporation (operating Hertz, Dollar and Thrifty brands) and Sixt Rent A Car, LLC. The Airports Authority receives the greater of a MAG payment or 10% of the gross receipts of each on-airport rental car operator as a concession fee. The MAG payment is contractually abated if the total number of non-connecting deplaning passengers is less than 80% of the preceding contract year. MAG payments were abated for the months of March through June 2020, the end of the first contract year. For the second contract year commencing July 1, 2020, MAG payments were reduced by 62.4% to reflect the total reduction in non-connecting deplaning passengers compared to the previous year. The MAG for each rental car operator was abated by 25% for the months of July, August, and September 2021. No further relief was necessary following September 2021 as deplanements did not meet the contractually required percentage for abatement. During the MAG abatement period(s), the Contractor was still required to pay all other contractual amounts. Each on-airport rental car operator at Dulles International Airport also currently assesses its customers and remits to the Airports Authority a daily Customer Facility Charge (CFC) of \$3.00 established by the Airports Authority to recover costs associated with the design and construction of fixed improvements at the on-airport rental car sites. Contracts with rental car operators at Dulles International Airport were awarded on July 1, 2019, for an initial five-year term to expire on June 30, 2024. The contracts include two, one-year extension periods.

## **Agreements with Transportation Network Companies**

The Airports Authority has three active TNC service permits issued to Rasier, LLC (commonly known as Uber), Lyft, Inc. and ALTO Operations Virginia, LLC (commonly known as ALTO) granting each of these companies the privilege to provide ground transportation services at the Airports as TNCs. TNCs are app-based transportation companies that connect paying

passengers with non-commercially licensed drivers providing ground transportation services. In accordance with the permits, the TNCs remit payment to the Airports Authority of \$5.00 for each pick-up or drop-off made at the Airports.

## **Agreements with Fixed Base Operators**

In the fall of 2022, the Airports Authority issued a Request for Proposals for two fixed base operator ("FBO") servicer contracts and subsequently issued two new long term contracts. The contract with Signature Flight Support commenced November 1, 2022 and expires October 31, 2042. The contract with Atlantic Aviation commences on June 1, 2023 and also expires October 31, 2042. Each contract also has two 5-year extension options and requires the payment of the greater of a MAG or percentage rent, and facility rent. The agreements also provide for waivers of the MAG payment at the Airports Authority's discretion if the total number of general aviation flights is less than 75% of the total general aviation flights in the preceding contract year. During any MAG waiver period, the contractor is still required to pay all other contractual amounts. In 2022, the Airports Authority did not waive the FBO MAGs.

### THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY

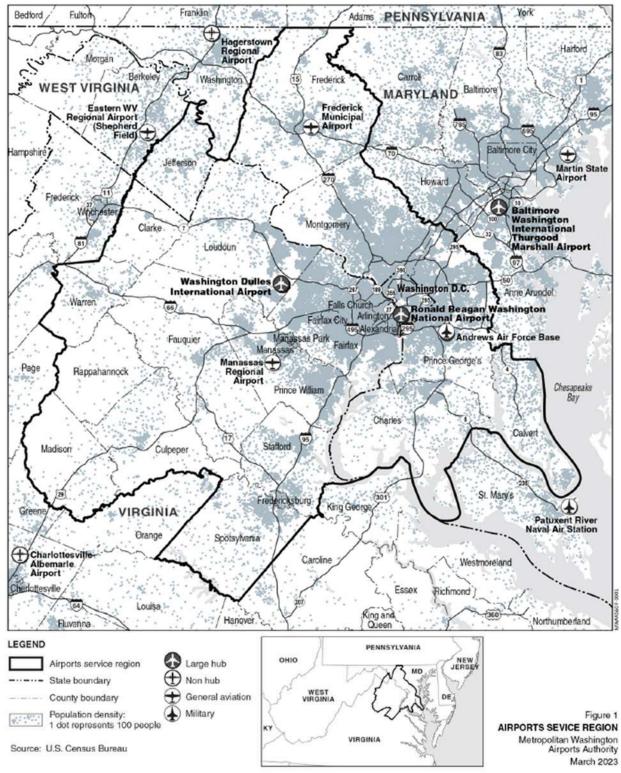
## **The Airports Service Region**

The Airports Service Region includes the District of Columbia; the Maryland counties of Calvert, Charles, Frederick, Montgomery and Prince George's; the Virginia counties of Arlington, Clarke, Culpeper, Fairfax, Fauquier, Loudoun, Madison, Prince William, Rappahannock, Spotsylvania, Stafford and Warren; the independent Virginia cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas and Manassas Park; and the West Virginia county of Jefferson.

According to the U.S. Department of Commerce, Bureau of Census, between 2010 and 2021 (the most recent data available), population growth in the Airports Service Region increased an average of 1.0% annually, compared with a 0.6% average annual increase for the nation. The Airports Service Region's per capita personal income in 2021 (the most recent data available) was 26.0% higher than the average for the United States, making it the 9<sup>th</sup> highest in the U.S., as reported by the U.S. Department of Commerce, Bureau of Economic Analysis. Since 2010, the rate of unemployment in the Airports Service Region has been lower than the average for the United States, and in 2022, unemployment in the Airports Service Region was 3.4% compared with 3.6% for the nation according to the U.S. Department of Labor, Bureau of Labor Statistics. The Airports Service Region's economy is typically insulated from downturns by the economic activity generated by the federal government, although in 2013, implementation of the sequestration provisions of the Budget Control Act of 2011 (Pub. L. 112-25) (the "Budget Control Act") led to reductions in federal employment and spending. Beyond employment and commerce driven by the federal government, the Airports Service Region is home to other major employers. For example, phase one of Amazon.com Inc.'s second headquarters project (HQ2) in Crystal City called Metropolitan Park is scheduled to open in June and is anticipated to have positive economic and population impacts on the Airports Service Region, especially around Reagan National Airport. An anticipated 8,000 employees will work at the Metropolitan Park campus when it opens, with capacity for a total of 14,000 employees. Amazon recently announced that it will delay construction of phase two of HQ2 called PenPlace to be located in Arlington County. The

Airports Authority has no financial obligations related to HQ2. See "APPENDIX A – Report of the Airport Consultant."

## **AIRPORTS SERVICE REGION**



Source: Report of the Airport Consultant.

## **Airlines Serving the Airports**

Listed below are airlines that are scheduled to serve the Airports as of June 1, 2023:

### **REAGAN NATIONAL AIRPORT**

#### **U. S. MAINLINE AIRLINES** FOREIGN FLAG AIRLINES **REGIONAL AIRLINES**

Alaska Airlines Air Canada Jazz (Regional) American Airlines Delta Air Lines Frontier Airlines JetBlue Airways Southwest Airlines United Airlines

Endeavor Air3 Envov1 Mesa Airlines<sup>2</sup> PSA Airlines<sup>1</sup> Republic Airlines<sup>1,2,3</sup> SkyWest Airlines<sup>2</sup>

Commutair<sup>2</sup> Envoy1

GoJet Airlines<sup>2</sup>

Mesa Airlines<sup>2</sup>

PSA Airlines<sup>1</sup>

Republic Airlines<sup>2,3</sup>

SkyWest Airlines<sup>2,3</sup>

**ALL-CARGO CARRIERS** 

## **DULLES INTERNATIONAL AIRPORT**

#### **U. S. MAINLINE AIRLINES** FOREIGN FLAG AIRLINES **REGIONAL AIRLINES** (continued)

Alaska Airlines Allegiant Air Iberia Airlines American Airlines Icelandair Delta Air Lines ITA Airways

Southern Airways Express KLM-Royal Dutch Airlines Southwest Airlines Korean Air

United Airlines Lufthansa German Airlines Norse Atlantic Airways

Play Airlines

WestJet Airlines

Porter Airlines (Regional)

Qatar Airways FOREIGN FLAG AIRLINES Roval Air Maroc

Aer Lingus Air Canada Scandinavian Airlines System

Air Canada Jazz (Regional) TAP Air Portugal Air China A Turkish Airlines Virgin Atlantic Airways Air France Air India Volaris Costa Rica All Nippon Airways Volaris El Salvador

Saudi Arabian Airlines Air Transport Int'l FedEx Mountain Air Cargo

United Parcel Service

Austrian Airlines

Avianca Airlines **British Airways** Brussels Airlines Copa Airlines EgyptAir **Emirates** 

**Ethiopian Airlines** Etihad Airways

Source: Official Airline Guide; Airports Authority records (for all-cargo carriers).

Operates under a code sharing agreement with American.

Operates under a code sharing agreement with United.

Operates under a code sharing agreement with Delta.

Suspended IAD service and plans to return later in 2023.

## **Airports Activity**

Largely as a result of the Perimeter Rule, Reagan National Airport offers primarily short and medium haul passenger flights to destinations within 1,250 miles of Washington, D.C. See "THE AIRPORTS AUTHORITY – Regulations and Restrictions Affecting the Airports." As scheduled for June 2023, nonstop airline service will be provided from Reagan National Airport to 100 U.S. destinations and five international destinations, including the Bahamas and several destinations in Canada for a total of 105 non-stop destinations, compared to 97 total non-stop destinations in 2019. See "THE AIRPORTS AUTHORITY – Regulations and Restrictions Affecting the Airports."

Dulles International Airport serves primarily medium to long-haul markets, which is partly a function of the Perimeter Rule at Reagan National Airport. Since 1986, Dulles International Airport has served as a hub for United. As scheduled for June 2023, nonstop airline service will be provided from Dulles International Airport to 77 U.S. destinations and 62 international destinations, as compared to 87 U.S. destinations and 57 international destinations in 2019.

## **Historical Enplanement Activity**

The following table summarizes total commercial enplanements at Reagan National Airport and Dulles International Airport from 2013 through 2022. See "CERTAIN INVESTMENT CONSIDERATIONS."

	Reagan Nationa	l Airport 1,2,3		Dulles International Airport 1,2,3						
	Total Enplanements	Annual Growth	Domestic Enplanements	Annual Growth	International Enplanements	Annual Growth	Total Enplanements	Annual Growth		
2013	10,198	4.2%	7,397	(5.8%)	3,464	4.4%	10,861	(2.8%)		
2014	10,458	2.6%	7,112	(3.8%)	3,567	3.0%	10,679	(1.7%)		
2015	11,496	9.9%	7,139	0.4%	3,575	0.2%	10,714	0.3%		
2016	11,770	2.4%	7,145	0.1%	3,723	4.2%	10,868	1.4%		
2017	11,934	1.4%	7,466	4.5%	3,858	3.6%	11,324	4.2%		
2018	11,710	(1.9%)	7,957	6.6%	3,990	3.4%	11,947	5.5%		
2019	11,949	1.8%	8,150	2.4%	4,177	4.7%	12,327	3.2%		
2020	3,768	(68.5%)	3,095	(62.0%)	988	(76.3%)	4,083	(66.9%)		
2021	7,049	87.1%	5,720	84.8%	1,665	68.5%	7,385	80.9%		
2022	11,969	70.0%	6,924	21.0%	3,661	120%	10,586	43.3%		
			Annual (	Compounded	Growth					
2013-2022		1.8%		(0.7%)		0.6%		-0.3%		

<sup>&</sup>lt;sup>1</sup> Passenger enplanements in thousands.

Source: Airports Authority records.

<sup>&</sup>lt;sup>2</sup> Excludes passengers enplaned on general aviation and military flights.

<sup>&</sup>lt;sup>3</sup> Enplanement figures have been reconciled to the Airports Authority's records and may not match figures released in previous issues.

## Reagan National Airport

In 2022 enplanements at Reagan National Airport were 12.0 million, nearly all on flights to domestic destinations, which was 100.2% of enplanements in 2019. For 2022, O&D passengers accounted for 79.3% of enplanements at Reagan National Airport. The top airline at Reagan National Airport, American Airlines (along with its code-sharing affiliate carriers), enplaned 54.8% of all passengers in 2022.

For the first three months of 2023, combined domestic and international enplanements at Reagan National Airport were 2.9 million compared to 2.7 million for the same period in 2019, a recovery of 107.5%.

## Dulles International Airport

Prior to the COVID-19 global pandemic, domestic and international enplanements at Dulles International Airport had been increasing each year since 2015, notably, growing 2.4% and 4.8%, respectively, in 2019. Domestic activity was driven by United Airlines' increased capacity and new destinations. International enplanements grew to a record 4.2 million in 2019, which was the 16th consecutive year of growth. Foreign flag airlines that have started service from Dulles International Airport since 2012 are Aer Lingus, Aeromexico (discontinued December 2018), Air China (currently suspended), Air India, Alitalia (discontinued January 2020), Brussels Airlines, Cabo Verde Airlines (discontinued February 2020), Cathay Pacific Airways (discontinued February 2020), Egyptair, Etihad Airways, Iberia Airlines, ITA Airways, Norse Atlantic Airways, Play Airlines, Porter Airlines, Royal Air Maroc, TAP Air Portugal, Volaris Costa Rica, Volaris El Salvador, and WestJet Airlines.

Total enplanements at Dulles International Airport were approximately 10.6 million in 2022, which was 85.9% of enplanements in 2019. For 2022, O&D passengers accounted for 68.1% of enplanements at Dulles International Airport. United Airlines, along with its code-sharing affiliate carriers, accounted for 83.4% of domestic enplanements and 41.7% of international enplanements at Dulles International Airport in 2022 while foreign-flag scheduled airlines accounted for virtually all of the remaining 58.3% of international enplanements. See "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS - General - United."

For the first three months of 2023, domestic enplanements at Dulles International Airport were approximately 1.65 million compared to 1.69 million for the same period in 2019, a recovery of 97.7%, and international enplanements at Dulles International Airport were 806,302 compared to 785,798 for the same period in 2019, a recovery of 102.6%. See "COVID-19 GLOBAL PANDEMIC IMPACTS ON THE AIRPORTS AUTHORITY."

The following tables show passenger enplanements at Reagan National Airport and Dulles International Airport by airline between 2018 and 2022.

#### ENPLANEMENT MARKET SHARE BY AIRLINE AT REAGAN NATIONAL AIRPORT

	<u>2018</u>	<b>Share</b>	<u>2019</u>	<b>Share</b>	<u>2020</u>	<b>Share</b>	<u>2021</u>	<b>Share</b>	<u>2022</u>	<b>Share</b>
American Carriers	5,795,154	49.4%	5,998,429	50.2%	1,964,910	52.2%	4,125,183	52.2%	6,558,291	54.8%
Southwest	1,734,092	14.8%	1,800,257	15.1%	551,066	14.6%	905,647	14.6%	1,665,737	13.9%
Delta	1,697,573	14.5%	1,763,370	14.8%	546,336	14.5%	937,096	14.5%	1,528,066	12.8%
United Carriers	983,205	8.4%	897,708	7.5%	253,023	6.7%	376,009	6.7%	801,855	6.7%
JetBlue	891,218	7.6%	912,771	7.6%	229,540	6.1%	362,199	6.1%	899,953	7.5%
Alaska	326,707	2.8%	266,815	2.2%	106,213	2.8%	208,709	2.8%	257,612	2.2%
Frontier Carriers	163,743	1.4%	165,685	1.4%	90,803	2.4%	116,527	2.4%	166,804	1.4%
Air Canada Carriers	136,155	1.2%	135,477	1.1%	25,026	0.7%	15,173	0.7%	85,860	0.7%
Sun Country	6,425	0.1%	1,258	0.0%	-	0.0%	145	0.0%	-	0.0%
Other	165	0.0%	7,270	0.1%	620	0.0%	2,275	0.0%	5,307	0.0%
Grand Total*	11,734,437	100.0%	11,949,040	100.0%	3,767,537	100.00%	7,048,963	100.0%	11,969,485	100.0%

## ENPLANEMENT MARKET SHARE BY AIRLINE AT DULLES INTERNATIONAL AIRPORT

#### **Domestic Enplanements** <u>2018</u> **Share** <u>2019</u> **Share** <u>2020</u> **Share** <u>2021</u> **Share** <u>2022</u> Share United Carriers 6,060,100 76.2% 6,547,564 80.3% 2,581,399 83.4% 4,832,939 84.5% 5,777,321 83.4% Delta Carriers 525,255 6.6% 591,772 7.3% 212,172 6.9% 382,476 6.7% 469,201 6.8% American Carriers 507,311 6.4% 390,786 4.8% 144,049 4.7% 187,161 3.3% 241,847 3.5% Southwest 303,489 3.8% 219,571 2.7% 85,013 2.8% 187,681 3.3% 203,861 2.9% Alaska 234,313 2.9% 240,778 3.0% 63,659 2.1% 102,551 1.8% 171,133 2.5% Allegiant Air 0.0% 0.0% 0.0% 0.0% 0.7% 1,856 46,465 Southern Airways 0.0% 0.0% 0.0% 4,553 0.1%13,146 0.2% Frontier 172,773 2.2% 135,886 1.7% 8,188 0.3% 20,447 0.4% 295 0.0%JetBlue 1.9% 0.0% 0.0% 0.0% 149,798 2,538 0.0%Sun Country 0.0%16,859 0.2% 0.0%0.0%632 0.0%Other 0.0% 3,788 4,136 0.1% 954 0.0% 0.0 0.0% 353 0.0%Grand Total<sup>†</sup>

3,095,434

100.00%

5,719,847

100.0%

6,924,254

100.0%

100.0%

Source: Airports Authority records

7,956,827

100.0%

8,149,890

Excludes military and general aviation passenger enplanements. Enplanement data has been reconciled to the Airports Authority's records and may not match figures released in previous issues. The totals may not add due to rounding.

Excludes military and general aviation passenger enplanements. Enplanement data has been reconciled to the Airports Authority's records and may not match figures released previously. The totals may not add due to rounding.

ENPLANEMENT MARKET SHARE BY AIRLINE AT DULLES INTERNATIONAL AIRPORT

**International Enplanements** 2018 Share 2019 Share 2020 Share 2021 Share 2022 Share United 1,541,916 38.6% 1,572,591 37.7% 342,151 34.6% 653,970 39.3% 1,525,467 41.7% Lufthansa 221,283 5.5% 220,563 5.3% 35,167 3.6% 56,831 3.4% 167,525 4.6% 4.4% British Airways 173,618 167.894 4.0% 41.751 4 2% 49.686 3.0% 143,348 3 9% 172,605 4.3% 192,970 4.6% 129,216 7.8% 201.759 5.5% Avianca1 62,650 6.3% Air France 159,953 4.0% 173,978 4.2% 27,756 2.8% 52,905 3.2% 139,167 3.8% Emirates 140,976 3.5% 142,983 3.4% 35,451 3.6% 45,671 2.7% 107,697 2.9% COPA 107,002 2.7% 111,784 2.7% 32,353 3.3% 73,087 4.4% 108,502 3.0% 2.5% Ethiopian 105,882 2.7% 106,158 50,332 5.1% 81,167 4.9% 111,873 3.1% Turkish 99,256 2.5% 102,072 2.4% 49,808 5.0% 86,371 5.2% 145,387 4.0% KLM Royal 93,722 2.4% 92,634 2.2% 20,563 2.1% 27,830 1.7% 65,133 1.8% Dutch Qatar Airways 87,348 2.2% 99,956 2.4% 37,400 3.8% 90,279 5.4% 131,587 3.6% Korean Air 82,946 2.1% 86,110 2.1% 24,389 2.5% 14,587 0.9% 51,294 1.4% 1.9% Icelandair 74,679 79,260 1.9% 8,475 0.9% 23,905 1.4% 52,086 1.4% 1.7% 30,094 0.8% All Nippon 72,850 1.8% 72,881 14,155 1.4% 6,557 0.4% South African 72,046 1.8% 70,795 1.7% 14,393 1.5% 0.0% 0.0% Virgin Atlantic 70,304 1.8% 69,066 1.7% 7,797 0.8% 0.0% 38,171 1.0% 68,763 1.7% 73,059 1.7% 9,606 1.0% 8,296 0.5% 77,253 2.1% Aer Lingus Etihad 67,836 1.7% 72,658 1.7% 14,446 1.5% 28,183 1.7% 70,105 1.9% Air China 67,291 1.7% 71,218 1.7% 6,825 0.7% 0.0% 0.0% 40,064 10,723 SAS 66,294 1.7% 67,075 1.6% 10,260 1.0% 0.6% 1.1% 34,282 1.9% Air Canada 65.287 1.6% 67.545 1.6% 12,644 1.3% 2.1% 70.133 Saudi Arabian 64,976 1.6% 62,730 1.5% 32,382 3.3% 36,352 2.2% 63,517 1.7% 1.4% 1.4% 1.5% 34,524 55,498 1.5% Austrian 56,854 59,424 14,351 2.1% Porter 56,070 1.4% 57,189 1.4% 3,847 0.4% 4,936 0.3% 29,148 0.8% Brussels 40,568 1.0% 39,367 0.9% 2,278 0.2% 8,015 0.5% 21,522 0.6% 0.9% Air India 37,459 0.9% 37,671 20,295 2.1% 21.589 1.3% 1.0% 35,434 31,448 0.8% 0.5% 0.9% 0.8% 33,909 4,939 17,591 1.1% 33,017 Royal Air Maroc Alitalia 0.0% 29,187 0.7% 586 0.1% 0.0% 0.0% Aeromexico 29,035 0.7% 0.0%0.0%0.0% 0.0%Aeroflot 21,234 0.5% 19,727 0.5% 1,854 0.2% 4,572 0.3% 0.0%

\_

Cathay Pacific

LAN Airlines

Grand Total\*

Volaris

Egyptair Iberia

TAP

Other

14,633

8,410

4,658

12,910

3,990,112

0.4%

0.2%

0.1%

0.0%

0.0%

0.0%

0.3%

100.0%

44,097

23,657

25,506

18,181

13,141

4,177,036

1.1%

0.6%

0.0%

0.6%

0.4%

0.0%

0.3%

100.0%

4,519

6,272

10,303

17,872

10,133

988,003

0.5%

0.6%

0.0%

1.0%

1.8%

0.0%

1.0%

100.0%

0.0%

0.7%

0.0%

1.3%

1.6%

0.0%

0.3%

100.0%

40,003

47.651

35,035

20,186

4,092

3,661,757

11,221

21,304

25,873

5,653

1,665,176

0.0%

1.1%

0.0%

1.3%

1.0%

0.6%

0.1%

100.0%

<sup>\*</sup> Excludes military and general aviation passenger enplanements. Enplanement data has been reconciled to the Airports Authority's records and may not match figures released in previous issues. The totals may not add due to rounding.

<sup>&</sup>lt;sup>1</sup> The merger of Avianca and TACA was completed in 2013 and the official name of the airline is now Avianca. Source: Airports Authority records

COMBINED REAGAN NATIONAL AIRPORT AND DULLES INTERNATIONAL AIRPORT ENPLANEMENT MARKET SHARE BY AIRLINE

	2010	CI.			2020			CI.	2022	CI.
	<u>2018</u>	<u>Share</u>	<u>2019</u>	<u>Share</u>	<u>2020</u>	<u>Share</u>	<u>2021</u>	<u>Share</u>	<u>2022</u>	<b>Share</b>
United Carriers	8,585,221	36.3%	9,017,863	37.2%	3,176,573	40.5%	5,862,918	40.6%	8,104,643	35.9%
American Carriers	6,302,465	26.6%	6,389,215	26.3%	2,108,959	26.9%	4,312,344	29.9%	6,800,138	30.2%
Delta	2,227,713	9.4%	2,357,287	9.7%	759,659	9.7%	1,320,148	9.2%	1,997,394	8.9%
Southwest	2,037,581	8.6%	2,019,828	8.3%	636,081	8.1%	1,093,328	7.6%	1,869,600	8.3%
JetBlue	1,041,016	4.4%	915,309	3.8%	229,611	2.9%	362,199	2.5%	899,953	4.0%
Alaska	561,020	2.4%	507,593	2.1%	169,872	2.2%	311,260	2.2%	428,745	1.9%
Frontier	336,516	1.4%	301,571	1.2%	98,991	1.3%	136,974	1.0%	167,099	0.7%
Lufthansa	221,283	0.9%	220,563	0.9%	35,167	0.5%	56,831	0.4%	167,525	0.7%
Air Canada	201,442	0.9%	203,022	0.8%	37,670	0.5%	49,455	0.3%	155,993	0.7%
British Airways	173,618	0.7%	167,894	0.7%	41,751	0.5%	49,686	0.3%	143,348	0.6%
Avianca <sup>1</sup>	172,605	0.7%	192,970	0.8%	62,650	0.8%	129,216	0.9%	201,759	0.9%
Air France	159,953	0.7%	173,978	0.7%	27,756	0.4%	52,905	0.4%	139,167	0.6%
Emirates	140,976	0.6%	142,983	0.6%	35,451	0.5%	45,671	0.3%	107,697	0.48
COPA	107,002	0.5%	111,784	0.5%	32,353	0.4%	73,087	0.5%	108,502	0.5%
Ethiopian	105,882	0.5%	106,158	0.4%	50,332	0.6%	81,167	0.6%	111,873	0.5%
Turkish	99,256	0.4%	102,072	0.4%	49,808	0.6%	86,371	0.6%	145,387	0.6%
KLM Royal Dutch	93,722	0.4%	92,634	0.4%	20,563	0.3%	27,830	0.2%	65,133	0.3%
Qatar Airways	87,348	0.4%	99,956	0.4%	37,400	0.5%	90,279	0.6%	131,587	0.6%
Korean Air	82,946	0.4%	86,110	0.4%	24,389	0.3%	14,587	0.1%	51,294	0.2%
Icelandair	74,679	0.3%	79,260	0.3%	8,475	0.1%	23,905	0.2%	52,086	0.2%
All Nippon	72,850	0.3%	72,881	0.3%	14,155	0.2%	6,557	0.1%	30,094	0.1%
South African	72,046	0.3%	70,795	0.3%	14,393	0.2%	-	0.0%	_	0.0%
Virgin Atlantic	70,304	0.3%	69,066	0.3%	7,797	0.1%	_	0.0%	38,291	0.2%
Aer Lingus	68,763	0.3%	73,059	0.3%	9,606	0.1%	8,296	0.1%	77,253	0.3%
Etihad	67,836	0.3%	72,658	0.3%	14,446	0.2%	28,183	0.2%	70,105	0.3%
Air China	67,291	0.3%	71,218	0.3%	6,825	0.1%	-	0.0%	9	0.0%
SAS	66,294	0.3%	67,075	0.3%	10,260	0.1%	10,723	0.1%	40,064	0.0%
Saudi Arabian	64,976	0.3%	62,730	0.3%	32,382	0.4%	36,352	0.3%	63,517	0.3%
Austrian	56,854	0.2%	59,424	0.2%	14,351	0.2%	34,524	0.2%	55,498	0.3%
Porter	56,070	0.2%	57,189	0.2%	3,847	0.1%	4,936	0.0%	29,148	0.1%
Brussels	40,568	0.2%	39,367	0.2%	2,278	0.0%	8,015	0.1%	21,522	0.1%
Air India	37,459	0.2%	37,671	0.2%	20,295	0.3%	21,589	0.2%	35,434	0.1%
Royal Air Maroc	31,448	0.1%	33,909	0.1%	4,939	0.1%	17,591	0.1%	33,017	0.2%
Aeromexico	29,035	0.1%	33,707	0.1%	-,,,,,,	0.0%	-	0.1%	-	0.276
Aeroflot	21,234	0.1%	19,727	0.1%	1,854	0.0%	4,572	0.0%	_	0.0%
Cathay Pacific	14,633	0.1%	44,097	0.1%	4,519	0.0%	-,572	0.0%	-	0.0%
Volaris	8,410	0.0%	23,657	0.1%	6,272	0.1%	11,221	0.0%	40,003	0.0%
Sun Country	6,425	0.0%	18,117	0.1%	- 0,272	0.1%	145	0.1%	665	0.276
Alitalia	- 0,423	0.0%	29,187	0.1%	586	0.0%	-	0.0%	-	0.0%
TAP	-	0.0%	25,506	0.1%	10,303	0.0%	21,304	0.0%	47,651	0.0%
Egyptair	-	0.0%	18,181	0.1%	17,872	0.1%	25,873	0.2%	35,035	0.2%
	-									
Allegiant Air	-	0.0% 0.0%	-	0.0%	-	0.0%	1,856	0.0%	46,465	0.2%
Iberia	-		-	0.0%	-	0.0%	- 4 553	0.0%	20,186	.01%
Southern Airways	16.626	0.0%	22.402	0.0%	10.492	0.0%	4,553	0.0%	13,146	0.1%
Other	16,636	0.1%	22,402	0.1%	10,483	0.1%	13,944	0.1%	9,470	0.0%
Grand Total*	23,681,376	100.0%	24,275,966	100.0%	7,850,974	100.0%	14,433,986	100.0%	22,555,496	100.0%

The totals may not add due to rounding.

The merger of Avianca and TACA was completed in 2013 and the official name of the airline is now Avianca. Source: Airports Authority records.

## **Baltimore/Washington International Thurgood Marshall Airport**

Portions of the Airports Service Region also are served by Baltimore/Washington International Thurgood Marshall Airport ("BWI"), which is located northeast of Washington, D.C., approximately 30 miles from Reagan National Airport and 46 miles from Dulles International Airport. BWI is operated by the State of Maryland Department of Transportation. The Federal Lease and the Federal Act provide for the voluntary inclusion of BWI among the airports operated by the Airports Authority. At the time the Airports Authority was created, the State of Maryland declined to have BWI included in the Airports Authority.

According to information on BWI's website (which has not been independently verified by the Airports Authority or the Underwriters), enplaned passengers at BWI in 2022 were approximately 11.4 million, a 84.1% recovery compared with 2019. The five airlines with the largest number of enplaned passengers at BWI as of December 2022 were Southwest Airlines (68.8%), Spirit (9.1%), Delta (7.2%), American (5.3%) and United (3.7%).

The following table details the market share of enplaned passengers at Reagan National Airport, Dulles International Airport and BWI from 2018 through 2022:

Airport	2018	2019	2020	2021	2022
Reagan National Airport	31.3%	31.6%	28.0%	29.6%	35.2%
<b>Dulles International Airport</b>	32.0%	32.7%	30.3%	31.0%	31.2%
BWI	36.7%	35.7%	41.7%	39.5%	33.6%
	100.0%	100.0%	100.0%	100.0%	100.0%

Totals may not add due to rounding.

Source: Airports Authority records; BWI Air Traffic Statistics.

Changes in the market share of enplaned passengers at Reagan National Airport, Dulles International Airport and BWI in 2022 are related to differing effects of and subsequent recovery from the COVID-19 pandemic. Both Reagan National Airport and Dulles International Airport have gained market share due to increased travel demand, easing travel restrictions, recovery of air service offerings, and increased connecting traffic. Of the three regional airports, Reagan National Airport has historically served the most domestic business travel, Dulles International Airport has served the most international travel, while BWI has served the most domestic leisure travel. With the opening of Concourse E at Reagan National Airport as part of Project Journey, airlines serving Reagan National Airport have increased service operations to levels near or in excess of those of 2019. American Airlines, in particular, has up-gauged aircraft at Reagan National Airport and has used the Airport for increased connecting traffic and service to leisure destinations, resulting in additional market share. Dulles International Airport has been affected by the numerous restrictions on international travel that were put in place by the U.S. Government As international restrictions and entry criteria have eased, beginning in February 2020. international air service has resumed for many destinations served by Dulles International Airport,

including many in Latin America and Africa. In addition, United Airlines continues to direct connecting traffic through the Airport as it continues to rebuild its route network. BWI predominantly serves domestic, leisure travel which has not been as heavily impacted by travel restrictions related to COVID-19 and has recovered faster in comparison to business and international travel. However, in late 2022, Southwest Airlines, the predominant carrier at BWI, experienced staffing shortages, scheduling issues and unprecedented flight cancellations during the winter months which had an impact on flight operations and enplanements at BWI.

The following table details the approximate number of international enplaned passengers at Reagan National Airport, Dulles International Airport and BWI from 2018 through 2022:

Airport	2018	2019	2020	2021	2022
Reagan National Airport	184,000	183,000	34,000	28,000	134,000
<b>Dulles International Airport</b>	3,990,000	4,177,000	988,000	1,665,000	3,662,000
BWI	659,000	611,000	204,000	384,000	560,000
	4,833,000	4,971,000	1,226,000	2,077,000	4,356,000

Totals may not add due to rounding.

Source: Airports Authority records; BWI Air Traffic Statistics.

#### FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS

#### General

The Airports Authority derives a substantial portion of its operating revenues from airline landing and facility rental fees. The financial strength and stability of the airlines using the Airports, together with numerous other factors, influence the level of aviation activity at the Airports and revenues of the Airports Authority. Individual airline decisions regarding level of service, particularly hubbing activity at the Airports, also affect enplanements.

To mitigate the effects of the COVID-19 pandemic, the CARES Act allotted the following amounts to the airline industry: \$25 billion for payroll support to passenger airlines, \$4 billion for payroll support to cargo airlines and \$25 billion in loans and grants. CRRSA appropriated an additional \$16 billion to the Department of the Treasury to provide payroll support for passenger air carriers and certain aviation contractors. For recent developments affecting the airline industry, See "COVID-19 GLOBAL PANDEMIC IMPACTS ON THE AIRPORTS AUTHORITY" and "CERTAIN INVESTMENT CONSIDERATIONS – COVID-19."

## **Information Concerning the Airlines**

Certain airlines (or their respective parent corporations) are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file reports and other information with the SEC. Certain information, including financial information, concerning such airlines (or their respective parent corporations) is disclosed in reports and statements filed with the SEC. Such reports and statements can be inspected and copies

obtained at prescribed rates at the public reference facilities maintained by the SEC, which can be located by calling the SEC at 1-800-SEC-0330. The SEC maintains a website (www.sec.gov) that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Most airlines are required to file periodic reports of financial and operating statistics with the US DOT. Such reports can be inspected at the US DOT's Office of Airline Information Bureau of Transportation Statistics, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590, and copies of such reports can be obtained from the US DOT at prescribed rates.

Airlines owned by foreign governments or foreign corporations operating airlines (unless such foreign airlines have American Depository Receipts registered on a national exchange) are not required to file information with the SEC. Airlines owned by foreign governments or foreign corporations file limited information only with the US DOT.

The Airports Authority has no responsibility for the completeness or accuracy of information available from the US DOT or SEC, including, but not limited to, updates of information on the SEC's Internet site or links to other Internet sites accessed through the SEC's site.

#### American

For the year ended December 31, 2022, American Airlines and its regional affiliates represented approximately 56.8% of the revenues earned from airlines at Reagan National Airport. No other airline represented over 15% of such revenues at Reagan National Airport. Enplanements by American Airlines and its regional affiliates at the Airports in 2022 represented 30.2% of the combined enplanements at both Airports. According to information obtained from its filings with the SEC, American Airlines reported net income of \$127 million in 2022, compared to a net loss of \$2.0 billion in 2021.

On January 10, 2021, American Airlines and JetBlue Airways Corporation ("JetBlue") entered into an agreement with US DOT to address competitive issues related to the Northeast Alliance cooperative agreement between American Airlines and JetBlue. Pursuant to their agreement with US DOT, American Airlines agreed to divest four slot pairs and JetBlue agreed to divest two slot pairs, both at Reagan National Airport. The six slot pair divestitures will take the form of renewable leases. Upon termination of the Northeast Alliance, American Airlines and JetBlue will have the right to terminate each lease and use the slots upon the later of five years from the execution of the first lease of the subject slot or six months from the termination date of their alliance agreement. Spirit Airlines and Southwest Airlines filed letters with US DOT alleging the arrangement between JetBlue and American Airlines raises market consolidation and anticompetitive concerns. The National Air Carrier Association, which represents low-cost and cargo carriers including Spirit Airlines, Frontier Airlines, Allegiant Air, Sun Country Airlines and Atlas Air, submitted a letter to US DOT in which it supported Spirit Airlines and Southwest Airlines arguments. On September 21, 2021 the Department of Justice (DOJ) filed a civil antitrust suit against American Airlines and JetBlue and on May 19, 2023, the federal district court found that the alliance between American Airlines and JetBlue violated federal antitrust law. American Airlines and JetBlue have 30 days to unwind their partnership or appeal.

#### United

For the year ended December 31, 2022, United and its regional affiliates represented approximately 8.6% of the revenues earned from airlines at Reagan National Airport, and approximately 54.4% of the revenues earned from airlines at Dulles International Airport. Enplanements by United and its regional affiliates at the Airports in 2022 represented 35.9% of the combined enplanements at both Airports. According to information obtained from its filings with the SEC, United reported a net income of \$737 million in 2022, compared to a net loss of \$2.0 billion in 2021.

#### Delta

For the year ended December 31, 2022, Delta represented approximately 8.1% of the revenues earned from airlines at both airports. Enplanements by Delta represented approximately 8.9% of the combined enplanements at both Airports in 2022. According to information obtained from its filings with the SEC, Delta reported net income of \$1.3 billion in 2022, compared to a net income of \$280 million in 2021.

#### Southwest

For the year ended December 31, 2022, Southwest represented approximately 8.9% of the revenues earned from airlines at Reagan National Airport. Enplanements by Southwest represented approximately 8.3% of the combined enplanements at both Airports in 2022. According to information obtained from its filings with the SEC, Southwest reported net income of \$539 million in 2022, compared to \$977 million in 2021.

#### CERTAIN INVESTMENT CONSIDERATIONS

The Series 2023A Bonds may not be suitable for all investors. Prospective purchasers of the Series 2023A Bonds should give careful consideration to the information set forth in this Official Statement, including, in particular, the matters referred to in the following summary.

#### General

The Revenues of the Airports Authority are affected substantially by the economic health of the air transportation industry and the airlines serving the Airports. Certain factors that may materially affect the Airports Service Region, the Airports and the airlines include, but are not limited to, (i) public health risks, such as COVID-19, (ii) national and international economic conditions and currency fluctuations, (iii) the population growth and the economic health of the region and the nation, (iv) the financial health and viability of the airline industry, (v) air carrier service and route networks, (vi) the availability and cost of aviation fuel and other necessary supplies, (vii) changes in demand for air travel (viii) service and cost competition, (ix) levels of air fares, (x) fixed costs and capital requirements, (xi) the cost and availability of financing, including federal funding, (xii) the capacity of the national air traffic control system, (xiii) the capacity of the Airports and of competing airports, (xiv) alternative modes of travel and transportation substitutes, (xv) national and international disasters and hostilities, (xvii) the cost and availability of employees, (xviii) labor relations within the airline industry, (xviii) regulation

by the federal government including the effect of the High Density and Perimeter rules on Reagan National Airport, (xix) evolving federal restrictions on travel to the United States from certain countries, (xx) environmental risks and regulations, noise abatement concerns and regulations, (xxi) bankruptcy and insolvency laws, and (xxii) safety concerns arising from international conflicts, the possibility of terrorist or other attacks and other risks (including the impact of such attacks on other airports that have flights to or from the Airports, as well as the possibility of the closure of those airports for a period of time).

### **COVID-19 Related Matters**

The outbreak of COVID-19 and related restrictions and measures adopted to contain the spread of the virus have had a severe negative impact on both international and domestic travel and travel-related industries, including airlines serving the Airports and Airports concessionaires, and caused record-high unemployment and a devastating contraction of global and national economies. Airlines experienced a drastic and unprecedented decrease in traffic, resulting in flight cancellations, route reductions and modifications, changes in aircraft used to service flights and airports and other operational changes instituted to mitigate and manage impacts of the pandemic. In 2020, retail concessionaires at the Airports either temporarily closed or reported drastic declines in sales. The concession arrangements include gross sales payment mechanisms and, accordingly, such reductions in sales reduced the Airports Authority revenues from these concessionaires. The concession arrangements also include minimum annual guarantee payments, some of which were temporarily waived by the Airports Authority. In addition to the impact on concessionaires, the reduction in air travel caused by the pandemic had an adverse effect on parking, TNC (transportation network company), ground transportation (such as taxi and limousine) and rental car revenues at the Airports. However, the availability of COVID-19 vaccines and treatments have helped to abate the spread and severity of the virus and have contributed to measurable recoveries of travel-related industries.

The Airports Authority cannot predict (i) the duration or extent of the COVID-19 pandemic or other outbreak or pandemic; (ii) the duration or expansion of travel restrictions and warnings; (iii) whether additional countries or destinations will be added to travel restrictions or warnings; (iv) what effect any COVID-19 or other outbreak/pandemic-related travel restrictions or warnings may have on demand for air travel, including to and from the Airports, Airports' costs or Airports Authority revenues; (v) to what extent the COVID-19 pandemic or other outbreak or pandemic may disrupt the local or global economy, manufacturing or supply chain, or whether any such disruption may adversely impact construction or other operations at the Airports; (vi) the extent to which the COVID-19 pandemic or other outbreak or pandemic may result in changes in demand for travel, or may have an impact on the airlines serving the Airports, concessionaires at the Airports or the airline and travel industry generally; (vii) the extent to which the COVID-19 pandemic or other outbreak or pandemic may result in staff reductions of TSA, airlines or other partners at the Airports that would have an impact on passenger security screening as well as baggage, flight and other delays at the Airports; (viii) whether or to what extent the Airports Authority may provide deferrals, forbearances, adjustment or other changes to the Airports Authority's arrangements with its tenants and concessionaires; (ix) the duration and extent of the economic contraction and high unemployment resulting from measures adopted to contain the spread of the virus; or (x) whether any of the foregoing may have a material adverse effect on the finances and operations of the Airports Authority. Future outbreaks or pandemics may reduce

demand for travel, which in turn could cause a decrease in passenger activity at the Airports and declines in Airports Authority revenues.

#### **Public Health Risks**

Public health concerns affect air travel demand from time to time. The spread of COVID-19 caused the World Health Organization to declare the outbreak a global pandemic. During the COVID-19 pandemic and the related passenger fears about traveling and national and global attempts to contain the virus, airlines significantly cut flights in domestic and international markets both as a result of mandated travel restrictions and due to the reduced number of travelers. See "COVID-19 Related Matters" above. Similarly, in 2009, concerns about the spread of influenza caused by the H1N1 virus reduced certain international travel, particularly to and from Mexico and Asia. Following an outbreak of the Ebola virus in West Africa in 2014, concerns about the spread of the virus adversely affected travel to and from certain regions of Africa. In January 2016, the Centers for Disease Control and Prevention issued a travel alert warning pregnant women to avoid travel to areas where the Zika virus had spread, a list that included more than 50 countries and territories.

#### **National and Global Economic Conditions**

Historically, the financial performance of the air transportation industry has correlated with the state of the national and global economy. With the globalization of business and the increased importance of international trade and tourism, the U.S. economy and, by extension, passenger traffic at U.S. airports, have become more closely tied to worldwide economic, political, and social conditions. As a result, international economics, trade balances, currency exchange rates, political relationships, global pandemics such as COVID-19 and hostilities such as the Russian invasion of Ukraine all influence passenger traffic at major U.S. airports. The COVID-19 pandemic altered the behavior of businesses and people in a manner that exhibited negative impacts on global and local economies. In addition, stock markets in the U.S. and globally have seen significant fluctuations that have been attributed to coronavirus concerns and economic policy undertaken by the U.S. and international institutions. The Russian invasion of Ukraine and the resulting war have had negative effects on commodity prices and global economic growth. See "COVID-19 Related Matters" above and "Geopolitical Considerations" below.

## **Airlines Serving the Airports**

The Airports Authority derives a substantial portion of its operating revenues from landing, facility rental and concession fees. The financial strength and stability of the airlines using the Airports, together with numerous other factors, influence the level of aviation activity and revenues at the Airports. In addition, individual airline decisions regarding level of service, particularly hubbing activity at the Airports and aircraft size such as use of regional jets, can affect total enplanements.

United accounted for approximately 83.4% of domestic enplanements and 41.7% of international enplanements at Dulles International Airport in 2022 and maintains a hub at that Airport. In 2022 approximately 25.0% of the Airports Authority's operating revenue from Dulles International Airport was received from rentals and fees derived from United's operation at the

Airport. Pursuant to the First Universal Amendment, United extended its lease at Dulles International Airport through December 31, 2024; however, if United were to discontinue or reduce its hubbing operations at Dulles International Airport after that date, the Airports Authority cannot predict if United's current level of activity at the Airport would be replaced by other carriers.

The Airports Authority cannot predict the duration or extent of reductions and disruptions in air travel or the extent of any adverse impact on Revenues, PFC collections, passenger enplanements, operations or the financial condition of the Airports Authority that disruptions and reductions related to airline bankruptcies may cause, or whether these and other factors will result in more airline bankruptcies. All airlines that have filed for reorganization under the United States bankruptcy laws in the past have remitted all material payments due to the Airports Authority under the Airline Agreements. Bankruptcies, liquidations or major restructurings of airlines could occur in the future. The Airports Authority is not able to predict how long any airline in bankruptcy protection would continue operating at the Airports or whether any such airline would liquidate or substantially restructure its operations. Further, the Airports Authority cannot predict or give any assurance that the airlines serving the Airports will continue to pay or to make timely payment of their obligations under the Airline Agreement.

See "Effect of Signatory Airline Bankruptcy on the Airline Agreement" under this caption for additional discussion of airline bankruptcy on the Airline Agreement.

### **Airline Consolidations**

In response to competitive pressures, the U.S. airline industry has continued to consolidate. Delta and Northwest merged in 2008; United and Continental merged in 2010; Southwest Airlines acquired AirTran Airways in 2011; and US Airways and American Airlines merged in 2013. Alaska Air Group acquired Virgin America in December 2016 and received a single operating certificate in January 2018. On March 7, 2023, the Justice Department, joined by the states of Massachusetts and New York as well as Washington, D.C., filed a lawsuit to block the merger of JetBlue and Spirit Airlines. The suit was later joined by the states of California, Maryland, New Jersey, and North Carolina. A private anti-trust lawsuit opposing the merger is also ongoing.

Airline consolidation has affected airline service patterns at Reagan National Airport and Dulles International Airport, including in 2014, the required divestiture of 104 carrier slots, or 52 round trip flights, at Reagan National Airport resulting from the merger of US Airways and American Airlines. Further airline consolidation is possible and could continue to change airline service patterns, particularly at the connecting hub airports of the merged airlines. The Airports Authority cannot predict what impact, if any, such consolidations will have on airline traffic at the Airports. See "Competition" under this caption for additional discussion on the effect of airline consolidation on the Airports.

## **Cost and Supply of Aviation Fuel**

Airline profitability is significantly affected by the price of aviation fuel. According to Airlines for America, fuel is the second largest single cost component for most airline operations,

and therefore an important and uncertain determinant of an air carrier's operating economics. Any increase in fuel prices causes an increase in airline operating costs. Fuel prices continue to be susceptible to, among other factors, political unrest in various parts of the world, Organization of Petroleum Exporting Countries' policy, increased demand for fuel caused by rapid growth of economies such as China and India, the levels of fuel inventory maintained by certain industries, the amounts of reserves maintained by governments, currency fluctuations, disruptions to production, refining facilities and fuel delivery and weather. The cost of aviation fuel has fluctuated in the past in response to changes in demand for and supply of oil worldwide. Significant fluctuations and prolonged increases in the cost of aviation fuel historically have had an adverse impact on air transportation industry profitability, causing airlines to reduce capacity, fleet and personnel as well as to increase airfares and institute fuel, checked baggage and other extra surcharges, all of which may decrease demand for air travel. The war in Ukraine has resulted in steep increases of global oil and fuel prices, which are expected to affect the airline industry and cause higher ticket prices. See "-Geopolitical Considerations" herein. In addition, concerns about possible fuel shortages were raised by the cyberattack on the Colonial Pipeline in May 2021, which impacted delivery of fuel to seven airports in the eastern United States, including Dulles International Airport. However, while Dulles International Airport is served by the Colonial Pipeline, the Airport maintains several days of fuel on-site.

## **Geopolitical Considerations**

The U.S. economy and aviation sector in particular are exposed to risks from geopolitical conflicts. The Russia-Ukraine war has affected the global economy and commercial aviation. The impacts of the war include but are not limited to (i) increased food, commodity and fuel prices and increased strain on global supply chains; (ii) economic sanctions against certain Russian individuals, institutions, companies and commodities including oil and natural gas; (iii) closure of affected airspace necessitating changes to airline routes and the suspension of service to some areas; and (iv) increased risk of cyber-attacks from Russia against U.S. government agencies, financial institutions and infrastructure. The geopolitical security situation is highly volatile and conditions may deteriorate without warning.

## **Aviation Safety and Security Concerns**

Concerns about the safety of air travel and the effectiveness of security precautions, particularly in the context of international hostilities and domestic and foreign terrorist attacks and threats and other airline incidents, may influence passenger travel behavior and air travel demand. Travel behavior may be affected by anxieties about the safety of flying and by the inconveniences and delays associated with more stringent security screening procedures, which may give rise to the avoidance of air travel generally and the switching from air to surface travel modes.

Safety concerns in the aftermath of the terrorist attacks on September 11, 2001 resulted in the implementation of enhanced security measures by government agencies, airlines, and airport operators to guard against possible terrorist incidents 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 TSA, more effective dissemination of information about threats, more

intensive screening of passengers, baggage, and cargo, and deployment of new screening technologies.

The Boeing 737 MAX aircraft (the "MAX") was grounded in March 2019 after fatal crashes of that aircraft that were suspected to have been caused by malfunctions of the automated flight control system. As a result of its investigation, in November 2020, the FAA required that MAX aircraft obtain FAA airworthiness and export certificates of airworthiness and implement specified design changes. The FAA also required that U.S. airlines operating the MAX implement revised pilot training programs and mandatory aircraft maintenance in order to return MAX planes to passenger service. In February 2021, the US DOT's inspector general issued a report with 14 recommendations for the FAA to implement to improve the certification process for future new planes. While the grounding did not cause significant flight cancellations at the Airports, safety concerns of travelers and future aircraft grounding could, in the future, impact airlines serving the Airports. See "APPENDIX A – Report of the Airport Consultant."

Computer networks and data transmission and collection are vital to the safe and efficient operation of the Airports, the airlines that serve the Airports and other tenants of the Airports. Notwithstanding security measures, information technology and infrastructure of the Airports, any of the airlines serving the Airports or any other tenants at the Airports may be vulnerable to attacks by outside or internal hackers, or breached by employee error, negligence or malfeasance. Any such breach or attack could compromise systems and the information stored thereon. Any such disruption or other loss of information could result in a disruption to the operations of the Airports and/or the airlines serving the Airports and to the services provided at the Airports, thereby adversely affecting the ability of the Airports to generate revenue.

With the proliferation of inexpensive, commercially available, unmanned aerial vehicles ("UAVs"), or drones, the threat that unauthorized and unsafe UAV operations near airports could adversely affect the safety or security of U.S. airports and arriving or departing aircraft has increased significantly in recent years. Recent incursions of airport airspace by UAVs have disrupted airport operations by causing flights to be halted or diverted. An unauthorized UAV incursion at the Airports could result in the temporary delay or cancellation of flights to or from the Airports. Though no such incursion has occurred to date, there can be no assurance, however, that in the future, unauthorized UAV activity will not adversely affect the Airports Authority's operations.

## **Aviation Security Requirements and Related Costs and Restrictions**

The Airports Authority cannot predict the effect of any future government-required security measures on passenger activity at the Airports. Nor can the Airports Authority predict how the government will staff security screening functions or the effect on passenger activity of government decisions regarding its staffing levels.

Enplanements at the Airports, collections of PFCs and the receipt of Revenues were negatively affected by security restrictions on the Airports and the financial condition of the air transportation industry following the terrorist attacks of September 11, 2001. The Airports Authority, like many airport operators, experienced increased operating costs due to compliance with federally mandated and other security and operating changes. The proximity of the Airports

to Washington, D.C., the FAA or the Department of Homeland Security may require further enhanced security measures and impose additional restrictions on the Airports, which may negatively affect future Airports Authority performance. The Airports Authority cannot predict the likelihood of future incidents similar to the terrorist attacks of September 11, 2001, the possibility of increased security restrictions, the likelihood of future air transportation disruptions or the impact on the Airports or the airlines from such incidents or disruptions. See "THE AIRPORTS AUTHORITY – Regulations and Restrictions Affecting the Airports – Possible Future Restrictions on Reagan National Airport," "THE AIR TRADE AND AIRPORTS ACTIVITY – Airlines Serving the Airports," and "FINANCIAL CONDITION OF CERTAIN AIRLINES SERVING THE AIRPORTS."

## **Regulations and Other Restrictions Affecting the Airports**

The operations of the Airports Authority and its ability to generate revenues are affected by a variety of legislative, legal, contractual, statutory, regulatory and practical requirements and restrictions, including by the Federal Act, the Federal Lease, provisions of the Airline Agreement, the PFC Acts, regulations such as the High Density and Perimeter Rules that affect Reagan National Airport, and extensive federal legislation and regulations applicable to all airports. In addition, on February 16, 2023 the FAA announced a new rule requiring more than 200 major airports, including Reagan National Airport and Dulles International Airport, to implement airport wide safety management systems (SMS). The Airports Authority has begun the planning process to ensure compliance with the rule. It is not possible to predict whether future requirements and restrictions on the Airports' operation will be imposed, whether future legislation or regulation will affect anticipated federal funding or PFC collection, whether additional requirements will be funded by the federal government or require funding by the Airports Authority, or whether any such future requirements, restrictions, legislation or regulations would adversely affect Net Revenues. However, prior changes to the Perimeter Rule as part of the 2012 FAA Reauthorization Act resulted in increases in flight activity at Reagan National Airport and some reductions in flight activity at Dulles International Airport, and further changes to the Perimeter Rule could have similar impacts. For a description of these restrictions and regulations, see "THE AIRPORTS AUTHORITY - Regulations and Restrictions Affecting the Airports."

## Risks from Unexpected Events and Global Climate Change

General. The Airports could sustain damage and loss of use as a result of certain unexpected events, such as terrorist attacks, extreme weather events and other natural occurrences, fires and explosions, spills of hazardous substances, strikes and lockouts, sabotage, wars, blockades and riots. While the Airports Authority has attempted to address the risk of loss through the purchase of insurance, certain of these events may not be covered. Furthermore, even for events that are covered by insurance, the Airports Authority cannot guarantee that coverage will be sufficient or that insurers will pay claims in a timely manner. From time to time, the Airports Authority may change the types of, and limits and deductibles on, the insurance coverage that it carries. The Airports Authority cannot predict what effects any of these events may have on the Airports Authority's ability to generate Revenues but the effects may be materially adverse.

Global Climate Change. Numerous scientific studies on global climate change show that, among other effects on the global ecosystem, sea levels will rise, extreme temperatures will

become more common and extreme weather events will become more frequent as a result of increasing global temperatures attributable to atmospheric pollution. Over the coming decades, such extreme events and conditions are expected to increasingly disrupt and damage critical infrastructure and property as well as regional economies and industries that depend on natural resources and favorable climate conditions. Disruptions may include more frequent and longerlasting power outages, fuel shortages and service disruptions. Coastal public infrastructure may be threatened by the continued increase in the frequency and extent of high-tide flooding due to sea level rise, and inland infrastructure, including access to roads, the viability of bridges and the safety of pipelines, may be affected by increases in the severity and frequency of heavy precipitation events. Near-coastal areas like the greater Washington, D.C. metropolitan area (which contains areas of land that are at or near sea level) may be at risk of substantial flood damage over time, affecting private development and public infrastructure. As a result, many residents, businesses, and governmental operations within this area could be negatively impacted and possibly displaced, reducing demand for air and land travel to or from the greater Washington, D.C. metropolitan area. In addition, local public agencies and governmental entities, including the Airports Authority, could be required to mitigate these climate change effects at a potentially material cost.

Climate-Related Regulations. Climate change concerns have led, and may continue to lead, to new laws and regulations at the federal and state levels that could have a material adverse effect on the operations of the Airports and on the airlines operating at the Airports. On July 5, 2011 a United States District Court concluded the United States Environmental Protection Agency (the "EPA") has an obligation under the Clean Air Act ("CAA") to consider whether greenhouse gas ("GHG") emissions and black carbon emissions of aircraft engines endanger public health and welfare. On January 11, 2021, the EPA issued a final rule entitled Control of Air Pollution from Airplanes and Airplane Engines: GHG Emission Standards and Test Procedures, 86 Fed. Reg. 2136 (Jan. 11, 2021). The rule adopts GHG standards equivalent to those adopted by the International Civil Aviation Organization (ICAO) in 2017 for certain civil subsonic jet airplanes and larger subsonic propeller-driven airplanes with turboprop engines. The standards generally apply to in-production airplanes starting on January 1, 2028, but not to existing airplanes already in service. In its analysis of costs and benefits in the preamble to the rule, the EPA explained that many airplanes manufactured in the United States "already met the ICAO standards at the time of their adoption" or would be expected to do so by 2028. The impact to the Airports Authority is not expected to be significant, and the rule does not require modifications to airports.

## **Federal Funding**

The Airports Authority depends upon federal funding for the Airports not only in connection with grants and PFC authorizations but also because federal funding provides for TSA, Federal Inspection Services, air traffic control, Customs and Border Protection ("CBP") and other FAA staffing and facilities. The Airports Authority depends on federal employees working at these agencies to support financial and operational activities at the Airports. Federal funds must be appropriated to continue to pay the workforce of these federal agencies providing services at the Airports. Gaps in appropriation authority can occur due to Congressional or Presidential inaction creating government shutdowns. During government shutdowns federal agencies must discontinue all non-essential, discretionary functions until new funding legislation is passed and signed into law. Essential services continue to function, as do mandatory spending programs.

Essential federal employees have included air traffic controllers, TSA screeners and CBP agents providing services at airports throughout the nation. The most recent and longest government shutdown commenced at the end of 2018 and carried in to early 2019 lasting 35 days. While that shutdown did not have a significant impact on the Airports Authority's finances or operations, it is possible that future government shutdowns could result in significant operational or financial effects on the Airports Authority, depending on the duration and severity of the circumstances.

The federal government is subject to a debt "ceiling" established by Congress. On January 19, 2023, the outstanding debt of the United States reached the statutory debt "ceiling" and the U.S. Treasury began to deploy certain extraordinary measures to continue to pay its obligations. If Congress does not raise the debt ceiling by June 1, 2023, the U.S. Treasury expects it will not have sufficient funds to meet its obligations. The economic effects of such a situation are unknown.

Federal funding received by the Airports Authority and aviation operations at the Airports could also be adversely affected by the implementation of across-the-board spending cuts, known as sequestration, a budgetary feature first introduced in the Budget Control Act of 2011. Sequestration could adversely affect FAA and TSA budgets and operations and the availability of certain federal grant funds typically received annually by the Airports Authority, which may cause the FAA or TSA to implement furloughs of its employees and freeze hiring, and may result in flight delays and cancellations.

On October 5, 2018, President Trump signed into law a five-year reauthorization bill for the FAA – the FAA Reauthorization Act of 2018, which will expire on September 30, 2023. The 2018 FAA reauthorization retains the federal cap on PFCs at \$4.50 and authorizes \$3.35 billion per year for AIP grants through federal fiscal year 2023, which is the same funding level as was in place for the preceding five years. The AIP provides federal capital grants to support airport infrastructure, including entitlement grants (determined by formulas based on passenger, cargo, and general aviation activity levels) and discretionary grants (allocated on the basis of specific setasides and the national priority ranking system). FAA AIP expenditures are subject to congressional appropriation and no assurance can be given that the FAA will receive spending authority. In addition, the AIP could be affected by a government shutdown or sequestration described above. The Airports Authority is unable to predict the level of available AIP funding it may receive. If there is a reduction in the amount of AIP grants awarded to the Airports Authority, such reduction could (i) increase by a corresponding amount the capital expenditures that the Airports Authority would need to fund from other sources (including operating revenues and additional Bonds), (ii) result in adjustments to the CCP or (iii) extend the timing for completion of certain projects. See "PLAN OF FUNDING FOR THE CCP - Funding Source: Federal and State Grants."

The Infrastructure Investment and Jobs Act (the "Bipartisan Infrastructure Law") was approved by the United States Congress and signed into law by President Biden on November 15, 2021. The Bipartisan Infrastructure Law provides \$15 billion for airport-related projects as defined under the existing Airport Improvement Grant and Passenger Facility Charge criteria. The funds can be invested in runways, taxiways, safety and sustainability projects, as well as terminal, airport-transit connections and roadway projects. For the federal fiscal year 2022, the federal government made available \$2.89 billion to U.S. airports. The Airports Authority is eligible to

receive approximately \$22.1 million for Reagan National Airport and \$22.8 million for Dulles International Airport each year for federal fiscal years 2022 and 2023 as entitlement grants. Entitlement grants for fiscal years 2024 through 2026 will be based upon calendar year 2022-2024 enplanement levels. The Bipartisan Infrastructure Law also provides for a \$5 billion Competitive Grant Program for airport terminal development projects. The Competitive Grant Program includes \$1 billion a year for federal fiscal years 2022-2026 with a maximum of 55% of funds designated for large hubs, 15% for medium hubs, 20% for small hubs and 10% for non-hubs. The FAA issued a notice of funding opportunity for the Competitive Grant Program on February 23, 2023.

## Effect of Signatory Airline Bankruptcy on the Airline Agreement

In the event of bankruptcy proceedings involving one or more of the Signatory Airlines, the debtor airline or its bankruptcy trustee must determine within a time period determined by the court whether to assume or reject its Airline Agreement with the Airports Authority. In the event of assumption, the debtor airline is required to cure any prior defaults and to provide adequate assurance of future performance under its Airline Agreement. Rejection of the Airline Agreement by a debtor Signatory Airline gives rise to an unsecured claim of the Airports Authority for damages, the amount of which may be limited by the U.S. Bankruptcy Code. The amounts unpaid as a result of a rejection of the Airline Agreement by a Signatory Airline in bankruptcy can be passed on to the remaining Signatory Airlines under the Airline Agreement. If the bankruptcy of one or more Signatory Airlines were to occur, however, there can be no assurance that the remaining Signatory Airlines would be able, individually or collectively, to meet their obligations under the Airline Agreement. See "CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS – Airport Use Agreement and Premises Lease," and APPENDIX C – "Summary of Certain Provisions of the Airport Use Agreement and Premises Lease."

Pursuant to the Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508), the Wendel H. Ford Aviation Investment and Reform Act for the 21st Century (P.L. 106-181), the VISION 100-Century of Aviation Reauthorization Act, P.L. 108-176, the Federal Aviation Administration Extension Act of 2008, P.L. 110-330 and the FAA Modernization and Reform Act of 2012, P.L. 112-95 (collectively, the "PFC Acts"), the FAA has approved the Airports Authority's applications to require airlines to collect and remit to the Airports Authority a \$4.50 PFC for each enplaning revenue passenger at the Airports.

The PFC Acts provide that PFCs collected by the airlines constitute a trust fund held for the beneficial interest of the eligible agency (i.e., the Airports Authority) imposing the PFCs, 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 on financial statements. Airlines are permitted to commingle PFC collections with other revenues. Airlines that have filed for Chapter 7 or 11 bankruptcy protection, however, are required to segregate PFC collections in a separate account for the benefit of the airport and cannot grant a third party any security or other interest in PFC collections. The airlines are entitled to retain interest earned on PFC collections until such PFC collections are remitted. PFCs collected by those airlines are required by the bankruptcy court to be placed in accounts separate from other airline revenue accounts and be paid to airports monthly in accordance with the PFC regulations. However, the Airports Authority cannot predict

whether an airline that files for bankruptcy protection will properly account for the PFCs it has collected at the Airports or whether the bankruptcy estate will have sufficient moneys to pay the Airports Authority in full for the PFCs owed by such airline. The Airports Authority has recovered all of its PFC revenues from each of the airlines that filed for Chapter 11 bankruptcy protection in the past. PFC revenues are not pledged to the repayment of the Bonds.

### **Availability of PFC Revenues**

The Airports Authority has included in its 2023 Budget its intent to use PFC revenues to pay Annual Debt Service on PFC Eligible Bonds in 2023. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Application of Designated Passenger Facility Charges" above.

The amount of available PFC revenues received by the Airports Authority in future years will vary based upon the actual number of PFC-eligible passenger enplanements at the Airports. No assurance can be given that any level of enplanements will be realized. Additionally, the FAA may terminate the Airports Authority's authority to impose PFCs, subject to informal and formal procedural safeguards, if (a) PFC revenues are not being used for approved projects in accordance with the FAA's approval, the PFC Act or the PFC Regulations, or (b) the Airports Authority otherwise violates the PFC Act or the PFC Regulations. The Airports Authority's authority to impose a PFC also may be terminated if the Airports Authority violates certain provisions of the Airport Noise and Capacity Act of 1990 (the "ANCA") and its regulations relating to the implementation of noise and access restrictions for certain types of aircraft. The regulations under ANCA also contain procedural safeguards to ensure that the Airports Authority's authority to impose a PFC would not be summarily terminated. No assurance can be given that the Airports Authority's authority to impose a PFC will not be terminated by Congress or the FAA, that the PFC program will not be modified or restricted by Congress or the FAA so as to reduce PFC revenues available to the Airports Authority, or that the Airports Authority will not seek to decrease the amount of PFCs to be collected, provided such decrease does not violate the Airports Authority's covenant in the Indenture. A shortfall in PFC revenues may cause the Airports Authority to increase rentals, fees and charges at the Airports to meet the debt service requirements on the Bonds that the Airports Authority plans to pay from available PFC revenues, and/or require the Airports Authority to identify other sources of funding for its capital program, including issuing additional Bonds.

### **Airports Authority Insolvency**

The Series 2023A Bonds are not secured by or payable from the revenues derived from the Dulles Toll Road or other assets of the Airports Authority accounted for under the Dulles Corridor Enterprise Fund. Nevertheless, the Airports Authority could become insolvent in connection with activities related to the Dulles Toll Road and the Dulles Metrorail Project, even though the Airports are meeting all financial obligations. If this were to occur, an Event of Default under the Indenture could occur even though the Revenues of the Airports may be adequate to meet the rate covenant under the Indenture. A creditor who has a judgment against the Airports Authority as a result of activities related to the Dulles Toll Road or the Dulles Metrorail Project may not be restricted to claims against the revenues of, or other assets accounted for by, the Dulles Corridor Enterprise Fund. Any attempt to levy against Airports Authority facilities used in operation of the Airports or Revenues derived from such operations may cause an Event of Default under the Indenture.

Similarly, the Airports Authority could become insolvent in connection with its operations and maintenance of the Airports.

## **Counterparty and Liquidity Provider Exposure**

In connection with certain variable rate Bonds, the Airports Authority has entered into credit facility agreements and Swap Agreements with various financial institutions. Any adverse rating developments with respect to such credit or liquidity providers or swap counterparties could have an adverse effect on the Airports Authority, including, without limitation, an increase in debt service-related costs, a termination event or other negative effects under the related agreements. Payments required under these agreements in the event of any termination or a default by any of the financial institutions under its liquidity or interest rate swap obligations could have an adverse impact on the finances of the Airports Authority.

### Limitations on Bondholders' Remedies

The occurrence of an Event of Default under the Indenture does not grant a right to either the Trustee or the Bondholders to accelerate payment of the Bonds. As a result, the Airports Authority may be able to continue collecting Revenues and applying them to the operation of the Airports even if an Event of Default has occurred and no payments are being made on the Bonds. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS – Events of Default and Remedies; No Acceleration or Cross Default."

The rights and remedies available to the owners of the Series 2023A Bonds upon an Event of Default under the Indenture are in many respects dependent upon judicial enforcement actions which are often subject to discretion and delay. Currently, the Airports Authority is not authorized by either of the Acts to file for bankruptcy. See "– Airports Authority Insolvency" above.

### **Expiration and Possible Termination of Airline Agreement**

Under certain limited conditions, a Signatory Airline may terminate the Airline Agreement. See "CERTAIN AGREEMENTS FOR USE OF THE AIRPORTS – Airport Use Agreement and Premises Lease." The Airline Agreement expires on December 31, 2024. If the Airports Authority and the Signatory Airlines have been unable to reach a successor agreement to replace the current agreement by this date, the Airports Authority will set airline rentals, fees and charges at that Airport in accordance with a regulation of the Board that will be consistent with US DOT requirements.

### **Cost and Schedule of Capital Construction Program**

The costs and the schedule of the projects included in the CCP depend on various sources of funding, including additional Bonds, Revolving Loan Notes, PFCs, and federal grants, and are subject to a number of uncertainties. The ability of the Airports Authority to complete the CCP may be adversely affected by various factors including, but not limited to: (i) estimating errors, (ii) design and engineering errors, (iii) changes to the scope of the projects, (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, and (xii) additional security improvements and associated costs

mandated by the federal government. A delay in the completion of certain projects under the CCP could delay the collection of revenues in respect of such projects, increase costs for such projects, and cause the rescheduling of other projects. In addition, any of the deferred projects could be implemented at any time, adding to the cost of the CCP. There can be no assurance that the cost of construction of the CCP projects will not exceed the currently estimated dollar amount or that the completion of the projects will not be delayed beyond the currently projected completion dates. Any schedule delays or cost increases could result in the need to issue additional Bonds and could result in increased costs per enplaned passenger to the airlines, which could place the Airports at a competitive disadvantage relative to lower-cost airports. See "CAPITAL CONSTRUCTION PROGRAM (CCP)."

## Competition

The Airports compete with other U.S. airports for both domestic and international passengers. Portions of the Airports Service Region are served by BWI, which experienced significant growth in the past decade, mostly due to low-cost carriers using the airport. Between 2018 and 2021, BWI had the largest share of enplaned passengers in the Airports' service region, with 39.5% of enplaned passengers departing from BWI in 2021 and 41.7% in 2020. Reagan National Airport had the largest share of enplaned passengers in the Airports' service region in 2022 with 35.2% of enplaned passengers. However, BWI is expected to continue to be a competitor for the region's domestic and international traffic. See "THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY – Baltimore/Washington International Thurgood Marshall Airport."

Of the three airports in the Airports Service Region, Dulles International Airport maintains the largest share of international passengers. In 2022, Dulles International Airport's share of international passengers was approximately 84.1%. International passengers made up approximately 34.6% of all commercial enplanements at Dulles International Airport in 2022. In 2021, Dulles International Airport's share of international passengers was approximately 80.2%, with international passengers making up approximately 22.5% of all commercial enplanements at Dulles International Airport. Among east coast airports, only the New York area airports offer more service across the Atlantic. International traffic may be more susceptible to fluctuation and disruption based on cost, political instability, terrorist activities, currency fluctuations, pandemics, including COVID-19, and other factors that cannot be predicted or controlled by the airlines or the Airports Authority. The Airports Authority cannot predict whether the level of international traffic will decrease, remain steady, continue to recover or exceed pre-pandemic levels, nor can it predict what events, occurring domestically or internationally, might adversely affect such traffic in the future. See "COVID-19 Related Matters" herein for the impacts of COVID-19 and related travel restrictions and APPENDIX A – "Report of the Airport Consultant – Competing Airports Serving the Region" for additional information on competition risks.

The Airports Authority also may continue to experience increases in its operating costs due to compliance with federally mandated and other security and operating changes that are unique to the Airports. Such increased costs may increase the cost per enplaned passenger to the airlines, which could result in the Airports being put at a competitive disadvantage relative to other airports and transportation modes. See "THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY."

### Cybersecurity

The Airports Authority, like many other large public and private entities, relies on a large and complex technology environment to conduct its operations and faces multiple cybersecurity threats, including, but not limited to, hacking, phishing, viruses, malware and other attacks on its computing and other digital networks and systems (collectively, "Systems Technology"). As a recipient and provider of personal, private, or sensitive information, the Airports Authority may be the target of cybersecurity incidents that may result in adverse consequences to the Airports Authority and its Systems Technology, requiring a response action to mitigate the consequences. Cybersecurity incidents could result from unintentional events or from deliberate attacks by unauthorized entities or individuals attempting to gain access to the Airports Authority's Systems Technology for the purposes of misappropriating assets or information or causing operational disruption and damage. To mitigate the risk of business operations impact and/or damage from cybersecurity incidents or cyber-attacks, the Airports Authority invests in multiple forms of cybersecurity and operational safeguards. The Airports Authority utilizes the U.S. Department of Commerce, National Institute of Standards and Technology's cybersecurity infrastructure framework to provide a systematic approach to cybersecurity. While Airports Authority cybersecurity and operational safeguards are periodically tested and upgraded, no assurances can be given by the Airports Authority that such measures will ensure against cybersecurity threats and attacks, and any breach could damage the Airports Authority's Systems Technology and cause material disruption to the Airports Authority's finances or operations. The costs of remedying any such damage or protecting against future attacks may be substantial. Furthermore, cybersecurity breaches could expose the Airports Authority to material litigation and other legal risks, which may cause the Airports Authority to incur material costs.

### **Alternative Travel Modes and Travel Substitutes**

Competition from surface modes of transportation, primarily Amtrak rail service, has resulted in decreased passenger numbers in certain markets, particularly the New York City market. In addition, businesses and individuals may choose surface modes of transportation for environmental reasons. As an example, France passed a law ending domestic flights that could be replaced by train travel of two and a half hours or less due to legislative efforts to reduce CO<sub>2</sub> emissions.

Teleconference, video-conference and web-based meetings continue to improve in quality and price and are considered a satisfactory alternative to some face-to-face business meetings, especially with their increased use throughout the COVID-19 pandemic.

In addition, consumers have become more price sensitive. Efforts by airlines to stimulate traffic by discounting fares have changed consumer expectations. The availability of transparent price information on airline websites, third party vendor websites and mobile applications allows easier comparison shopping, which has changed consumer purchasing habits. As a result, pricing and marketing have become more competitive in the airline industry.

### **Industry Workforce Shortages**

Pilot shortage has been an industry-wide issue, and especially so for smaller regional airlines. There are several causes for the pilot shortage that has affected all airlines. Congress changed duty time rules in 2010 to mitigate pilot fatigue, which required airlines to increase pilot staff. Beginning in 2013, first officers flying for commercial airlines were required to have at least 1,500 hours of flight time, instead of the 250 hours previously required. Other factors include an aging pilot workforce and fewer new pilots coming from the military. As a result of the COVID-19 pandemic, many airlines offered buyouts, early retirement, and severance packages to reduce staffing costs to mitigate the effects of reduced passenger traffic. As passenger demand recovers, major air carriers need additional pilots and have hired pilots away from regional airlines. As a result, small regional airlines have experienced difficulties in hiring qualified new pilots, despite increased incentives, resulting in reduced service to some smaller U.S. markets.

In addition to the pilot shortage, over the next decade there could be a shortage of qualified mechanics to maintain the airlines' fleet of planes. This potential shortage is a result of an aging pool of mechanics, a large portion of which are expected to retire in the next decade, and relatively fewer new mechanics entering the labor market. A shortage of mechanics could raise the cost of maintenance, require airlines to maintain more spare planes and/or result in increased flight cancellations and delays.

Due to lower levels of air traffic controller staffing at the New York Terminal Radar Approach Control facility, on March 22, 2023, the FAA published a notice of limited, conditional waiver of the minimum usage requirement that applies to slots at John F. Kennedy International Airport, New York LaGuardia Airport, and Reagan National Airport. United Airlines, Delta Airlines and American Airlines have sought slot waivers which may result in fewer flights between Regan National Airport and New York City area airports between May 15, 2023 and September 15, 2023.

General labor shortages, including pilots, mechanics and air traffic controllers, have been impacting, and may continue to impact, the airline industry and the Airports. Several major airlines have announced reduced schedules and have cancelled flights as a result of reported labor shortages and staffing challenges. Labor shortages have been attributed to growing travel demand after thousands of workers in the airline industry opted for buyouts, early retirement packages or otherwise terminated their employment during the COVID-19 pandemic. Staffing challenges as a result of COVID-19 infections and quarantines also may have short-term impacts on an airline's ability to operate scheduled flights.

## **Changes in Federal Tax Law**

See "TAX MATTERS - Risk of Future Legislative Changes and/or Court Decisions."

### **Other Key Factors**

Capacity limitations of the national air traffic control system, the Airports and at competing airports could be factors that might affect future activity at the Airports. In the past, demands on the air traffic control system have caused operational restrictions that have affected airline schedules and passenger traffic and caused significant delays. For example, on January 10, 2023,

a failure in the FAA's Notice to Air Missions (NOTAM) system, which flags potential hazards for pilots before departure, caused an approximately two-hour grounding of all passenger aircraft in the United States. The FAA concluded the outage was caused by a contractor who mistakenly deleted files in the NOTAM system database.

Over the last ten years, the FAA has made certain improvements to the computer, radar and communications equipment of the air traffic control system in recent years, but no assurances can be given that future increases in airline and passenger activity would not again adversely affect airline operations. The 2012 FAA Reauthorization Act contains numerous provisions aimed at accelerating the implementation of Next Generation Air Transport System ("NextGen"). NextGen is designed to modernize the National Airspace System from a ground-based system of air traffic control to a satellite-based system of air traffic management in order to enhance the use of airspace and runways.

Future growth of air traffic at Reagan National Airport will be constrained to a significant extent by the High Density Rule and its constrained airfield facilities. Existing terminal and airfield capacity at Dulles International Airport are believed to be sufficient to accommodate future growth in airline traffic.

BWI is the primary airport in the Airports Service Region that competes with the Airports. BWI has no airfield, landside or access constraints that would inhibit growth in either domestic or international markets. In recent years, certain low-cost carriers, particularly Southwest Airlines, have developed hubs and expanded service at BWI. No assurances can be given that other airlines will not commence or expand activities at BWI to the detriment of airline activity at either or both of the Airports.

For more details on these and other key factors that could impact results of Airports Authority operations, see APPENDIX A – "Report of the Airport Consultant."

### **Forward Looking Statements**

This Official Statement, and particularly the information contained under the captions "SUMMARY STATEMENT," "INTRODUCTION," "THE AIRPORTS AUTHORITY," "THE SERIES 2023A Bonds," "THE AIRPORTS AUTHORITY'S FACILITIES AND MASTER PLANS," "THE CCP," "PLAN OF FUNDING FOR THE CCP," "REPORT OF THE AIRPORT CONSULTANT" and the Report of the Airport Consultant included as APPENDIX A to 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," "project," "intend," "expect," and similar expressions identify forward looking statements. Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in such forward looking statements. Among the factors that may cause forecast revenues and expenditures to be materially different from those anticipated are an inability to incur debt at assumed rates, construction delays, increases in construction costs, general economic downturns, factors affecting the airline industry in general, federal legislation and/or regulations, and regulatory and other restrictions, including but not limited to those that may affect the ability to undertake the timing

or the costs of certain projects. Any forecast is subject to such uncertainties. Therefore, there will be differences between forecast and actual results, and those differences may be material.

### REPORT OF THE AIRPORT CONSULTANT

The Report of the Airport Consultant dated May 11, 2023 is attached as APPENDIX A. The Report of the Airport Consultant was prepared by LeighFisher, in conjunction with its subconsultant, DKMG Consulting LLC. The Report of the Airport Consultant evaluates the ability of the Airports Authority to produce Net Revenues sufficient to meet the requirements of the rate covenant during the forecast period, taking into account estimated Annual Debt Service using assumptions as documented in the Report of the Airport Consultant. The Airport Consultant has provided its consent to include the Report of the Airport Consultant as APPENDIX A hereto. The Report of the Airport Consultant has been included herein in reliance upon the knowledge and experience of LeighFisher as the Airport Consultant and its subconsultant. As stated in the Report of the Airport Consultant, any forecast is subject to uncertainties. Therefore, there will be differences between forecast and actual results, and those differences may be material. The Report of the Airport Consultant has not been updated to reflect the final pricing terms of the Series 2023A Bonds or other changes that may have occurred after the date of the Report. The forecasts presented in the Report of the Airport Consultant are based on various assumptions that reflect the best information available to the Airports Authority and the knowledge and experience of the Airport Consultant as of the date of the Report. The Airports Authority's future operating and financial performance, however, will vary from the forecasts and such variances may be material. The Report of the Airport Consultant should be read in its entirety for an understanding of the forecasts and the underlying assumptions.

### FINANCIAL ADVISOR

Frasca & Associates, LLC (the "Financial Advisor") serves as the financial advisor to the Airports Authority in connection with the issuance of the Series 2023A Bonds. The Financial Advisor has prepared the debt issuance plan for funding portions of the CCP based on information provided by the Airports Authority. In addition, it has assisted in the preparation of this Official Statement. The Financial Advisor has not undertaken to make an independent verification of, or to assume responsibility for, the accuracy, completeness or fairness of the information contained in this Official Statement.

### INDEPENDENT ACCOUNTANTS

The financial statements as of December 31, 2022 contained in the Airports Authority's 2022 Financial Report, which was filed with EMMA and can also be found at <a href="www.mwaa.com">www.mwaa.com</a> and <a href="www.mwaa.com">www.mwaa.com</a> and <a href="www.dacbond.com">www.dacbond.com</a>, have been audited by Crowe LLP, independent auditor, as stated in their report included therein. Crowe LLP has not been engaged to perform and has not performed, since the date of its report included therein, any procedures on the financial statements addressed in that report. Additionally, the Crowe LLP report does not cover any other information in this Official Statement and should not be read to do so.

### TAX MATTERS

In the opinion of Squire Patton Boggs (US) LLP, Bond Counsel, under existing law: (i) interest on the Series 2023A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except interest on any Series 2023A Bond for any period during which it is held by a "substantial user" of the facilities financed or a "related person," as those terms are used in Section 147(a) of the Code and is an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals; and (ii) the Series 2023A Bonds and interest on the Series 2023A Bonds are exempt from income taxation by the Commonwealth of Virginia and are exempt from all taxation by the District of Columbia except estate, inheritance and gift taxes. Bond Counsel expresses no opinion as to any other tax consequences regarding the Series 2023A Bonds.

The opinion on federal tax matters will be based on and will assume the accuracy of certain representations and certifications, and continuing compliance with certain covenants, of the Airports Authority contained in the transcript of proceedings and that are intended to evidence and assure the foregoing, including that the Series 2023A Bonds are and will remain obligations the interest on which is excluded from gross income for federal income tax purposes. Bond Counsel will not independently verify the accuracy of the Airports Authority's representations and certifications or the continuing compliance with the Airports Authority's covenants.

The opinion of Bond Counsel is based on current legal authority and covers certain matters not directly addressed by such authority. It represents Bond Counsel's legal judgment as to exclusion of interest on the Series 2023A Bonds from gross income for federal income tax purposes but is not a guaranty of that conclusion. The opinion is not binding on the Internal Revenue Service (the "IRS") or any court. Bond Counsel expresses no opinion about (i) the effect of future changes in the Code and the applicable regulations under the Code or (ii) the interpretation and the enforcement of the Code or those regulations by the IRS.

The Code prescribes a number of qualifications and conditions for the interest on state and local government obligations to be and to remain excluded from gross income for federal income tax purposes, some of which require future or continued compliance after issuance of the obligations. Noncompliance with these requirements by the Airports Authority may cause loss of such status and result in the interest on the Series 2023A Bonds being included in gross income for federal income tax purposes retroactively to the date of issuance of the Series 2023A Bonds. The Airports Authority has covenanted to take the actions required of it for the interest on the Series 2023A Bonds to be and to remain excluded from gross income for federal income tax purposes, and not to take any actions that would adversely affect that exclusion. After the date of issuance of the Series 2023A Bonds, Bond Counsel will not undertake to determine (or to so inform any person) whether any actions taken or not taken, or any events occurring or not occurring, or any other matters coming to Bond Counsel's attention, may adversely affect the exclusion from gross income for federal income tax purposes of interest on the Series 2023A Bonds or the market value of the Series 2023A Bonds.

Interest on the Series 2023A Bonds may be subject: (1) to a federal branch profits tax imposed on certain foreign corporations doing business in the United States; (2) to a federal tax imposed on excess net passive income of certain S corporations; and (3) to the alternative

minimum tax imposed under Section 55(b) of the Code on "applicable corporations" (within the meaning of Section 59(k) of the Code). Under the Code, the exclusion of interest from gross income for federal income tax purposes may have certain adverse federal income tax consequences on items of income, deduction or credit for certain taxpayers, including financial institutions, certain insurance companies, recipients of Social Security and Railroad Retirement benefits, those that are deemed to incur or continue indebtedness to acquire or carry tax-exempt obligations, and individuals otherwise eligible for the earned income tax credit. The applicability and extent of these and other tax consequences will depend upon the particular tax status or other tax items of the owner of the Series 2023A Bonds. Bond Counsel will express no opinion regarding those consequences.

Payments of interest on tax-exempt obligations, including the Series 2023A Bonds, are generally subject to IRS Form 1099-INT information reporting requirements. If a Series 2023A Bond owner is subject to backup withholding under those requirements, then payments of interest will also be subject to backup withholding. Those requirements do not affect the exclusion of such interest from gross income for federal income tax purposes.

Bond Counsel's engagement with respect to the Series 2023A Bonds ends with the issuance of the Series 2023A Bonds, and, unless separately engaged, Bond Counsel is not obligated to defend the Airports Authority or the owners of the Series 2023A Bonds regarding the tax status of interest thereon in the event of an audit examination by the IRS. The IRS has a program to audit tax-exempt obligations to determine whether the interest thereon is includible in gross income for federal income tax purposes. If the IRS does audit the Series 2023A Bonds, under current IRS procedures, the IRS will treat the Airports Authority as the taxpayer and the beneficial owners of the Series 2023A Bonds will have only limited rights, if any, to obtain and participate in judicial review of such audit. Any action of the IRS, including but not limited to selection of the Series 2023A Bonds for audit, or the course or result of such audit, or an audit of other obligations presenting similar tax issues, may affect the market value of the Series 2023A Bonds.

Prospective purchasers of the Series 2023A Bonds upon their original issuance at prices other than the respective prices indicated on the inside cover pages of this Official Statement, and prospective purchasers of the Series 2023A Bonds at other than their original issuance, should consult their own tax advisors regarding other tax considerations such as the consequences of market discount, as to all of which Bond Counsel expresses no opinion.

### Risk of Future Legislative Changes and/or Court Decisions

Legislation affecting tax-exempt obligations is regularly considered by the United States Congress and may also be considered by the Commonwealth and the District legislature. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the Series 2023A Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2023A Bonds will not have an adverse effect on the tax status of interest on the Series 2023A Bonds or the market value or marketability of the Series 2023A Bonds. These adverse effects could result, for example, from changes to federal or state income tax rates, changes in the structure of federal or state income taxes (including replacement with another type of tax), or repeal (or reduction in the benefit) of the exclusion of

interest on the Series 2023A Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

For example, federal tax legislation that was enacted on December 22, 2017 reduced corporate tax rates, modified individual tax rates, eliminated many deductions, repealed the corporate alternative minimum tax that was in effect at the time, and eliminated the tax-exempt advance refunding of tax-exempt bonds and tax-advantaged bonds, among other things. Additionally, investors in the Series 2023A Bonds should be aware that future legislative actions might increase, reduce or otherwise change (including retroactively) the financial benefits and the treatment of all or a portion of the interest on the Series 2023A Bonds for federal income tax purposes for all or certain taxpayers. In all such events, the market value of the Series 2023A Bonds may be affected and the ability of holders to sell their Series 2023A Bonds in the secondary market may be reduced.

Investors should consult their own financial and tax advisors to analyze the importance of these risks.

### Original Issue Discount and Original Issue Premium

Certain of the Series 2023A Bonds ("Discount 2023A Bonds") may be offered and sold to the public at an original issue discount ("OID"). OID is the excess of the stated redemption price at maturity (the principal amount) over the "issue price" of a Discount 2023A Bond. The issue price of a Discount 2023A Bond is the initial offering price to the public (other than to bond houses, brokers or similar persons acting in the capacity of underwriters or wholesalers) at which a substantial amount of the Discount 2023A Bonds of the same maturity is sold pursuant to that offering. For federal income tax purposes, OID accrues to the owner of a Discount 2023A Bond over the period to maturity based on the constant yield method, compounded semiannually (or over a shorter permitted compounding interval selected by the owner). The portion of OID that accrues during the period of ownership of a Discount 2023A Bond (i) is interest excluded from the owner's gross income for federal income tax purposes to the same extent, and subject to the same considerations discussed above, as other interest on the Series 2023A Bonds, and (ii) is added to the owner's tax basis for purposes of determining gain or loss on the maturity, redemption, prior sale or other disposition of that Discount 2023A Bond. A purchaser of a Discount 2023A Bond in the initial public offering at the issue price (described above) for that Discount 2023A Bond who holds that Discount 2023A Bond to maturity will realize no gain or loss upon the retirement of that Discount 2023A Bond.

Certain of the Series 2023A Bonds ("Premium 2023A Bonds") may be offered and sold to the public at a price in excess of their stated redemption price at maturity (the principal amount). That excess constitutes bond premium. For federal income tax purposes, bond premium is amortized over the period to maturity of a Premium 2023A Bond, based on the yield to maturity of that Premium 2023A Bond (or, in the case of a Premium 2023A Bond callable prior to its stated maturity, the amortization period and yield may be required to be determined on the basis of an earlier call date that results in the lowest yield on that Premium 2023A Bond), compounded semiannually. No portion of that bond premium is deductible by the owner of a Premium 2023A Bond. For purposes of determining the owner's gain or loss on the sale, redemption (including redemption at maturity) or other disposition of a Premium 2023A Bond, the owner's tax basis in

the Premium 2023A Bond is reduced by the amount of bond premium that is amortized during the period of ownership. As a result, an owner may realize taxable gain for federal income tax purposes from the sale or other disposition of a Premium 2023A Bond for an amount equal to or less than the amount paid by the owner for that Premium 2023A Bond. A purchaser of a Premium 2023A Bond in the initial public offering who holds that Premium 2023A Bond to maturity (or, in the case of a callable Premium 2023A Bond, to its earlier call date that results in the lowest yield on that Premium 2023A Bond) will realize no gain or loss upon the retirement of that Premium 2023A Bond.

Owners of Discount 2023A Bonds and Premium 2023A Bonds should consult their own tax advisors as to the determination for federal income tax purposes of the existence of OID or bond premium, the determination for federal income tax purposes of the amount of OID or bond premium properly accruable or amortizable in any period with respect to the Discount 2023A Bonds or Premium 2023A Bonds, other federal tax consequences in respect of OID and bond premium, and the treatment of OID and bond premium for purposes of state and local taxes on, or based on, income.

### **LEGAL MATTERS**

Certain legal matters relating to the issuance of the Series 2023A Bonds are subject to the approving opinion of Bond Counsel to the Airports Authority, Squire Patton Boggs (US) LLP, which will be furnished upon the issuance of the Series 2023A Bonds. The form of such opinion is set forth in APPENDIX E of this Official Statement (the "Bond Opinion"). The Bond Opinion is limited to matters relating to the issuance of the Series 2023A Bonds and to the status of interest on the Series 2023A Bonds as described in "TAX MATTERS."

Certain legal matters will be passed upon for the Airports Authority by Johnna S. Spera, Esquire, Senior Vice President and General Counsel of the Airports Authority, and by Squire Patton Boggs (US) LLP, as Disclosure Counsel. Certain legal matters will be passed upon for the Underwriters by their counsel, Orrick Herrington & Sutcliffe LLP.

### LITIGATION

The Airports Authority is involved in various claims and lawsuits arising in the ordinary course of business that are covered by insurance or that the Airports Authority does not believe to be material. Although the outcome of these claims and lawsuits is not presently determinable, in the opinion of the Airports Authority's general counsel, the likely outcome in these matters that are not covered by insurance will not have a material adverse effect on the financial condition of the Airports Authority. No litigation is pending or, to the knowledge of the Airports Authority, threatened against the Airports Authority (a) seeking to restrain or enjoin the issuance of the Series 2023A Bonds or the collection of Net Revenues pledged under the Indenture, or (b) in any way contesting or affecting any authority for the issuance of the Series 2023A Bonds, the validity or binding effect of the Series 2023A Bonds, the resolution of the Airports Authority authorizing and implementing the Series 2023A Bonds or the Indenture, or (c) in any way contesting the creation, existence, powers or jurisdiction of the Airports Authority, the validity or effect of the Federal Act, the Federal Lease, the Virginia Act or the District Act, or any provision thereof, or the application of the proceeds of the Series 2023A Bonds.

### **RATINGS**

Fitch Ratings ("Fitch"), Moody's Investors Service, Inc. ("Moody's") and S&P Global Ratings ("S&P") have assigned the Series 2023A Bonds the ratings of "AA-", "Aa3" and "AA-" respectively. Fitch assigned the Series 2023A Bonds the rating of "AA-" with a "Stable Outlook" on May 17, 2023. Moody's assigned the Series 2023A Bonds the rating of "Aa3" with a "Stable Outlook" on May 16, 2023. S&P assigned the Series 2023A Bonds the rating of "AA-" with a "Stable Outlook" on May 16, 2023. The Airports Authority furnished to such rating agencies the information contained in this Official Statement and certain other materials and information about the Airports Authority. Generally, rating agencies base their ratings on such materials and information, as well as investigations, studies and assumptions by the rating agencies.

A rating, including any related outlook with respect to potential changes in such ratings, reflects only the view of the agency giving such rating and is not a recommendation to buy, sell or hold the Series 2023A Bonds. An explanation of the procedure and methodology used by each rating agency and the significance of such ratings may be obtained from the rating agency furnishing the same. Such ratings may be changed at any time, and no assurance can be given that they will not be revised downward or withdrawn entirely by any of such rating agencies if, in the judgment of any of them, circumstances so warrant. Any such downward revision or withdrawal of any of such ratings is likely to have an adverse effect on the market price of the Series 2023A Bonds.

### **UNDERWRITING**

The underwriters of the Series 2023A Bonds listed on the cover of this Official Statement, for whom Barclays Capital Inc., acts as representative (the "Underwriters"), have agreed to purchase the Series 2023A Bonds, at a price of \$461,160,245.65 (consisting of \$436,225,000.00 aggregate par amount of the Series 2023A Bonds, plus net original issue premium of \$26,084,184.25, less an underwriting discount of \$1,148,938.60) pursuant to the Bond Purchase Agreement, entered into by and between the Airports Authority and the Underwriters (the "Bond Purchase Agreement"). The Bond Purchase Agreement requires the Underwriters to purchase all of the Series 2023A Bonds if any are purchased. The Underwriters reserve the right to join with other underwriters in the offering of the Series 2023A Bonds. The obligations of the Underwriters to accept the delivery of the Series 2023A Bonds are subject to various conditions set forth in the Bond Purchase Agreement.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage services. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform investment banking services for the Airports Authority, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities, which may include credit default swaps) and financial instruments (including bank loans) for their own account and for the accounts of their

customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the Airports Authority.

The Underwriters and their respective affiliates may also communicate independent investment recommendations, market conditions or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Certain of the Underwriters have entered into distribution agreements with other broker-dealers for the distribution of the Series 2023A Bonds at the initial public offering prices. Such agreements generally provide that the relevant Underwriter will share a portion of its underwriting compensation or selling concession with such broker-dealers.

Morgan Stanley & Co. LLC, an underwriter of the Series 2023A Bonds, has entered into a retail distribution arrangement with its affiliate Morgan Stanley Smith Barney LLC. As part of the distribution arrangement, Morgan Stanley & Co. LLC may distribute municipal securities to retail investors through the financial advisor network of Morgan Stanley Smith Barney LLC. As part of this arrangement, Morgan Stanley & Co. LLC may compensate Morgan Stanley Smith Barney LLC for its selling efforts with respect to the Series 2023A Bonds.

### **VERIFICATION AGENT**

Robert Thomas CPA, LLC will verify from the information provided to them the mathematical accuracy of the computations contained in the provided schedules as of the delivery date of the Series 2023A Bonds to determine that the proceeds of the Series 2023A Bonds and other funds of the Airports Authority to be held in escrow under the Refunding Agreement will be sufficient to pay the principal or redemption price, as applicable, and accrued interest with respect to the Refunded Bonds. Robert Thomas CPA, LLC will express no opinion on the assumptions provided to them.

### **RELATIONSHIP OF PARTIES**

Manufacturers and Traders Trust Company serves as the Trustee for the Bonds, the Revolving Loan Notes and the Airports Authority's Dulles Toll Road Revenue Bonds, as trustee for the Airports Authority's pension plan and safe keeper of certain operating funds of the Airports Authority.

### **CONTINUING DISCLOSURE**

The Airports Authority has entered into a Continuing Disclosure Agreement (the "Disclosure Agreement") with Digital Assurance Certification, LLC ("DAC") to assist the Underwriters in complying with the requirements of Rule 15c2-12 (the "Rule") promulgated by the SEC pursuant to the Securities Exchange Act of 1934, as amended. The Disclosure Agreement requires the Airports Authority to file with DAC (i) certain annual financial information and operating data and (ii) certain event notices. Under the Disclosure Agreement, DAC will serve as the Airports Authority's Disclosure Dissemination Agent for purposes of filing annual disclosure

and any event notices required by the Rule with the Municipal Securities Rulemaking Board (the "MSRB") for posting on EMMA. DAC also will provide certain Airports Authority financial information through DAC's web site at <a href="www.dacbond.com">www.dacbond.com</a>. The form of the Disclosure Agreement is attached as APPENDIX F. The Airports Authority may amend the Disclosure Agreement in the future so long as such amendments are consistent with the Rule as then in effect.

The Disclosure Agreement requires the Airports Authority to provide limited information at specified times. While the Airports Authority expects to provide substantial additional information, as it has in the past, it is not legally obligated to do so. A default by the Airports Authority under the Disclosure Agreement is not an Event of Default with respect to the Series 2023A Bonds. The Disclosure Agreement permits any Bondholder to seek specific performance of the Airports Authority's obligations thereunder after providing a 30-day prior written qualifying notice to the Airports Authority and 30 days to cure, but no assurance can be given as to the outcome of any such proceeding.

The Airports Authority believes that it has complied in all material respects with its previous continuing disclosure undertakings during the last five years.

### CONCLUDING STATEMENT

To the extent that any statements made in this Official Statement involve matters of opinion, forecasts or estimates, whether or not expressly stated to be such, they are made as such and not as representations of fact or certainty, and no representation is made that any of those statements have been or will be realized. Historical data are presented for informational purposes only and are not intended to be a projection of future results. Information in this Official Statement has been derived by the Airports Authority from official and other sources and is believed by the Airports Authority to be accurate and reliable. Information other than that obtained from official records of the Airports Authority has not been independently confirmed or verified by the Airports Authority and its accuracy is not guaranteed. The Trustee has not participated in the preparation of this Official Statement and takes no responsibility for its content.

Neither this Official Statement nor any statement that may have been or that may be made orally or in writing is to be construed as or as part of a contract with the original purchasers or subsequent holders or beneficial owners of the Series 2023A Bonds.

All of the appendices are integral parts of this Official Statement and should be read together with the other parts of this Official Statement. The description of the Indenture does not purport to be comprehensive or definitive, and prospective purchasers of the Series 2023A Bonds are referred to the Indenture for the complete terms thereof. Copies of the Fifty-sixth Supplemental Indenture may be obtained from the Airports Authority. The text of the Master Indenture may be obtained from the Airports Authority's website at <a href="https://www.mwaa.com">www.mwaa.com</a> and at <a href="https://www.dacbond.com">www.dacbond.com</a>.

This Official Statement has been prepared and delivered by the Airports Authority and executed for and on behalf of the Airports Authority by its official identified below.

# METROPOLITAN WASHINGTON **AIRPORTS AUTHORITY**

By: <u>/s/William E. Sudow</u>
Chairperson



# APPENDIX A REPORT OF THE AIRPORT CONSULTANT



# Appendix A

# REPORT OF THE AIRPORT CONSULTANT

on the proposed issuance of

### METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

# AIRPORT SYSTEM REVENUE AND REFUNDING BONDS Series 2023A (AMT)

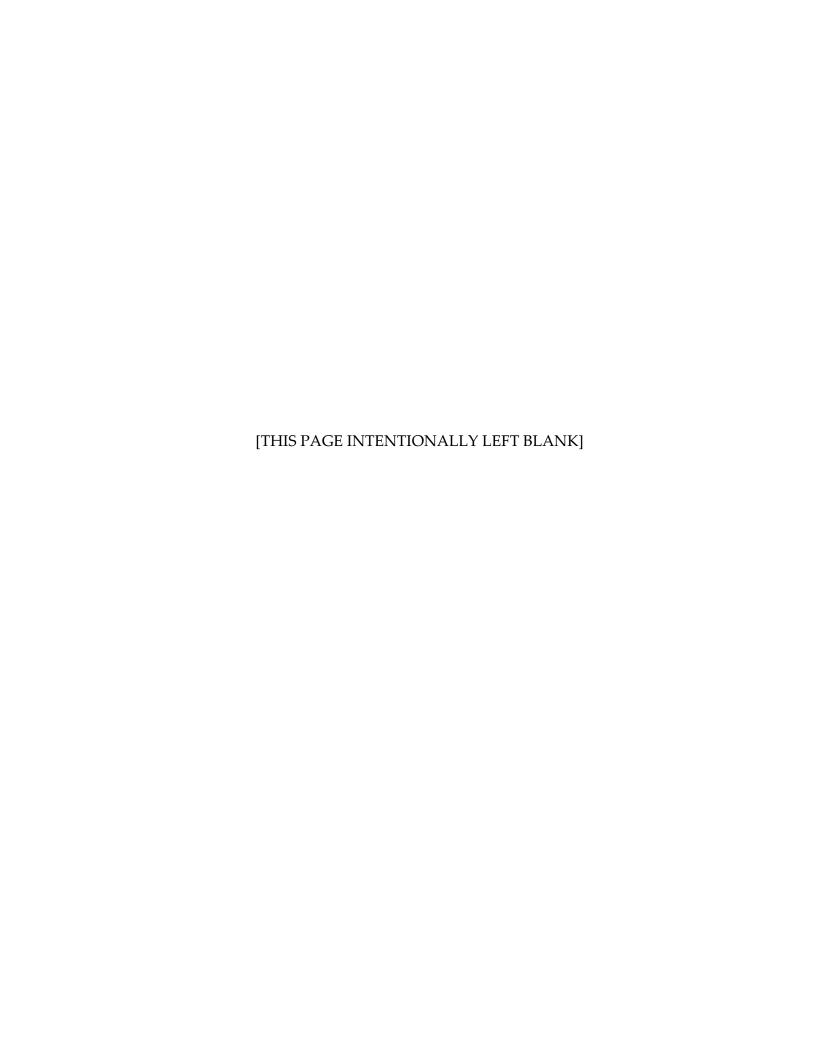
Prepared for

Metropolitan Washington Airports Authority

Prepared by

LeighFisher San Francisco, California

May 11, 2023





May 11, 2023

Mr. William E. Sudow Chairperson of the Board of Directors

Mr. John E. Potter President and Chief Executive Officer

Metropolitan Washington Airports Authority 1 Aviation Circle Washington, D.C. 20001-6000

Re: Report of the Airport Consultant
Metropolitan Washington Airports Authority
Airport System Revenue and Refunding Bonds, Series 2023A (AMT)

Dear Mr. Sudow and Mr. Potter:

LeighFisher, in conjunction with DKMG Consulting, LLC, is pleased to submit this Report of the Airport Consultant in connection with the proposed issuance by the Metropolitan Washington Airports Authority (the Airports Authority) of its Airport System Revenue and Refunding Bonds, Series 2023A (AMT) (the 2023A Bonds). This letter and the accompanying attachment and financial exhibits constitute our report.

The Airports Authority operates Ronald Reagan National Airport (Reagan National Airport or Reagan) and Washington Dulles International Airport (Dulles International Airport or Dulles) (collectively, the Airports) under the terms of an agreement and deed of lease with the federal government (the Federal Lease) that, as amended, extends to 2067.

The Airports Authority proposes to issue the 2023A Bonds in the principal amount of approximately \$311 million to fund approximately \$264 million of the costs of capital improvements at the Airports.

The Airports Authority also expects to issue 2023A Bonds in the principal amount of approximately \$153 million to refund approximately \$171 million principal amount of outstanding Airport System Revenue and Refunding Bonds, Series 2013A (AMT), but such issuance and associated savings in debt service were not taken into account for this report.

# Leigh Fisher

Mr. William E. Sudow Mr. John E. Potter May 11, 2023

The report also takes into account additional Bonds that the Airports Authority plans to issue in approximately 2024 through 2027 in the assumed principal amount of approximately \$1.834 billion to fund certain costs of capital improvements to the Airports (the Planned Bonds).

The report does not take into account the debt service requirements of additional Bonds that the Airports Authority plans to issue after 2026 to fund the costs of capital improvements at the Airports. Most of such debt service requirements are expected not to be payable from Revenues until after 2028.

The Airports Authority may issue additional Bonds during the forecast period to refund outstanding Bonds to achieve debt service savings or reduce variable-rate interest risk. However, no such issuances of Refunding Bonds after the 2023A Bonds were assumed for this report.

### Indenture

The proposed 2023A Bonds and Planned Bonds are to be issued under the 2001 Amended and Restated Master Indenture of Trust securing Airport System Revenue Bonds, as supplemented and amended (the Indenture). Except as otherwise defined, capitalized terms in this report are used as defined in the Indenture.

### Aviation Enterprise Fund

The Airports Authority operates and develops the Airports through the Aviation Enterprise Fund. The Airports Authority also oversees the operation and development of the Dulles Toll Road and the Dulles Corridor Metrorail Project through the Dulles Corridor Enterprise Fund. The Aviation Enterprise Fund and the Dulles Corridor Enterprise Fund are segregated. Under the Indenture, the Airports Authority may not use Net Revenues pledged for the payment of Airport System Revenue Bonds to pay the operating or debt service costs of the Dulles Toll Road or the Dulles Corridor Metrorail Project. Revenues from the operation of the Dulles Toll Road are Released Revenues under the Indenture and are excluded from the pledge of Net Revenues securing the Bonds. Only the financial operations of the Aviation Enterprise Fund are considered in this report.

### **Capital Construction Program**

The Airports Authority is implementing capital improvements (collectively the Capital Construction Program or CCP) to expand, redevelop, and modernize the Airports consistent with their master plans.

# Leigh Fisher

Mr. William E. Sudow Mr. John E. Potter May 11, 2023

Estimated project costs for in-progress and planned projects in the CCP, now scheduled for completion through 2028, including allowances for inflation, total \$3.684 billion, comprising \$1.709 billion for projects at Reagan and \$1.974 billion for projects at Dulles.

CCP projects for Reagan include (1) construction of Concourse E that accommodates 14 loading bridge-equipped gates that replaced hardstands formerly used for regional airline operations; (2) construction of space above the arrivals curbside roadway at Terminal 2 that accommodates new passenger security screening checkpoints to allow passengers to move between Concourses B through E post-security screening (referred to as the secure National Hall); (3) planning, programming and design for the eventual redevelopment of Terminal 1; (4) improvements to Terminal 2 restrooms, concessions, holdroom seating, and circulation areas; (5) construction of a new parking garage; and (5) various airfield improvement projects and upgrades to roadways, utility systems, and other infrastructure.

CCP projects for Dulles include (1) construction of the first phase of a new two-level midfield concourse to accommodate up to 14 loading bridge-equipped gates for narrowbody or large regional jet aircraft, designated the Tier 2 Concourse (East), (2) replacement of deteriorated airfield pavement; (3) construction of additional domestic gates (Z gates); (4) improvements to increase the capacity of the main terminal; (5) upgrades to utilities and systems at Concourses A, B, C and D; (6) major maintenance of the AeroTrain system; (7) rehabilitation of the mobile lounge fleet; (8) reconstruction of sections of the Dulles International Airport Access Highway; and (9) upgrades to utility systems and other infrastructure. Also included in the CCP for Dulles is the Airports Authority's contribution to pay the costs of the Metrorail station and related facilities serving Dulles.

The Airports Authority has funded or is funding the CCP with a combination of grants from the Federal Aviation Administration (FAA), the Commonwealth of Virginia, and the Transportation Security Administration (TSA); revenues derived from a \$4.50 passenger facility charge imposed at the Airports (PFC Revenues); other Airports Authority funds, and Bond proceeds. The Airports Authority expects that the proceeds of the Planned and future Bonds, together with other available sources of capital funds, will provide all funds needed to complete the CCP.

### **Security for the Bonds**

Under the Indenture, Bonds are secured by a pledge of Net Revenues defined as all Revenues of the Aviation Enterprise Fund plus transfers, if any, from the General Purpose Fund to the Revenue Fund, after provision is made for the payment of



Mr. William E. Sudow Mr. John E. Potter May 11, 2023

Operation and Maintenance (O&M) Expenses. PFC Revenues are excluded from Revenues under the Indenture, unless specifically so designated, and are not pledged to secure Bonds. The Airports Authority has not designated any PFC Revenues as Revenues, although, as discussed in the following section, it intends to use PFC Revenues to pay certain PFC-eligible Bond debt service.

### **Rate Covenant**

In Section 604(a) (the Rate Covenant) of the Indenture, the Airports Authority covenants that it will fix and adjust from time to time the fees and other charges for the use of the Airports, including services rendered by the Airports Authority, so as to produce Net Revenues at least sufficient to provide for the larger of either:

- (i) The amounts needed for making the required deposits in the Fiscal Year to the Principal Accounts, the Interest Accounts, the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund, and the Emergency Repair and Rehabilitation Fund; or
- (ii) 125% of Annual Debt Service with respect to Bonds for such Fiscal Year.

The Airports Authority's Fiscal Year is the calendar year ending December 31.

For purposes of demonstrating compliance with the Rate Covenant, Annual Debt Service is defined in the Indenture to exclude the payment of principal of and interest on indebtedness for which funds are, or are reasonably expected to be, available for and which are irrevocably committed to make such payments, including any such funds in an escrow account or any such funds constituting capitalized interest.

The Airports Authority intends to use PFC Revenues to pay certain future PFC-eligible debt service. For purposes of demonstrating compliance with the Rate Covenant, for the forecasts in this report, Annual Debt Service is reduced by such PFC Revenues.

### **Airline Agreement**

Effective January 2015, the Airports Authority and airlines accounting for substantially all passengers at the Airports (the Signatory Airlines) entered into an Airport Use Agreement and Premises Lease (the Airline Agreement) that provides for the use and occupancy of the Airports and establishes the methodologies for calculating the terminal rentals, landing fees, and other fees and charges payable by

# Leigh Fisher

Mr. William E. Sudow Mr. John E. Potter May 11, 2023

the Signatory Airlines. Certain capitalized terms in this report are used as defined in the Airline Agreement.

Under an "extraordinary coverage protection" provision of the Airline Agreement, the Airports Authority may adjust rentals, fees, and charges payable by the Signatory Airlines to ensure that forecast Net Revenues at the Airports are not less than required to meet the 125% debt service coverage requirement of the Rate Covenant.

The term of the Airline Agreement is 10 years, through 2024, for both Reagan and Dulles. For purposes of this report, it was assumed that the Signatory Airlines will pay all rentals, fees, and charges as calculated under the provisions of the Airline Agreement and that similar provisions will apply during the forecast period after 2024. No payments under the extraordinary coverage protection provision are forecast to be required.

Under the provisions of the Airline Agreement, the Signatory Airlines have consented to the funding plan for the CCP, thereby allowing debt service requirements and O&M Expenses allocable to airline cost centers to be recovered through Signatory Airline rentals, fees, and charges as provided for in the Airline Agreement.

### Scope of Report

The purpose of this report is to evaluate the ability of the Airports Authority to produce Net Revenues sufficient to meet the requirements of the Rate Covenant taking into account the estimated debt service requirements of outstanding Bonds, the proposed 2023A Bonds and the Planned Bonds. The report covers the six-year forecast period through 2028.

In preparing the report, we analyzed:

- The pattern and rate of recovery of air traffic at the Airports from the reductions that occurred, beginning in early 2020, from the economic disruption and public health restrictions caused by the novel coronavirus (COVID-19) pandemic.
- Future airline traffic demand at the Airports, giving consideration to the
  demographic and economic characteristics of the Airports service region,
  historical trends in airline service and traffic, the roles of the Airports in airline
  route systems, constraints on aircraft operations at Reagan, and other key
  factors that may affect future traffic.

# Leigh Fisher

Mr. William E. Sudow Mr. John E. Potter May 11, 2023

- Estimated sources and uses of funds for the CCP and associated Bond debt service requirements.
- Historical and forecast PFC Revenues and the use of such PFC Revenues to pay project costs and PFC-eligible Bond debt service.
- Historical relationships among revenues, expenses, and airline traffic at the Airports.
- Budgeted revenues and expenses for 2023, expected staffing requirements, the facilities being constructed under the CCP, and other factors that may affect future revenues and expenses.
- The Airports Authority's policies and agreements relating to airline use and occupancy of the Airports, including the calculation of airline rentals, fees, and charges under the Airline Agreement.
- The Airports Authority's policies and contractual agreements relating to the operation of other services and concessions, including public parking, rental car concessions, terminal concessions, and the leasing of buildings and grounds.
- The use of federal economic relief grants to pay debt service requirements and operating expenses to offset the loss of revenues resulting from the COVID-19 pandemic.

We also identified key factors upon which the future financial results of the Airports Authority may depend, formulated assumptions about those factors, and on the basis of those assumptions, assembled the financial forecasts presented in the exhibits at the end of the report. Historical financial data and estimates of project costs, project financing, and annual debt service requirements were provided by the sources noted in the report.

### Forecast Airline Payments per Passenger

Exhibits E-4 and E-5 present the forecast financial requirements that determine terminal rentals, landing fees, and other fees and charges payable by the Signatory Airlines under the Airline Agreement. The exhibits also present projected Signatory Airline payments expressed per enplaned passenger.



Mr. William E. Sudow Mr. John E. Potter May 11, 2023

# **Forecast Debt Service Coverage**

As shown in the following tabulation and Exhibit G-1, the Net Revenues of the Airports Authority are forecast to be sufficient to meet the requirements of the Rate Covenant and to exceed the required 125% debt service coverage in each year of the forecast period under the Base passenger traffic forecast. As shown in Exhibit H-2, the required 125% debt service coverage is also projected to be exceeded under a Stress Test passenger projection.

### **FORECAST DEBT SERVICE COVERAGE**

in thousands

	Net Revenues	Annual Debt Service (a)	Debt service coverage
Year	[A]	[B]	[A/B]
2023	\$ 557,753	\$ 253,216	2.20x
2024	574,224	273,067	2.10x
2025	605,732	298,965	2.03x
2026	667,315	359,975	1.85x
2027	736,532	424,147	1.74x
2028	765,232	443,724	1.72x

<sup>(</sup>a) Net of PFC Revenues that the Airports Authority intends to use to pay PFC-eligible Bond debt service.



Mr. William E. Sudow Mr. John E. Potter May 11, 2023

## **Assumptions Underlying the Financial Forecasts**

The financial forecasts presented in this report are based on information and assumptions that were provided by or reviewed with and agreed to by Airports Authority management as being appropriate for the report's purpose. 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 Airports Authority. Those key factors and assumptions that are significant to the forecasts are set forth in the report, which 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 financial 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. Accordingly, neither LeighFisher nor DKMG Consulting, LLC, makes any warranty with respect to the information, assumptions, forecasts, opinions, or conclusions disclosed in the 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 for the Airports Authority's proposed financing.

Respectfully submitted,

Leightisher

LEIGHFISHER

[THIS PAGE INTENTIONALLY LEFT BLANK]

### Attachment

# REPORT OF THE AIRPORT CONSULTANT

on the proposed issuance of METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

AIRPORT SYSTEM REVENUE AND REFUNDING BONDS Series 2023A (AMT) [THIS PAGE INTENTIONALLY LEFT BLANK]

# CONTENTS

AIRPORT FACILITIES
Reagan National Airport
Passenger Terminals at Reagan
Capital Construction Program at Reagan
Dulles International Airport
Passenger Terminals at Dulles
Capital Construction Program at Dulles
Capital Construction Frogram at Dunes
BASIS FOR AIRLINE PASSENGER DEMAND
Airports Service Region
Demographic and Economic Profile
Historical Socioeconomic Data
Employment by Industry Sector
Visitors and Conventions
Economic Outlook
AIRLINE TRAFFIC ANALYSIS
Historical Passenger Traffic at the Airports
Airline Shares of Passengers at the Airports
Ranking Among Other Airports
Competing Airports Serving the Region
Competition with Baltimore/Washington Airport
Competition with Other International Gateway Airports
Historical Airline Service and Traffic at Reagan
Perimeter and High Density Rules
American-US Airways Merger and Slot Transfers
Airline Service
Enplaned Passengers
Domestic Airfares
Airline Shares of Enplaned Passengers
Cargo
Aircraft Operations
Recent Changes in Enplaned Passengers at Reagan
Historical Airline Service and Traffic at Dulles
Airline Service
Enplaned Passengers
Domestic Airfares
Airline Shares of Domestic Enplaned Passengers
Airline Shares of International Enplaned Passengers
International Passengers by World Region
111C11au01a1 assengeis dv vv01U NC210H

# CONTENTS (continued)

	Page
AIRLINE TRAFFIC ANALYSIS (continued)	
Historical Airline Service and Traffic at Dulles (continued)	
Cargo	A-84
Aircraft Operations	A-84
Recent Changes in Enplaned Passengers at Dulles	
Key Factors Affecting Future Airline Travel	A-87
National Economic Conditions	A-87
International Economic and Geopolitical Conditions	
Financial Health of the Airline Industry	
Airline Consolidation and Alliances	A-90
Airline Service and Routes	A-91
Airline Competition and Airfares	A-92
Availability and Price of Aviation Fuel	A-93
Aviation Safety and Security Concerns	A-94
Public Health Concerns and COVID-19 Pandemic	A-95
Climate Change Concerns	A-97
Capacity of the National Air Traffic Control System	A-98
Capacity of the Airports	A-98
Airline Traffic Forecasts	A-98
Airline Traffic Forecasts for Reagan	A-99
Airline Traffic Forecasts for Dulles	
Forecast Passengers for Both Airports	A-106
Stress Test Projections	
FINANCIAL ANALYSIS	. A-116
Framework for Airports Authority's Financial Operations	A-116
Indenture	
Airline Agreement	
Capital, Operating and Maintenance Investment Program	
Federal COVID-19 Relief Grants	
Capital Construction Program	A-119
Revolving Loan Notes	A-120
Federal AIP Grants	
Bipartisan Infrastructure Law Grants	
State Grants	A-121
Passenger Facility Charge (PFC) Revenues	A-121
Airport System Revenue Bonds	
Annual Debt Service	
Operation and Maintenance Expenses	A-123
Revenues	A-124
Airline Revenues	

# CONTENTS (continued)

	Page
FINANCIAL ANALYSIS (continued)	
Airline Revenues (continued)	
Signatory Airline Rentals, Fees, and Charges	A-125
Western Lands Account	
Concession Revenues	
Public Parking	A-127
Rental Cars	
Ground Transportation	A-131
Terminal Concession Programs	A-132
Food and Beverage	
Newsstand and Retail	
Duty Free	A-134
Display Advertising	A-134
Fixed Base Operations	A-135
In-Flight Catering	A-135
Other Operating Revenues	A-136
Investment Earnings	
Application of Revenues	A-136
Sharing of Net Remaining Revenues	A-138
Application of PFC Revenues	A-138
Debt Service Coverage	A-138
Financial Forecasts and Stress Test Projections	A-139

# **TABLES**

	Page
1 Gate Distribution and Use by Airline	A-21
2 Gate Distribution and Use By Airline	A-27
3 Historical Socioeconomic Data	A-30
4 Population in Most Populous U.S. Metropolitan Statistical areas	A-31
5 Nonagricultural Employment in Most Populous U.S. Metropolitan Statistical Areas	A-33
6 Nonagricultural Employment by Industry Sector	A-35
7 Largest Private Sector Employers	A-36
8 Enplaned Passenger Trends	A-39
9 Airlines Shares of Enplaned Passengers	A-41
10 Enplaned Passengers at Top-Ranking U.S. Airports	A-42
11 Originating Passengers at Top-Ranking U.S. Airports	A-43
12 Connecting Passengers at Top-Ranking U.S. Airports	A-44
13 International Passengers at Top-Ranking U.S. Airports	A-45
14 Domestic Airline Service at Regional Airports	A-47
15 Historical Trends in Enplaned Passengers at Regional Airports	A-48
16 International Departing Seats, by World Region Destination	A-50
17 Departing Seats on American at U.S. Airports	A-54
18 American Enplaned Passengers at its Principal Airports	A-55
19 Airline Service for Top Domestic Destinations, Reagan	A-57
20 Domestic Airline Service by Aircraft Type, Reagan	A-58
21 Historical Enplaned Passengers by Component, Reagan	A-60
22 Enplaned Passengers by Airline Group, Reagan	A-61

# TABLES (continued)

	Page
23 Passengers and Airfares in Top 20 Domestic Destinations, Reagan	A-63
24 Airline Shares of Enplaned Passengers, Reagan	A-64
25 Departing Seats on United at U.S. Airports	A-68
26 United Enplaned Passengers at its Principal Airports	A-70
27 Airline Service for Top Domestic Destinations, Dulles	A-72
28 Domestic Airline Service by Aircraft Type, Dulles	A-73
29 International Airline Service, Dulles	A-75
30 Historical Enplaned Passengers by Component, Dulles	A-77
31 Enplaned Passengers by Airline Group, Dulles	A-78
32 Passengers and Airfares in Top 20 Domestic Destinations, Dulles	A-80
33 Airline Shares of Domestic Enplaned Passengers, Dulles	A-81
34 Airline Shares of International Enplaned Passengers, Dulles	A-82
35 International Departing Passengers by World Region, Dulles	A-83
36 Historical Air Cargo Weight, Dulles	A-85
37 Historical and Forecast Enplaned Passengers, Reagan	A-101
38 Historical and Forecast Aircraft Departures and Landed Weight, Reagan	A-103
39 Historical and Forecast Enplaned Passengers, Dulles	A-107
40 Historical and Forecast Aircraft Departures and Landed Weight, Dulles	A-109
41 Historical and Forecast Enplaned Passengers	A-111
42 Base Forecasts and Stress Test Projections	A-113
43 Revenue Summary for 2022	A-125
44 Airport Public Parking Facilities	A-128
45 Rental Car Gross Receipts	A-130

# **FIGURES**

		Page
1	Airports Service Region	A-29
2	Historical Enplaned Passengers	A-38
3	U.S. Destinations with Daily Scheduled Nonstop Roundtrip Passenger Airline Service, Reagan	A-56
4	Monthly Enplaned Passengers, Reagan	A-66
5	U.S. Destinations with Daily Scheduled Nonstop Roundtrip Passenger Airline Service, Dulles	A-71
6	International Destinations with Scheduled Passenger Airline Service, Dulles	A-76
7	Monthly Enplaned Passengers, Dulles	A-86
8	Historical Enplaned Passengers on U.S. Airlines	A-87
9	Net Income for U.S. Airlines	A-89
10	Historical Domestic Yield for U.S. Airlines	A-93
11	Historical Aviation Fuel Prices	A-94
12	Base Forecasts and Stress Test Projections of Enplaned Passengers, Reagan	A-114
13	Base Forecasts and Stress Test Projections of Enplaned Passengers, Dulles	A-115

# **EXHIBITS**

	Page
A	Capital Construction Program
В	Sources and Uses of Bond Funds
C-1	Annual Debt Service
C-2	Annual Debt Service by Cost Center, Reagan
C-3	Annual Debt Service by Cost Center, Dulles
D-1	Operation and Maintenance Expenses
D-2	Operation and Maintenance Expenses, Reagan
D-3	Operation and Maintenance Expenses, Dulles
E-1	Revenues
E-2	Revenues, Reagan
E-3	Revenues, Dulles
E-4	Calculation of Signatory Airline Payments, Reagan
E-5	Calculation of Signatory Airline Payments, Dulles
F-1	Application of Revenues and Allocation of Net Remaining Revenues A-158
F-2	Sources and Uses of PFC Revenues, Reagan
F-3	Sources and Uses of PFC Revenues, Dulles
G-1	Debt Service Coverage and Rate Covenant Requirement
G-2	Debt Service Coverage, Reagan
G-3	Debt Service Coverage, Dulles
H-1	Summary of Base and Stress Test Financial Projections
H-2	Summary of Base and Stress Test Financial Projections, Reagan A-167
H-3	Summary of Base Forecast and Stress Test Financial Projection, Dulles A-168

[THIS PAGE INTENTIONALLY LEFT BLANK]

#### **AIRPORT FACILITIES**

#### REAGAN NATIONAL AIRPORT

Reagan National Airport, opened in 1941, is located on approximately 860 acres along the Potomac River in Arlington County, Virginia, approximately 3 miles south of central Washington, D.C. Roadway access to the airport is provided via the George Washington Memorial Parkway and Route 1 through the Crystal City area of Arlington, Virginia. Access is also provided by the Metrorail rapid transit system via a station adjacent to the airport's passenger terminals.

Reagan has three runways. Runway 1-19 (7,169 feet) is the primary air carrier runway, capable of accommodating up to Airplane Design Group (ADG) IV aircraft (B-767 and similar). Runway 15-33 (5,204 feet) and Runway 4-22 (5,000 feet) are used primarily by smaller aircraft.

# Passenger Terminals at Reagan

The passenger terminals at Reagan provide 58 loading bridge-equipped aircraft gates and associated passenger check-in, security screening, baggage claim, and other functions in approximately 1.6 million square feet of space. Terminal 1, which dates from the opening of the airport, is listed on the National Register of Historic Places and provides approximately 250,000 square feet of space and nine aircraft gates, which are designated the Concourse A gates. Terminal 2, opened in 1997, provides approximately 990,000 square feet of space and 35 aircraft gates on the three original concourses (designated Concourses B, C, and D). The fourth Terminal 2 concourse (designated Concourse E) was constructed as part of the CCP and opened in April 2021. Concourse E provides 230,000 square feet of space and 14 loading-bridge-equipped gates for large regional airline aircraft, replacing the 12 hardstand positions formerly used. Table 1 shows the distribution and use of gates by concourse and airline.

The Airports Authority provides approximately 9,100 revenue-producing public automobile parking spaces at Reagan. Approximately 3,200 additional spaces are provided for employee parking. Direct connections from Terminal 2 to the Metrorail station and the public parking garages are provided through two enclosed pedestrian bridges. Connections from Terminal 1 to the Metrorail station and the public parking garages are provided via shuttle buses and an underground walkway.

# Table 1 GATE DISTRIBUTION AND USE BY AIRLINE

Reagan Washington National Airport
As scheduled for June 2023

							Average daily	departures		ige daily ing seats
			Conc	ourse				Per		Per
	Α	В	С	D	Е	Total	Departures	gate	Seats	departure
American			8	11	14	33	242.3	7.3	23,733	98
Other airlines										
Air Canada	1					1	8.0	8.0	506	63
Alaska (a)		1				1	5.1	5.1	792	155
Delta (b)		7				7	54.8	7.8	6,086	111
Frontier	1					1	3.0	3.0	558	186
JetBlue			4			4	27.5	6.9	3,216	117
Southwest	7					7	43.2	6.2	6,507	151
United	_	4				4	<u>31.3</u>	7.8	2,838	91
Subtotal	<u>9</u>	<u>12</u>	4			<u>25</u>	<u>172.9</u>	6.9	20,502	119
Total gates	9	12	12	11	14	58	415.2	7.2	44,234	107

Notes: Departures and departing seats include those by regional affiliate airlines. Numbers may not add to totals shown because of rounding.

Sources: Airports Authority records as of March 2023 and OAG Schedules, accessed March 2023.

<sup>(</sup>a) United operates 2 daily departures on a gate shared with Alaska. These departures are included with Alaska's.

<sup>(</sup>b) Alaska operates 2 daily departures on a gate shared with Delta. These departures are included with Delta's.

## **Capital Construction Program at Reagan**

Exhibit A shows the sources and uses of funds for the Capital Construction Program at Reagan. The principal CCP projects at Reagan are:

*Concourse E.* As part of Project Journey, Concourse E, connected to Concourses B, C, and D, was completed in 2021 to accommodate 14 loading-bridge-equipped gates for large regional aircraft. Concourse E replaced the 12 hardstands formerly used for regional airline operations. Enabling projects included the demolition of an office building and hangars and modifications to the central utility plant.

Secure National Hall. Also, as part of Project Journey, security facilities were constructed above the arrivals curbside roadway at the north and south ends of Terminal 2 to accommodate new passenger security screening checkpoints. The two checkpoints, occupying approximately 90,000 square feet of space, opened in November 2021 and replaced the three separate checkpoints at the entrances to the original concourses to allow passengers to move between the Terminal 2 concourses through National Hall without having to be rescreened. Passengers now have post-security access to concession outlets in National Hall. (Passengers moving between Terminal 1 and the Terminal 2 concourses must be rescreened.)

*Terminal 1 Rehabilitation.* Planning, programming, and design is being undertaken for the redevelopment of Terminal 1. Near-term improvements include upgrades and rehabilitation of baggage systems, passenger loading bridges, utility systems, and other facilities.

*Terminal 2 Redevelopment.* Following the completion of Project Journey and the subsequent changes to security and passenger flow, Terminal 2 facilities are to be redeveloped to further enhance the passenger experience. Improvements include the reconfiguration of existing and construction of new restrooms, infrastructure additions to support concessions expansion, and updates to National Hall and concourse holdroom seating and circulation areas.

*Parking Garage.* Construction of a new parking garage providing approximately 1,600 spaces on three levels was planned at a site at the southwest corner of the airport. The project would also include major utility relocations, soil remediation, and storm water management. Upon further evaluation, a temporary parking structure will be constructed to accommodate vehicle parking affected by other planned construction projects. The Airports Authority may reprogram the funding for the project for other purposes.

Other CCP projects at Reagan include airfield pavement replacement, airfield improvement projects, upgrades to roadways and utility systems, and other infrastructure improvements.

#### **DULLES INTERNATIONAL AIRPORT**

Dulles International Airport, opened in 1962, is located on approximately 11,184 acres of land in Fairfax and Loudoun counties, Virginia, approximately 26 miles west of central Washington, D.C.

The Dulles International Airport Access Highway, a limited-access highway under the jurisdiction of the Airports Authority, is the primary access route to the airport. Direct Metrorail Silver Line service to the station at Dulles, operated by the Washington Metropolitan Area Transit Authority, began in November 2022.

Dulles has four runways: Runway 1L-19R (9,400 feet), Runway 1C-19C (11,500 feet), Runway 1R-19L (11,500 feet), and Runway 12-30 (10,500 feet). All runways are capable of accommodating operations by ADG VI aircraft (such as the A380). Most aircraft operations at the airport are conducted in parallel flow on the three north-south Runways 1-19. Crosswind Runway 12-30 is used primarily for departures to the west and arrivals from the east during periods of high winds.

# **Passenger Terminals at Dulles**

The passenger terminal complex at Dulles consists of the Eero Saarinen-designed main terminal and four midfield concourses. All passenger check-in, security screening, and baggage claim areas are located in the main terminal. Processing of international arrivals is accommodated at both the main terminal and the Concourse C Federal Inspection Services (FIS) facility. The main terminal also provides four loading bridge-equipped aircraft gates and three ground loading parking positions, referred to as the Z Gates. The main terminal, including the International Arrivals Building (IAB), and midfield Concourses A, B, C, and D collectively encompass approximately 3.7 million square feet of floor space. The main terminal and four concourses provide 127 aircraft gates, equipped with 95 loading bridges. The gate count is the number of marked aircraft parking positions, including both hardstand parking positions for regional aircraft and gates equipped with two loading bridges to accommodate large widebody aircraft.

The security mezzanine adjoins the main terminal station for the underground automated people-mover system, known as the AeroTrain. The AeroTrain system has four stations, one located at the main terminal (integrated with the security mezzanine), two serving Concourses A and B, and one serving Concourse C. The Concourse C station is located at the site of a future midfield concourse, the first phase of which is included in the CCP as the Tier 2 Concourse (East) project

(discussed in the following section). The Tier 2 Concourse (East) is to be constructed directly above the Concourse C station and will be served by it. Passengers now access Concourse C from the station via an underground walkway. During peak periods, the AeroTrain system operates with headways of approximately 2.5 minutes and achieves travel times of approximately 2.0 minutes between stations.

Mobile lounges provide shuttle service to and from Concourse D and the IAB at the main terminal. An underground moving walkway also provides access between the main terminal and Concourses A and B.

The IAB accommodates the FIS (customs, immigration, and agriculture inspection) conducted by U.S. Customs and Border Protection (CBP) for most international arriving passengers. The IAB, which is connected to the main terminal, was expanded and upgraded as part of the CCP and has a processing capacity of approximately 2,400 passengers per hour.

Concourses A and B, which are connected, together provide approximately 1.1 million square feet of floor space. Concourse A is used by United and provides 31 parking positions for regional airline aircraft. Concourse B accommodates airlines other than United, including foreign-flag airlines, and provides 31 gates, up to 17 of which are served by a secure corridor to accommodate arriving international passengers. The gate count is the number of marked aircraft parking positions, some of which are equipped with two loading bridges to accommodate large widebody aircraft.

Concourses C and D, which are connected, together provide 923,000 square feet of floor space and 58 aircraft parking positions, 50 of which are equipped with loading bridges and all of which are used by United. Of the 58 gates, 12 are served by a sterile corridor to a CBP facility, referred to as the midfield FIS, that provides federal inspection services for passengers arriving on United and other Star Alliance airlines who are connecting to domestic flights. The midfield FIS has a processing capacity of approximately 1,200 passengers per hour.

Table 2 shows the distribution and use of the gates at Dulles by concourse and airline.

United leases, on a preferential basis, all 31 regional airline gates at Concourse A and all 58 gates at Concourses C and D. Under the Airline Agreement, the Airports Authority has the right to reallocate preferential-use gates (and associated hold rooms) to provide adequate facilities for any airline wishing to operate at the airport. The Airports Authority also may require a Signatory Airline to accommodate another airline at its preferential-use gates.

The Airports Authority manages and assigns all 31 gates on Concourse B and the seven Z Gates (four of which are equipped with loading bridges) under an application and permit process whereby the gates are operated on a common-use basis in accordance with established policies and procedures. The Airports Authority may cancel a permit with a 30-day written notice. A Signatory Airline may cancel a permit with a 60-day written notice.

The Airports Authority provides approximately 20,300 revenue-producing public automobile parking spaces at Dulles. Approximately 7,000 additional spaces are provided for employee parking. The two garages at Dulles are connected to the main terminal, one with an underground walkway with moving sidewalks and the other with a covered walkway. The garages and remote surface parking lots are served via shuttle buses. A direct connection from the newly opened Metrorail station to the main terminal's ticketing and baggage claim levels is provided through an indoor pedestrian tunnel with moving sidewalks.

## **Capital Construction Program at Dulles**

Exhibit A shows the sources and uses of funds for the Capital Construction Program at Dulles. CCP projects at Dulles include:

*Tier 2 Concourse (East).* The first phase of a new two-level midfield concourse is to be constructed south of Concourses C and D. The concourse, referred to as the Tier 2 Concourse (East), is planned to provide up to approximately 14 loading bridge-equipped gates for narrowbody or large regional jet aircraft. The new concourse will replace the single-level Concourse A that is now used for the ground loading of regional jet aircraft. Upon the completion of Tier 2 Concourse (East), Concourse A will be demolished and the site repurposed as aircraft parking pavement. The new concourse is to be constructed over and connected to the AeroTrain station that now serves Concourse C.

*Dulles Metrorail Project.* The Metrorail Silver Line station has been constructed and opened for service in November 2022. The Airports Authority's contribution to the costs on the station and related facilities are included in the CCP.

*Airfield Improvements.* Various sections of deteriorated airfield pavement will be reconstructed.

*Additional Aircraft Gates.* Up to six additional gates will be constructed when required for increased domestic airline operations.

*Upgrades to Main Terminal and IAB*. Upgrades to the terminal will include enhancement of the capacity of the International Arrivals Building.

*Upgrades to Concourses A, B, C, and D.* Upgrades to the concourses will include replacement of electrical equipment and other utility systems.

Other CCP projects at Dulles include replacement of terminal and concourse roofs, major maintenance of the AeroTrain system, rehabilitation of the mobile lounge fleet, reconstruction of Access Highway pavement, upgrades to stormwater and sanitary sewer systems, and other utility and infrastructure upgrades.

# Table 2 GATE DISTRIBUTION AND USE BY AIRLINE

Washington Dulles International Airport
As scheduled for June 2023

	Concourse						Average daily	/ departures	Average daily departing seats	
	A (a)	B (b)	С	D	Z	Total	Departures	Per gate	Seats	Per departure
United (c)										
Mainline only			17	9		26				
Regional only	31		1	9	5	46				
Mainline/regional			_5_	<u>17</u>	_	<u>22</u>				
Subtotal	31		23	35	5	94	215.0	2.3	28,672	133
Other airlines (d)										
Alaska		2				2	7.1	3.6	1,308	183
Allegiant		0.5				0.5	1.5		254	
American		3				3	7.3	2.4	849	117
Delta		6.5				6.5	17.7	2.7	1,902	107
Southern					1	1	10.8	10.8	97	9
Southwest		2				2	5.3	2.7	838	157
Foreign-flag airlines (e)	_	<u>17</u>			<u>1</u>	<u>17</u>	46.8	2.6	10,277	220
Subtotal	<u></u>	<u>31</u>	<u></u>	<u></u>	<u>1</u> 2	<u>33</u>	<u>96.5</u>	2.9	<u>15,526</u>	161
Total gates	31	31	23	35	7	127	311.5	2.5	44,198	142

Note: Departures and departing seats include those by regional affiliate airlines. Excludes 16 remote hardstand positions.

Source: Airports Authority records as of March 2023 and OAG Schedules, accessed March 2023.

<sup>(</sup>a) Hardstand positions for regional airline aircraft, not equipped with loading bridges. The configuration of these positions is changed from time to time as the types of aircraft operated at the positions change. As a result, the number of positions may not match the number shown in other Airports Authority records.

<sup>(</sup>b) The gate count is the number of marked aircraft parking positions, some of which are equipped with two loading bridges to accommodate large widebody aircraft.

<sup>(</sup>c) All gates are leased on a preferential-use basis except for four common-use Z gates, which are assigned to United.

<sup>(</sup>d) All gates are operated on a common-use basis under a permit process.

<sup>(</sup>e) Departures and departing seats include some by Star Alliance airlines operating at Concourses C and D.

#### BASIS FOR AIRLINE PASSENGER DEMAND

#### AIRPORTS SERVICE REGION

Reagan National Airport and Dulles International Airport serve the greater Washington, D.C. area, home of the nation's capital. The Airports service region, as defined for purposes of this report, is the Washington-Arlington-Alexandria, DC-VA-MD-WV Metropolitan Statistical Area (MSA) encompassing the District of Columbia; the Maryland counties of Calvert, Charles, Frederick, Montgomery, and Prince George's; the Virginia counties of Arlington, Clarke, Culpeper, Fairfax, Fauquier, Loudoun, Madison, Prince William, Rappahannock, Spotsylvania, Stafford, and Warren; the independent Virginia cities of Alexandria, Fairfax, Falls Church, Fredericksburg, Manassas, and Manassas Park; and the West Virginia county of Jefferson. Figure 1 shows a map of the Airports service region.

Portions of the Airports service region also are served by Baltimore/Washington International Thurgood Marshall Airport (Baltimore/Washington Airport or BWI), located approximately 30 miles northeast of Washington, D.C. and operated by the Maryland Aviation Administration. Information on competing airline service at Reagan, Dulles, and BWI is discussed in the later section "Competing Airports Serving the Region."

#### DEMOGRAPHIC AND ECONOMIC PROFILE

The demographic and economic factors that most strongly influence airline passenger demand at the Airports are the population, per capita income, per capita gross domestic product (GDP), and employment of the Airports service region, one of the nation's largest metropolitan areas. Its residents tend to be wealthier than the national average, resulting in high rates of air travel to and from the Airports. In addition, tourism, government, and business-related travel have a strong role in generating visitors to the region.

#### **Historical Socioeconomic Data**

Table 3 shows data on historical population, per capita income, per capita gross domestic product, nonagricultural employment, and unemployment rates for the Airports service region and the nation.

**Population.** Between 2010 and 2021 (the most recent year for which data are available), the population of the Airports service region increased an average of 1.0% annually, compared with a 0.6% average annual increase for the nation. As shown in Table 4, in 2021, the Airports service region was the sixth most populous metropolitan area in the nation. Between 2010 and 2021, the region was the eighth fastest growing MSA among the nation's 20 most populous MSAs.

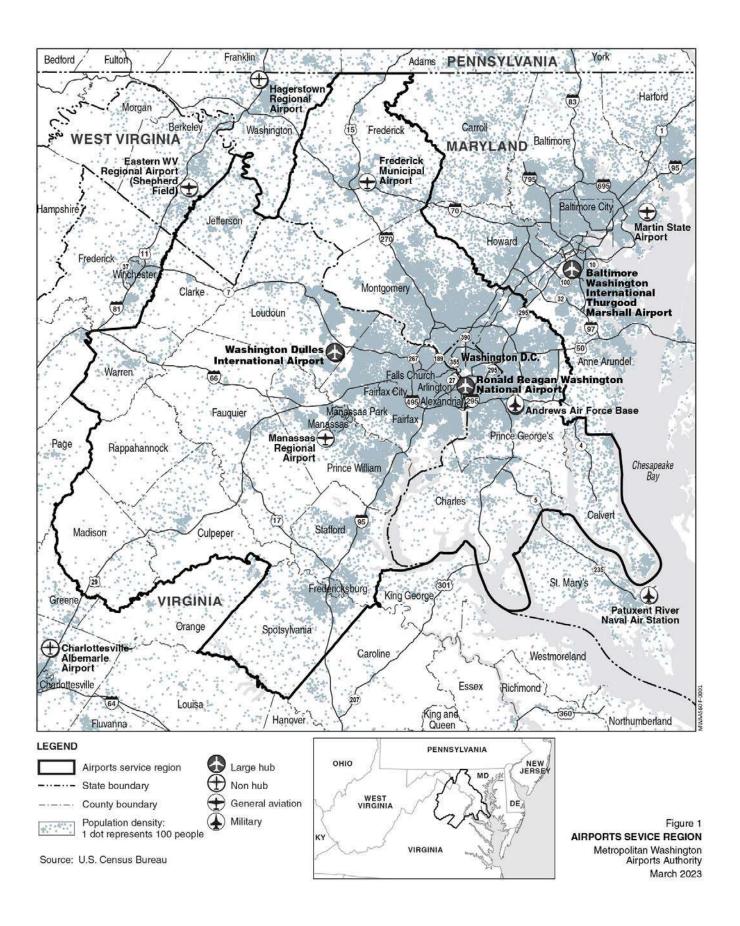


Table 3
HISTORICAL SOCIOECONOMIC DATA

	Population (thousands)		·		domestic	Per capita gross domestic product (2022 dollars)		Nonagricultural employment (thousands)		Unemployment rate	
	Airports		Airports		Airports		Airports		Airports		
	service	United	service	United	service	United	service	United	service	United	
	region	States	region	States	Region(a)	States	Region(b)	States	region	States	
2000	4,876	282,162	72,404	52,127	n.a. <i>(b)</i>	61,743	2,693	132,011	2.7%	4.0%	
2010	5,678	309,327	78,418	54,601	100,525	65,284	2,980	130,345	6.6	9.6	
2015	6,099	320,739	80,667	60,163	98,475	69,850	3,158	141,824	4.4	5.3	
2016	6,155	323,072	81,924	60,496	100,123	70,278	3,217	144,335	3.8	4.9	
2017	6,218	325,122	82,063	61,547	100,158	71,197	3,267	146,607	3.6	4.4	
2018	6,256	326,838	82,696	62,685	101,190	72,838	3,307	148,908	3.2	3.9	
2019	6,297	328,330	83,555	64,390	102,213	74,115	3,348	150,904	3.0	3.7	
2020	6,386	331,512	86,063	67,580	99,902	71,838	3,148	142,186	6.4	8.1	
2021	6,356	332,032	87,290	69,276	103,243	75,870	3,213	146,285	4.9	5.3	
2022	n.a.	333,288	n.a.	n.a.	n.a.	n.a.	3,308	152,575	3.4 <i>(c)</i>	3.6	
			Aver	age annual pe	ercent increase (	decrease)					
2000-2010	1.5%	0.9%	0.8%	0.5%	n.a.	0.6%	1.0%	(0.1%)			
2010-2019	1.2	0.7	0.7	1.8	0.2	1.4	1.3	1.6			
2010-2020	1.2	0.7	0.9	2.2	(0.1)	1.0	0.5	0.9			
2020-2021	(0.5)	0.2	1.4	2.5	3.3	5.6	2.1	2.9			
2021-2022	n.a.	0.4	n.a.	n.a.	n.a.	n.a.	2.9	4.3			

Airports service region = The 24 counties and independent cities (plus the District of Columbia) in the Washington-Arlington-Alexandria MSA as currently defined (see Figure 1).

Notes: Population numbers are estimated as of July 1 each year. Calculated percentages may not match those shown because of rounding. n.a. = not available.

- (a) Data for 2000 are no longer available from the Bureau of Economic Analysis at the MSA level.
- (b) Excludes data for Madison County, due to unavailability.
- (c) Data for 2022 are preliminary.

Sources: Population: U.S. Department of Commerce, Bureau of the Census website, www.census.gov, accessed February 2023.

Income and Gross Domestic Product: U.S. Department of Commerce, Bureau of Economic Analysis website, www.bea.gov, accessed February 2023.

Employment: U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov, accessed March 2023.

Table 4

POPULATION IN MOST POPULOUS U.S. METROPOLITAN STATISTICAL AREAS

2021		Population	(thousands)	Percent increase
Rank	Metropolitan Statistical Area	2010	2021 (a)	(decrease)
1	New York-Newark-Jersey City	18,923	19,768	4.5%
2	Los Angeles-Long Beach-Anaheim	12,838	12,997	1.2
3	Chicago-Naperville-Elgin	9,471	9,510	0.4
4	Dallas-Fort Worth-Arlington	6,392	7,760	21.4
5	Houston-The Woodlands-Sugar Land	5,947	7,207	21.2
6	Washington Airports service region	5,678	6,356	11.9
7	Philadelphia-Camden-Wilmington	5,971	6,229	4.3
8	Atlanta-Sandy Springs-Alpharetta	5,303	6,144	15.9
9	Miami-Fort Lauderdale-Pompano Beach	5,583	6,092	9.1
10	Phoenix-Mesa-Chandler	4,204	4,946	17.6
11	Boston-Cambridge-Newton	4,566	4,900	7.3
12	Riverside-San Bernardino-Ontario	4,242	4,653	9.7
13	San Francisco-Oakland-Berkeley	4,344	4,623	6.4
14	Detroit-Warren-Dearborn	4,292	4,365	1.7
15	Seattle-Tacoma-Bellevue	3,449	4,012	16.3
16	Minneapolis-St. Paul-Bloomington	3,340	3,691	10.5
17	San Diego-Chula Vista-Carlsbad	3,103	3,286	5.9
18	Tampa-St. Petersburg-Clearwater	2,788	3,220	15.5
19	Denver-Aurora-Lakewood	2,555	2,973	16.4
20	Baltimore-Columbia-Towson	2,716	2,838	4.5

Washington Airports service region = The 24 counties and independent cities (plus the District of Columbia) in the Washington-Arlington-Alexandria MSA as currently defined (see Figure 1).

Notes: Population numbers are estimates as of July 1 of each year. Calculated percentages may not match those shown because of rounding.

(a) The most recent data available.

Source: U.S. Department of Commerce, Bureau of the Census website, www.census.gov, accessed April 2022.

**Per Capita Income.** Between 2010 and 2021 (the most recent year for which data are available), per capita personal income in the Airports service region increased an average of 1.0% annually, compared with an average annual increase of 2.2% for the nation. Even so, the Airports service region's per capita personal income in 2021 (\$87,290) was 26.0% higher than the national average (\$69,276). More than 1.3 million households in the Airports service region had annual incomes of \$100,000 or more in 2021. This number equated to 54.9% of the region's households, a much higher proportion than that of the nation (34.0%), and second highest among the nation's 20 most populous MSAs (after San Francisco-Oakland-Berkeley; 56.3%).

**Per Capita Gross Domestic Product.** Real per capita gross domestic product in the Airports service region exhibited negligible change from 2010 to 2021 (the most recent year for which data are available), compared with an average annual increase of 1.4% for the nation. In 2021, the Airports service region's per capita gross domestic product (\$103,243) was 36.1% higher than the national average (\$75,870).

**Nonagricultural Employment.** Between 2010 and 2022, nonagricultural employment in the Airports service region increased an average of 0.9% annually, compared with a 1.3% average annual increase for the nation.

**Unemployment Rates.** The rate of unemployment was lower for the Airports service region than for the nation in each year from 2010 to 2022. In 2022, unemployment in the region was 3.4% compared with 3.6% for the nation.

As shown in Table 5, nonagricultural employment in the Airports service region increased 8.1% between 2012 and 2022.

The Airports service region is home to much of the federal government and many of its employees and contractors. Between 2010 and 2022, federal spending in the Airports service region increased from \$63.2 billion to \$71.4 billion.\* While federal employment in the Airports service region decreased between 2010 and 2014, and again between 2016 and 2019, employment growth in other economic sectors has more than compensated for these decreases, as evidenced by the overall employment gains since 2010 shown in Table 3.

The workforce in the Airports service region is well-educated, with 32.5% of the population 25 years and over holding an associate or bachelor's degree and an additional 26.8% holding a graduate or professional degree, compared with national averages of 30.0% and 13.8%, respectively.\*\* This well-educated resident population is a key strength of the region's economy and is reflected in its high per capita income. The region has a high ratio of workers in professional services, information technology, education, and research, many of whom provide services to the federal government, either directly or through contracted services.

\*\*U.S. Department of Commerce, Bureau of the Census, 2021 American Community Survey.

A-32

<sup>\*</sup>George Mason University, Center for Regional Analysis, Washington, DC Economy: Performance and Outlook, January 18, 2023.

Table 5

NONAGRICULTURAL EMPLOYMENT IN MOST POPULOUS

U.S. METROPOLITAN STATISTICAL AREAS

			Percent
	Employment	t (thousands)	increase
Metropolitan Statistical Area	2012	2022	(decrease)
New York-Newark-Jersey City	8,859	9,852	11.2%
Los Angeles-Long Beach-Anaheim	5,464	6,209	13.6
Chicago-Naperville-Elgin	4,371	4,704	7.6
Dallas-Fort Worth-Arlington	3,086	4,091	32.6
Washington Airports service region (a)	3,060	3,308	8.1
Houston-The Woodlands-Sugar Land	2,739	3,246	18.5
Philadelphia-Camden-Wilmington	2,721	3,015	10.8
Atlanta-Sandy Springs-Roswell	2,355	2,987	26.9
Miami-Fort Lauderdale-West Palm Beach	2,287	2,808	22.8
San Francisco-Oakland-Hayward	2,032	2,470	21.5
Phoenix-Mesa-Scottsdale	1,760	2,319	31.7
Seattle-Tacoma-Bellevue	1,734	2,104	21.4
Detroit-Warren-Dearborn	1,835	2,002	9.1
Minneapolis-St. Paul-Bloomington	1,821	1,945	6.8
Boston-Cambridge-Newton	1,671	1,897	13.5
Riverside-San Bernardino-Ontario	1,186	1,660	40.1
Denver-Aurora-Lakewood	1,250	1,587	27.0
San Diego-Carlsbad	1,283	1,534	19.6
Tampa-St. Petersburg-Clearwater	1,149	1,479	28.7
Baltimore-Columbia-Towson	1,315	1,394	6.0
	New York-Newark-Jersey City Los Angeles-Long Beach-Anaheim Chicago-Naperville-Elgin Dallas-Fort Worth-Arlington Washington Airports service region (a) Houston-The Woodlands-Sugar Land Philadelphia-Camden-Wilmington Atlanta-Sandy Springs-Roswell Miami-Fort Lauderdale-West Palm Beach San Francisco-Oakland-Hayward Phoenix-Mesa-Scottsdale Seattle-Tacoma-Bellevue Detroit-Warren-Dearborn Minneapolis-St. Paul-Bloomington Boston-Cambridge-Newton Riverside-San Bernardino-Ontario Denver-Aurora-Lakewood San Diego-Carlsbad Tampa-St. Petersburg-Clearwater	Metropolitan Statistical Area2012New York-Newark-Jersey City8,859Los Angeles-Long Beach-Anaheim5,464Chicago-Naperville-Elgin4,371Dallas-Fort Worth-Arlington3,086Washington Airports service region (a)3,060Houston-The Woodlands-Sugar Land2,739Philadelphia-Camden-Wilmington2,721Atlanta-Sandy Springs-Roswell2,355Miami-Fort Lauderdale-West Palm Beach2,287San Francisco-Oakland-Hayward2,032Phoenix-Mesa-Scottsdale1,760Seattle-Tacoma-Bellevue1,734Detroit-Warren-Dearborn1,835Minneapolis-St. Paul-Bloomington1,821Boston-Cambridge-Newton1,671Riverside-San Bernardino-Ontario1,186Denver-Aurora-Lakewood1,250San Diego-Carlsbad1,283Tampa-St. Petersburg-Clearwater1,149	New York-Newark-Jersey City Los Angeles-Long Beach-Anaheim Chicago-Naperville-Elgin Al,371 Al,704 Dallas-Fort Worth-Arlington Washington Airports service region (a)  Houston-The Woodlands-Sugar Land Philadelphia-Camden-Wilmington Atlanta-Sandy Springs-Roswell Alami-Fort Lauderdale-West Palm Beach San Francisco-Oakland-Hayward  Phoenix-Mesa-Scottsdale Seattle-Tacoma-Bellevue Detroit-Warren-Dearborn Minneapolis-St. Paul-Bloomington Riverside-San Bernardino-Ontario Denver-Aurora-Lakewood San Diego-Carlsbad Tampa-St. Petersburg-Clearwater  1,499  9,852 6,209 6,209 6,209 6,209 6,209 6,209 3,086 4,091 2,739 3,246 2,739 3,246 2,721 3,015 2,721 3,015 2,987 2,808 2,987 2,808 2,355 2,987 2,808 2,470 2,470 2,104 2,1

Notes: Calculated percentages may not match those shown because of rounding.

Most populous MSAs based on 2021 population, the most recent available.

Source: U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov, accessed March 2023.

In recent years, companies such as Computer Sciences Corporation (now DXC Technology), Hilton Worldwide, Northrop Grumman, Science Applications International Corporation, and Volkswagen Group of America have located their U.S. headquarters in the region. According to the 2022 *Fortune* 500 list, 16 of the top 500 U.S. companies by revenue were headquartered in the Airports service region and accounted for combined revenues of approximately \$466 billion.\*

<sup>(</sup>a) Madison County excluded from MSA employment numbers due to unavailability.

<sup>\*</sup>Of the 16 companies, seven are identified in Table 7. The remaining nine companies are: AES, Beacon Roofing Supply, Carlyle Group, Danaher, DXC Technology, Fannie Mae, Freddie Mac, Lockheed Martin, and NVR.

Approximately 1,000 institutions in the region engage in international business, including the World Bank, the International Monetary Fund, the Inter-American Development Bank, and the Export-Import Bank. The region is also home to approximately 400 international associations and more than 180 embassies and international cultural centers.

Amazon is developing its HQ2 (secondary corporate headquarters location) in Crystal City, Virginia, a business district located adjacent to Reagan. The first phase of construction is expected to be completed in June 2023 and will have space to accommodate 14,000 employees. In March 2023, Amazon announced that the second phase of construction had been put on hold, given recent corporate layoffs and changing expectations about the need for office space as employees work from home at least part-time.\* Amazon currently employs 11,400 people in the region, as shown in Table 7.

Virginia Tech's new \$1 billion Innovation Campus, located about 2 miles from Amazon HQ2, will offer master's and PhD programs with a computer science and engineering focus, as well as experiential learning programs for undergraduate students. The campus is expected to open in 2024, tripling Virginia Tech's Northern Virginia presence and attracting leading tech talent, research, and education.

## **Employment by Industry Sector**

Table 6 shows employment by industry sector in the Airports service region and the United States in 2022. Relative to the national average, employment in the Airports service region is disproportionately concentrated in the government and professional and business services sectors. Together, employment in these two sectors accounted for 46.0% of employment in the region, compared with 29.3% in the nation. Employment growth in the government and manufacturing sectors outpaced national rates of growth from 2012 to 2022. According to Bureau of Labor Statistics data, in 2022, the federal government accounted for approximately 375,000 employees in the Airports service region, 11.3% of the Airports service region's total nonagricultural workforce.

<sup>\*</sup> WTOP.com, Amazon HQ2 construction put on hold, March 3, 2023.

Table 6
NONAGRICULTURAL EMPLOYMENT BY INDUSTRY SECTOR

Average annual percent Increase (decrease)

	Share of	total 2022	2012	-2022
Industry sector	Airports service region	United States	Airports service region	United States
Professional and business services	24.3%	14.8%	1.3%	2.3%
Government	21.7	14.5	0.4	0.1
Education and health services	13.3	16.0	1.4	1.6
Trade, transportation, and utilities	12.1	18.8	0.3	1.2
Leisure and hospitality	9.1	10.4	0.6	1.4
Other services	5.8	3.7	0.4	0.5
Mining, logging, and construction	4.9	5.5	1.1	2.5
Financial activities	4.7	5.9	0.5	1.5
Information	2.4	2.0	0.4	1.4
Manufacturing	<u>1.7</u>	<u>8.4</u>	1.0	0.7
Total	100.0%	100.0%	0.8%	1.3%

Notes: Percent shares may not add to 100.0% because of rounding. Madison County excluded from MSA employment numbers due to unavailability.

Source: U.S. Department of Labor, Bureau of Labor Statistics website, www.bls.gov, accessed March 2023.

Table 7 shows the top 25 private-sector employers in the region. Nine of these 25 employers are on the *Fortune* 500 list of largest U.S. companies, of which seven are also headquartered in the Airports service region. Eleven of the 25 companies are providers of professional, business, or technical services, largely to the federal government.

# Table 7 LARGEST PRIVATE SECTOR EMPLOYERS

Washington, D.C. Metro area 2022

Rank	Company	Employment	Type of business
1	Inova Health System	20,000	Health care
2	Giant Food	19,172	Retail grocer
3	Medstar Health	17,236	Health care
4	Deloitte	16,041	Professional services
5	Leidos Holdings (a)	16,011	Technology and engineering
6	Marriott International (a)	15,763	Hospitality
7	Booz Allen Hamilton (a)	13,487	Professional services
8	Verizon Communications (b)	11,587	Telecommunications
9	Safeway	11,568	Retail grocer
10	General Dynamics (a)	11,500	Aerospace and defense
11	Amazon (b)	11,400	Online retailer
12	Capital One Financial (a)	10,520	Financial services
13	Accenture Federal Services	9,600	Professional Services
14	Children's National Hospital	7,653	Health care
15	CACI International	7,111	Professional services
16	Science Applications International Corp. (a)	6,584	Information technology
17	Kaiser Permanente	6,158	Health care
18	Adventist HealthCare	6,145	Health care
19	George Washington University	6,030	Higher education
20	Peraton	5,670	Defense and technology
21	Georgetown University	5,409	Higher education
22	Northrop Grumman (a)	5,100	Defense and technology
22	Securitas Security Services	4,964	Professional services
24	The MITRE Corp.	4,211	Technology and engineering
25	Holy Cross Health	4,060	Health care

Notes: The Washington, D.C. Metro area as defined by the Washington Business Journal includes D.C.; Montgomery and Prince George's counties in Maryland; and Arlington, Fairfax, Loudoun and Prince William counties and the city of Alexandria in Virginia.

Data are self-reported by companies to the Greater Washington Business Journal. Such self-reporting, or lack thereof, affects companies' inclusion in the list from year to year.

- (a) Fortune 500 company (based on 2022 revenue) headquartered in the Airports service region.
- (b) Fortune 500 company (based on 2022 revenue) not headquartered in the Airports service region.

Sources: Greater Washington Business Journal, 2023 Book of Lists; Fortune 500 website, www.fortune.com.

# **Visitors and Conventions**

The national monuments, institutions, museums, and other attractions of the Airports service region make it one of the most visited in the nation. Washington, D.C. attracted 19.1 million visitors (by all modes of transport) in 2021, reaching 78% of 2019 numbers, according to Destination DC, a nonprofit organization that promotes tourism. In 2021, visitors to Washington, D.C. spent \$5.4 billion, reaching 66% of 2019 expenditures.

The Walter E. Washington Convention Center, located in downtown Washington, D.C., contains approximately 700,000 square feet of meeting and exhibit space. There are more than 4,600 hotel rooms within one mile of the convention center. The Airports service region is also home to the Gaylord National Resort & Convention Center (2,000 guest rooms and over 500,000 square feet of convention space), as well as numerous other hotels and venues offering smaller meeting facilities.

#### **ECONOMIC OUTLOOK**

Real GDP decreased 2.8% in 2020 during the COVID-19 pandemic, then rebounded 5.9% in 2021 and 1.9% in 2022. The Congressional Budget Office forecasts real GDP growth of 0.3% in 2023, 1.8% in 2024, and an average of 2.4% per year through 2028.

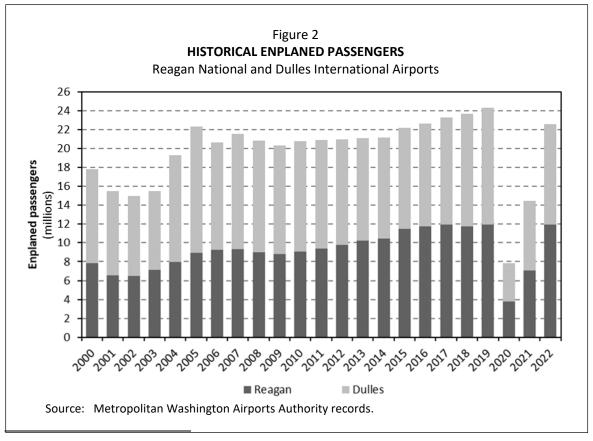
Continued U.S. economic growth will depend on, among other factors, stable financial and credit markets, a stable value of the U.S. dollar versus other currencies, stable energy and other commodity prices, the ability of the federal government to reduce historically high fiscal deficits, inflation being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

The economic outlook for the Airports service region generally depends on the same factors as those for the nation, although changes in federal spending will have a greater effect on economic growth and employment in the Airports service region.

### **AIRLINE TRAFFIC ANALYSIS**

#### HISTORICAL PASSENGER TRAFFIC AT THE AIRPORTS

Figure 2 and Table 8 provide historical data on numbers of enplaned passengers at the Airports.\* Following a decade of combined growth, in 2020, passenger numbers at Reagan and Dulles decreased to 31.5% and 32.3%, respectively, of the 2019 numbers. By 2022, passenger numbers at Reagan and Dulles had recovered to 100.2% and 85.9%, respectively, of the 2019 numbers. Annual passenger numbers obscure the steady return to pre-pandemic numbers that occurred during 2021 and 2022. (Monthly trends are discussed in the later sections "Recent Changes in Enplaned Passengers at Reagan" and "Recent Changes in Enplaned Passengers at Dulles.")



<sup>\*</sup> Throughout this report, enplaned passenger numbers obtained from Airports Authority reports include non-revenue passengers, while enplaned passenger numbers obtained from U.S. DOT reports exclude such passengers. In the first nine months of 2022, non-revenue passengers represented approximately 3.5% of enplaned passengers at both Reagan and Dulles (up slightly from approximately 3.0%, pre-pandemic). Throughout this report, passengers on general aviation and military flights, which in 2022 accounted for less than 0.4% of enplaned passengers at Reagan and Dulles, are excluded.

Table 8
ENPLANED PASSENGER TRENDS

Reagan National and Dulles International Airports (enplaned passengers in thousands)

	Reagan				Dulles		Airports total			
Year	Domestic	International	Total	Domestic	International	Total	Domestic	International	Total	
2010	8,891	144	9,036	8,565	3,177	11,742	17,456	3,322	20,778	
2015	11,298	198	11,496	7,139	3,575	10,714	18,437	3,773	22,210	
2016	11,603	167	11,770	7,145	3,723	10,868	18,748	3,890	22,638	
2017	11,751	183	11,934	7,466	3,858	11,324	19,217	4,041	23,258	
2018	11,551	184	11,734	7,957	3,990	11,947	19,508	4,174	23,681	
2019	11,765	184	11,949	8,150	4,177	12,327	19,915	4,361	24,276	
2020	3,734	34	3,768	3,095	988	4,083	6,829	1,022	7,851	
2021	7,021	28	7,049	5,720	1,665	7,385	12,741	1,693	14,434	
2022	11,836	134	11,969	6,924	3,662	10,586	18,760	3,796	22,555	
				Average annu	ual percent increas	se (decrease)				
2010-2015	4.9%	6.5%	4.9%	(3.6%)	2.4%	(1.8%)	1.1%	2.6%	1.3%	
2015-2019	1.0	(1.7)	1.0	3.4	4.0	3.6	1.9	3.7	2.2	
2010-2019	3.2	2.8	3.2	(0.6)	3.1	0.5	1.5	3.1	1.7	
				Annual p	ercent increase (d	lecrease)				
2018-2019	1.9%	0.4%	1.8%	2.4%	4.7%	3.2%	2.1%	4.5%	2.5%	
2019-2020	(68.3)	(81.8)	(68.5)	(62.0)	(76.3)	(66.9)	(65.7)	(76.6)	(67.7)	
2020-2021	88.0	(17.5)	87.1	84.8	68.5	80.9	86.6	65.7	83.8	
2021-2022	68.6	382.2	69.8	21.1	119.9	43.3	47.2	124.2	56.3	
2019-2022	0.6	(27.4)	0.2	(15.0)	(12.3)	(14.1)	(5.8)	(13.0)	(7.1)	
				Sh	are of Airports to	tal				
2010			43.5%			56.5%			100.0%	
2015			51.8			48.2			100.0	
2019			49.2			50.8			100.0	
2022			53.1			46.9			100.0	

Notes: Numbers in rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

Source: Metropolitan Washington Airports Authority records.

## Airline Shares of Passengers at the Airports

Table 9 shows airline shares of enplaned passengers at the Airports.\* American, the airline enplaning the most passengers at Reagan, and United, the airline enplaning the most passengers at Dulles, together enplaned 66.1% of passengers at the two Airports in 2022. (Tables 24, 33, and 34 provide detail on historical airline shares of enplaned passengers at the Airports.)

# **Ranking Among Other Airports**

Table 10 shows the 30 largest U.S. airports ranked by enplaned passengers. By this measure, in 2022, Reagan ranked 23rd and Dulles ranked 27th. Between 2019 and 2022, numbers of enplaned passengers decreased less at Reagan and Dulles than at BWI.

Table 11 shows the 30 largest U.S. airports ranked by enplaned originating passengers. By this measure, in 2022, Reagan ranked 22nd and Dulles ranked 30th.

Table 12 shows the 30 largest U.S. airports ranked by connecting passengers. By this measure, in 2022, Dulles ranked 19th and Reagan ranked 25th.

Table 13 shows the 30 largest U.S. gateway airports ranked by international enplaned passengers. In 2022, Dulles ranked 10th among U.S. gateway airports.

#### **COMPETING AIRPORTS SERVING THE REGION**

Airlines; and Virgin America with Alaska Airlines).

Reagan and Dulles compete for domestic traffic with Baltimore/Washington Airport and compete for international traffic with other major eastern U.S. gateway airports, such as Boston Logan, Philadelphia, New York Kennedy, Newark Liberty, and Hartsfield-Jackson Atlanta international airports. Table 14 provides data on airline service at the three airports serving the greater Washington-Baltimore region. Table 15 provides historical data on numbers of average daily enplaned passengers and air cargo tonnage at the three airports.

A-40

<sup>\*</sup>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

Table 9
AIRLINES SHARES OF ENPLANED PASSENGERS

Reagan National and Dulles International Airports

Average daily

		enplaned p	oassengers	5		Airline sha	re of total	
Airline (a)	2010	2015	2019	2022	2010	2015	2019	2022
United	23,807	20,766	24,706	22,205	41.8%	34.1%	37.1%	35.9%
American	15,848	17,452	17,505	18,631	27.8	28.7	26.3	30.1
Delta	6,316	5,555	6,458	5,472	11.1	9.1	9.7	8.9
Southwest	2,399	4,909	5,534	5,122	4.2	8.1	8.3	8.3
JetBlue	1,691	3,056	2,508	2,466	3.0	5.0	3.8	4.0
Alaska	1,045	1,561	1,391	1,175	1.8	2.6	2.1	1.9
Avianca/TACA	338	392	529	553	0.6	0.6	0.8	0.9
Lufthansa	483	571	604	459	0.8	0.9	0.9	0.7
Frontier	909	1,304	826	458	1.6	2.1	1.2	0.7
Air Canada	410	356	556	427	0.7	0.6	0.8	0.7
Turkish	15	249	280	398	0.0	0.4	0.4	0.6
British Airways	475	544	460	393	0.8	0.9	0.7	0.6
Air France	444	419	477	381	0.8	0.7	0.7	0.6
Qatar	282	273	274	361	0.5	0.4	0.4	0.6
Ethiopian	154	234	291	307	0.3	0.4	0.4	0.5
All other	<u>2,309</u>	<u>3,207</u>	<u>4,111</u>	<u>2,990</u>	<u>4.1</u>	<u>5.3</u>	<u>6.2</u>	<u>4.8</u>
Total	56,925	60,849	66,509	61,796	100.0%	100.0%	100.0%	100.0%
By type of airline								
U.S. airlines								
Mainline airline	29,997	27,581	30,140	30,164	52.7%	45.3%	45.3%	48.8%
Affiliated regional airline	16,323	16,419	18,808	16,144	28.7	27.0	28.3	26.1
Low-cost carrier	5,037	9,432	8,940	8,190	8.8	15.5	13.4	13.3
Other	<u>1,093</u>	<u>1,692</u>	<u>1,426</u>	<u>1,221</u>	<u>1.9</u>	<u>2.8</u>	<u>2.1</u>	2.0
U.S. airline total	52,451	55,124	59,314	55,719	92.1	90.6	89.2	90.2
Foreign-flag airlines	4,474	5,725	7,195	6,077	7.9	9.4	10.8	9.8

Note: Columns may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

(a) Includes regional code-sharing affiliates.

Source: Metropolitan Washington Airports Authority records.

Table 10
ENPLANED PASSENGERS AT TOP-RANKING U.S. AIRPORTS

Calendar years, except 2022

2022 Rank	City (airport)	2010	-	d passeng illions) _2019	gers 2022(a)	Percent increase (decrease) 2019-2022	Increase (decrease) 2019-2022 (millions)
1	Atlanta	43.0	49.3	53.5	44.5	(16.9%)	(9.0)
2	Dallas/Fort Worth	27.0	31.6	35.8	34.8	(2.7)	(1.0)
3	Denver	25.2	26.3	33.6	33.0	(1.9)	(0.6)
4	Chicago (O'Hare)	32.2	36.4	40.9	32.6	(20.4)	(8.4)
5	Los Angeles (International)	28.9	36.5	43.0	31.3	(27.3)	(11.7)
6	New York (Kennedy)	22.9	28.0	31.2	24.9	(20.1)	(6.3)
7	Las Vegas	18.9	21.7	24.5	24.4	(0.4)	(0.1)
8	Orlando (International)	17.0	18.8	24.6	23.7	(3.4)	(0.8)
9	Miami	17.0	21.0	21.5	23.5	9.1	2.0
10	Charlotte	18.6	21.9	24.2	22.7	(6.3)	(1.5)
11	Phoenix (Sky Harbor)	18.9	21.4	22.4	21.7	(3.4)	(0.8)
12	Seattle	15.4	20.1	25.0	21.4	(14.3)	(3.6)
13	Newark	16.6	18.7	23.2	20.8	(10.3)	(2.4)
14	Houston (Bush)	19.5	20.6	21.9	19.4	(11.6)	(2.5)
15	San Francisco	19.3	24.2	27.7	19.0	(31.6)	(8.8)
16	Boston	13.6	16.3	20.7	16.4	(20.6)	(4.3)
17	Minneapolis-St. Paul	15.5	17.6	19.2	15.0	(21.8)	(4.2)
18	Fort Lauderdale	10.8	13.1	18.0	15.0	(16.6)	(3.0)
19	Detroit	15.6	16.3	18.1	13.6	(24.8)	(4.5)
20	New York (LaGuardia)	12.0	14.3	15.4	13.6	(11.8)	(1.8)
21	Salt Lake City	9.9	10.6	12.8	12.4	(3.7)	(0.5)
22	Philadelphia	14.9	15.1	16.0	12.1	(24.4)	(3.9)
23	Washington DC (Reagan)	9.0	11.5	11.9	11.4	(4.5)	(0.5)
24	Baltimore	10.8	11.7	13.3	10.8	(18.4)	(2.4)
25	San Diego	8.4	10.0	12.6	10.6	(15.8)	(2.0)
26	Tampa	8.1	9.2	10.9	10.5	(4.3)	(0.5)
27	Washington DC (Dulles)	11.7	10.7	12.3	10.2	(17.2)	(2.1)
28	Austin	4.2	5.8	8.5	10.0	17.1	1.5
29	Nashville	4.4	5.7	8.9	9.4	5.7	0.5
30	Chicago (Midway)	8.5	10.8	10.1	9.2	(8.9)	(0.9)
	Total—top 30 airports					(12.7%)	

Notes: Airports shown are the top 30 U.S. airports ranked by number of passengers for 2022. Percentages were calculated using unrounded numbers.

Sources: Metropolitan Washington Airports Authority (for Reagan and Dulles); U.S. DOT, Schedule T100 (for all other airports).

<sup>(</sup>a) Data are for the 12 months ended September 30, 2022, the most recent available.

Table 11
ORIGINATING PASSENGERS AT TOP-RANKING U.S. AIRPORTS

Calendar years, except 2022

						Percent	Increase	
		0	riginatin	g passer	ngers	increase	(decrease)	2022
2022			-	illions)	.60.0	(decrease)	2019-2022	Percent
Rank	City (airport)	2010	2015	2019	2022(a)	2019-2022	(millions)	originating
1	Los Angeles (International)	22.2	28.4	35.4	26.5	(25.3%)	(9.0)	84.6%
2	Orlando (International)	16.0	17.8	23.2	22.2	`(4.5)´	(1.0)	93.5
3	Las Vegas	16.0	18.2	21.4	20.5	(4.0)	(0.9)	84.1
4	New York (Kennedy)	18.1	22.4	26.8	20.2	(24.6)	(6.6)	81.0
5	Chicago (O'Hare)	15.6	19.5	24.3	19.9	(18.2)	(4.4)	60.9
6	Denver	12.9	16.0	21.8	19.5	(10.8)	(2.4)	59.1
7	Atlanta	13.9	16.2	20.8	18.9	(9.5)	(2.0)	42.4
8	Newark	11.8	13.5	19.2	16.9	(11.7)	(2.2)	81.3
9	Miami	9.6	12.4	14.8	15.9	7.6	1.1	67.9
10	Boston	13.0	15.4	19.5	15.5	(20.4)	(4.0)	94.5
11	San Francisco	15.0	19.2	22.3	15.5	(30.4)	(6.8)	81.7
12	Phoenix (Sky Harbor)	10.9	12.4	15.2	15.4	1.5	0.2	71.2
13	Dallas/Fort Worth	11.0	13.0	16.3	15.3	(6.7)	(1.1)	43.8
14	Seattle	11.3	13.7	17.6	14.7	(16.7)	(2.9)	68.4
15	Fort Lauderdale	10.0	11.8	15.0	12.6	(15.7)	(2.4)	84.2
16	New York (LaGuardia)	11.1	12.6	14.0	12.0	(14.5)	(2.0)	88.3
17	Houston (Bush)	7.7	9.6	11.7	11.3	(3.9)	(0.5)	58.2
18	San Diego	8.0	9.4	11.9	10.2	(14.3)	(1.7)	95.9
19	Tampa	7.5	8.7	10.5	10.2	(3.0)	(0.3)	97.5
20	Minneapolis-St. Paul	8.1	9.4	11.9	9.9	(16.6)	(2.0)	66.2
21	Philadelphia	8.8	9.3	11.1	9.4	(15.9)	(1.8)	77.3
22	Washington DC (Reagan)	7.5	9.7	10.6	9.1	(14.1)	(1.5)	79.7
23	Detroit	7.5	8.4	10.8	9.1	(16.0)	(1.7)	66.4
24	Austin	4.0	5.5	8.1	8.5	5.4	0.4	85.6
25	Nashville	3.7	4.8	7.6	7.9	4.2	0.3	83.9
26	Salt Lake City	5.0	5.9	7.9	7.9	0.2	0.0	63.9
27	Baltimore	8.3	8.1	9.8	7.6	(22.8)	(2.2)	69.9
28	Charlotte	4.9	5.8	7.7	7.2	(5.6)	(0.4)	31.9
29	Honolulu	7.0	7.8	8.9	7.1	(20.5)	(1.8)	86.2
30	Washington DC (Dulles)	7.0	7.2	8.6	6.8	(20.4)	(1.7)	66.8
	Total—top 30 airports					(13.2%)		

Notes: Airports shown are the top 30 U.S. airports ranked by originating passengers for 2022. Percentages were calculated using unrounded numbers.

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

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

<sup>(</sup>a) Data are for the 12 months ended September 30, 2022, the most recent available.

Table 12
CONNECTING PASSENGERS AT TOP-RANKING U.S. AIRPORTS

Calendar years, except 2022

2022 Bank	City (airm ant)			llions)		Percent increase (decrease)	Increase (decrease) 2019-2022	2022 Percent
Rank	City (airport)	2010	2015	2019	2022(a)	2019-2022	(millions)	connecting
1	Atlanta	29.1	33.2	32.7	25.6	(21.6%)	(7.1)	57.6%
2	Dallas/Fort Worth	16.1	18.6	19.4	19.5	0.5	0.1	56.2
3	Charlotte	13.7	16.1	16.5	15.4	(6.6)	(1.1)	68.1
4	Denver	12.3	10.3	11.8	13.5	14.6	1.7	40.9
5	Chicago (O'Hare)	16.6	16.8	16.7	12.7	(23.7)	(3.9)	39.1
6	Houston (Bush)	11.8	11.0	10.2	8.1	(20.5)	(2.1)	41.8
7	Miami	7.4	8.6	6.7	7.5	12.5	0.8	32.1
8	Seattle	4.1	6.4	7.4	6.8	(8.7)	(0.6)	31.6
9	Phoenix (Sky Harbor)	8.0	9.0	7.2	6.2	(13.8)	(1.0)	28.8
10	Minneapolis-St. Paul	7.4	8.2	7.3	5.1	(30.4)	(2.2)	33.8
11	Los Angeles (International)	6.7	8.1	7.6	4.8	(36.5)	(2.8)	15.4
12	New York (Kennedy)	4.8	5.6	4.4	4.7	7.3	0.3	19.0
13	Detroit	8.1	7.8	7.4	4.6	(37.7)	(2.8)	33.6
14	Salt Lake City	4.9	4.7	5.0	4.5	(10.0)	(0.5)	36.1
15	Newark	4.8	5.2	4.1	3.9	(3.9)	(0.2)	18.7
16	Las Vegas	2.9	3.5	3.1	3.9	24.4	0.8	15.9
17	San Francisco	4.3	5.1	5.5	3.5	(36.5)	(2.0)	18.3
18	Chicago (Midway)	3.0	4.2	3.3	3.4	3.4	0.1	37.3
19	Washington DC (Dulles)	4.8	3.5	3.8	3.4	(10.0)	(0.4)	33.2
20	Baltimore	2.5	3.6	3.5	3.3	(6.0)	(0.2)	30.1
21	Philadelphia	6.2	5.8	4.9	2.8	(43.7)	(2.1)	22.7
22	Dallas (Love)	1.1	2.2	2.7	2.6	(2.5)	(0.1)	34.3
23	Houston (Hobby)	1.2	1.9	2.4	2.4	(1.3)	(0.0)	38.1
24	Fort Lauderdale	0.8	1.3	3.0	2.4	(20.7)	(0.6)	15.8
25	Washington DC (Reagan)	1.6	1.8	1.4	2.3	69.0	0.9	20.3
26	New York (LaGuardia)	0.9	1.8	1.4	1.6	16.1	0.2	11.7
27	Orlando (International)	1.0	1.0	1.4	1.6	13.7	0.2	6.5
28	Nashville	0.8	0.9	1.3	1.5	14.5	0.2	16.1
29	Austin	0.2	0.3	0.4	1.4	247.0	1.0	14.4
30	St. Louis	0.9	1.0	1.8	1.3	(26.3)	(0.5)	20.7
	Total—top 30 airports					(11.6%)		

Notes: Airports shown are the top 30 U.S. airports ranked by number of connecting passengers for 2022. Percentages were calculated using unrounded numbers.

Excludes 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 Schedule T100.

<sup>(</sup>a) Data are for the 12 months ended September 30, 2022, the most recent available.

Table 13
INTERNATIONAL PASSENGERS AT TOP-RANKING U.S. AIRPORTS
Calendar years, except 2022

2022 Rank	City (airport)		planed ir assenger 2015			Percent increase (decrease) 2019-2022	Increase (decrease) 2019-2022 (millions)	2022 Percent international
1	New York (Kennedy)	11.39	14.81	17.02	11.60	(31.8%)	(5.4)	46.6%
2	Miami	8.37	10.54	10.71	9.14	(14.7)	(1.6)	39.0
3	Los Angeles (International)	7.67	9.89	12.57	7.04	(44.0)	(5.5)	22.5
4	Newark	5.68	5.82	7.13	5.66	(20.6)	(1.5)	27.2
5	Chicago (O'Hare)	5.16	5.81	6.88	5.06	(26.4)	(1.8)	15.5
6	Atlanta	4.51	5.42	6.23	4.48	(28.2)	(1.8)	10.1
7	Houston (Bush)	4.18	5.17	5.48	4.40	(19.8)	(1.1)	22.7
8	Dallas/Fort Worth	2.52	3.77	4.63	4.32	(6.7)	(0.3)	12.4
9	San Francisco	4.19	5.44	7.34	4.06	(44.7)	(3.3)	21.4
10	Washington DC (Dulles)	3.18	3.57	4.18	3.30	(20.9)	(0.9)	32.4
11	Fort Lauderdale	1.62	2.60	4.24	2.86	(32.5)	(1.4)	19.1
12	Boston	1.85	2.55	3.94	2.56	(34.8)	(1.4)	15.6
13	Orlando (International)	1.56	2.48	3.47	2.30	(33.8)	(1.2)	9.7
14	Seattle	1.36	2.17	2.78	1.84	(33.8)	(0.9)	8.6
15	Charlotte	1.32	1.49	1.77	1.52	(13.6)	(0.2)	6.7
16	Denver	0.96	1.09	1.56	1.52	(2.3)	(0.0)	4.6
17	Philadelphia	1.88	2.00	1.98	1.33	(33.0)	(0.7)	11.0
18	Las Vegas	1.07	1.70	1.76	1.06	(39.5)	(0.7)	4.4
19	Detroit	1.43	1.60	1.87	0.97	(48.2)	(0.9)	7.1
20	Phoenix (Sky Harbor)	1.05	1.14	1.04	0.94	(9.4)	(0.1)	4.3
21	Minneapolis-St. Paul	1.13	1.29	1.62	0.93	(42.7)	(0.7)	6.2
22	New York (LaGuardia)	0.54	0.94	1.12	0.57	(49.2)	(0.6)	4.2
23	Honolulu	1.80	2.51	2.65	0.51	(80.7)	(2.1)	6.2
24	Salt Lake City	0.23	0.28	0.52	0.50	(3.7)	(0.0)	4.1
25	Baltimore	0.20	0.51	0.56	0.49	(12.1)	(0.1)	4.5
26	Houston (Hobby)	0.00	0.08	0.43	0.45	4.9	0.0	7.1
27	Austin	0.01	0.12	0.26	0.38	47.2	0.1	3.8
28	Tampa	0.20	0.32	0.54	0.34	(37.7)	(0.2)	3.2
29	Chicago (Midway)	0.05	0.38	0.39	0.33	(16.8)	(0.1)	3.6
30	San Diego	0.13	0.35	0.52	0.31	(40.9)	(0.2)	2.9
	Total—top 30 airports					(29.9%)		

Notes: n.c. = not calculated.

Airports shown are the top 30 U.S. airports (excluding airports in Puerto Rico, the islands of the Pacific Trust, and the U.S. Virgin Islands) ranked by international passengers for 2022. Percentages were calculated using unrounded numbers.

Sources: Metropolitan Washington Airports Authority (for Reagan and Dulles); U.S. DOT, Schedule T100 (for all other airports).

<sup>(</sup>a) Data are for the 12 months ended September 30, 2022, the most recent available.

## **Competition with Baltimore/Washington Airport**

BWI, operated by the Maryland Aviation Administration, is located about 30 miles northeast of downtown Washington, D.C., and is accessible by interstate highway, rail, and bus service. As shown in Table 14, as scheduled for June 2023, airlines provided nonstop domestic service from BWI to 57 airports, 52 of them with service by low-cost carriers (LCCs)\*, mainly Southwest. Airlines provided nonstop domestic service from Reagan to 89 airports, 23 of them with service by LCCs. Airlines provided nonstop domestic service from Dulles to 62 airports, 4 of them with service by LCCs.

Airfares at BWI historically have been lower than airfares at Reagan and Dulles. Since 2010, average one-way domestic airfares have exceeded those at BWI by approximately \$33 at Reagan and by approximately \$68 at Dulles. The fare differential among the three airports has not changed materially since the onset of the pandemic. Airfares tend to correlate with trip distance (longer distances generally equate to higher airfares) and trip purpose (higher proportions of business travelers generally equate to higher airfares). Airport surveys indicate that Reagan and Dulles have historically accommodated higher proportions of business travelers than BWI.\*\*

In June 2023, BWI is the fourth-ranked airport in the Southwest system as measured by scheduled departing seats (after Denver, Las Vegas, and Chicago Midway). Southwest began service at Dulles in 2006 and at Reagan in 2011 following its merger with AirTran.

\*\*Washington-Baltimore Regional Air Passenger Survey – 2019: General Findings, April 2020, National Capital Region Transportation Planning Board.

<sup>\*</sup>For purposes of this report, the following airlines are considered to be low-cost carriers: Allegiant Air, Frontier Airlines, JetBlue Airways, Southwest Airlines, Spirit Airlines, and Sun Country Airlines.

Table 14

DOMESTIC AIRLINE SERVICE AT REGIONAL AIRPORTS

Reagan National, Dulles International, and Baltimore/Washington Airports
As scheduled for June of years shown

		er of des ed nonst	tinations cop <i>(a)</i>		Average d raft depa	-	Average daily departing seats		
	2013	2023	Change	2013	2023	Change	2013	2023	Change
By airport									
Reagan	82	89	7	382	404	22	37,396	43,466	6,070
Dulles	77	62	(15)	316	225	(90)	27,461	26,168	(1,293)
BWI	59	57	(2)	320	276	(44)	42,866	45,040	2,174
By airline type									
Low-cost carriers									
Reagan	15	23	8	39	74	34	5,036	10,281	5,245
Dulles	6	4	(2)	16	7	(9)	2,060	1,092	(968)
BWI	54	52	(2)	231	228	(3)	32,794	37,753	4,959
All other airlines									
Reagan	77	86	9	343	331	(12)	32,360	33,185	825
Dulles	77	62	(15)	300	219	(82)	25,401	25,076	(325)
BWI	18	16	(2)	88	47	(41)	10,071	7,287	(2,785)
By aircraft type (b)									
Large jet									
Reagan	29	40	11	162	175	13	23,683	26,657	2,974
Dulles	21	35	14	97	112	15	15,604	19,345	3,741
BWI	57	55	(2)	279	264	(15)	40,376	44,201	3,825
Regional jet and to	ırboprop								
Reagan	64	72	8	220	230	9	13,713	16,809	3,096
Dulles	62	39	(23)	219	113	(106)	11,857	6,823	(5,034)
BWI	9	4	(5)	41	12	(29)	2,489	839	(1,651)

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

Source: OAG Schedules, accessed April 2023.

Table 15 shows that, of the domestic originating passengers served by the three airports during 2022, BWI accounted for 36.3% (down from 41.6% in 2010), Reagan for 43.2% (up from 34.7% in 2010), and Dulles for 20.5% (down from 23.7% in 2010).

<sup>(</sup>b) Jet aircraft are categorized as large jets (100+ seats) or regional jets (<100 seats).

Table 15 **HISTORICAL TRENDS IN ENPLANED PASSENGERS AT REGIONAL AIRPORTS**Reagan National, Dulles International, and Baltimore/Washington Airports

Share of three-airport region total Reagan **Dulles** BWI Reagan **Dulles** BWI Year Average daily enplaned passengers 2010 23,935 30,896 29,573 28.4% 36.6% 35.0% 2015 30,812 28,484 32,047 33.7 31.2 35.1 31,768 32,607 2019 36,329 32.4 36.1 31.5 2020 9,764 10,652 14,748 27.8 30.3 41.9 2021 18,464 19,545 25,184 29.2 30.9 39.9 30,033 27,044 29,648 2022 (a) 34.6 31.2 34.2 Average daily international enplaned passengers 2010 411 8,204 555 4.5% 89.5% 6.0% 2015 550 9,563 1,392 4.8 83.1 12.1 2019 3.7 492 11,342 1,535 84.8 11.5 2020 91 2,658 461 2.8 82.8 14.4 2021 75 4,466 907 1.4 82.0 16.6 2022 (a) 306 8,759 1,349 2.9 84.1 12.9 Average daily domestic originating passengers (b) 2010 17,882 12,249 21,445 34.7% 23.7% 41.6% 2015 24,033 11,082 20,238 43.4 20.0 36.6 2019 26,189 12,720 24,405 41.4 20.1 38.5 2020 8,010 4,317 9,272 37.1 20.0 42.9 2021 14,155 8,199 16,075 36.8 21.3 41.8 2022 (a) 22,296 10,595 18,755 43.2 20.5 36.3 Average daily air cargo tonnage (metric tons) 75.3% 2010 18 908 280 1.5% 23.2% 2015 8 716 320 0.7 68.6 30.7 2019 6 749 0.4 54.4 45.2 622 2020 4 540 738 0.3 42.2 57.6 2021 4 0.3 44.4 55.3 617 769 2022 703 0.3 46.7 619 53.0

Sources: U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100; U.S. DOT, Schedule T100; Metropolitan Washington Airports Authority; Maryland Aviation Administration.

Dulles accounted for 84.1% of average daily international passengers served by the three regional airports in 2022, compared with 12.9% for BWI and 2.9% for Reagan. BWI accommodates only limited international airline service, ranking 25th among

<sup>(</sup>a) Data are for the 12 months ended September 30, 2022.

<sup>(</sup>b) Excludes connecting passengers.

U.S. gateway airports by international enplaned passengers, as shown in Table 13. Reagan does not provide CBP 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 2020 and 2021, BWI temporarily gained in regional share of enplaned passengers as Southwest and other low-cost airlines added capacity during the pandemic to serve the domestic leisure travel market. (Leisure travel demand was quicker to recover from the pandemic than business travel demand.) By 2022, however, passenger shares among the three regional airports had reverted to resemble prepandemic shares more closely.

BWI's increased regional share of cargo tonnage since 2017 is largely attributable to Amazon Air's establishment of the airport as its mid-Atlantic base of operations and the increased demand for package delivery since the onset of the pandemic.

## **Competition with Other International Gateway Airports**

The large number of international flights provided by United and foreign flag airlines at Dulles makes it the preferred airport for international travel to and from the Washington-Baltimore region as well as for connections between domestic and international flights. As shown in Table 16, as scheduled for June 2023, Dulles ranked fourth in service to Europe and second in service to the Middle East and Africa among U.S. international gateway airports.

Table 16
International Departing Seats, by World Region Destination

Top 20 U.S. Gateway Airports As scheduled for June 2023

Average daily departing seats

						, , ,			
			Latin				Africa &		
Rank	City (airport)	Europe	America	Caribbean	Canada	Asia	Mid-East	Oceania (a)	TOTAL
1	New York (Kennedy)	26,910	7,892	1,333	10,158	4,701	6,875	182	58,051
2	Los Angeles	9,214	10,808	4,573	21	7,784	1,985	3,299	37,684
3	Miami	4,960	16,349	1,075	11,185		1,567		35,136
4	Newark	13,694	2,698	3,786	3,645	1,425	2,174		27,423
5	San Francisco	7,834	2,701	3,840		7,634	1,831	1,861	25,701
6	Chicago (O'Hare)	12,083	4,012	3,193	943	1,841	2,532	119	24,723
7	Atlanta	7,586	6,278	1,975	3,594	980	1,833		22,245
8	Houston (Bush)	2,941	13,094	1,657	1,302	824	1,282	308	21,408
9	Dallas/Ft. Worth	4,685	10,575	1,543	1,298	1,304	1,201	338	20,944
10	Washington (Dulles)	9,646	2,236	1,283	556	879	3,430		18,030
11	Boston	9,343	847	1,708	1,562	617	1,153		15,230
12	Fort Lauderdale	101	5,677	1,358	5,946				13,084
13	Orlando	2,258	4,310	1,934	2,315		248		11,065
14	Seattle	3,691	1,164	2,224		2,062	1,010	78	10,230
15	Charlotte	2,750	1,340	585	3,024				7,699
16	Philadelphia	3,623	747	898	1,473		354		7,096
17	Denver	2,331	2,487	1,844	124	257			7,042
18	Las Vegas	1,304	1,096	2,975		165			5,540
19	Detroit	2,907	783	949		694	162		5,494
20	Honolulu			<u>343</u>		3,423		<u>1,022</u>	4,788
	Total—top 20 gateways	125,845	93,780	<u>38,749</u>	45,822	<u>35,237</u>	27,607	<u>7,081</u>	374,120
	All other gateways	9,872	<u> 15,958</u>	<u>13,101</u>	4,517	4,496		<u>255</u>	48,198
	Total—all U.S. gateways	135,717	109,738	51,850	50,339	39,733	27,607	7,335	422,319

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

(a) Australia, New Zealand, and Pacific Ocean Islands

Source: OAG Schedules, accessed April 2023.

#### HISTORICAL AIRLINE SERVICE AND TRAFFIC AT REAGAN

## **Perimeter and High Density Rules**

The "Perimeter Rule," a federal regulation in effect since 1966, generally limits nonstop flights from Reagan to destinations not more than 1,250 statute miles away. Originally introduced to encourage airlines to operate long-haul flights from newly opened Dulles, the Perimeter Rule was amended in 2000, 2003, and 2012 to allow a total of 20 daily round-trip nonstop flights between Reagan and points beyond the 1,250-mile perimeter.

The "High Density Rule," a federal regulation in effect since 1969 and intended to allow the FAA to manage airspace congestion and delays, limits the number of airline, regional airline, and general aviation flights that may be scheduled each hour at Reagan.

Authorizations from the FAA for aircraft landings and takeoffs are referred to as "slots." A pair of slots is required for an airline to operate the arrival and subsequent departure of a flight. The constraints of the High Density Rule have dissuaded incumbent airlines from reducing their flights at Reagan because any such reductions would place them at risk of losing slots. As discussed in the following section, additional slots were made available to LCCs in connection with the approval of the merger of American and US Airways.

Airlines may lose their slots if they fail to use them at least 80% of the time. In March 2020, as airlines cancelled flights, the FAA issued a temporary waiver of the 80% use requirement through October 2021. The FAA again temporarily waived slot utilization requirements at Reagan during the 2023 peak summer travel season to mitigate flight delays.

In July 2020, American and JetBlue announced a "Northeast Alliance" involving increased service, codesharing, and schedule coordination by the two airlines, primarily for flights to and from Boston, New York Kennedy, New York LaGuardia, and Newark airports. Approval of the alliance by the U.S. DOT in January 2021 was conditioned on slot divestitures at New York Kennedy (initially seven slot pairs) and Washington Reagan (initially six slot pairs, four by American and two by Jet Blue) and other antitrust compliance measures.

However, various airlines have filed complaints with the U.S. DOT citing anticompetitive concerns and, in September 2021, the U.S. Department of Justice (DOJ) filed an antitrust lawsuit against American and JetBlue. An antitrust trial took place in fall 2022, with closing arguments concluding in November. Ultimate approval of the alliance by the U.S. DOT rests on the ruling in this trial, which remains pending. Concurrently, the U.S. DOT and DOJ are reviewing JetBlue's

planned acquisition of Spirit, as discussed in the later section "Airline Consolidation and Alliances." It is possible that a condition for approval of that acquisition could involve changes to, or cessation of, the Northeast Alliance.

## **American-US Airways Merger and Slot Transfers**

In February 2013, American and US Airways announced an agreement under which the two airlines would combine. Under the terms of an agreement with the U.S. DOJ, the combined airline was required to divest 52 pairs of slots and five gates at Reagan. Of the 52 slot pairs, Southwest purchased rights to 28, one of which (for Sunday-only service) it relinquished; JetBlue purchased 20, eight of which it had already been leasing from American; and Virgin America (now Alaska) purchased four.

To accommodate increased service by these three airlines, the Airports Authority leased three of the five divested gates to Southwest, one to JetBlue, and one to Alaska. The additional service made possible by the slot and gate transfers largely accounted for an increase in enplaned passenger numbers at Reagan between 2014 and 2015. Effective October 2018, Alaska leased four within-perimeter slot-pairs at Reagan to Southwest for a 10-year period.

As shown in Table 17, as scheduled for June 2023, Reagan ranks seventh by domestic departing seats among airports in the American route network. Reagan experienced the largest increase in domestic capacity among American's ten busiest airports between 2019 and 2023. The increase was facilitated by the new Concourse E and American's associated aircraft upgauging.

As shown in Table 18, for the 12 months ended September 30, 2022, Reagan accommodated a larger share of originating passengers and a smaller share of connecting passengers, relative to higher ranked hub airports in the American route network. This was also the case in 2019, pre-pandemic.

Figure 3 shows the destinations with daily nonstop service from Reagan as scheduled for June 2023. The 1,250-mile perimeter is shown for reference.

#### **Airline Service**

Table 19 presents data on nonstop airline service from Reagan to the top 20 domestic passenger destinations. Between 2013 and 2023, the number of aircraft departures from Reagan is scheduled to increase 5.8%, while the number of seats is scheduled to increase 16.2%. Numbers of both seats and departures are scheduled to be higher in 2023 than in 2019. (Table 23 provides data on fares in the air service markets.)

As scheduled for June 2023, nonstop service is provided from Reagan to all of the top 20 domestic destinations; 17 of these are served nonstop by more than one airline (or affiliated regional airline).\*

-

<sup>\*</sup>Regional airlines operating at Reagan as code-sharing affiliates of mainline airlines as scheduled for June 2023 are Endeavor Air (Delta Connection), Envoy Air (American Eagle), GoJet Airlines (United Express), Jazz Aviation (Air Canada Express), PSA Airlines (American Eagle), Republic Airlines (American Eagle, Delta Connection, and United Express), and SkyWest Airlines (United Express).

Table 17 **DEPARTING SEATS ON AMERICAN AT U.S. AIRPORTS** 

Top U.S. Airports in the American Airlines System
As scheduled for June of years shown

2023		Average	daily depart	ing seats	Percent increa	ase (decrease)
Rank	City (airport)	2013	2019	2023	2013-2019	2019-2023
Domest	tic					
1	Dallas/Fort Worth	80,669	98,357	100,347	21.9%	2.0%
2	Charlotte	62,029	67,027	71,868	8.1	7.2
3	Chicago (O'Hare)	41,617	50,147	33,203	20.5	(33.8)
4	Miami	26,136	26,989	28,665	3.3	6.2
5	Phoenix (Sky Harbor)	34,580	32,349	27,062	(6.5)	(16.3)
6	Philadelphia	35,075	34,208	25,897	(2.5)	(24.3)
7	Washington (Reagan)	22,715	20,414	23,470	(10.1)	15.0
8	Los Angeles	21,230	25,927	16,580	22.1	(36.1)
9	New York (LaGuardia)	14,703	14,934	12,411	1.6	(16.9)
10	Orlando	8,849	8,952	9,327	1.2	4.2
	All other	240,687	269,612	<u>258,165</u>	12.0	(4.2)
	Total—U.S. system	588,290	648,915	606,994	10.3%	(6.5%)
Interna	tional					
1	Miami	21,116	20,728	20,500	(1.8%)	(1.1%)
2	Dallas/Fort Worth	10,183	14,399	14,735	41.4	2.3
3	Charlotte	6,054	7,046	7,198	16.4	2.2
4	New York (Kennedy)	5,600	3,868	5,690	(30.9)	47.1
5	Philadelphia	7,159	6,855	4,975	(4.2)	(27.4)
6	Chicago (O'Hare)	4,239	3,877	4,005	(8.5)	3.3
7	Los Angeles	1,573	3,220	2,296	104.7	(28.7)
8	Phoenix (Sky Harbor)	2,497	1,691	1,651	(32.3)	(2.3)
9	New York (LaGuardia)	710	327	568	(53.9)	73.3
10	Austin			502	n.a.	n.a.
::	:: ::	::	::	::	::	::
14	Washington (Reagan)	466	219	262	(53.1)	20.0
	All other	807	300	<u>852</u>	(62.8)	184.3
	Total—U.S. system	60,404	62,530	63,235	3.5%	1.1%
Total						
1	Dallas/Fort Worth	90,852	112,756	115,082	24.1%	2.1%
2	Charlotte	68,084	74,073	79,066	8.8	6.7
3	Miami	47,252	47,717	49,165	1.0	3.0
4	Chicago (O'Hare)	45,856	54,024	37,208	17.8	(31.1)
5	Philadelphia	42,234	41,062	30,872	(2.8)	(24.8)
6	Phoenix (Sky Harbor)	37,077	34,040	28,713	(8.2)	(15.6)
7	Washington (Reagan)	23,181	20,633	23,733	(11.0)	15.0
8	Los Angeles	22,803	29,146	18,876	27.8	(35.2)
9	New York (Kennedy)	14,399	11,090	13,886	(23.0)	25.2
10	New York (LaGuardia)	15,413	15,261	12,978	(1.0)	(15.0)
	All other	<u>241,544</u>	271,642	260,650	12.5	(4.0)
	Total—U.S. system	648,694	711,445	670,230	9.7%	(5.8%)

Notes: Percentages were calculated using unrounded numbers.

Sources: OAG Schedules, accessed April 2023.

Table 18

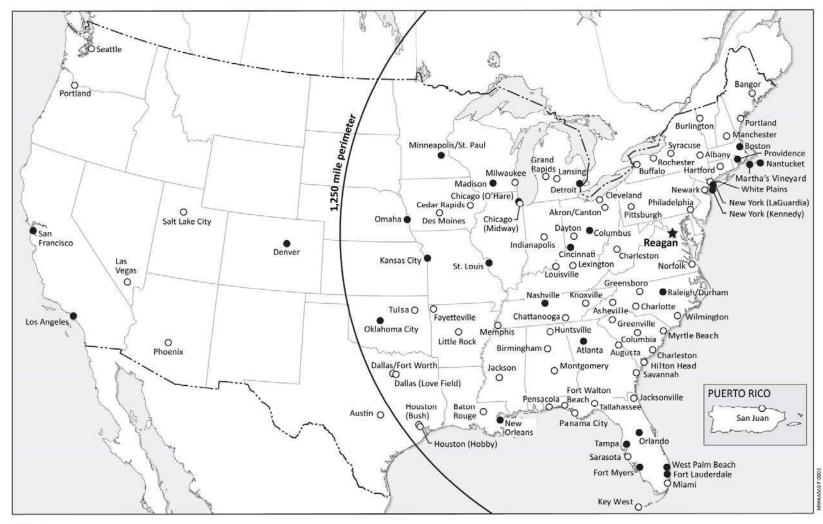
AMERICAN ENPLANED PASSENGERS AT ITS PRINCIPAL AIRPORTS

Average daily enplaned passengers

						6 2.22 20			
	Dom	estic	Interna	tional	Origin	ating	Conne	ecting	
		% of		% of		% of		% of	
City (airport)	Psgrs.	total	Psgrs.	total	Psgrs.	total	Psgrs.	total	Total
Calendar Year 2019						·			
Dallas/Fort Worth	73,351	88.0%	9,956	12.0%	31,842	38.2%	51,464	61.8%	83,307
Charlotte	55,459	92.5	4,507	7.5	15,065	25.1	44,901	74.9	59,967
Miami	23,543	59.0	16,365	41.0	22,606	56.6	17,302	43.4	39,908
Chicago (O'Hare)	36,654	93.5	2,569	6.5	22,154	56.5	17,069	43.5	39,223
Philadelphia	25,719	86.4	4,033	13.6	17,096	57.5	12,655	42.5	29,751
Phoenix (Sky Harbor)	26,734	95.0	1,398	5.0	14,038	49.9	14,093	50.1	28,131
Washington (Reagan)	16,307	99.2	127	0.8	13,233	80.5	3,201	19.5	16,434
Los Angeles	20,824	88.5	2,711	11.5	17,408	74.0	6,128	26.0	23,536
New York (Kennedy)	5,719	65.8	2,976	34.2	7,498	86.2	1,197	13.8	8,695
New York (LaGuardia)	10,610	97.4	285	2.6	9,945	91.3	951	8.7	10,896
12 months ended Septer	mber 30, 2	022							
Dallas/Fort Worth	71,716	88.5%	9,284	11.5%	29,328	36.2%	51,672	63.8%	81,000
Charlotte	52,735	93.0	3,968	7.0	14,597	25.7	42,106	74.3	56,703
Miami	26,260	63.1	15,328	36.9	21,962	52.8	19,625	47.2	41,587
Chicago (O'Hare)	28,124	92.6	2,237	7.4	17,466	57.5	12,895	42.5	30,362
Philadelphia	18,617	87.5	2,651	12.5	14,262	67.1	7,005	32.9	21,268
Phoenix (Sky Harbor)	23,319	95.1	1,212	4.9	13,474	54.9	11,057	45.1	24,531
Washington (Reagan)	17,141	99.3	113	0.7	11,592	67.2	5,662	32.8	17,254
Los Angeles	14,448	93.8	947	6.2	12,651	82.2	2,745	17.8	15,396
New York (Kennedy)	6,492	64.2	3,628	35.8	7,708	76.2	2,413	23.8	10,121
New York (LaGuardia)	9,517	97.3	262	2.7	8,744	89.4	1,035	10.6	9,779

Notes: Airports shown are the 10 busiest airports as ranked by departing seats on American and its American Eagle affiliates for June 2023, as shown in Table 17. This ranking may differ from rankings by passenger numbers for calendar year 2019 and the 12 months ended September 30, 2022.

Sources: Metropolitan Washington Airports Authority records; U.S. DOT, Schedule T100 and *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.



#### LEGEND

O Destinations with service by only 1 airline

Destinations with service by 2 or more airlines

Figure 3
U.S. DESTINATIONS WITH DAILY SCHEDULED NONSTOP
ROUNDTRIP PASSENGER AIRLINE SERVICE

Reagan National Airport June 2023

Source: OAG Schedules, accessed April 2023.

## Table 19 AIRLINE SERVICE FOR TOP DOMESTIC DESTINATIONS

Reagan National Airport
As scheduled for June of years shown

		Airlines providing	g Average daily scheduled						
Rank	Destination	nonstop service (b)	Airc	raft depar	tures	Dep	parting sea	ts	
(a)	Airport	2023	2013	2019	2023	2013	2019	2023	
1	South Florida	AA,B6,UA,WN	17	18	19	2509	2349	2854	
	Miami	AA	9	9	8	1,424	1,360	1,405	
	Ft. Lauderdale	<i>B6,WN</i>	6	7	7	894	810	1,073	
	West Palm Beach	AA,UA,WN	2	2	4	191	179	456	
2	Boston	AA,B6,DL	22	22	26	2,690	2,495	2,553	
3	Chicago	AA,UA,WN	22	28	23	3,121	3,744	3,290	
	O'Hare	AA,UA	22	22	17	3,121	2,870	2,386	
	Midway	WN		6	6		874	887	
4	Orlando	AA,WN	11	10	11	1,515	1,395	1,724	
5	Atlanta	AA,DL,WN	21	20	19	2,988	3,071	2,780	
6	Los Angeles (c)	AA,AS,DL	2	4	4	319	709	719	
7	Dallas/Fort Worth	AA,UA,WN	10	14	13	1,560	2,314	2,056	
	Dallas/Fort Worth	AA	10	9	8	1,560	1,559	1,393	
	Love Field	UA,WN		5	5		<i>755</i>	663	
8	New York	AA,B6,DL,UA	29	32	44	2,595	2,509	3,288	
	LaGuardia	AA,DL	13	19	17	1,637	1,500	1,621	
	Newark	UA	7	7	16	420	408	851	
	Kennedy	AA,B6,DL	9	7	10	538	600	762	
9	Houston	UA,WN	7	11	9	1,012	1,142	1,266	
	Bush	UA	7	8	6	1,012	713	796	
	Hobby	WN		3	3		429	449	
10	Tampa	AA,WN	6	6	6	765	820	920	
11	Denver	F9,UA	4	4	4	734	750	726	
12	Nashville	AA,WN	7	9	9	353	981	981	
13	San Francisco (d)	AS,UA	2	2	2	245	356	325	
14	Minneapolis-St. Paul	AA,DL	8	8	7	1,049	1,051	902	
15	Phoenix	AA	3	3	3	523	530	588	
16	Detroit	AA,DL	11	9	8	1,175	1,091	853	
17	New Orleans	AA,WN	5	6	5	363	593	671	
18	St. Louis	AA,WN	5	8	6	683	870	859	
19	Charlotte	AA	10	8	7	1,114	1,130	1,010	
20	Las Vegas	AA	1	1	1	187	160	176	
	Total—top 20 destinations		204	204	224	225	25,500	28,058	
	Other destinations		<u>178</u>	<u>171</u>	<u>179</u>	<u>11,896</u>	<u>12,603</u>	<u>14,936</u>	
	Total—all destinations		382	395	404	37,396	40,661	43,466	

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

Source: OAG Schedules, accessed March 2023.

<sup>(</sup>a) Top 20 destinations ranked by domestic originating passengers for the 12 months ended September 30, 2022.

<sup>(</sup>b) Airlines operating scheduled passenger service. Legend: AA=American, AS=Alaska, B6=JetBlue, DL=Delta, F9=Frontier, UA=United, and WN=Southwest.

<sup>(</sup>c) Service provided to Los Angeles International Airport.

<sup>(</sup>d) Service provided to San Francisco International Airport.

Table 20 provides detail on airline service by aircraft type. The average seating capacity of both large jet and regional jet aircraft at Reagan has increased since 2013, resulting in an increase in the overall average number of seats per departure from 98 in June 2013 to 108 in June 2023. In June 2023, the numbers of cities served nonstop, daily departures, and daily departing seats are all scheduled to exceed June 2019 levels.

# Table 20 **DOMESTIC AIRLINE SERVICE BY AIRCRAFT TYPE**

Reagan National Airport As scheduled for June of years shown

				Increase (	decrease)
	2013	2019	2023	2013-2019	2019-2023
Destinations served nonstop (a)					
Large jet	29	33	40	4	7
Regional jet and turboprop	64	69	72	5	3
Total cities served nonstop (a)	82	81	89	(1)	8
Average daily aircraft departures					
Large jet	162	151	175	(11)	24
Regional jet and turboprop	<u>220</u>	<u>245</u>	<u>230</u>	<u>24</u>	<u>(15)</u>
Total aircraft departures	382	395	404	13	9
Percent of total					
Large jet	42.3%	38.1%	43.2%		
Regional jet and turboprop	57.7	61.9	56.8		
Average daily departing seats					
Large jet	23,683	23,248	26,657	(435)	3,409
Regional jet and turboprop	<u>13,713</u>	17,413	16,809	<u>3,700</u>	<u>(604)</u>
Total departing seats	37,396	40,661	43,466	3,265	2,805
Percent of total					
Large jet	63.3%	57.2%	61.3%		
Regional jet and turboprop	36.7	42.8	38.7		
Average seats per departure					
Large jet	146	154	153	8	(2)
Regional jet and turboprop	62	71	73	9	2
Total seats per departure	98	103	108	5	5

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

Changes were calculated using unrounded numbers. Jet aircraft are categorized as large jets (100+ seats) or regional jets (<100 seats).

Source: OAG Aviation Worldwide Ltd., OAG Analyser database, accessed April 2023.

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

## **Enplaned Passengers**

Passenger numbers increased between 2010 and 2019, in part because of the 2014 slot and gate transfers, reaching 11.95 million enplaned passengers in 2019. In 2020, passenger numbers decreased 68.5% to 3.77 million, as the pandemic drastically reduced demand for air travel both locally and worldwide. Passenger numbers began recovering in 2021 and, in 2022, reached a new record high of 11.97 million enplaned passengers. Monthly trends from 2020 through 2022 are discussed in the later section "Recent Changes in Enplaned Passengers at Reagan."

Table 21 shows historical passenger enplanements at Reagan by domestic and international subtotals and originating and connecting components. Originating passengers accounted for 88.5% of enplaned passengers at the airport in 2019, with the remaining 11.5% connecting between flights. The originating passenger percentage had increased from 82.5% in 2010 as American competed more aggressively for originating passengers and reduced its reliance on connecting activity. By 2022, however, the share of originating passengers declined to 79.3%, as originating passengers decreased more than connections and as the April 2021 opening of post-security National Hall facilitated additional connecting activity in Terminal 2.

According to a passenger survey conducted by the Airports Authority, approximately 44% of originating passengers at Reagan in 2022 were traveling for business-related purposes and approximately 56% were traveling for non-business purposes. Of business travelers, approximately 24% were traveling for business related to the federal government or military.

As shown in Table 22, for the 12 months ended September 30, 2022, American accounted for 46.5% of originating passengers and 89.2% of connecting passengers at Reagan. Connecting passengers on American accounted for 32.8% of the airline's enplaned passengers.

## Table 21 HISTORICAL ENPLANED PASSENGERS BY COMPONENT

Reagan National Airport (passengers in thousands)

Passengers enplaned on

		Domestic flights		Inter	national flights		All flights			
Year	Originating (a)	Connecting	Total	Originating (b)	Connecting	Total	Originating	Connecting	Total	
2010	7,339	1,552	8,891	116	29	144	7,454	1,581	9,036	
2015	9,501	1,798	11,298	168	30	198	9,669	1,827	11,496	
2016	10,102	1,501	11,603	144	23	167	10,246	1,524	11,770	
2017	10,374	1,377	11,751	160	23	183	10,534	1,400	11,934	
2018	10,270	1,281	11,551	161	22	184	10,431	1,303	11,734	
2019	10,417	1,348	11,765	162	22	184	10,579	1,370	11,949	
2020	3,251	483	3,734	28	5	34	3,280	488	3,768	
2021	5,723	1,299	7,021	24	3	28	5,747	1,302	7,049	
2022	9,381	2,455	11,836	114	20	134	9,494	2,475	11,969	
				Average annual pe	rcent increase (d	ecrease)				
2010-2015	5.3%	3.0%	4.9%	7.8%	0.6%	6.5%	5.3%	2.9%	4.9%	
2015-2019	2.3	(6.9)	1.0	(0.9)	(7.0)	(1.7)	2.3	(6.9)	1.0	
2010-2019	4.0	(1.6)	3.2	3.8	(2.8)	2.8	4.0	(1.6)	3.2	
				Percent in	crease (decrease)	)				
2018-2019	1.4%	5.2%	1.9%	0.5%	(0.3%)	0.4%	1.4%	5.1%	1.8%	
2019-2020	(68.8)	(64.2)	(68.3)	(82.4)	(76.9)	(81.8)	(69.0)	(64.4)	(68.5)	
2020-2021	76.0	169.1	88.0	(14.1)	(36.1)	(17.5)	75.2	167.0	87.1	
2021-2022	63.9	89.0	68.6	365.0	510.1	382.2	65.2	90.1	69.8	
2019-2022	(9.9)	82.1	0.6	(29.8)	(9.9)	(27.4)	(10.2)	80.6	0.2	
				Share o	of Airport total					
2010	81.2%	17.2%	98.4%	1.3%	0.3%	1.6%	82.5%	17.5%	100.0%	
2015	82.6	15.6	98.3	1.5	0.3	1.7	84.1	15.9	100.0	
2019	87.2	11.3	98.5	1.4	0.2	1.5	88.5	11.5	100.0	
2022	78.4	20.5	98.9	1.0	0.2	1.1	79.3	20.7	100.0	

Notes: Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers. The distribution of originating and connecting passengers for 2022 was estimated using actual data for the first three quarters and estimated data for the fourth quarter.

Sources: Metropolitan Washington Airports Authority; U.S. DOT, Air Passenger Origin-Destination Survey, reconciled to Schedule T100.

<sup>(</sup>a) Includes domestic originating passengers, international originating passengers who boarded domestic flights at Reagan bound for international destinations via other gateway airports, passengers on nonscheduled (charter) flights, and nonrevenue passengers.

<sup>(</sup>b) Includes international originating passengers on scheduled flights, along with small numbers of passengers on nonscheduled flights, nonrevenue passengers, and international-to-international connections.

## Table 22 ENPLANED PASSENGERS BY AIRLINE GROUP

Reagan National Airport 12 Months ended September 30, 2022

	Average dai	ly enplaned	passengers	Distribut	ion by airlin	ne group	
		All other	All		All other	All	
	American	airlines	airlines	American	airlines	airlines	
By sector							
Domestic	17,141	13,803	30,943	99.3%	98.6%	99.0%	
International	113	191	305	0.7	1.4	1.0	
Total	17,254	13,994	31,248	100.0%	100.0%	100.0%	
By type of passenger							
Originating – resident (a)	6,272	6,312	12,584	36.3%	45.1%	40.3%	
Originating – visitor (b)	<u>5,320</u>	<u>7,000</u>	12,320	<u>30.8</u>	<u>50.0</u>	<u>39.4</u>	
Subtotal originating	11,592	13,312	24,904	67.2%	95.1%	79.7%	
Connecting	<u>5,662</u>	<u>682</u>	<u>6,344</u>	<u>32.8</u>	<u>4.9</u>	20.3	
Total	17,254	13,994	31,248	100.0%	100.0%	100.0%	
Share by airline group							
Originating	46.5%	53.5%	100.0%				
Connecting	89.2	10.8	100.0				
Total	55.2	44.8	100.0				

Notes: Rows and columns may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

Sources: Metropolitan Washington Airports Authority records; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.

<sup>(</sup>a) Originating-resident passengers are defined as those passengers whose flight itineraries began at Reagan.

<sup>(</sup>b) Originating-visitor passengers are defined as those passengers whose flight itineraries began at airports other than Reagan.

#### **Domestic Airfares**

Table 23 presents data on domestic originating passengers and average airfares for the top 20 domestic destinations from Reagan. Between 2010 and 2019, for the top 20 domestic destinations taken together, average airfares increased 7.4% while passenger numbers increased 47.4%. Airfare and service competition led to different results for different destinations. Generally, those that experienced increased competition from LCCs showed the largest increases in passenger numbers. Between 2019 and 2022, the effects of the pandemic on travel demand led to reduced passenger numbers and reduced average airfares to most destinations.

The average airfares shown in Table 23, 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 airfares 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.

Table 23

PASSENGERS AND AIRFARES IN TOP 20 DOMESTIC DESTINATIONS

Reagan National Airport

Average daily domestic originating passengers

Average one-way fare (b)

				· ·	As percent of total		increase ease)				Percent (decr	increase ease)
Rank	Destination	2010	2019	2022 (a)	2022	2010-2019	2019-2022	2010	2019	2022 (a)	2010-2019	2019-2022
1	South Florida (c)	1,318	1,717	1,694	7.6%	30.3%	(1.3%)	\$125.62	\$167.31	\$142.44	33.2%	(14.9%)
2	Boston	895	1,794	1,486	6.7	100.6	(17.2)	173.27	135.27	102.10	(21.9)	(24.5)
3	Chicago (d)	1,145	1,510	1,256	5.6	31.9	(16.8)	140.03	193.12	139.98	37.9	(27.5)
4	Orlando	701	1,168	1,110	5.0	66.6	(5.0)	112.75	119.41	122.28	5.9	2.4
5	Atlanta	1,041	1,214	1,067	4.8	16.7	(12.2)	141.64	172.33	148.23	21.7	(14.0)
6	Los Angeles (e)	488	917	867	3.9	87.8	(5.5)	185.82	260.43	284.90	40.2	9.4
7	Dallas/Fort Worth (f)	651	1,004	845	3.8	54.3	(15.8)	218.08	212.64	204.38	(2.5)	(3.9)
8	New York (g)	939	846	641	2.9	(9.9)	(24.2)	168.36	161.92	143.57	(3.8)	(11.3)
9	Houston (h)	462	583	562	2.5	26.1	(3.5)	230.33	229.66	198.84	(0.3)	(13.4)
10	Tampa	365	630	524	2.4	72.8	(16.7)	164.56	146.51	152.74	(11.0)	4.2
11	Denver	435	584	498	2.2	34.3	(14.8)	180.41	138.89	171.38	(23.0)	23.4
12	Nashville	131	464	471	2.1	253.1	1.4	193.18	162.03	131.74	(16.1)	(18.7)
13	San Francisco (i)	290	584	464	2.1	101.5	(20.5)	190.38	289.96	300.94	52.3	3.8
14	Minneapolis-St. Paul	434	509	417	1.9	17.4	(18.1)	203.23	184.56	184.56	(9.2)	0.0
15	Phoenix	224	414	403	1.8	84.5	(2.6)	265.04	268.39	276.31	1.3	3.0
16	Detroit	299	476	396	1.8	59.1	(16.9)	190.05	157.83	135.46	(17.0)	(14.2)
17	New Orleans	243	439	366	1.6	80.5	(16.6)	202.47	164.99	169.14	(18.5)	2.5
18	St. Louis	299	452	364	1.6	51.4	(19.6)	164.81	162.28	130.97	(1.5)	(19.3)
19	Charlotte	174	301	299	1.3	72.7	(0.4)	184.66	180.46	141.65	(2.3)	(21.5)
20	Las Vegas	<u>248</u>	<u>281</u>	<u>296</u>	<u>1.3</u>	13.3	5.2	191.13	235.87	261.16	23.4	10.7
	Average—top 20 destinations	10,782	15,888	14,027	62.9%	47.4%	(11.7%)	\$167.51	\$179.89	\$165.72	7.4%	(7.9%)
	All other destinations	7,101	10,301	<u>8,269</u>	<u>37.1</u>	45.1	(19.7)	199.77	199.54	205.47	(0.1)	3.0
	Average—all destinations	17,882	26,189	22,296	100.0%	46.5%	(14.9%)	\$180.32	\$187.62	\$180.46	4.0%	(3.8%)

Notes: Columns may not add to totals shown because of rounding. Percentages shown were calculated using unrounded numbers.

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

<sup>(</sup>a) Data are for the 12 months ended September 30, 2022, the most recent available.

<sup>(</sup>b) Average one-way fares shown are net of taxes, fees, passenger facility charges, and fees charged by the airlines for optional services.

<sup>(</sup>c) Miami, Ft. Lauderdale, and West Palm Beach airports.

<sup>(</sup>d) O'Hare and Midway airports.

<sup>(</sup>e) Los Angeles, Burbank, Long Beach, Ontario, and Orange County airports.

<sup>(</sup>f) Dallas/Fort Worth airport and Love Field.

<sup>(</sup>g) Kennedy, LaGuardia, and Newark airports.

<sup>(</sup>h) Bush and Hobby airports.

<sup>(</sup>i) San Francisco, Oakland, and San Jose airports.

## **Airline Shares of Enplaned Passengers**

As shown in Table 24, American enplaned 54.8% of Reagan's passengers in 2022 and second-ranked and third-ranked Southwest and Delta enplaned 13.9% and 12.8%, respectively. Between 2010 and 2022, the share of passengers enplaned at Reagan by mainline airlines decreased from 58.2% to 40.9%, the share of regional airlines (essentially all of which are now affiliated with mainline airlines) increased from 30.7% to 33.4%, and the LCC share (Southwest, JetBlue, Frontier, and Sun Country) increased from 8.3% to 22.9%. These changes in airline shares of passengers resulted largely from slot and gate transfers as discussed earlier in the section "American-US Airways Merger and Slot Transfers."

Table 24
AIRLINE SHARES OF ENPLANED PASSENGERS
Reagan National Airport

Average daily enplaned passengers 2015 2019

16,053

4,183

4,272

2,629

2,454

940

453

356

156

14,256

8,750

7,421

1,070

866

941

2.9

0 31,496

e daliy					
assengers	5		Airline sha	re of total	
2019	2022	2010	2015	2019	2022
16,434	17,968	57.2%	51.0%	50.2%	54.8%
4,932	4,564	4.2	13.3	15.1	13.9
4,831	4,186	19.6	13.6	14.8	12.8
2,501	2,466	0.4	8.3	7.6	7.5
2,459	2,197	10.7	7.8	7.5	6.7
731	706	1.7	3.0	2.2	2.2
454	457	3.7	1.4	1.4	1.4
371	235	1.2	1.1	1.1	0.7
23	15		0.5	0.1	0.0
		1.4	0.0		
32,737	32,793	100.0%	100.0%	100.0%	100.0%
13,681	13,400	58.2%	45.3%	41.8%	40.9%
10,280	10,952	30.7	27.8	31.4	33.4
7,910	7,501	8.3	23.6	24.2	22.9

3.4

2.6

2.9

Note: Columns may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

2010

14,151

1,046

4,863

2,638

102

409

909

298

340

24,755

14,405

7,596

2,047

708

Airline (a)

American

Southwest

Delta

JetBlue

United

Alaska

**Frontier** 

All other

Total

Air Canada

Sun Country

By type of airline Mainline airline

Low-cost carrier

Other airline

Affiliated regional airline

(a) Includes regional code-sharing affiliates.

Source: Metropolitan Washington Airports Authority records.

### Cargo

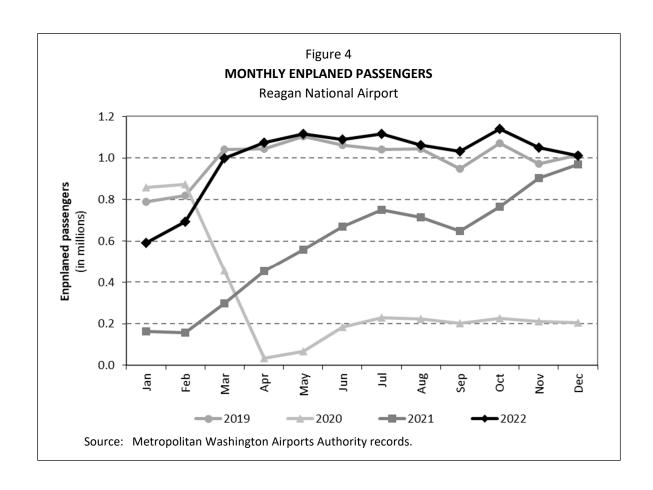
All-cargo airlines serving the Airports Authority's two Airports now operate exclusively at Dulles. FedEx served Reagan between 2008 and 2012. All cargo at Reagan is carried in the belly compartments of passenger aircraft. In 2022, approximately 1,700 metric tons of air cargo were handled at Reagan (down from 2,200 metric tons in 2019) versus 226,000 metric tons at Dulles (down from 273,000 metric tons in 2019). Southwest accounted for 48% of air cargo tonnage handled at Reagan in 2022, followed by American with 28%, and Delta with 16%.

## **Aircraft Operations**

Historical aircraft departures, enplaned passenger load factor, and average seats per departure at Reagan are shown in Table 38. The number of operations (landings and takeoffs) by commercial passenger aircraft at Reagan increased an average of 0.9% per year between 2010 and 2019, less than the average increase in the number of enplaned passengers (3.2% per year) over the same period. The average passenger load factor (percentage of seats occupied) increased from 73% in 2010 to 81% in 2019 as airlines implemented more sophisticated scheduling, reservations, and yield management systems to align capacity and demand. Average load factor dropped to 53% in 2020, as travel demand weakened during the pandemic, but rebounded to 77% in 2021 and 78% in 2022. The average number of seats per departure increased from 94 in 2010 to 106 in 2022.

## Recent Changes in Enplaned Passengers at Reagan

Figure 4 shows that historical patterns of passenger traffic at Reagan were drastically disrupted by the coronavirus pandemic beginning in early 2020. In April 2020, enplaned passengers had dropped to only 3.4% of their pre-pandemic April 2019 level. By summer they had increased modestly, but then plateaued at roughly 20-22% of pre-pandemic levels through the fall and winter months. In spring 2021, increasing vaccination rates and pent-up travel demand combined to drive strong growth in passenger enplanements over the remaining course of the year. Additionally, the opening of Concourse E in April 2021 has allowed American to operate larger regional jet aircraft than had been used at the hardstand positions that Concourse E replaced. Since April 2022, the number of enplaned passengers at Reagan have been at or above corresponding 2019 monthly levels.



### HISTORICAL AIRLINE SERVICE AND TRAFFIC AT DULLES

#### **Airline Service**

Unlike Reagan, Dulles is not subject to the High Density Rule or the Perimeter Rule, and the expansion of airline service is not constrained by the capacity of its airside or landside facilities.

United operates a connecting hub at Dulles, along with other U.S. hubs in Chicago, Denver, Houston, Los Angeles, Newark, and San Francisco. As shown in Table 25, Dulles ranks sixth in United's U.S. airport system by departing seats as scheduled for June 2023. As shown in Table 26, for the 12 months ended September 30, 2022, United accommodated only 11% fewer connecting passengers at Dulles than Newark, an airport also serving a transatlantic gateway role in the United route network. However, United accommodated 43% fewer originating passengers at Dulles than Newark.

Dulles and Newark, approximately 200 miles apart, fill similar transatlantic gateway roles in the United route network. Historically, United has taken advantage of this redundancy by directing connecting passenger flow through whichever airport had more capacity available relative to local originating passenger demand, thereby helping to maximize load factors for both airports as well as airline profitability.

Table 25 **DEPARTING SEATS ON UNITED AT U.S. AIRPORTS** 

Top U.S. Airports in the United Airlines system As scheduled for June of years shown

2023		Average	daily depart	ing seats	Percent increa	ase (decrease)
Rank	City (airport)	2013	2019	2023	2013-2019	2019-2023
Domesti	ic					
1	Denver	33,564	50,240	55,753	49.7%	11.0%
2	Chicago (O'Hare)	49,465	58,005	49,606	17.3	(14.5)
3	Newark	31,550	36,238	43,309	14.9	19.5
4	Houston (Bush)	46,401	44,717	41,407	(3.6)	(7.4)
5	San Francisco	30,611	37,231	30,872	21.6	(17.1)
6	Washington (Dulles)	20,741	22,444	20,920	8.2	(6.8)
7	Los Angeles	22,322	19,542	16,891	(12.5)	(13.6)
8	Las Vegas	6,565	6,412	6,382	(2.3)	(0.5)
9	Orlando	5,632	6,310	6,297	12.0	(0.2)
10	Boston	6,762	6,686	6,224	(1.1)	(6.9)
	All other	<u>161,673</u>	176,563	171,813	9.2	(2.7)
	Total—U.S. system	415,285	464,388	449,474	11.8%	(3.2%)
Internat	tional					
1	Newark	15,225	16,797	16,961	10.3%	1.0%
2	Houston (Bush)	13,602	14,100	13,663	3.7	(3.1)
3	San Francisco	6,526	9,400	9,635	44.0	2.5
4	Washington (Dulles)	7,056	7,069	7,752	0.2	9.7
5	Chicago (O'Hare)	7,999	8,393	7,101	4.9	(15.4)
6	Denver	1,851	2,393	3,409	29.3	42.5
7	Los Angeles	2,444	2,144	2,421	(12.3)	12.9
8	Guam	2,256	1,500	1,749	(33.5)	16.6
9	Boston			167	n.a.	n.a.
10	Honolulu	430	458	77	6.4	(83.1)
	All other	1,215	143	94	(88.3)	(33.8)
	Total—U.S. system	58,604	62,395	63,030	6.5%	1.0%
Total						
1	Newark	46,775	53,035	60,269	13.4%	13.6%
2	Denver	35,415	52,633	59,162	48.6	12.4
3	Chicago (O'Hare)	57,464	66,397	56,707	15.5	(14.6)
4	Houston (Bush)	60,003	58,817	55,070	(2.0)	(6.4)
5	San Francisco	37,137	46,631	40,508	25.6	(13.1)
6	Washington (Dulles)	27,797	29,513	28,672	6.2	(2.8)
7	Los Angeles	24,767	21,685	19,312	(12.4)	(10.9)
8	Boston	6,762	6,686	6,391	(1.1)	(4.4)
9	Las Vegas	6,565	6,412	6,382	(2.3)	(0.5)
10	Orlando	5,677	6,310	6,297	11.1	(0.2)
	All other	<u>165,529</u>	<u>178,664</u>	<u>173,733</u>	7.9	(2.8)
	Total—U.S. system	473,889	526,783	512,504	11.2%	(2.7%)

Notes: n.a. = not applicable. Percentages were calculated using unrounded numbers.

Source: OAG Schedules, accessed April 2023.

**Domestic Airline Service**. Figure 5 shows the domestic destinations with daily nonstop service from Dulles as scheduled for June 2023.

Table 27 presents data on nonstop airline service from Dulles to the top 20 domestic passenger destinations. Between 2013 and 2023, the number of aircraft departures from the airport is scheduled to decrease 28.6%, while the number of seats is scheduled to decrease 4.7%. (Table 32 provides data on fares in the air service markets.)

As scheduled for June 2023, United (including affiliated United Express regional airlines) provides nonstop service to all of the top 20 destinations at Dulles; 13 of the top 20 destinations are served nonstop by two or three airlines (or their affiliated regional airlines); and 5 destinations are served nonstop by LCCs (Southwest or Allegiant).\*

\*Regional airlines operating at Dulles as code-sharing affiliates of mainline airlines as scheduled for June 2023 are CommutAir (United Express), Endeavor Air (Delta Connection), Envoy Air (American Eagle), GoJet Airlines (United Express), Jazz Aviation (Air Canada Express), Mesa Airlines (United Express), PSA Airlines (American Eagle),

Republic Airlines (United Express), and SkyWest Airlines (Delta Connection and United Express).

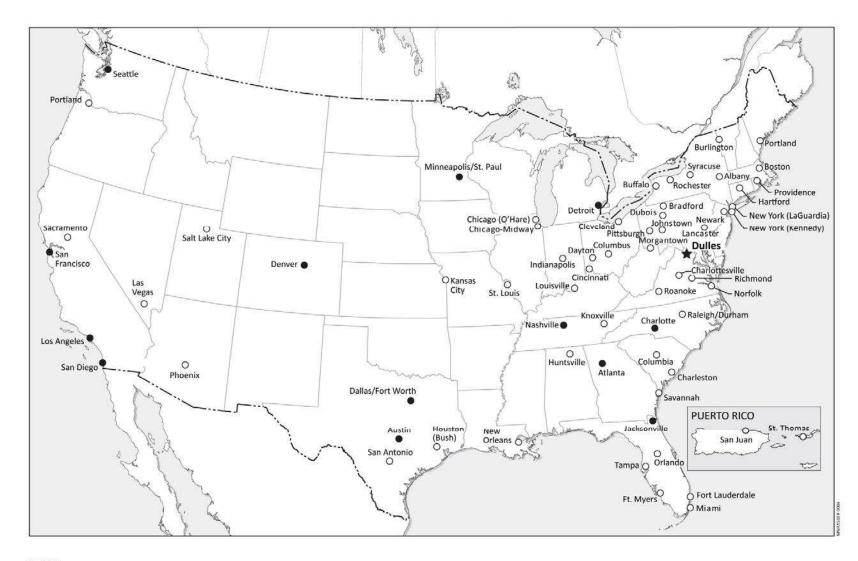
Table 26
UNITED ENPLANED PASSENGERS AT ITS PRINCIPAL AIRPORTS

Average daily enplaned passengers

			Ave	rage uany	empianeu	passerig	E13		
	Dom	estic	Interna	tional	Origina	ting	Connec	cting	
		% of		% of		% of		% of	
City (airport)	Psgrs.	total	Psgrs.	total	Psgrs.	total	Psgrs.	total	Total
Calendar Year 2019									
Newark	30,073	72.1%	11,652	27.9%	31,571	75.7%	10,154	24.3%	41,725
Denver	38,950	95.5	1,847	4.5	18,652	45.7	22,144	54.3	40,796
Chicago (O'Hare)	44,129	88.5	5,711	11.5	24,723	49.6	25,116	50.4	49,839
Houston (Bush)	35,731	77.7	10,244	22.3	19,362	42.1	26,612	57.9	45,975
San Francisco	27,729	80.8	6,596	19.2	21,820	63.6	12,504	36.4	34,325
Washington (Dulles)	17,939	80.6	4,308	19.4	12,833	57.7	9,414	42.3	22,247
Los Angeles	15,216	90.9	1,522	9.1	12,672	75.7	4,067	24.3	16,739
Boston	5,101	100.0	1	0.0	4,981	97.6	120	2.4	5,101
Las Vegas	5,509	100.0	0	0.0	5,310	96.4	198	3.6	5,509
Orlando	5,477	100.0	0	0.0	5,391	98.4	86	1.6	5,477
12 months ended Septe	mber 30,	2022							
Newark	20,979	72.4%	8,016	27.6%	19,191	66.2%	9,804	33.8%	28,995
Denver	29,955	95.0	1,585	5.0	7,938	25.2	23,602	74.8	31,540
Chicago (O'Hare)	26,892	89.0	3,308	11.0	10,921	36.2	19,279	63.8	30,200
Houston (Bush)	22,484	77.5	6,510	22.5	7,631	26.3	21,363	73.7	28,994
San Francisco	15,989	83.7	3,122	16.3	11,096	58.1	8,015	41.9	19,111
Washington (Dulles)	15,858	80.5	3,850	19.5	10,969	55.7	8,739	44.3	19,708
Los Angeles	9,527	88.8	1,199	11.2	7,795	72.7	2,930	27.3	10,725
Boston	3,001	97.9	63	2.1	2,956	96.5	108	3.5	3,064
Las Vegas	3,435	100.0		0.0	3,281	95.5	154	4.5	3,435
Orlando	4,033	100.0		0.0	3,937	97.6	96	2.4	4,033

Notes: Airports shown are the 10 busiest airports as ranked by departing seats on United and its United Express affiliates for June 2023, as shown in Table 25. This ranking may differ from rankings by passenger numbers for calendar year 2019 and the 12 months ended September 30, 2022.

Sources: Metropolitan Washington Airports Authority records; U.S. DOT, Schedule T100 and *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.



#### LEGEND

- O Destinations with service by only 1 airline
- Destinations with service by 2 or more airlines

Source: OAG Schedules, accessed April 2023.

Figure 5
U.S. DESTINATIONS WITH DAILY SCHEDULED NONSTOP
ROUNDTRIP PASSENGER AIRLINE SERVICE

Dulles International Airport June 2023

## Table 27 AIRLINE SERVICE FOR TOP DOMESTIC DESTINATIONS

Dulles International Airport
As scheduled for June of years shown

		Airlines providing	ng Average daily scheduled						
Rank	Destination	nonstop service (b)	Aircra	ft depar	tures	De	parting sea	ats	
(a)	Airport	2023	2013	2019	2023	2013	2019	2023	
1	Los Angeles (c)	AS,UA	15	11	7	2,546	1,798	1,341	
2	San Francisco (d)	AS,UA	14	9	8	2,272	1,788	1,773	
3	Denver	UA,WN	10	12	8	1,684	2,068	1,718	
4	Orlando	UA	4	5	4	606	817	707	
5	Seattle	AS,DL,UA	3	7	8	505	1,093	1,344	
6	South Florida	UA	4	2	3	579	344	451	
	Ft. Lauderdale	UA	1	2	2	166	344	321	
	Miami	UA	3		1	413		127	
7	Atlanta	DL,UA,WN	12	13	11	1,191	1,625	1,461	
8	Chicago	UA,WN	13	6	8	1,935	939	1,257	
	O'Hare	UA	7	6	5	1,101	939	858	
	Midway	WN	6		3	834		401	
9	San Diego	AS,UA	3	3	4	494	503	971	
10	Austin	AA,G4,UA	3	4	4	208	394	543	
11	Las Vegas	UA	2	2	2	344	409	348	
12	Dallas/Fort Worth (e)	AA,UA	8	7	5	1,029	977	816	
13	Houston <i>(f)</i>	UA	5	5	5	743	883	903	
14	Boston	UA	9	4	4	1,105	646	647	
15	New York	DL,UA	22	13	17	1,234	1,210	1,571	
	Newark	UA	6	6	5	317	736	696	
	LaGuardia	UA	8	4	8	434	241	631	
	Kennedy	DL	8	4	3	483	233	228	
16	Tampa	UA	3	3	3	466	489	490	
17	Phoenix	UA	1	1	1	176	158	185	
18	Detroit	DL,UA	8	8	6	391	609	441	
19	Charlotte	AA,UA	11	11	8	768	810	746	
20	Jacksonville	G4,UA	3	3	3	207	145	447	
	Total—top 20 destinations		153	153	129	117	18,483	17,704	
	Other destinations		<u>163</u>	<u>147</u>	<u>108</u>	8,978	10,525	8,088	
	Total—all destinations		316	276	225	27,461	28,229	26,168	

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

Source: OAG Schedules, accessed April 2023.

<sup>(</sup>a) Top 20 destinations ranked by domestic originating passengers for the 12 months ended September 30, 2022.

<sup>(</sup>b) Airlines operating scheduled passenger service. Legend: AA=American, AS=Alaska, DL=Delta, G4=Allegiant, UA=United, and WN=Southwest.

<sup>(</sup>c) Service provided to Los Angeles International Airport in all years shown and Long Beach Airport in 2013.

<sup>(</sup>d) Service provided to San Francisco International Airport in all years shown and Oakland International Airport in 2013.

<sup>(</sup>e) Service provided to George Bush Intercontinental Airport.

<sup>(</sup>f) Service provided to Dallas/Fort Worth International Airport.

Table 28 provides detail on airline service at Dulles by aircraft type. As scheduled for June 2023, large jets account for 49.7% of aircraft departures and 73.9% of departing seats, while regional jets and turboprops account for the remainder. Changes in the mix of aircraft types serving Dulles resulted in an increase in the average number of seats per departure from 87 in June 2013 to 116 in June 2023.

## Table 28 **DOMESTIC AIRLINE SERVICE BY AIRCRAFT TYPE**

Dulles International Airport
As scheduled for June of years shown

				Increase	(decrease)
	2013	2019	2023	2013-2019	2019-2023
Destinations served nonstop (a)					
Large jet	21	32	35	11	3
Regional jet and turboprop	62	58	39	(4)	(19)
Total cities served nonstop (a)	77	77	62	-	(15)
Average daily aircraft departures					
Large jet	97	110	112	13	2
Regional jet and turboprop	<u>219</u>	<u>165</u>	<u>113</u>	<u>(53)</u>	<u>(52)</u>
Total aircraft departures	316	276	225	(40)	(50)
Percent of total					
Large jet	30.7%	40.0%	49.7%		
Regional jet and turboprop	69.3	60.0	50.3		
Average daily departing seats					
Large jet	15,604	18,053	19,345	2,450	1,292
Regional jet and turboprop	11,857	<u>10,176</u>	<u>6,823</u>	(1,681)	<u>(3,353)</u>
Total departing seats	27,461	28,229	26,168	768	(2,061)
Percent of total					
Large jet	56.8%	64.0%	73.9%		
Regional jet and turboprop	43.2	36.0	26.1		
Average seats per departure					
Large jet	161	164	173	3	9
Regional jet and turboprop	54	62	60	7	(1)
Total seats per departure	87	102	116	15	14

Notes: Columns may not add to totals shown because of rounding. Changes were calculated using unrounded numbers. Jet aircraft are categorized as large jets (100+ seats) or regional jets (<100 seats).

Source: OAG Aviation Worldwide Ltd., OAG Analyser database, accessed April 2023.

<sup>(</sup>a) Some destinations are served by more than one airport and some airports are served by more than one airline type or aircraft type. Includes only cities with an average of at least 4 flights per week.

International Airline Service. Table 29 shows that the average number of international departing seats at Dulles, as scheduled for June, increased 26.6% between 2013 and 2023. Between 2013 and 2019, capacity increased to all regions, as several foreign-flag airlines began service at Dulles. The number of international departing seats fell in 2020, with the onset of the COVID-19 pandemic but, by June 2023, is scheduled to exceed June 2019 levels. The capacity recovery is attributable to service to Europe, the Middle East and Africa, Latin America and the Caribbean, and Canada. International departing seats to Asia remain below their June 2019 level.

Figure 6 shows the international destinations with daily nonstop (or direct, single-plane) service from Dulles as scheduled for June 2023. United and 33 foreign-flag airlines are scheduled to operate international service to 59 destinations on five continents.

## **Enplaned Passengers**

Between 2010 and 2015, the number of enplaned passengers at Dulles decreased an average of 1.8% per year. Between 2015 and 2019, the number of enplaned passengers increased an average of 3.6% per year, reaching 12.3 million in 2019. In 2020, passenger numbers decreased 66.9% to 4.1 million, as the pandemic drastically reduced demand for air travel, particularly international. Monthly trends from 2020 through 2022 are discussed in the later section "Recent Changes in Enplaned Passengers at Dulles."

Table 30 shows historical passenger enplanements at Dulles by domestic and international subtotals and originating and connecting components. Originating passengers accounted for 69.4% of enplaned passengers at the airport in 2019, with the remaining 30.6% connecting between flights. The originating passenger percentage had increased from 59.4% in 2010 as United competed more aggressively for originating passengers and reduced its reliance on connecting activity. By 2022, the share of originating passengers declined slightly to 68.1%, as originating passengers decreased more than connections.

## Table 29 INTERNATIONAL AIRLINE SERVICE

Dulles International Airport
As scheduled for June of years shown

	Number of destinations served (a)			Number of airlines (b)			Average daily departing seats			
	2013	2019	2023	2013	2019	2023	2013	2019	2023	% increase (decrease) 2013-2023
Total all destinations	45	53	59	25	33	34	14,238	16,831	18,030	26.6%
By airline/airline flag United Other U.S. flag Foreign-flag	30  25	30  36	38  37	1 24	1 32	1	7,056 7,183	7,069 9,762	7,752 10,277	9.9% n.a. 43.1
By destination world region										
Europe	15	18	20	11	14	16	7,460	9,195	9,646	29.3%
Middle East and Africa	9	13	15	8	10	9	2,744	2,817	3,430	25.0
Latin America and Caribbean (c)	13	12	15	5	4	5	1,842	1,864	2,792	51.6
Asia	3	5	3	3	6	4	1,229	1,732	879	(28.5)
Canada	5	5	6	2	3	4	963	1,224	1,283	33.2
By aircraft type										
Large jet	41	49	56	24	31	33	13,312	15,629	17,058	28.1%
Regional jet and turboprop	4	4	4	2	3	3	926	1,201	971	4.9

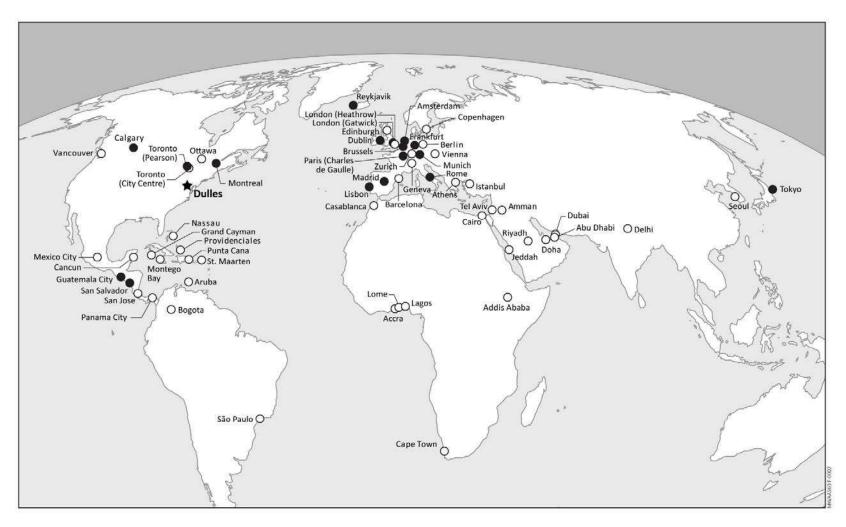
Note: n.a.=not applicable.

Source: OAG Schedules, accessed April 2023.

<sup>(</sup>a) Some destinations may be served by both U.S. and foreign-flag airlines or by more than one aircraft type.

<sup>(</sup>b) Some airlines may serve more than one destination world area or may operate more than aircraft type.

<sup>(</sup>c) Mexico, Central America, South America, and the Caribbean.



#### LEGEND

- O Destinations with nonstop or one-stop (direct single-plane) service by 1 airline
- Destinations with nonstop or one-stop (direct single-plane) service by 2 or more airlines

Figure 6
INTERNATIONAL DESTINATIONS WITH SCHEDULED
PASSENGER AIRLINE SERVICE

**Dulles International Airport** 

June 2023

## Table 30 HISTORICAL ENPLANED PASSENGERS BY COMPONENT

Dulles International Airport (enplaned passengers in thousands)

Passengers enplaned on

		Domestic flights		Inter	national flights			All flights	
Year	Originating (a)	Connecting	Total	Originating (b)	Connecting	Total	Originating	Connecting	Total
2010	4,947	3,618	8,565	2,023	1,155	3,177	6,969	4,773	11,742
2015	4,536	2,603	7,139	2,654	921	3,575	7,191	3,523	10,714
2016	4,428	2,716	7,145	2,868	855	3,723	7,297	3,571	10,868
2017	4,852	2,614	7,466	3,006	852	3,858	7,857	3,466	11,324
2018	5,067	2,889	7,957	3,133	857	3,990	8,200	3,747	11,947
2019	5,266	2,884	8,150	3,295	882	4,177	8,561	3,766	12,327
2020	1,794	1,301	3,095	762	226	988	2,556	1,527	4,083
2021	3,274	2,446	5,720	1,271	394	1,665	4,545	2,841	7,385
2022	4,349	2,575	6,924	2,862	800	3,662	7,211	3,375	10,586
				Average annual pe	rcent increase (d	ecrease)			
2010-2015	(1.7)	(6.4)	(3.6)	5.6	(4.4)	2.4	0.6	(5.9)	(1.8)
2015-2019	3.8	2.6	3.4	5.6	(1.1)	4.0	4.5	1.7	3.6
2000-2019	0.7	(2.5)	(0.6)	5.6	(2.9)	3.1	2.3	(2.6)	0.5
				Percent in	crease (decrease)	)			
2018-2019	3.9%	(0.2%)	2.4%	5.2%	2.9%	4.7%	4.4%	0.5%	3.2%
2019-2020	(65.9)	(54.9)	(62.0)	(76.9)	(74.4)	(76.3)	(70.1)	(59.5)	(66.9)
2020-2021	82.5	88.0	84.8	66.7	74.7	68.5	77.8	86.0	80.9
2021-2022	32.9	5.3	21.1	125.2	102.8	119.9	58.7	18.8	43.3
2019-2022	(17.4)	(10.7)	(15.0)	(13.2)	(9.3)	(12.3)	(15.8)	(10.4)	(14.1)
				Share o	of Airport total				
2010	42.1%	30.8%	72.9%	17.2%	9.8%	27.1%	59.4%	40.6%	100.0%
2015	42.3	24.3	66.6	24.8	8.6	33.4	67.1	32.9	100.0
2019	42.7	23.4	66.1	26.7	7.2	33.9	69.4	30.6	100.0
2022	41.1	24.3	65.4	27.0	7.6	34.6	68.1	31.9	100.0

Notes: Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers. The distribution of originating and connecting passengers for 2022 was estimated using actual data for the first three quarters and estimated data for the fourth quarter.

Sources: Metropolitan Washington Airports Authority; U.S. DOT, Air Passenger Origin-Destination Survey, reconciled to Schedule T100.

<sup>(</sup>a) Includes domestic originating passengers, international originating passengers who boarded domestic flights at Dulles bound for international destinations via other gateway airports, passengers on nonscheduled (charter) flights, and nonrevenue passengers.

<sup>(</sup>b) Includes international originating passengers on scheduled flights, along with small numbers of passengers on nonscheduled flights, nonrevenue passengers, and international-to-international connections.

According to a passenger survey conducted by the Airports Authority, approximately 35% of originating passengers at Dulles were traveling for business-related purposes and approximately 65% were traveling for non-business purposes in 2022. Of business travelers, approximately 26% were traveling for business related to the federal government or military.

As shown in Table 31, for the 12 months ended September 30, 2022, United accounted for 59.6% of originating passengers and 92.3% of connecting passengers at Dulles. Connecting passengers on United accounted for 43.5% of the airline's enplaned passengers.

Table 31
ENPLANED PASSENGERS BY AIRLINE GROUP

Dulles International Airport 12 Months ended September 30, 2022

		Average daily aned passen		Distribution by airline group			
	United	All other	All	United	All other	All	
	Airlines	airlines	airlines	Airlines	airlines	airlines	
By sector							
Domestic	15,858	3,052	18,910	80.5%	37.0%	67.6%	
International	<u>3,850</u>	<u>5,203</u>	9,053	<u> 19.5</u>	<u>63.0</u>	<u>32.4</u>	
Total	19,708	8,255	27,963	100.0%	100.0%	100.0%	
By type of passenger							
Originating – resident (a)	7,112	2,730	9,842	36.1%	33.1%	35.2%	
Originating – visitor (b)	<u>4,025</u>	<u>4,806</u>	<u>8,831</u>	<u>20.4</u>	<u>58.2</u>	<u>31.6</u>	
Subtotal originating	11,138	7,536	18,674	56.5%	91.3%	66.8%	
Connecting	<u>8,570</u>	<u>719</u>	<u>9,289</u>	<u>43.5</u>	<u>8.7</u>	<u>33.2</u>	
Total	19,708	8,255	27,963	100.0%	100.0%	100.0%	
Share by airline group							
Originating	59.6%	40.4%	100.0%				
Connecting	92.3	7.7	100.0				
Total	70.5	29.5	100.0				

Notes: Rows and columns may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

Sources: Metropolitan Washington Airports Authority records; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100.

<sup>(</sup>a) Originating-resident passengers are defined as those passengers whose flight itineraries began at Dulles.

<sup>(</sup>b) Originating-visitor passengers are defined as those passengers whose flight itineraries began at airports other than Dulles.

### **Domestic Airfares**

Table 32 presents data on domestic originating passengers and average airfares for the top 20 domestic destinations from Dulles. West Coast destinations rank higher at Dulles than at Reagan (as shown in Table 23) due to the Perimeter Rule's restrictions on long-haul flights from Reagan. For the top 20 domestic destinations taken together, average airfares increased 20.9% while passenger numbers decreased 3.2% between 2010 and 2019. Between 2019 and 2022, the effects of the pandemic on travel demand led to reduced passenger numbers and reduced average airfares to many destinations.

As noted in the earlier discussion of Table 23, the reported airfare data presented in Table 32 do not include charges for optional services such as checked baggage and preferred seating.

## **Airline Shares of Domestic Enplaned Passengers**

As shown in Table 33, United and United Express enplaned 83.4% of domestic passengers at Dulles in 2022. Between 2010 and 2022, the LCCs' share of domestic enplaned passengers decreased from 12.7% to 3.6%, as Southwest reduced service at Dulles and increased service at Reagan and BWI. In addition, JetBlue ceased Dulles service in January 2019, Allegiant launched Dulles service in November 2021, and Frontier ceased Dulles service in January 2022.

Table 32

PASSENGERS AND AIRFARES IN TOP 20 DOMESTIC DESTINATIONS

**Dulles International Airport** 

		Av	Average daily domestic enplaned originating passengers						Aver	age one-wa	y fare (b)	
					As percent	Percent	increase				Percent increase	
					of total	(decr	ease)				(deci	rease)
Rank	Destination	2010	2019	2022 (a)	2022	2010-2019	2019-2022	2010	2019	2022 (a)	2010-2019	2019-2022
1	Los Angeles (c)	1,514	1,181	861	8.1%	(21.9%)	(27.2%)	\$207.86	\$249.79	\$279.38	20.2%	11.8%
2	San Francisco (d)	1,365	1,018	758	7.2	(25.4)	(25.5)	235.94	348.21	349.08	47.6	0.2
3	Denver	472	804	623	5.9	70.6	(22.6)	242.18	198.87	230.57	(17.9)	15.9
4	Orlando	624	581	446	4.2	(6.9)	(23.2)	106.82	131.39	149.78	23.0	14.0
5	Seattle	250	535	422	4.0	114.1	(21.1)	280.78	240.45	281.90	(14.4)	17.2
6	South Florida (e)	425	332	397	3.7	(21.8)	19.4	120.78	168.19	155.21	39.2	(7.7)
7	Atlanta	425	461	392	3.7	8.4	(14.9)	141.63	176.30	148.39	24.5	(15.8)
8	Chicago (f)	596	295	361	3.4	(50.5)	22.2	140.81	219.96	146.15	56.2	(33.6)
9	San Diego	321	353	314	3.0	10.1	(11.1)	305.82	312.56	339.47	2.2	8.6
10	Austin	104	295	276	2.6	183.2	(6.3)	248.01	201.07	202.07	(18.9)	0.5
11	Las Vegas	354	379	264	2.5	7.1	(30.5)	209.98	225.61	294.64	7.4	30.6
12	Dallas/Fort Worth (g)	326	357	260	2.4	9.6	(27.4)	214.12	225.01	211.57	5.1	(6.0)
13	Houston (h)	167	230	245	2.3	37.3	6.7	203.74	253.78	230.23	24.6	(9.3)
14	Boston	725	294	243	2.3	(59.4)	(17.2)	97.56	152.06	118.95	55.9	(21.8)
15	New York (i)	334	287	220	2.1	(14.2)	(23.4)	107.37	174.95	148.68	62.9	(15.0)
16	Tampa	214	281	210	2.0	31.6	(25.4)	145.43	170.48	183.10	17.2	7.4
17	Phoenix	134	174	188	1.8	30.0	8.1	228.44	268.18	271.99	17.4	1.4
18	Detroit	111	199	175	1.6	80.3	(12.4)	178.72	150.85	129.72	(15.6)	(14.0)
19	Charlotte	92	185	161	1.5	101.1	(13.1)	190.98	164.23	128.94	(14.0)	(21.5)
20	Jacksonville	<u>68</u>	<u>99</u>	<u>152</u>	<u>1.4</u>	45.1	52.5	176.82	156.93	136.80	(11.2)	(12.8)
	Average—top 20 destinations	8,621	8,343	6,966	65.8%	(3.2%)	(16.5%)	\$185.96	\$224.90	\$225.92	20.9%	0.5%
	All other destinations	<u>3,628</u>	4,376	<u>3,629</u>	<u>34.2</u>	20.6	(17.1)	209.56	221.74	233.76	5.8	5.4
	Average—all destinations	12,249	12,720	10,595	100.0%	3.8%	(16.7%)	\$192.95	\$223.81	\$228.61	16.0%	2.1%

Notes: Columns may not add to totals shown because of rounding. Percentages shown were calculated using unrounded numbers.

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

<sup>(</sup>a) Data is for the 12 months ended September 30, 2022, the most recent available.

<sup>(</sup>b) Average one-way fares shown are net of taxes, fees, passenger facility charges, and fees charged by the airlines for optional services.

<sup>(</sup>c) Los Angeles, Burbank, Long Beach, Ontario, and Orange County airports.

<sup>(</sup>d) San Francisco, Oakland, and San Jose airports.

<sup>(</sup>e) Miami, Ft. Lauderdale, and West Palm Beach airports.

<sup>(</sup>f) O'Hare and Midway airports.

<sup>(</sup>g) Dallas/Fort Worth Airport and Love Field.

<sup>(</sup>h) Bush and Hobby airports.

<sup>(</sup>i) Kennedy, LaGuardia, and Newark airports.

Table 33
AIRLINE SHARES OF DOMESTIC ENPLANED PASSENGERS

**Dulles International Airport** 

Aver	age	daily

	(	enplaned p	passengers	5	Airline share of total			
Airline (a)	2010	2015	2019	2022	2010	2015	2019	2022
United	16,689	14,153	17,939	15,828	71.1%	72.4%	80.3%	83.4%
Delta	1,443	1,269	1,621	1,285	6.1	6.5	7.3	6.8
Southwest	1,697	1,400	1,071	663	7.2	7.2	4.8	3.5
American	1,353	727	602	559	5.8	3.7	2.7	2.9
Alaska	635	622	660	469	2.7	3.2	3.0	2.5
Frontier	1	0		127	0.0	0.0		0.7
All other	<u>1,647</u>	<u>1,388</u>	<u>437</u>	<u>40</u>	<u>7.0</u>	<u>7.1</u>	2.0	0.2
Total	23,465	19,559	22,328	18,971	100.0%	100.0%	100.0%	100.0%
By type of airline								
Mainline airline	11,605	9,686	12,620	12,822	49.5%	49.5%	56.5%	67.6%
Affiliated regional airline	8,223	7,136	8,011	4,954	35.0	36.5	35.9	26.1
Low-cost carrier	2,979	2,001	1,029	689	12.7	10.2	4.6	3.6
Other airline	657	736	669	505	2.8	3.8	3.0	2.7

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

Percentages were calculated using unrounded numbers.

Source: Metropolitan Washington Airports Authority records.

### Airline Shares of International Enplaned Passengers

Between 2010 and 2019, the number of international enplaned passengers at Dulles increased an average of 3.1% per year. Passengers enplaning on international flights accounted for 27.1% of all enplaned passengers at the airport in 2010 and 33.9% in 2019. In 2020, the number of international enplaned passengers decreased 76.3%. By 2022, the number of international enplaned passengers had increased to 87.7% of its 2019 pre-pandemic level.

As shown in Table 34, United and United Express accounted for 41.7% of international enplaned passengers at Dulles in 2022, down from 51.5% in 2010. Foreign-flag airlines accounted for virtually all of the remaining 58.3% of international enplaned passengers in 2022. Among foreign-flag airlines, those from Europe accounted for 27.7%, those from Africa and the Middle East for 15.1%, followed by airlines from the Caribbean and Latin America (9.6%), Asia (3.2%), and Canada (2.7%).

Dulles is one of two main international gateway airports on the East Coast for United and other members of the Star Alliance; the other is Newark Liberty. The

<sup>(</sup>a) Includes regional code-sharing affiliates.

Star Alliance has 26 member airlines, 14 of which served Dulles in 2022. Dulles serves as a connecting gateway for Star Alliance flights to and from Europe (in 2022 operated by United, Austrian Airlines, Brussels Airlines, Lufthansa, SAS, and TAP Air Portugal); Canada (United and Air Canada); Asia (United, Air India, and ANA); Latin America (United, Avianca, and Copa Airlines); and the Middle East and Africa (United, Egyptair, Ethiopian Airlines, and Turkish Airlines).

Table 34

AIRLINE SHARES OF INTERNATIONAL ENPLANED PASSENGERS

**Dulles International Airport** 

		Averag	e daily					
	6	nplaned p	assengers	5		Airline sha	re of total	
Airline (a)	2010	2015	2019	2022	2010	2015	2019	2022
United (b)	4,480	4,159	4,308	4,179	51.5%	42.5%	37.6%	41.7%
Avianca/Taca (b)	338	392	529	553	3.9	4.0	4.6	5.5
Lufthansa (b)	475	544	460	393	5.5	5.6	4.0	3.9
Turkish (b)	483	571	604	459	5.5	5.8	5.3	4.6
British Airways	15	249	280	398	0.2	2.5	2.4	4.0
Air France	444	419	477	381	5.1	4.3	4.2	3.8
Qatar	282	273	274	361	3.2	2.8	2.4	3.6
Ethiopian (b)	154	234	291	307	1.8	2.4	2.5	3.1
COPA (b)	85	213	306	297	1.0	2.2	2.7	3.0
Emirates	150	75	200	212	1.7	0.8	1.7	2.1
Aer Lingus		278	392	295		2.8	3.4	2.9
Air Canada (b)	112		185	192	1.3		1.6	1.9
Etihad		193	199	192		2.0	1.7	1.9
KLM Royal Dutch	79	191	172	174	0.9	2.0	1.5	1.7
Saudi Arabian	214	213	236	141	2.5	2.2	2.1	1.4
Austrian (b)			70	131			0.6	1.3
Icelandair	205	231	254	178	2.4	2.4	2.2	1.8
Korean Air	165	208	163	152	1.9	2.1	1.4	1.5
All other	<u>1,023</u>	<u>1,351</u>	2,045	1,038	<u>11.7</u>	13.8	<u>17.9</u>	10.3
Total	8,705	9,794	11,444	10,032	100.0%	100.0%	100.0%	100.0%
By type of airline								
Star Alliance	6,440	6,754	7,769	7,112	74.0%	69.0%	67.9%	70.9%
SkyTeam Alliance	1,162	1,331	1,413	979	13.4	13.6	12.3	9.8
Oneworld Alliance	818	820	948	899	9.4	8.4	8.3	9.0
<b>Unaligned airlines</b>	285	889	1,314	1,042	3.3	9.1	11.5	10.4

Notes: Columns may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

In 2022, "All other" included Air India, All Nippon, Brussels, Egyptair, Iberia, Omni Air International, Porter, Royal Air Maroc, SAS, TAP Air Portugal, Virgin Atlantic, Volaris and various charter activity.

Source: Metropolitan Washington Airports Authority records.

<sup>(</sup>a) Includes regional code-sharing affiliates.

<sup>(</sup>b) Member of Star Alliance as of March 2023.

## **International Passengers by World Region**

Table 35 presents trends in the number of passengers departing on international flights from Dulles to five major world regions. Between 2010 and 2019, the number of passengers to Europe increased 17.4%, while the number of passengers to other world areas increased 59.0%. In 2020, the effects of the pandemic on travel demand led to substantial decreases in passenger numbers to all world regions. By 2022, numbers of passengers to all world regions had begun rebounding, while numbers of passengers to Latin America, Mexico, and the Caribbean had recovered fully.

Table 35
INTERNATIONAL DEPARTING PASSENGERS BY WORLD REGION
Dulles International Airport

Average	daily	departir	ng pas	sengers

Year	Europe	Middle East and Africa	Latin America Mexico and Caribbean <i>(a)</i>	Asia	Canada	Total all destinations
2010	4,797	1,179	1,095	761	559	8,391
2015	4,847	1,867	1,340	880	623	9,558
2019	5,633	1,963	1,652	1,213	888	11,349
2020	1,059	714	500	230	155	2,658
2021	1,733	1,133	1,307	114	180	4,467
2022 <i>(b)</i>	4,307	1,895	1,847	239	473	8,761
			Percent increase	(decrease)		
2010-2015	1.0%	58.3%	22.4%	15.7%	11.4%	13.9%
2015-2019	16.2	5.1	23.3	37.9	42.5	18.7
2010-2019	17.4	66.4	50.9	59.5	58.8	35.3
2019-2020	(81.2)	(63.6)	(69.8)	(81.1)	(82.6)	(76.6)
2020-2021	63.6	58.6	161.7	(50.3)	16.2	68.1
2021-2022	148.5	67.3	41.3	109.7	163.2	96.1

Notes: Rows may not add to totals shown because of rounding.

Percentages were calculated using unrounded numbers.

Departing passengers include originating, connecting, and "through" passengers on scheduled and nonscheduled international flights. Not included are passengers who board domestic flights to U.S. gateway airports where they connect to international flights.

- (a) Mexico, Central America, South America, and the Caribbean.
- (b) Data are for the 12 months ended September 30, 2022.

Source: U.S. DOT, Schedule T100.

## Cargo

Dulles is an important cargo airport, ranking 14th among U.S. airports in terms of international cargo weight for the 12 months ended September 30, 2022, according to data filed by the airlines with the U.S. DOT.

As shown in Table 36, between 2010 and 2019, domestic cargo weight at Dulles decreased an average of 2.5% per year, while international cargo weight (virtually all carried by the passenger airlines) decreased 1.9% per year, for a combined decrease of 2.1% per year. The decrease in domestic cargo weight, both at Dulles and nationwide, was attributable to several factors including post-September 2001 security restrictions on the carriage of freight and mail on passenger aircraft, tariffs on shipments, consolidation in the air cargo industry, and the increased use of time-definite ground transportation modes as the relative operating economics of air and truck modes have changed.

Between 2019 and 2022, international cargo weight at Dulles decreased more than domestic cargo weight. The decline was primarily attributable to cargo weight on passenger airlines. In overall terms, cargo weight at Dulles in 2022 was 17.3% below its 2019 pre-pandemic level.

FedEx accounted for 30% of air cargo tonnage handled at Dulles in 2022, followed by United with 19%, and UPS with 6%.

## **Aircraft Operations**

Historical aircraft departures, enplaned passenger load factor, and average seats per departure at Dulles are shown in Table 40. The number of commercial operations (landings and takeoffs by passenger and all-cargo aircraft) at Dulles decreased an average of 1.4% per year between 2010 and 2019, compared with an average increase of 0.5% per year in the number of enplaned passengers over the same period. The average passenger load factor (percentage of seats occupied) increased from 80% in 2010 to 84% in 2019. Average load factor dropped to 57% in 2020, as travel demand weakened during the pandemic, but rebounded to 73% in 2021 and 82% in 2022. The average number of seats per departure increased from 103 in 2010 to 129 in 2022.

Table 36
HISTORICAL AIR CARGO WEIGHT

Dulles International Airport (thousands of metric tons)

	0	omestic		Int	ernationa	I	Total				
		All-			All-			All-			
Year	Passenger	cargo	Total	Passenger	cargo	Total	Passenger	cargo	Total		
2010	51.9	79.4	131.3	200.1	0.0	200.1	252.0	79.4	331.4		
2015	21.8	70.9	92.7	167.4	1.2	168.6	189.2	72.1	261.3		
2016	20.5	81.6	102.2	162.2	1.3	163.5	182.7	82.9	265.7		
2017	22.7	82.7	105.5	191.4	1.8	193.1	214.1	84.5	298.6		
2018	24.3	82.6	106.9	191.2	2.2	193.4	215.5	84.8	300.3		
2019	21.5	82.9	104.4	167.6	1.3	168.9	189.1	84.2	273.3		
2020	16.6	86.3	102.9	92.3	2.5	94.8	108.9	88.9	197.7		
2021	18.7	82.6	101.4	122.5	1.4	123.9	141.2	84.0	225.3		
2022	20.5	80.3	100.8	124.0	1.1	125.1	144.6	81.3	225.9		
	Average annual percent increase (decrease)										
2010-2019	(9.3%)	0.5%	(2.5%)	(1.9%)	50.0%	(1.9%)	(3.1%)	0.7%	(2.1%)		
2019-2022	(1.5)	(1.1)	(1.2)	(9.5)	(6.5)	(9.5)	(8.6)	(1.1)	(6.1)		
			А	nnual perce	nt increase	e (decreas	se)				
2018-2019	(11.6%)	0.4%	(2.4%)	(12.3%)	(41.0%)	(12.7%)	(12.2%)	(0.7%)	(9.0%)		
2019-2020	(22.9)	4.2	(1.4)	(44.9)	93.7	(43.9)	(42.4)	5.5	(27.7)		
2020-2021	13.2	(4.3)	(1.5)	32.7	(44.3)	30.6	29.7	(5.4)	13.9		
2021-2022	9.5	(2.8)	(0.6)	1.3	(24.1)	1.0	2.4	(3.2)	0.3		
				Share	of Airport	total					
2010	15.7%	23.9%	39.6%	60.4%	0.0%	60.4%	76.0%	24.0%	100.0%		
2015	8.3	27.1	35.5	64.1	0.5	64.5	72.4	27.6	100.0		
2019	7.9	30.3	38.2	61.3	0.5	61.8	69.2	30.8	100.0		
2021	9.1	35.5	44.6	54.9	0.5	55.4	64.0	36.0	100.0		

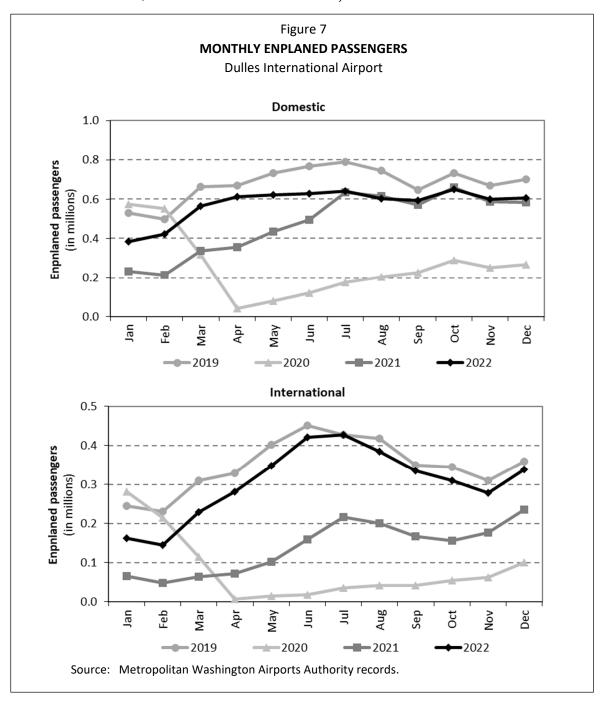
Notes: Sum of enplaned and deplaned freight and mail. Excludes air cargo carried on military and general aviation flights. Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

Source: Metropolitan Washington Airports Authority records.

## **Recent Changes in Enplaned Passengers at Dulles**

Figure 7 shows that, as at Reagan, historical patterns of passenger traffic at Dulles were also disrupted by the pandemic in early 2020. In April 2020, enplaned passengers dropped to 4.8% of their pre-pandemic April 2019 level. Relative to Reagan, recovery of passenger numbers at Dulles has exhibited a longer-lasting,

more gradual trend. During the final 6 months of 2022, numbers of enplaned passengers ranged from 84.8% to 93.0% of corresponding 2019 monthly levels (80.8-91.4% for domestic, 90.0-99.9% for international).



#### **KEY FACTORS AFFECTING FUTURE AIRLINE TRAVEL**

In addition to the demographics and economy of the Airports service region, as discussed earlier, key factors that will affect future airline traffic at the Airports in the long term include:

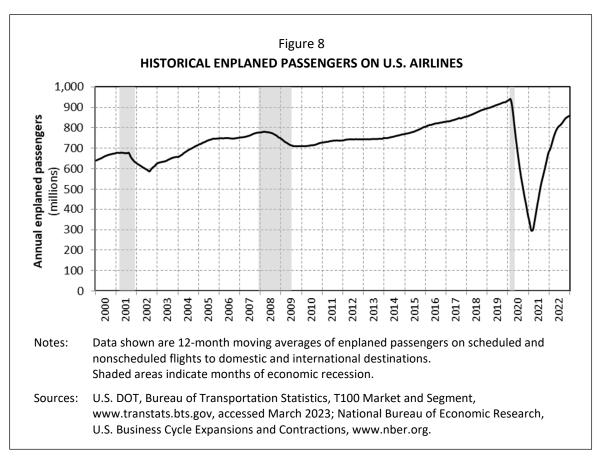
- National economic conditions
- International economic and geopolitical conditions
- Financial health of the airline industry
- Airline consolidation and alliances
- Airline service and routes
- Airline competition and airfares
- Availability and price of aviation fuel
- Aviation safety and security concerns
- Public health concerns and COVID-19 pandemic
- Climate change concerns
- Capacity of the national air traffic control system
- Capacity of the Airports

#### **National Economic 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 8, recessions in the U.S. economy in 2001, 2008-2009, and 2020, and associated high unemployment, reduced discretionary income and airline travel demand.

The 2020 economic recession brought about by the COVID-19 pandemic and the related government actions to contain the spread of the disease were short-lived but caused the largest ever decrease in real GDP (31.2% in the second quarter of 2020), with an associated sharp increase in unemployment. The second quarter decrease was followed by strong GDP growth in the third and fourth quarters, with GDP in the fourth quarter of 2020 at close to the pre-pandemic level. Economic recovery continued in 2021 and 2022. GDP for 2021 increased 5.9% over 2020 and for 2022 increased 1.9% over 2021.

Future increases in domestic passenger traffic at the Airports will depend on the continuation of national economic growth.



# **International Economic and Geopolitical Conditions**

International passenger traffic at U.S. airports is influenced by the globalization of business, international trade and tourism, international economics, trade balances, currency exchange rates, government policies, and geopolitical relationships. Concerns about hostilities, terrorist attacks, other perceived security risks, and associated travel restrictions also affect travel demand to and from particular international destinations from time to time.

Future increases in international passenger traffic at the Airports will partly depend on global economic growth, a stable and secure travel environment, and government policies that do not unreasonably restrict or deter travel.

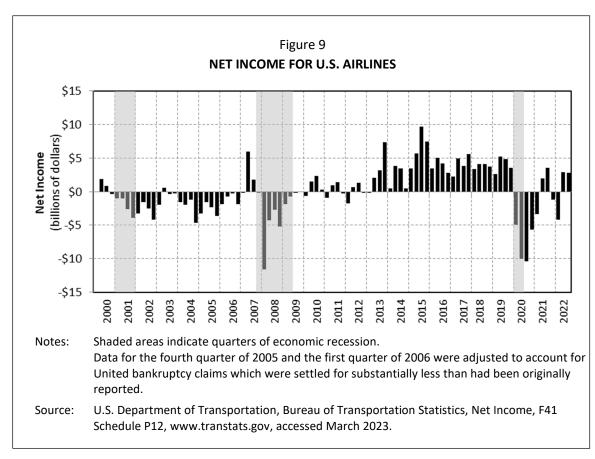
Russia's invasion of Ukraine in February 2022 and the continuing war have caused catastrophic destruction, loss of life, and a humanitarian and refugee crisis in eastern Europe. The invasion prompted the United States, the European Union, and other nations to impose economic and financial sanctions that are causing economic disruption beyond Russia's and Ukraine's borders by increasing energy and commodity prices, worsening inflation, disrupting international commerce, and slowing economic growth.

# **Financial Health of the Airline Industry**

The number of passengers using the Airports will depend partly on the profitability of the U.S. airline industry and the associated ability of the industry and individual airlines, particularly United and American, to make the necessary investments to provide service. Figure 9 shows historical net income for U.S. airlines.

Largely as a result of the 2001 economic recession and the disruption of the airline industry following the September 2001 attacks, the industry experienced large financial losses between 2001 and 2006. During this period, Delta, Northwest, United, and US Airways filed for bankruptcy protection and restructured their operations.

In 2007, the U.S. passenger airline industry was profitable, but in 2008, as oil and aviation fuel prices increased to unprecedented levels and the U.S. economy contracted, the industry experienced large net losses. The industry responded by grounding less fuel-efficient aircraft, eliminating unprofitable routes and hubs, reducing seat capacity, and increasing airfares.



From 2010 to 2013, after recovery from the 2008-2009 recession, U.S. passenger airlines generally recorded positive net income, notwithstanding sustained high fuel

prices, by controlling capacity and nonfuel expenses, increasing airfares, achieving high load factors, and increasing ancillary revenues. American filed for bankruptcy protection in 2011.

From 2014 to 2019, the U.S. passenger airline industry reported a succession of profitable years as fuel prices were low, demand was strong, and control of capacity allowed fares and ancillary charges to remain high, even as agreements between the major airlines and their unionized employees resulted in increased labor costs.

Beginning in 2020, reductions in air travel demand caused by the COVID-19 pandemic resulted in unprecedented airline industry losses. These losses were partially mitigated by federal aid provided under the Coronavirus Aid, Relief, and Economic Security (CARES) Act enacted in March 2020 and the American Rescue Plan Act of 2021 (ARPA) enacted in March 2021.

In response to the pandemic-induced losses, airlines took various actions to reduce costs and maintain liquidity, including reducing staffing, accelerating the retirement of older aircraft, and deferring the acquisition of new aircraft.

As shown in Figure 9, the U.S. airline industry returned to profitability in the second quarter of 2022.

Recovering from the effects of the pandemic and regaining sustained industry profitability will depend on, among other factors, economic growth to support airline travel demand, stable fuel prices, and the ability of airlines to hire and retain enough qualified employees, particularly pilots, and acquire enough aircraft and other equipment to support increased flight operations.

#### **Airline Consolidation and Alliances**

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).

In October 2022, JetBlue announced plans to acquire Spirit, which would create the nation's fifth largest airline by enplaned passengers with a market share of approximately 9%. The acquisition is subject to approval by the U.S. DOT and Justice Department and will be scrutinized for its potential effects on competition and airfares. In March 2023, the Justice Department filed a civil antitrust lawsuit to block the acquisition on the grounds that it would eliminate competition, further consolidate the airline industry, increase fares, and harm the flying public. A trial has been scheduled to begin in October 2023. JetBlue has stated that it intends to

advocate for the acquisition and expects to close the transaction no later than the first half of 2024. In 2022, JetBlue accounted for 7.5% of enplaned passengers at Reagan but did not serve Dulles. Spirit did not serve either Reagan or Dulles.

Airline industry consolidation has resulted in four airlines (American, Delta, Southwest, and United) and their regional affiliates now accounting for approximately 75% of domestic seat-mile capacity. Consolidation contributed to pre-pandemic airline 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 could drastically affect airline service at certain connecting hub airports and change airline travel patterns nationwide.

Alliances, joint ventures, and other marketing arrangements provide airlines with many of the advantages of mergers. Alliances typically involve marketing, code sharing, and scheduling arrangements to facilitate the transfer of passengers between airlines. Joint ventures involve even closer cooperation and the sharing of costs and revenues on designated routes. Most of the largest U.S. airlines are members of such alliances with foreign-flag airlines.

#### **Airline Service and Routes**

The Airports accommodate travel demand to and from the Airports service region and serve as connecting hubs. The number of origin and destination passengers at the Airports 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 Airports and at other competing airports. The number of connecting passengers, on the other hand, depends entirely on airline fares and service provided at the Airports.

The large network 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 has 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).

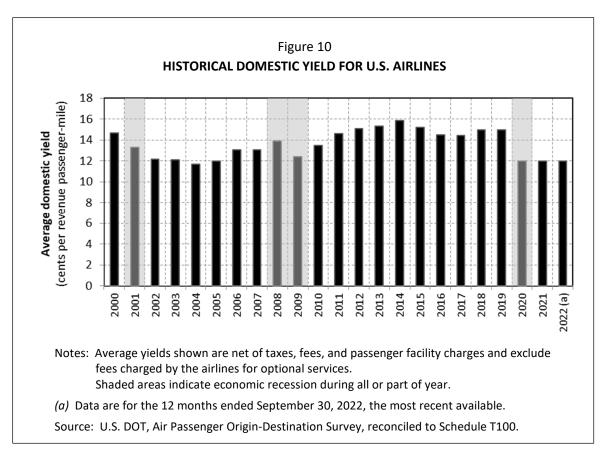
As discussed in earlier sections, Dulles serves as a primary connecting hub and international gateway for United, while Reagan serves as a secondary connecting airport for American. As a result, much of the connecting passenger traffic at the

Airports results from the route networks and flight schedules of United and, to a lesser extent, American, rather than the economy of the Airports service region. If United were to reduce connecting service at Dulles, such service would not necessarily be replaced by other airlines, although reductions in service by any airline would create business opportunities for others. Given the slot constraints at Reagan, any reduction in seat capacity devoted by American to connecting passengers would likely be offset by increased use of such capacity for originating passengers. Hypothetical reductions in passenger traffic as a result of reduced connecting airline service at the Airports are discussed in the later section "Stress Test Projections."

## **Airline Competition and Airfares**

Airline fares have an important effect on passenger demand, particularly for short trips for which the automobile and other 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 Airports, will depend partly on the level of airfares.

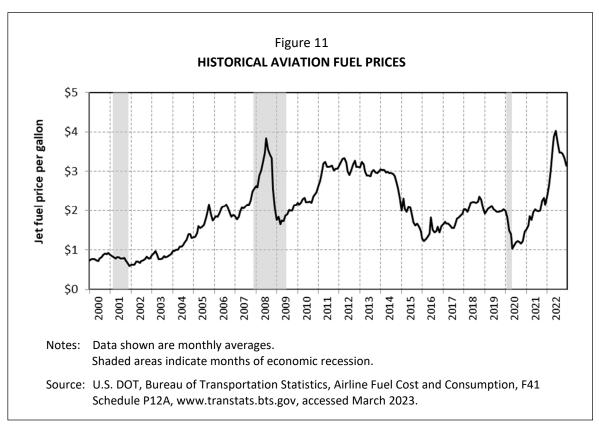
Figure 10 shows the historical average domestic yield (airfare per passenger-mile) for U.S. airlines. After the 2008-2009 recession, the average yield increased through 2014 as airline travel demand strengthened, the airlines collectively reduced available seat capacity, and were able to sustain airfare increases. Between 2014 and 2016, the average yield was reduced as a result of airline competition, and, through 2019 was fairly stable. The average yield decreased in 2020 as travel demand was depressed during the pandemic and has remained unchanged through 2022.



Beginning in 2006, ancillary 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 these yield figures indicate.

# **Availability and Price of Aviation Fuel**

The price of aviation fuel is a critical and uncertain factor affecting airline operating economics. Figure 11 shows the historical fluctuation in aviation fuel prices caused by the many factors influencing the global demand for and supply of oil.



Between early 2011 and mid-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. 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 of 2015. Fuel prices then increased, but the average price of aviation fuel at the end of 2019 was still approximately 30% below the price at mid-2014.

As the pandemic drastically reduced the demand for aviation fuel in early 2020, the price of aviation fuel fell sharply, before rebounding in 2021 as pandemic restrictions were eased, economies recovered, and demand exceeded supply. The economic disruption and sanctions resulting from the Russian invasion and war on Ukraine exacerbated the worldwide imbalance of demand and supply and caused increased oil and aviation fuel prices, peaking in June 2022. Higher fuel prices have a negative effect on airline profitability as well as far-reaching implications for the global economy.

# **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.

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. Measures have included strengthened aircraft cockpit doors, increased presence of armed federal air marshals, federalization of airport security under the Transportation Security Administration (TSA), and more intensive screening of passengers and baggage.

Following fatal crashes of B-737 MAX aircraft 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, United, and WestJet were affected. In November 2020, following the approval of modifications to the flight control system software and pilot training, the FAA rescinded its order grounding the aircraft, allowing it gradually to be reintroduced into service.

During the pandemic, anxieties about the safety of flying and the inconveniences and delays associated with COVID-19 testing, mask mandates, and vaccination requirements, led to both the avoidance of travel and the switching from air to surface modes of transportation for short trips. Quarantine requirements and other restrictions created additional impediments for international travelers.

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 at the Airports will depend primarily on economic, not safety or security, factors.

#### **Public Health Concerns and COVID-19 Pandemic**

Public health concerns and associated restrictions on travel periodically reduce airline travel demand to and from various parts of the world. Examples are Severe Acute Respiratory Syndrome (SARS) in 2002-2003, the H1N1 influenza virus in 2009, Middle East Respiratory Syndrome (MERS) in 2013, Ebola Virus Disease (EVD) in 2014-2016, and the Zika virus in 2016-2017. In all these historical examples, reductions in airline travel were geographically localized and short-lived, with travel soon recovering to pre-health-scare trends.

By comparison, the COVID-19 pandemic has had far more serious and widespread effects on airline travel worldwide. In late 2019, the highly contagious novel coronavirus that causes the COVID-19 respiratory illness emerged, soon spreading

through most of the world. COVID-19 was declared a global pandemic by the World Health Organization in March 2020.

During the early months of the pandemic, governmental actions to slow the spread of the disease, including the mandated closure of businesses and offices, work-at-home requirements, prohibitions of public gatherings, quarantines, and travel restrictions contributed to a recession in the global economy and widespread job losses. The economic recession, combined with fears about contagion, resulted in a severe reduction in the demand for air travel, the grounding of much of the world's airline fleets, and cuts in airline service.

In December 2020, the first COVID-19 vaccines were administered in the United States, and, following a peak of new COVID-19 cases at the end of 2020, the number of new cases fell as more people were vaccinated. The success of COVID-19 vaccines in preventing the transmission of the virus and reducing its effects resulted in a steady recovery in domestic air travel through the summer of 2021.

Notwithstanding the success of the vaccines, new variants of the COVID-19 virus emerged and resulted in new waves of cases in the fall and winter of 2021. These new cases contributed to cancelled travel bookings and reduced airline schedules, as well as delays in office openings and continued travel restrictions, particularly for corporate and international travel. These factors inhibited recovery in airline travel during the second half of 2021.

The availability and acceptance of vaccines and treatments have resulted in reduced hospitalizations and deaths and the pandemic has now largely been brought under control in the United States and other developed countries. As quarantine, testing, and other travel restrictions have been relaxed, COVID-19 has become a less important factor affecting airline travel, and by the end of 2022 domestic airline travel at many U.S. airports had approached or exceeded pre-pandemic levels. Nonetheless, until governments and public health authorities are able to contain the spread of the disease and its variants worldwide, COVID-19 will continue to affect travel, particularly internationally.

Questions remain about how some determinants of air travel demand may not return to those existing pre-pandemic. Some observers expect that there will be permanent reductions in business travel for some in-person meetings as a result of the widespread adoption of videoconferencing during the pandemic. Many companies have reduced travel by their employees and thereby achieved cost savings that may become a permanent feature of their financial operations. Offsetting that effect, there has been an increase in travel by workers who relocated during the pandemic and work remotely, and who need regularly to visit a central office location. Remote working and travel for a combination of business and leisure purposes are also changing travel demand patterns.

# **Climate Change Concerns**

There is now widespread acknowledgement of the urgent need for the nations of the world to transition from fossil fuels to cleaner energy sources that will allow the worst effects of global warming and climate change to be avoided.

Much like the way that the pandemic appears to have changed some airline travel behavior and demand patterns, concerns about the contribution of airline travel to the emission of carbon dioxide and other greenhouse gases into the atmosphere may influence future airline travel demand. For example, there may be increased societal pressures to avoid or reduce travel perceived as wasteful, particularly long-haul international travel; to favor or require the use of lower-emission travel modes, such as, train over airplane, for short trips; and for corporations to limit employee travel to "reduce their carbon footprint" and achieve environmental, social, and governance objectives.

Pre-pandemic, the aviation industry accounted for approximately 10% of anthropogenic greenhouse gas emissions from the U.S. transportation sector and 3% of total U.S. emissions. Alternatives to petroleum-derived jet fuel are unlikely to be economically available at large scale for the foreseeable future, so aviation's share of emissions will likely increase and attract more scrutiny. Consequently, it will be imperative for the industry to achieve efficiencies if growth in airline travel is to be sustained.

Achieving those efficiencies and mitigating emissions will require financial investments and changes to the operating economics of the aviation industry. Changes will likely include the early retirement and replacement of inefficient aircraft; the payment of carbon taxes and other regulatory charges designed to penalize or offset emissions; and the development of technologies and incentives to increase the supply and reduce the cost of sustainable aviation fuels derived from biomass and other renewable sources. In the longer term, investments will be required to develop new aircraft propulsion technologies using fuels such as hydrogen or electric power generated from renewable sources.

Increased direct governmental regulation of greenhouse gas emissions from aircraft is also possible. In 2020, the U.S. Environmental Protection Agency adopted emission standards that apply to new commercial aircraft and align with standards adopted by the International Civil Aviation Organization. More stringent emission standards may apply in the future.

Inevitably, some of the costs required to reduce greenhouse gas emissions and combat climate change will be passed on to passengers in the form of higher fares or surcharges, and thereby may inhibit airline travel demand.

# **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 11% between 2007 and 2019) but, as airline travel increases in the future, flight delays and restrictions may be expected. The FAA will temporarily ease slot utilization requirements at the New York City airports and Reagan between May and September 2023 to ease expected flight congestion and better manage workload for understaffed air traffic controllers.

## **Capacity of the Airports**

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 Airports will depend on the capacity of the Airports themselves. At Reagan, passenger numbers will be constrained by the availability of airport facilities and the restrictions imposed by the High Density Rule and the Perimeter Rule. At Dulles, existing and planned terminal and airfield facilities have the capacity to accommodate growth in airline traffic well beyond the forecast period covered in this report.

#### AIRLINE TRAFFIC FORECASTS

Forecasts of airline traffic at the Airports through 2028 were developed based on the economic outlook for the Airports service region, trends in historical airline traffic, and key factors likely to affect future airline traffic, all as discussed earlier in this report. Forecasts for the Airports included in the FAA's *Terminal Area Forecast* (TAF), issued in February 2023, were also reviewed.

In developing the forecasts in this report, it was assumed that, over the long term, airline traffic at the Airports will increase as a function of growth in the economy of the Airports service region and increased airline service. It was also assumed that airline service at the Airports will not be constrained by the availability of aviation fuel, the capacity of the air traffic control system or the Airports, charges for the use of aviation facilities, or, except for the Perimeter and High Density Rules now in effect at Reagan, government policies or actions that restrict growth.

The traffic forecasts for both Airports were developed based on the assumptions that:

- 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.
- The economy of the Airports service region will grow at approximately the same rate as the national economy.
- Airlines will add service to meet travel demand at the Airports and competition among airlines will ensure competitive airfares for flights from the Airports, notwithstanding higher aviation fuel costs and general price inflation.
- The airlines serving the Airports collectively will be able to hire and retain enough qualified employees, particularly pilots, and acquire enough aircraft and other equipment to support increased flight operations.
- International travel restrictions will continue to ease over time, notwithstanding temporary setbacks due to various disruptions to international commerce.
- A generally stable international political environment and safety and security precautions will ensure airline traveler confidence in aviation without imposing unreasonable inconveniences.
- There will be no major disruption of airline service or airline travel behavior due to international hostilities, terrorist acts or threats, or government policies restricting or deterring travel.
- The respective historical roles of Reagan, Dulles, and BWI in accommodating domestic and international airline service will be generally unchanged.

# **Airline Traffic Forecasts for Reagan**

Total enplaned passengers at Reagan equaled 11.9 million in 2019, pre-pandemic. In 2020, they decreased to 3.8 million (32% of 2019), in 2021, they recovered to 7.0 million (59% of 2019), and in 2022, they increased to 12.0 million (over 100% of 2019). In 2019, connecting passengers accounted for 11% of enplaned passengers. In 2022, the share of connecting passengers increased to 21%. The increase was attributable in part to the efficiencies afforded by the ability for passengers to connect between different concourses through post-security National Hall without rescreening and the use of larger regional jets accommodated at Concourse E.

In 2023, enplaned passengers are forecast to increase to 12.7 million (106% of 2019). The forecast considers strong recovery in actual enplanements during 2021 and 2022, and advance published airline flight schedules that indicate year-over-year increases in airline capacity at Reagan throughout 2023. Such advance schedules are always subject to change and could be reduced in the face of insufficient air travel demand, such as could be caused by reduced economic growth or increased airfares.

In forecasting enplaned passengers at Reagan between 2023 and 2028, it was assumed that:

- American will continue to operate the airport as a connecting point in its route network and connecting passengers will account for approximately the same share of enplaned passengers as was recorded in 2022.
- Any future changes to the High Density and Perimeter rules will result in no material increase or decrease in the number of landing and takeoff slots or the average size of aircraft accommodated.
- There will be no further exchanges of slots among airlines leading to a material increase or decrease in the average size of aircraft accommodated.

The number of enplaned passengers at Reagan is forecast to increase to from 12.7 million in 2023 to 13.2 million in 2028, an average increase of 0.8% per year. Table 37 presents historical and forecast enplaned passengers at Reagan by domestic and international subtotals and provides originating and connecting components.

Table 38 shows forecasts of aircraft departures and landed weight at Reagan, which were derived from the passenger forecasts using assumed trends in average seat occupancy, aircraft seat capacity, and aircraft size.

# Table 37 HISTORICAL AND FORECAST ENPLANED PASSENGERS

Reagan National Airport (passengers in thousands)

This forecast was prepared on the basis of the information and assumptions given in the text. The achievement of any forecast is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast, and the variance could be material.

Passengers e	enplaned on
--------------	-------------

	D	omestic flights		Inter	national flights		All flights			
Year	Originating (a)	Connecting	Total	Originating (b)	Connecting	Total	Originating	Connecting	Total	
Historical										
2018	10,270	1,281	11,551	161	22	184	10,431	1,303	11,734	
2019	10,417	1,348	11,765	162	22	184	10,579	1,370	11,949	
2020	3,251	483	3,734	28	5	34	3,280	488	3,768	
2021	5,723	1,299	7,021	24	3	28	5,747	1,302	7,049	
2022	9,381	2,455	11,836	114	20	134	9,494	2,475	11,969	
Forecast										
2023	9,911	2,604	12,515	164	21	185	10,075	2,625	12,700	
2024	9,977	2,628	12,605	173	22	195	10,150	2,650	12,800	
2025	10,043	2,652	12,695	182	23	205	10,225	2,675	12,900	
2026	10,109	2,676	12,785	191	24	215	10,300	2,700	13,000	
2027	10,175	2,700	12,875	200	25	225	10,375	2,725	13,100	
2028	10,241	2,724	12,965	209	26	235	10,450	2,750	13,200	

Table 37 (page 2 of 2)
HISTORICAL AND FORECAST ENPLANED PASSENGERS

Reagan National Airport

(passengers in thousands)

	Passeriger's emphanieu on											
	D	omestic flights		Inter	national flights		All flights					
Year	Originating (a)	Connecting	Total	Originating (b)	Originating (b) Connecting Total		Originating	Connecting	Total			
				Average annual pe	rcent increase (	decrease)						
Historical												
2018-2019	1.4%	5.2%	1.9%	0.5%	(0.3%)	0.4%	1.4%	5.1%	1.8%			
2019-2020	(68.8)	(64.2)	(68.3)	(82.4)	(76.9)	(81.8)	(69.0)	(64.4)	(68.5)			
2020-2021	76.0	169.1	88.0	(14.1)	(36.1)	(17.5)	75.2	167.0	87.1			
2021-2022	63.9	89.0	68.6	365.0	510.1	382.2	65.2	90.1	69.8			
Forecast												
2019-2023	(1.2%)	17.9%	1.6%	0.3%	(1.4%)	0.1%	(1.2%)	17.6%	1.5%			
2022-2023	5.7	6.1	5.7	44.1	5.0	38.3	6.1	6.1	6.1			
2023-2028	0.7	0.9	0.7	5.0	4.4	4.9	0.7	0.9	0.8			

Passengers ennlaned on

Notes: Excludes passengers enplaned on general aviation and military flights. Rows may not add to totals shown because of rounding.

Percentages were calculated using unrounded numbers. The distribution of originating and connecting passengers for 2022 was estimated using actual data for the first three quarters and estimated data for the fourth quarter.

- (a) Includes domestic originating passengers, international originating passengers who boarded domestic flights at Reagan bound for international destinations via other gateway airports, passengers on nonscheduled (charter) flights, and nonrevenue passengers.
- (b) Includes international originating passengers on scheduled flights, along with small numbers of passengers on nonscheduled flights, nonrevenue passengers, and international-to-international connections.

Sources: Historical: Metropolitan Washington Airports Authority; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100. Forecast: LeighFisher, March 2023.

# Table 38 HISTORICAL AND FORECAST AIRCRAFT DEPARTURES AND LANDED WEIGHT

Reagan National Airport (passengers and seats in thousands)

This forecast was prepared on the basis of the information and assumptions given in the text. The achievement of any forecast is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast, and the variance could be material.

				Average	_			Average landed weigh		<u> </u>		
	Enplaned	Load	Departing	seats per	Airc	raft departı	ures	per departu	re (pounds)	(milli	ons of poun	ds)
Year	passengers	factor (a)	seats	departure	Passenger	All-cargo	Total	Passenger	All-cargo	Passenger	All-cargo	Total
Historical												
2010	9,036	72.6%	12,438	94.0	132,390	199	132,589	91,065	198,000	12,056	39	12,095
2015	11,496	80.0	14,370	100.4	143,169		143,169	97,104		13,902		13,902
2016	11,767	80.6	14,605	101.1	144,406		144,406	97,204		14,037		14,037
2017	11,946	82.6	14,462	101.1	143,070		143,070	95,470		13,659		13,659
2018	11,734	81.1	14,472	100.5	143,987		143,987	95,238		13,713		13,713
2019	11,949	81.0	14,747	102.8	143,513		143,513	96,265		13,815		13,815
2020	3,768	52.7	7,153	112.1	63,829		63,829	105,606		6,741		6,741
2021	7,049	76.7	9,195	108.9	84,400		84,400	104,584		8,827		8,827
2022	11,969	77.9	15,368	106.0	144,970		144,970	102,386		14,843		14,843
Forecast												
2023	12,700	78.4%	16,204	106.5	152,200		152,200	102,860		15,660		15,660
2024	12,800	78.9	16,228	106.6	152,250		152,250	102,950		15,680		15,680
2025	12,900	79.4	16,249	106.7	152,300		152,300	103,040		15,700		15,700
2026	13,000	79.9	16,268	106.8	152,350		152,350	103,140		15,720		15,720
2027	13,100	80.4	16,287	106.9	152,400		152,400	103,240		15,740		15,740
2028	13,200	81.0	16,305	107.0	152,450		152,450	103,330		15,760		15,760

Table 38 (page 2 of 2)
HISTORICAL AND FORECAST AIRCRAFT DEPARTURES AND LANDED WEIGHT

Reagan National Airport

(passengers and seats in thousands)

	Enplaned	Load	Departing	Average seats per	Airc	raft departi	ıres	Average lan per departu	_		landed weigons of poun	O
Year	passengers	factor (a)	seats	departure	Passenger	All-cargo	Total	Passenger	All-cargo	Passenger	All-cargo	Total
					Average an	nual percen	t increase (	(decrease)				
Historical												
2010-2019	3.2%		1.9%		0.9%	n.a.	0.9%	0.6%	n.a.	1.5%	n.a.	1.5%
2019-2020	(68.5)		(51.5)		(55.5)	n.a.	(55.5)	9.7	n.a.	(51.2)	n.a.	(51.2)
2020-2021	87.1		28.5		32.2	n.a.	32.2	(1.0)	n.a.	30.9	n.a.	30.9
2021-2022	69.8		67.1		71.8	n.a.	71.8	(2.1)	n.a.	68.2	n.a.	68.2
Forecast												
2019-2023	1.5%		2.4%		1.5%	n.a.	1.5%	1.7%	n.a.	3.2%	n.a.	3.2%
2022-2023	6.1		5.4		5.0	n.a.	5.0	0.5	n.a.	5.5	n.a.	5.5
2023-2028	0.8		0.1		0.0	n.a.	0.0	0.1	n.a.	0.1	n.a.	0.1

Notes: n.a. = not applicable. Includes a small amount of landed weight on general aviation flights. Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

(a) Load factor calculated for enplaned passengers (excluding "through" passengers).

Sources: Historical: Metropolitan Washington Airports Authority; U.S. DOT, Schedule T100; OAG Aviation Worldwide Ltd., OAG Analyser database,

accessed March 2023.

Forecast: LeighFisher, March 2023.

#### **Airline Traffic Forecasts for Dulles**

Total enplaned passengers at Dulles equaled 12.3 million in 2019, pre-pandemic. In 2020, they decreased to 4.1 million (33% of 2019), in 2021, they recovered to 7.4 million (60% of 2019), and in 2022, they increased to 10.6 million (86% of 2019). In 2023, enplaned passengers are forecast to increase to 12.0 million (97% of 2019). The forecast considers the recovery of actual enplaned passengers during 2021 and 2022, averaging 89% of 2019 numbers for the last 6 months of 2022, and advance published airline flight schedules that indicate increases in both domestic and international seat capacity at Dulles in each month of 2023.

As with Reagan, advance published flight schedules are always subject to change and could be reduced in the face of insufficient air travel demand, such as could be caused by reduced economic growth or increased airfares.. Geopolitical conflict, associated disruption of international commerce, and public health-related travel restrictions could also slow future international traffic growth.

In forecasting enplaned passengers at Dulles between 2023 and 2028, it was assumed that:

- United will continue to operate a connecting hub and international gateway at the airport.
- The role of Dulles as the primary provider of domestic long-haul and international airline service for the region served by the Airports and BWI will be unchanged.
- No change will occur to the competitive position of the airport relative to competing U.S. airports as a gateway for international passengers.
- Completion of the Tier 2 Concourse (East) will support increases in air service by United. The additional service will accommodate increased connecting activity, as well as allow increased originating travel demand, beginning in 2027.

In the long term, it is expected that most of the increase in domestic passenger demand in the Airports service region will be accommodated at Dulles. This increase in demand is expected partly because capacity constraints and operating restrictions at Reagan will limit future increases in passenger numbers at that airport and partly because much of the increase in the population of the region is forecast to occur in the outer Virginia suburbs for which Dulles is more easily accessible. Dulles also has the capacity to accommodate additional connecting airline service and passengers.

The number of enplaned passengers at Dulles is forecast to increase to from 12.0 million in 2023 to 14.1 million in 2028, an average increase of 3.3% per year. International passenger numbers are forecast to reach pre-pandemic levels sooner than domestic passengers. Connecting passengers are forecast to account for a larger share of enplaned passengers in

2028 (34%) than they did in 2019 (31%). Table 39 presents historical and forecast enplaned passengers at Dulles by domestic and international subtotals and provides originating and connecting components.

Table 40 shows forecasts of aircraft departures and landed weight at Dulles, which were derived from the passenger forecasts using assumed trends in average seat occupancy, aircraft seat capacity, and aircraft size.

## Forecast Passengers for Both Airports

Table 41 shows that the combined number of enplaned passengers at Reagan and Dulles is forecast to increase to 27.3 million in 2028, with most of the increase for the two-Airports system occurring at Dulles.

## **Stress Test Projections**

Stress test projections of enplaned passengers were developed to provide the basis for conducting a test of the Airports Authority'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 that could result from changes in airline network strategies. For both Airports, relative to the base forecast for 2028, originating passenger numbers are projected to be 10% lower and connecting passenger numbers are projected to be 30% lower.

For Reagan, the number of enplaned passengers for the stress test in 2028 is projected to be 11.3 million, compared with 13.2 million for the base forecast. Connecting passengers account for approximately 17% of the 2028 total for the stress test projection, compared with 21% for the base forecast.

For Dulles, the number of enplaned passengers for the stress test in 2028 is projected to be 11.7 million, compared with 14.1 million for the base forecast. Connecting passengers account for approximately 28% of the 2028 total for the stress test projection, compared with 34% for the base forecast.

Table 42 presents the stress test projections relative to the base forecasts. Figure 12 and Figure 13 depict the stress test projections graphically for Reagan and Dulles, respectively.

# Table 39 HISTORICAL AND FORECAST ENPLANED PASSENGERS

Dulles International Airport (passengers in thousands)

This forecast was prepared on the basis of the information and assumptions given in the text. The achievement of any forecast is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast, and the variance could be material.

## Passengers enplaned on

	D	omestic flights		Inter	national flights	All flights			
Year	Originating (a)	Connecting	Total	Originating (b)	Connecting	Total	Originating	Connecting	Total
Historical									
2018	5,067	2,889	7,957	3,133	857	3,990	8,200	3,747	11,947
2019	5,266	2,884	8,150	3,295	882	4,177	8,561	3,766	12,327
2020	1,794	1,301	3,095	762	226	988	2,556	1,527	4,083
2021	3,274	2,446	5,720	1,271	394	1,665	4,545	2,841	7,385
2022	4,349	2,575	6,924	2,862	800	3,662	7,211	3,375	10,586
Forecast									
2023	4,865	2,935	7,800	3,285	915	4,200	8,150	3,850	12,000
2024	4,975	3,025	8,000	3,400	950	4,350	8,375	3,975	12,350
2025	5,085	3,115	8,200	3,515	985	4,500	8,600	4,100	12,700
2026	5,195	3,205	8,400	3,630	1,020	4,650	8,825	4,225	13,050
2027	5,325	3,375	8,700	3,770	1,105	4,875	9,095	4,480	13,575
2028	5,455	3,545	9,000	3,910	1,190	5,100	9,365	4,735	14,100

Table 39 (page 2 of 2)

#### HISTORICAL AND FORECAST ENPLANED PASSENGERS

Dulles International Airport (passengers in thousands)

Passengers enplaned on

	D	omestic flights		Inter	national flights		All flights			
Year	Originating (a)	Connecting	Total	Originating (b)	Connecting	Total	Originating	Connecting	Total	
			ļ	Average annual pe	rcent increase (	decrease)				
Historical										
2018-2019	3.9%	(0.2%)	2.4%	5.2%	2.9%	4.7%	4.4%	0.5%	3.2%	
2019-2020	(65.9)	(54.9)	(62.0)	(76.9)	(74.4)	(76.3)	(70.1)	(59.5)	(66.9)	
2020-2021	82.5	88.0	84.8	66.7	74.7	68.5	77.8	86.0	80.9	
2021-2022	32.9	5.3	21.1	125.2	102.8	119.9	58.7	18.8	43.3	
Forecast										
2019-2023	(2.0%)	0.4%	(1.1%)	(0.1%)	0.9%	0.1%	(1.2%)	0.6%	(0.7%)	
2022-2023	11.9	14.0	12.6	14.8	14.4	14.7	13.0	14.1	13.4	
2023-2028	2.3	3.8	2.9	3.5	5.4	4.0	2.8	4.2	3.3	

Notes: Excludes passengers enplaned on general aviation and military flights. Rows may not add to totals shown because of rounding.

Percentages were calculated using unrounded numbers. The distribution of originating and connecting passengers for 2022 was estimated using actual data for the first three quarters and estimated data for the fourth quarter.

Sources: Historical: Metropolitan Washington Airports Authority; U.S. DOT, *Air Passenger Origin-Destination Survey*, reconciled to Schedule T100. Forecast: LeighFisher, March 2023.

<sup>(</sup>a) Includes domestic originating passengers, international originating passengers who boarded domestic flights at Dulles bound for international destinations via other gateway airports, passengers on nonscheduled (charter) flights, and nonrevenue passengers.

<sup>(</sup>b) Includes international originating passengers on scheduled flights, along with small numbers of passengers on nonscheduled flights, nonrevenue passengers, and international-to-international connections.

# Table 40 HISTORICAL AND FORECAST AIRCRAFT DEPARTURES AND LANDED WEIGHT

Dulles International Airport (passengers and seats in thousands)

This forecast was prepared on the basis of the information and assumptions given in the text. The achievement of any forecast is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast, and the variance could be material.

	Enplaned	Load	Departing	Average seats per	Airo	craft departu	ıres	Average land per departur	•		landed weig	
Year	passengers	factor (a)	seats	departure	Passenger	All-cargo	Total	Passenger	All-cargo	Passenger	All-cargo	Total
Historical												
2010	11,742	79.9%	14,702	103.3	142,289	1,738	144,027	129,975	259,837	18,494	452	18,946
2015	10,714	82.3	13,016	114.2	113,980	1,751	115,731	140,536	280,723	16,018	492	16,510
2016	10,868	82.2	13,215	117.6	112,370	1,835	114,205	144,586	260,807	16,247	479	16,726
2017	11,324	82.5	13,719	124.9	109,843	1,791	111,634	148,684	257,654	16,332	461	16,793
2018	11,947	83.0	14,389	122.6	117,320	1,786	119,106	147,922	270,607	17,354	483	17,837
2019	12,327	84.2	14,639	116.8	125,329	1,693	127,021	144,629	280,503	18,126	475	18,601
2020	4,083	57.2	7,135	111.2	64,158	1,773	65,931	136,420	301,457	8,752	534	9,287
2021	7,385	73.4	10,057	110.8	90,755	1,858	92,613	135,315	291,502	12,281	541	12,822
2022	10,586	82.4	12,851	129.1	99,507	1,938	101,445	161,991	269,381	16,119	522	16,641
Forecast												
2023	12,000	80.9%	14,841	138.0	107,500	1,965	109,465	173,090	269,720	18,600	530	19,130
2024	12,350	81.6	15,139	138.5	109,300	1,990	111,290	173,720	271,357	19,000	540	19,540
2025	12,700	82.3	15,438	139.0	111,100	2,015	113,115	174,350	272,953	19,350	550	19,900
2026	13,050	82.9	15,737	139.5	112,800	2,040	114,840	174,970	274,510	19,750	560	20,310
2027	13,575	83.6	16,233	140.0	116,000	2,065	118,065	175,600	276,029	20,350	570	20,920
2028	14,100	84.3	16,723	140.5	119,000	2,090	121,090	176,230	277,512	20,950	580	21,530

Table 40 (page 2 of 2)

#### HISTORICAL AND FORECAST AIRCRAFT DEPARTURES AND LANDED WEIGHT

**Dulles International Airport** 

(passengers and seats in thousands)

Enplaned Vear passengers	Load	Departing	Average seats per				Average landed weight per departure (pounds)		Total landed weight (millions of pounds)		•	
Year	passengers	factor (a)	seats	departure	Passenger	All-cargo	Total	Passenger	All-cargo	Passenger	All-cargo	Total
					Average an	nual percer	nt increase (	decrease)				
Historical												
2010-2019	0.5%		(0.0%)		(1.4%)	(0.3%)	(1.4%)	1.2%	0.9%	(0.2%)	0.6%	(0.2%)
2019-2020	(66.9)		(51.3)		(48.8)	4.8	(48.1)	(5.7)	7.5	(51.7)	12.6	(50.1)
2020-2021	80.9		41.0		41.5	4.8	40.5	(0.8)	(3.3)	40.3	1.3	38.1
2021-2022	43.3		27.8		9.6	4.3	9.5	19.7	(7.6)	31.3	(3.6)	29.8
Forecast												
2019-2023	(0.7%)		0.3%		(3.8%)	3.8%	(3.7%)	4.6%	(1.0%)	0.6%	2.8%	0.7%
2022-2023	13.4		15.5		8.0	1.4	7.9	6.9	0.1	15.4	1.5	15.0
2023-2028	3.3		2.4		2.1	1.2	2.0	0.4	0.6	2.4	1.8	2.4

Notes: Includes a small amount of landed weight on general aviation flights. Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

(a) Load factor calculation based on enplaned passengers (excluding "through" passengers).

Sources: Historical: Metropolitan Washington Airports Authority; U.S. DOT, Schedule T100; OAG Aviation Worldwide Ltd., OAG Analyser database, accessed March 2023.

Forecast: LeighFisher, March 2023.

Table 41
HISTORICAL AND FORECAST ENPLANED PASSENGERS

Reagan National and Dulles International Airports (passengers in thousands)

This forecast was prepared on the basis of the information and assumptions given in the text. The achievement of any forecast is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast, and the variance could be material.

		Reagan			Dulles		Airports total			
Year	Domestic	International	Total	Domestic	International	Total	Domestic	International	Total	
Historical										
2018	11,551	184	11,734	7,957	3,990	11,947	19,508	4,174	23,681	
2019	11,765	184	11,949	8,150	4,177	12,327	19,915	4,361	24,276	
2020	3,734	34	3,768	3,095	988	4,083	6,829	1,022	7,851	
2021	7,021	28	7,049	5,720	1,665	7,385	12,741	1,693	14,434	
2022	11,836	134	11,969	6,924	3,662	10,586	18,760	3,796	22,555	
Forecast										
2023	12,515	185	12,700	7,800	4,200	12,000	20,315	4,385	24,700	
2024	12,605	195	12,800	8,000	4,350	12,350	20,605	4,545	25,150	
2025	12,695	205	12,900	8,200	4,500	12,700	20,895	4,705	25,600	
2026	12,785	215	13,000	8,400	4,650	13,050	21,185	4,865	26,050	
2027	12,875	225	13,100	8,700	4,875	13,575	21,575	5,100	26,675	
2028	12,965	235	13,200	9,000	5,100	14,100	21,965	5,335	27,300	

Table 41 (page 2 of 2)

#### HISTORICAL AND FORECAST ENPLANED PASSENGERS

Reagan National and Dulles International Airports (passengers in thousands)

	Reagan				Dulles		Airports total			
Year	Domestic	International	Total	Domestic	International	Total	Domestic	International	Total	
			-	Average annua	percent increase	(decrease)				
Historical										
2018-2019	1.9%	0.4%	1.8%	2.4%	4.7%	3.2%	2.1%	4.5%	2.5%	
2019-2020	(68.3)	(81.8)	(68.5)	(62.0)	(76.3)	(66.9)	(65.7)	(76.6)	(67.7)	
2020-2021	88.0	(17.5)	87.1	84.8	68.5	80.9	86.6	65.7	83.8	
2021-2022	68.6	382.2	69.8	21.1	119.9	43.3	47.2	124.2	56.3	
Forecast										
2019-2023	1.6%	0.1%	1.5%	(1.1%)	0.1%	(0.7%)	0.5%	0.1%	0.4%	
2022-2023	5.7	38.3	6.1	12.6	14.7	13.4	8.3	15.5	9.5	
2023-2028	0.7	4.9	0.8	2.9	4.0	3.3	1.6	4.0	2.0	

Notes: Excludes passengers enplaned on general aviation and military flights. Numbers in rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

Sources: Historical: Metropolitan Washington Airports Authority records. Forecast: LeighFisher, March 2023.

# Table 42 **BASE FORECASTS AND STRESS TEST PROJECTIONS**

Reagan National and Dulles International Airports (passengers in thousands)

These forecasts and projections were prepared on the basis of the information and assumptions given in the text. The achievement of any forecast or projection is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast or projection, and the variance could be material.

		Ac	tual		Forecast/Projection					
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Reagan										
Base case										
Enplaned passengers	11,949	3,768	7,049	11,969	12,700	12,800	12,900	13,000	13,100	13,200
Originating passengers	10,579	3,280	5,849	9,494	10,075	10,150	10,225	10,300	10,375	10,450
Connecting passengers	1,370	488	1,200	2,475	2,625	2,650	2,675	2,700	2,725	2,750
Stress test										
Enplaned passengers				11,969	11,645	11,325	11,325	11,325	11,325	11,325
Originating passengers				9,494	9,445	9,400	9,400	9,400	9,400	9,400
Connecting passengers				2,475	2,200	1,925	1,925	1,925	1,925	1,925
Percent reduction from Ba	ise									
Enplaned passengers				-	(8%)	(12%)	(12%)	(13%)	(14%)	(14%)
Originating passengers				-	(6)	(7)	(8)	(9)	(9)	(10)
Connecting passengers				-	(16)	(27)	(28)	(29)	(29)	(30)
Dulles										
Base case										
Enplaned passengers	12,327	4,083	7,385	10,586	12,000	12,350	12,700	13,050	13,575	14,100
Originating passengers	8,561	2,556	4,485	7,211	8,150	8,375	8,600	8,825	9,095	9,365
Connecting passengers	3,766	1,527	2,900	3,375	3,850	3,975	4,100	4,225	4,480	4,735
Stress test										
Enplaned passengers				10,586	11,425	11,625	11,740	11,740	11,740	11,740
Originating passengers				7,211	8,110	8,310	8,425	8,425	8,425	8,425
Connecting passengers				3,375	3,315	3,315	3,315	3,315	3,315	3,315
Percent reduction from Ba	ise									
Enplaned passengers				-	(5%)	(6%)	(8%)	(10%)	(14%)	(17%)
Originating passengers				-	(0)	(1)	(2)	(5)	(7)	(10)
Connecting passengers				-	(14)	(17)	(19)	(22)	(26)	(30)

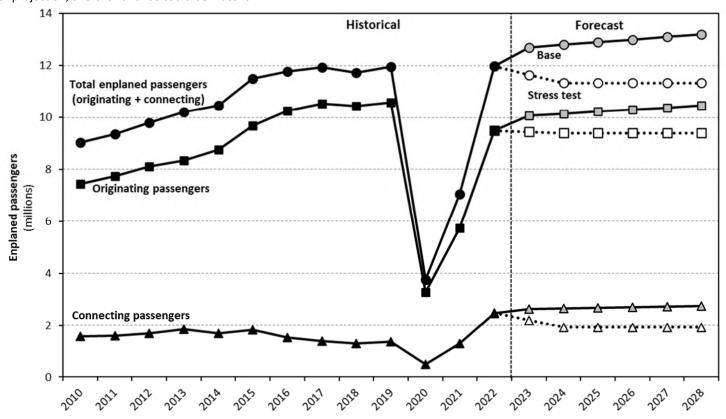
Notes: Rows may not add to totals shown because of rounding. Percentages were calculated using unrounded numbers.

Sources: Historical: Metropolitan Washington Airports Authority.

Forecast and Projection: LeighFisher, March 2023.

# Figure 12 BASE FORECASTS AND STRESS TEST PROJECTIONS OF ENPLANED PASSENGERS Reagan National Airport

These forecasts and projections were prepared on the basis of the information and assumptions given in the text. The achievement of any forecast or projection is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast or projection, and the variance could be material.



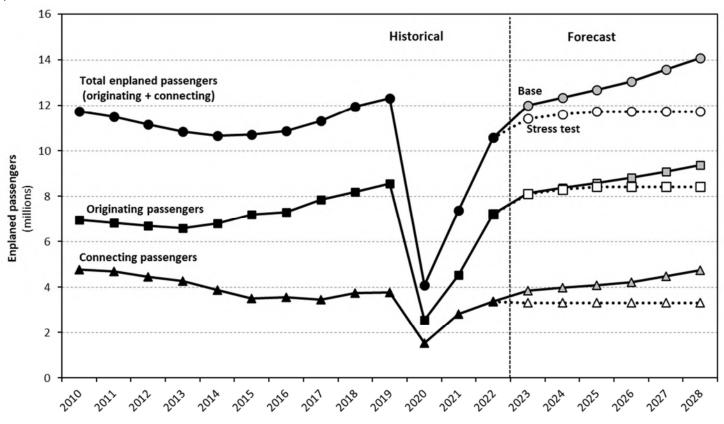
Notes: The distribution of originating and connecting passengers for 2022 was estimated using actual data for the first three quarters and estimated data for the fourth quarter.

Sources: Historical: Metropolitan Washington Airports Authority, *U.S. DOT, Air Passenger Origin-Destination Survey*, reconciled to Schedule T100. Forecast and Projection: LeighFisher, March 2023.

# Figure 13 BASE FORECASTS AND STRESS TEST PROJECTIONS OF ENPLANED PASSENGERS

**Dulles International Airport** 

These forecasts and projections were prepared on the basis of the information and assumptions given in the text. The achievement of any forecast or projection is dependent upon the occurrence of future events which cannot be assured. Therefore, the actual results may vary from the forecast or projection, and the variance could be material.



Notes: The distribution of originating and connecting passengers for 2022 was estimated using actual data for the first three quarters and estimated data for the fourth quarter.

Sources: Historical: Metropolitan Washington Airports Authority, *U.S. DOT, Air Passenger Origin-Destination Survey*, reconciled to Schedule T100. Forecast and Projection: LeighFisher, March 2023.

#### FINANCIAL ANALYSIS

#### FRAMEWORK FOR AIRPORTS AUTHORITY'S FINANCIAL OPERATIONS

At the end of 2022, the Airports Authority operated Reagan and Dulles through the Aviation Enterprise Fund with approximately 1,510 full-time permanent employees (250 at Reagan, 450 at Dulles, 440 in public safety, and 370 in consolidated functions). The Airports Authority operated the Dulles Corridor Enterprise with approximately 40 additional employees. The financial operations of the Aviation Enterprise are accounted for separately for each of the two Airports.

#### Indenture

The financial operations of the Aviation Enterprise are governed in large part by the Indenture authorizing the issuance of Airport System Revenue Bonds (Bonds). As described in the letter at the beginning of this report, the Airports Authority covenants in the Rate Covenant of the Indenture that it will fix and adjust fees and charges for the use of the Airports so as to ensure that all funding requirements of the Indenture are met and that Net Revenues are at least 125% of Annual Debt Service.

The Indenture also prescribes the application of Revenues and Designated Passenger Facility Charges to the funds and accounts established under the Indenture, as described in the later sections "Application of Revenues" and "Application of PFC Revenues."

#### **Airline Agreement**

Effective January 2015, the Airports Authority and airlines accounting for substantially all of the passengers at the Airports entered into an Airline Agreement with a term that extends through 2024 at both Reagan and Dulles. The Airline Agreement provides, among other things, for the use and occupancy of the Airports; the methodologies for calculating Signatory Airline rentals, fees, and charges according to cost-recovery principles; and the majority-in-interest (MII) rights of the Signatory Airlines to approve certain capital expenditures.\*

The Airline Agreement provides that the Airports Authority may adjust airline rates to include Extraordinary Coverage Protection Payments to ensure that Net

<sup>\*</sup>MII is defined in the Airline Agreement to mean, for each of the two Airports, for the Airfield Cost Center, 50% in number of Signatory Airlines and Signatory Cargo Carriers accounting for 60% of the landed weight of such airlines, and for other Signatory Airline Supported Areas, 50% of Signatory Airlines accounting for 60% of terminal rentals, fees, and charges.

Revenues at each of the Airports are forecast to be not less than 125% of the sum of Debt Service on Bonds and Subordinated Bonds, so ensuring that the 125% debt service coverage requirement of the Rate Covenant is met. Under the Airline Agreement, revenues from the Dulles Toll Road are excluded from the definition of Revenues.

The Airports Authority shares Net Remaining Revenues (NRR) each year with the Signatory Airlines. In 2019, pre-pandemic, the amount of NRR was \$313 million, shared approximately 31% to the Airports Authority and 69% to the Signatory Airlines. In 2022 the amount of NRR was \$284 million, shared approximately 32% to the Airports Authority and 68% to the Signatory Airlines. The forecast amounts of NRR and its sharing in accordance with allocation methodology set out in the Airline Agreement is shown in Exhibit F-1 and discussed in the later section "Sharing of Net Remaining Revenues."

The Airports Authority's share of NRR is deposited into the General Purpose Fund and, at the beginning of the next year, transferred into the Capital Fund. Amounts in the Capital Fund may be used at the discretion of the Airports Authority to pay the costs of the Capital Construction Program, other capital improvements, major maintenance and repair projects, equipment acquisitions, and other improvements and operating initiatives.

Under the Airline Agreement, the Airports Authority may use its share of NRR generated at Reagan, as available up to agreed-upon maximum amounts, to reduce required rentals, fees, and charges at Dulles in the following year. During the forecast period, such maximum amounts are, as generated in 2022 through 2024, \$25 million. Any limitation on how the Airports Authority may use its share of NRR generated at Reagan in 2025 through 2028 will be as specified in any airline agreement that succeeds the current Airline Agreement. For the financial forecasts, the use of NRR generated at Reagan to reduce rentals, fees, and charges at Dulles was assumed to be \$25 million per year as shown in Exhibit F-1.

The Signatory Airlines' share of NRR is deposited into the General Purpose Fund and, at the beginning of the next year, deposited into the Airline Transfer Account and used to reduce rentals, fees, and charges in such year.

For purposes of this report, it was assumed that the Signatory Airlines will pay all rentals, fees, and charges as calculated under the provisions of the Airline Agreement and that similar provisions will apply after the end of the term of the Airline Agreement through the forecast period.

# **Capital, Operating and Maintenance Investment Program**

The Airports Authority's Capital, Operating and Maintenance Investment Program (COMIP) provides for various maintenance projects, repairs, equipment acquisitions, improvements, and planning studies as well as the cost of the snow removal program and certain operating initiatives. For 2023, the Airports Authority has budgeted \$63.5 million of new COMIP authorization to be funded from the Capital Fund. In the financial forecasts, it was assumed that the Airports Authority's share of NRR transferred to the Capital Fund will be adequate to fund all required COMIP costs.

#### **Federal COVID-19 Relief Grants**

In March 2020, in response to the disruptive effects of the COVID-19 pandemic on economic activity and airline travel, the federal Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted. Among relief provided by the CARES Act is aid to airport operators as grants to offset the loss of revenues. The CARES Act provided an aggregate of approximately \$10.0 billion of grants to airports, allocated by formula. The Airports Authority was allocated \$229.1 million of such grants.

CARES Act grants may be used for any purpose for which airport revenues may lawfully be used. The Airports Authority used or expects to use its CARES Act grants to pay debt service and operating expenses.

The Airports Authority also received \$4.7 million of grants under provisions of the CARES Act that increased the federal match to 100% for capital grants under the Airports Improvement Program (AIP). Such additional AIP grant funds are being used as a source of funding for the CCP.

In December 2020, the federal Coronavirus Response and Relief Supplemental Appropriations Act of 2021 (CRRSA Act) was enacted to provide additional economic relief. The CRRSA Act provided for an aggregate of approximately \$2.0 billion in funds for airport operators to prevent, prepare for, and respond to the pandemic, including the provision of relief from rent and minimum annual guarantee (MAG) payments to eligible airport concessionaires.

Approximately \$1.75 billion of CRRSA Act grant funds was allocated by formula to primary commercial service airports. For Reagan, the Airports Authority was allocated \$18.6 million of grants plus \$2.5 million for concessionaire relief. For Dulles, it was allocated \$19.1 million of grants plus \$2.5 million of concessionaire relief. The Airports Authority used its CRRSA Act grants in 2021 to pay debt service, pay eligible operating expenses, and offset reduced concession revenues.

The American Rescue Plan Act (ARPA), enacted in March 2021, provided additional economic assistance to airport operators to prevent, prepare for, and respond to the pandemic. ARPA grants are being awarded to primary commercial service airports in the aggregate amount of approximately \$6.5 billion, allocated by formula. An additional, \$0.8 billion is to be available to provide relief from rent and MAG payments to the operators of eligible in-terminal concessions.

For Reagan, the Airports Authority was allocated ARPA grants of \$71.8 million plus \$9.9 million for concession relief. For Dulles, it was allocated \$74.1 million plus \$10.2 million for concession relief.

The Airports Authority also received additional AIP grants under provisions of ARPA that extended the 100% federal match. Such additional AIP grant funds, \$0.7 million for Reagan and \$5.0 million for Dulles, are to be used as a source of funding for the CCP.

Federal grants provided under the CARES Act, CRRSA Act, and ARPA are collectively referred to in this report as COVID-19 relief grants. The historical and forecast uses of COVID-19 relief grants to pay operating expenses and debt service are shown in Exhibit E-6. The forecast uses of the concession relief grants to offset reduced concession revenues are shown in Exhibits E-1, E-2, and E-3.

#### CAPITAL CONSTRUCTION PROGRAM

Projects in the CCP that are to be funded in part from the proceeds of the Planned and future Bonds are listed in Exhibit A. Descriptions of the CCP projects are provided in the earlier sections "Capital Construction Program at Reagan" and "Capital Construction Program at Dulles." Exhibit A also presents estimated project costs and sources of funding. Each of the sources of funding is discussed in the following sections.

The debt service requirements of the planned future Bonds to be issued after 2026, most of which are not expected to be paid from Revenues until after the forecast period, are not taken into account in the financial forecasts.

All projects in the CCP that are subject to MII approval by the Signatory Airlines have been so approved, including the Tier 2 Concourse (East) project at Dulles.

#### **Revolving Loan Notes**

Exhibit A shows the estimated permanent sources of funding for the CCP. Certain of these amounts will require interim funding pending the receipt of permanent funding. Under a program established in March 2022, the Airports Authority is authorized to issue up to \$200 million of Revolving Loan Notes to provide such interim funding. The Airports Authority's obligation to repay amounts advanced under the Revolving Loan Note program is secured by and payable from Net Revenues on a parity with outstanding Bonds.

As of May 4, 2023, \$1.0 million of Revolving Loan Notes was outstanding, all of which is to be repaid from the proceeds of the proposed 2023A Bonds. For the purposes of this report, no issuance of Revolving Loan Notes is assumed during the forecast period.

# **Federal AIP Grants**

The Airports Authority is eligible to receive AIP grants-in-aid from the FAA for up to 75% of the costs of eligible projects. (As noted in the earlier section "Federal COVID-19 Relief Grants," the FAA match was increased to 100% under the CARES Act and ARPA for 2020 and 2021.)

Certain AIP grants are awarded as "entitlement" grants, the annual amount of which is calculated on the basis of the number of enplaned passengers and the amount of landed weight of all-cargo aircraft at the Airports. Other, "discretionary" grants are awarded on the basis of the FAA's determination of the priorities for projects at the Airports and at other airports nationwide. In 2013 through 2022, the Airports Authority was awarded an average of approximately \$21.1 million annually in AIP entitlement and discretionary grants, mostly for airfield projects. The AIP grant program is subject to periodic reauthorization and appropriation by Congress.

As shown in Exhibit A, the Airports Authority expects to receive \$248.9 million in AIP grant funding for CCP projects, including the \$4.7 million of CARES Act funds discussed earlier. Such grants are mainly for airfield projects.

#### **Bipartisan Infrastructure Law Grants**

The federal Infrastructure Investment and Jobs Act of 2021, usually referred to as the Bipartisan Infrastructure Law (BIL), provides approximately \$20 billion in grants for infrastructure development at U.S. airports over the five years 2022 through 2026.

Up to approximately \$2.9 billion per year of BIL funds is to be awarded to primary airports as Airport Infrastructure Grants (AIG), allocated on the same basis as AIP

entitlement grants. The Airports Authority has been allocated AIG grants of \$44.1 million per year for Reagan and \$45.5 million for Dulles. Such grants will be for the standard AIP federal match (up to 75% of costs for most projects) and may be used for approved projects meeting PFC eligibility criteria (except that the grants may not be used to pay debt service).

An additional approximately \$1.0 billion per year is to be provided in grants under the Airport Terminal Program (ATP) provisions of BIL, with up to 55% going to large hub airports. The federal share is 80%. ATP grants are awarded at FAA's discretion following a competitive application process. PFC eligibility criteria apply and priorities for the grants include replacing aging and inadequate facilities, increasing capacity, and facilitating airline competition. The Airports Authority has to date been awarded \$70.6 million of ATP grants for the Tier 2 Concourse (East) project at Dulles.

As shown in Exhibit A, the Airports Authority has to date committed \$167.0 million of BIL grant funding to the Tier 2 Concourse (East) project.

#### **State Grants**

The Commonwealth of Virginia provides grants to Virginia airport operators. In 2013 through 2022, the Airports Authority was awarded \$2.0 million per year in such state grants. No state grants were assumed for the CCP funding plan shown in Exhibit A.

# Passenger Facility Charge (PFC) Revenues

The Airports Authority has received approvals from the FAA to impose a PFC of \$4.50 per eligible enplaned passenger at both Airports. Under the FAA approvals, the Airports Authority is authorized to collect up to approximately \$4.1 billion of PFC Revenues and to use such revenues on approved projects, both to pay project costs pay-as-you-go and to pay PFC-eligible Bond debt service. Through 2022, approximately \$2.0 billion of the approved amount had been collected. Exhibits F-2 and F-3 present historical and forecast sources and uses of PFC Revenues at the Airports assuming no change in the PFC from \$4.50.

Under PFC Application 4, the FAA approved the use of PFC Revenues to pay PFC-eligible debt service on Bonds used to fund the AeroTrain and related projects at Dulles. Under PFC Application 6, the FAA approved the use of PFC Revenues to pay PFC-eligible debt service on Bonds used to fund airside projects at Reagan (as well as pay-as-you-go funding for the station component of the Dulles Metrorail Project). Under PFC Application 7, the FAA approved the use of PFC Revenues to pay PFC-eligible debt service on Bonds used to fund Concourse E and the secure National Hall at Reagan. Under PFC Application 8, the FAA approved the use of

PFC Revenues (pay-as-you-go) to pay certain of the costs of the track component of the Dulles Metrorail Project.

The Airports Authority's contribution of \$230.7 million of PFC funding for the Dulles Metrorail Project shown in Exhibit A includes the funding for the track and an offsetting contribution of \$12.8 million by WMATA for its use of Dulles land for the track.

#### **AIRPORT SYSTEM REVENUE BONDS**

Exhibit B presents the estimated sources and uses of the proposed 2023A Bonds and Planned Bonds, as provided by Frasca & Associates, LLC, the Airports Authority's independent registered municipal advisor.

The proposed 2023A Bonds are being issued as fixed-rate AMT Bonds to (1) fund \$264 million of the costs of the CCP, (2) fund capitalized interest, (3) fund a deposit to the Common Reserve Account of the Debt Service Reserve Fund, and (4) pay costs of issuance.

The Planned Bonds were assumed to be issued as fixed-rate AMT Bonds to (1) fund \$1.506 billion of CCP costs, (2) fund capitalized interest, (3) fund deposits to the Debt Service Reserve Fund, and (4) pay costs of issuance. The amounts and dates of the Planned Bond issues are subject to change.

#### **ANNUAL DEBT SERVICE**

Exhibit C-1 presents historical and forecast Annual Debt Service. Forecast amounts were estimated using the following assumptions as provided by Frasca & Associates, LLC:

# Outstanding Variable-Rate Bonds Subject to Floating-to-Fixed Interest Rate Swaps:

Principal amounts of \$44.7 million of 2009D Bonds, \$48.7 million of 2010C-2 Bonds, and \$4.6 million of 2011A-3 Bonds subject to the 2009 Swap Agreements, interest rate of 4.099% plus the costs associated with the underlying variable-rate debt.

Principal amount of \$55.6 million of 2010D Bonds subject to the 2010 Swap Agreements, interest rate of 4.112% plus the costs associated with the underlying variable-rate debt.

Principal amount of \$28.3 million of 2011A-1 Bonds subject to the 2011 Swap Agreements, interest rate of 3.862% plus the costs associated with the underlying variable-rate debt.

#### **Planned Fixed-Rate Bonds:**

Principal amount of \$1.834 billion of 2003-2004 Bonds, amortization 2025 through 2056, interest rate of 6.09%, interest to be capitalized from bond proceeds for approximately 20 months.

Exhibits F-2 and F-3 present historical and forecast uses of PFC Revenues to pay Bond debt service for Reagan and Dulles, respectively.

Exhibit E-6 presents historical and forecast uses of COVID-19 relief grants to pay Bond debt service.

#### **OPERATION AND MAINTENANCE EXPENSES**

Exhibit D-1 presents historical and forecast Operation and Maintenance (O&M) Expenses for the Aviation Enterprise. Under the Indenture, O&M Expenses include all expenses of the Airports Authority paid or accrued for the operation, maintenance, administration, and ordinary current repairs of the Airports. Such expenses include those directly attributable to the Airports and an allocable portion of expenses for consolidated functions. O&M Expenses do not include, among other things, rentals payable under the Federal Lease or operating expenses of the Dulles Corridor Enterprise. Beginning in 2020, O&M Expenses include expenses and fees paid under the parking management agreement. (In earlier years, such expenses were shown as deductions from parking revenues.) Exhibits D-2 and D-3 present O&M Expenses for Reagan and Dulles, respectively.

O&M Expenses for 2023 are budgeted amounts, which were used as the base for the forecasts. The 2023 budget incorporates estimated increases, relative to the 2022 budget, of 6.3% in personnel expenses and 13.3% in non-personnel expenses, the latter driven largely by increases in the costs of utilities. services, and fuel. O&M Expenses were forecast taking into account assumed increases in costs as a result of inflation and planned facility development. In particular, it was assumed that:

- 1. The unit cost of salaries, wages, and employee fringe benefits for life and health insurance and retirement benefits will increase 5.0% in 2024, 4.0% in 2025, and 3.0% in 2026 and annually thereafter and there will be no overall increase in staffing.
- 2. The cost of utilities, services, materials, supplies, and expenses to operate and maintain the AeroTrain system will increase 7.0% in 2024, 5.0% in 2025, and 3.0% in 2026 and annually thereafter.

Exhibit E-6 presents historical and forecast uses of COVID-19 relief grants to pay O&M Expenses.

#### **REVENUES**

Exhibit E-1 presents historical and forecast Revenues of the Aviation Enterprise. Such Revenues are derived primarily from rentals, fees, and charges paid for the use and occupancy of the Airports, including landing fees, terminal rents, passenger conveyance fees (for the AeroTrain and mobile lounges), and other charges payable by Signatory Airlines under the Airline Agreement, public parking revenues, rental car revenues, and fees paid by concessionaires. Table 43 summarizes 2022 Revenues according to major category. Further detail for each of Reagan and Dulles is shown in Exhibits E-2 and E-3, respectively.

Under Governmental Accounting Standards Board Statement No. 87, Leases (GASB 87), components of certain revenues, in particular some building rentals and some concession revenues, are classified as lease-related revenues and separately reported as such in the Airports Authority's financial statements. Such lease-related revenue components are not separately stated for the purposes of calculating airline rentals, fees, and charges, and are not separately stated in the presentations of revenues in this report.

Individual components of Revenues, shown for Reagan in Exhibit E-2 and for Dulles in Exhibit E-3, were forecast taking into account historical results through 2022, budgeted amounts for 2023, and allowances for unit price inflation at 4.0% in 2024, 3.0% in 2025, and 2.0% in 2026 and annually thereafter. The forecasts also take into account planned facility development and the provisions of the Airline Agreement and other leases and agreements with tenants and users of the Airports.

Amounts shown for 2023 for nonairline revenues are as estimated taking into account budgeted amounts. Amounts shown for 2023 for airline revenues are as calculated per the provisions of the Airline Agreement using budgeted O&M Expenses and estimates of debt service and other rate base requirements.

Revenues from sources related to passengers, such as parking and terminal concessions, and from sources related to aircraft activity, such as landing fees, were forecast to change in part as a function of the Base passenger forecast scenario shown in Tables 37 through 41. The specific assumptions underlying individual components of Revenues are summarized in the following sections. In most instances, historical revenues and revenues per passenger are discussed for 2019, the most recent full year unaffected by pandemic-related traffic reductions, as well as for 2022.

# Table 43 REVENUE SUMMARY FOR 2022

Metropolitan Washington Airports Authority (dollars in thousands)

	Reagan N Airp		Dulles Inte Airp			Enterprise otal
		Percent of		Percent of		Percent of
	Amount	Total	Amount	total	Amount	Total
Airline revenues						
Terminal rents and user fees	\$ 88,443	27.0%	\$140,134	29.6%	\$228,577	28.5%
Landing and apron fees	45,039	13.8	27,264	5.8	72,303	9.0
International Arrival Building fees		0.0	18,962	4.0	18,962	2.4
Passenger conveyance fees		0.0	5,054	<u>1.1</u>	5,054	0.6
	\$133,482	40.8%	\$191,413	40.4%	\$324,896	40.6%
Concessions						
Landside concession revenues (a)	\$ 123,451	37.7%	\$111,853	23.6%	\$235,304	29.4%
In-terminal concession revenues	33,080	10.1	38,701	8.2	71,781	9.0
Airside concession revenues	4,458	1.4	48,667	10.3	53,125	<u>6.6</u>
	\$160,990	49.2%	\$199,221	42.1%	\$360,211	45.0%
COVID-19 relief grants	9,934	3.0	10,181	2.1	20,115	2.5
Other operating revenues	18,143	5.5	60,962	12.9	79,105	9.9
Investment earnings	4,562	1.4	11,770	2.5	16,332	2.0
Total	\$327,111	100.0%	\$473,547	100.0%	\$800,653	100.0%

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

(a) Includes public automobile parking stated net of expenses and management fees.

Source: Metropolitan Washington Airports Authority.

## **AIRLINE REVENUES**

# Signatory Airline Rentals, Fees, and Charges

Exhibits E-4 and E-5 show, for Reagan and Dulles respectively, the historical and forecast financial requirements that determine rentals, fees, and charges payable by the Signatory Airlines under the provisions of the Airline Agreement. The Airports Authority calculates and adjusts such rentals, fees, and charges annually, but may adjust them at mid-year or at any other time in the event the Indenture requires such an adjustment. Exhibits E-4 and E-5 also show aggregate Signatory Airline payments per enplaned passenger. The differences between the airline payments shown in Exhibits E-4 and E-5 and the airline revenues shown in Exhibits E-2 and E-3, respectively, are accounted for by payments made by nonsignatory airlines.

Signatory Airline rentals, fees, and charges are calculated for each of the Airports from the Total Requirement as allocable to the Cost Centers and Sub-Centers within the Airline Supported Areas listed on Exhibits E-4 and E-5.\* The Total Requirement of each such Cost Center and Sub-Center is the sum of allocable O&M Expenses, deposits into funds and accounts required under the Indenture, Capital Charges (including Debt Service), Debt Service Coverage, Federal Lease payments, and the requirements of the Indirect Cost Centers (Maintenance, Public Safety, Systems and Services, and Administration). The Airline Agreement defines Debt Service Coverage as an amount equal to the applicable annual coverage percentages specified in the Airline Agreement of the portion of Debt Service attributable to Senior Bonds and Subordinated Bonds that is not funded with PFC Revenues or federal grants plus such other amounts as may be established by any financing agreement or arrangement with respect to other indebtedness. The applicable coverage percentage during the forecast period is 30% for 2023 and 25% thereafter.

Beginning in 2020, required Signatory Airline payments were or are forecast to be reduced by COVID-19 relief grants used to pay O&M Expenses and Debt Service allocable to the Airline Supported Areas. (Exhibit E-6 provides a summary of the forecast amounts of such COVID-19 relief grants.) In total, the rentals, fees, and charges paid by the Signatory Airlines recover their pro rata share of the Total Requirements of the Airline Supported Areas for each year net of the Signatory Airline share of NRR from the prior year. Revenues of the Airports Authority from other (nonairline) sources cover the Total Requirements of the Non-Aviation Cost Centers including the allocable portion of the requirements of the Indirect Cost Centers and the unrecovered portion of the Total Requirements of the Airline Supported Areas.

Under the Airline Agreement, if Revenues are not forecast to be sufficient at either or both of the Airports to produce Net Revenues of at least 125% of the sum of Debt Service on Bonds and Subordinated Bonds, then the Airports Authority may adjust the Total Requirements in Airline Supported Areas, at either or both Airports, by requiring Extraordinary Coverage Protection Payments to ensure that the 125% coverage requirement of the Rate Covenant is met. No such Extraordinary Coverage Protection Payments are forecast to be required.

A-126

\_

<sup>\*</sup>Certain capitalized terms in this section of the report are as defined in the Airline Agreement.

#### **Western Lands Account**

In November 2018, the Airports Authority completed the sale of 424 acres of undeveloped land at the western boundary of Dulles, referred to as the Western Lands. Net proceeds from the sale amounted to approximately \$204 million, which were deposited into a segregated account, the Western Lands Account. Under the provisions of a September 2018 amendment to the Airline Agreement, withdrawals from the Western Lands Account are to be used solely to reduce the costs that would otherwise be included in the calculation of airline rentals, fees, and charges at Dulles. The amounts to be withdrawn from the Western Lands Account for such purpose are at the discretion of the Airports Authority, but in each year through 2024 must, at a minimum, be the amount of investment earnings on the account balance. As shown in Exhibit E-5, the minimum required amount, estimated at \$5.0 million, is assumed to be applied to reduce required airline payments in each forecast year.

## **CONCESSION REVENUES**

# **Public Parking**

Table 44 shows the number of revenue-producing public parking spaces and parking rates at the Airports as of April 2023. Effective March 2020, as parking demand was reduced at the start of the pandemic, at both Airports, the Economy lots were temporarily closed to eliminate the need for shuttle bus operations. At Dulles, Garage 2 was also temporarily closed and was used for employee parking. Valet parking service was also temporarily discontinued.

At Reagan, at the start of the pandemic, the daily rate for Garage parking was \$25 and for Economy parking was \$17. At Dulles, the daily rate for the Terminal Lot was \$25, for Garage parking was \$17, and for Economy parking was \$10.

Parking rates at both Airports were temporarily reduced during the pandemic, but were restored to pre-pandemic amounts by December 2021 at Dulles and by June 2022 at Reagan. When the Economy Lot at Dulles was reopened (effective June 2021), the daily rate was set at \$12. Rates were then increased to the rates shown in Table 44 by December 2022 at Reagan and by April 2023 at Dulles.

# Table 44 AIRPORT PUBLIC PARKING FACILITIES

Metropolitan Washington Airports Authority (as of April 2023)

	Number	Darking rates
	of spaces	Parking rates
Reagan National Airport		
Garage 1	1,102	\$6 per hour, \$29 per day
Garage 2	5,278	\$6 per hour, \$29 per day
Economy	<u>2,757</u>	\$19 per day
Total	9,137	
Dulles International Airport		
Terminal Lot	2,150	\$6 per hour, \$29 per day
Garage 1	4,576	\$6 per hour, \$21 per day
Garage 2	3,573	\$6 per hour, \$21 per day
Economy	9,318 (a)	\$14 per day
Valet	138	\$35 per day
Cell phone lot	<u>525</u>	No charge
Total	20,280	

Note: Different numbers of spaces may be listed on the Airports Authority website as available for reservation at any given time as the space inventory is actively managed.

Source: Metropolitan Washington Airports Authority.

The parking facilities at both Airports are operated for the Airports Authority by SP Plus Corporation under a management agreement that commenced in October 2021 and, with the exercise of two one-year options by the Airports Authority, would extend through September 2026. Under the management agreement, defined expenses are reimbursed to the operator, which receives a fixed management fee that increases annually. Parking expenses and fees under the parking management agreement were \$19.1 million in 2022.

For 2019, parking revenues in Exhibits E-1, E-2, and E-3 are shown net of expenses and fees under the parking management agreement (and O&M Expenses in Exhibits D-1, D-2, and D-3 exclude such parking expenses and fees). Beginning in 2020, parking revenues are shown gross.

Historically, public parking has represented the largest single source of nonairline revenues to the Airports Authority. At Reagan, in 2019, gross parking revenues were \$54.6 million, \$5.16 per originating passenger. At Dulles, in 2019, gross

<sup>(</sup>a) In addition, 3,036 spaces are available in lots for overflow parking during peak travel periods.

parking revenues were \$71.8 million, \$8.37 per originating passenger. There is little competition from off-airport operators at either Reagan or Dulles.

As parking demand recovered and parking rates were restored to pre-pandemic amounts during 2021 and 2022, parking revenues increased. At Reagan, in 2022, gross parking revenues were \$68.5 million, 126% of the 2019 amount and \$7.22 per originating passenger. At Dulles, in 2022, gross parking revenues were \$74.1 million, 103% of the 2019 amount and \$10.28 per originating passenger.

Between 2015 and 2019, the number of airport parking transactions decreased relative to the number of originating passengers at both Airports. At Reagan, the number of parking transactions decreased 33.7%, while the number of originating passengers increased 9.4%, resulting in an 39.4% decrease in the propensity to park as measured by parking transactions per originating passenger. At Dulles, the number of parking transactions decreased 1.0%, while the number of originating passengers increased 19.1%, resulting in a 16.9% decrease in parking transactions per originating passenger.

As airport access travel choices changed during the pandemic in response to concerns about COVID-19 contagion, the propensity to park increased, but by the end of 2022 had returned to approximately 2019 levels at both Airports.

The decreased propensity to park pre-pandemic was largely the result of changing airport access choices attributable to changes in the relative cost and convenience of competing travel modes. Short-stay parking transactions were also reduced as mobile phones made arranging curbside pick-up easier. The decrease in the propensity to park coincided with the increase in the number of airport trips made by ride-hailing services (also referred to as transportation network companies or TNCs), mainly Uber and Lyft, as discussed in the later section "Ground Transportation Fees."

For purposes of the financial forecasts, it was assumed that the propensity to park and the use of other modes of access will be similar to those occurring in 2019. It was further assumed that parking rates will not be increased from those now in effect.

#### **Rental Cars**

In 2022 rental car companies providing service at the Airports and their shares of gross receipts were as shown in Table 45.

# Table 45 RENTAL CAR GROSS RECEIPTS Metropolitan Washington Airports Authority

2022 (dollars in thousands)

	Reagan N	lational	Dulles Inte	rnational	Airports A	uthority
Group	Receipts	Share	Receipts	Share	Receipts	Share
Avis-Budget (a)	\$ 67,800	37.5%	\$ 52,459	32.2%	\$120,259	35.0%
Enterprise-Alamo-National (b)	59,977	33.2	54,525	33.5	114,502	33.3
Hertz-Dollar-Thrifty (c)	52,965	29.3	44,044	27.0	97,009	28.2
Sixt		0.0	11.899	7.3	11,899	3.5
	\$180,741	100.0%	\$162,927	100.0%	\$343.668	100.0%

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

- (a) Subsidiaries of Avis Budget Group.
- (b) Subsidiaries of Enterprise Holdings, Inc.
- (c) Subsidiaries of Hertz Global Holdings, Inc.

The rental car companies operate under the terms of competitively bid concession agreements. At Reagan, the agreements became effective in February 2023 and (with two one-year extensions at the Airport Authority's option) expire in January 2030. At Dulles, the agreements became effective in July 2019 and (with two one-year extensions at the Airport Authority's option) expire in June 2026.

Under the concession agreements for both Airports, the rental car companies pay the greater of a MAG or 10% of gross receipts. The MAG payments at Reagan are waived or reduced if the number of passengers in a given month is less than a specified percentage of the number in the same month of the prior year. The MAG payments at Dulles are waived or reduced if the number of passengers is less than a specified percentage of the number in the preceding contract year. Such MAG waivers or reductions applied at both Airports for certain months in 2020 and 2021, but not in 2022.

Rental car revenues also include the proceeds of fees collected on behalf of the Airports Authority by the rental car companies. At Reagan, a customer contract fee (CCF) (in effect since 2015) is assessed at \$3.50 per vehicle transaction-day. At Dulles, a customer facility charge (CFC) (in effect since July 2019) is assessed at \$3.00

per vehicle transaction-day. The CCF and CFC revenues are used to pay certain of the costs of financing, improving, maintaining, and operating the rental car facilities.

In 2019, pre-pandemic, revenues received by the Airports Authority from rental car operations at Reagan totaled \$26.4 million (\$17.5 million concession fees and \$8.9 million CCF revenues), \$2.50 per originating passenger. At Dulles, rental car revenues were \$19.7 million (\$15.8 million concession fees and \$3.9 million CFC revenues), \$2.30 per originating passenger.

In 2022, revenues received by the Airports Authority from rental car operations at Reagan totaled \$27.8 million (\$19.4 million concession fees and \$8.4 million CCF revenues), 105% of the 2019 amount and \$2.93 per originating passenger. At Dulles, rental car revenues were \$24.5 million (\$17.9 million concession fees and \$6.6 million CFC revenues), 124% of the 2019 amount and \$3.39 per originating passenger.

As with parking, between 2015 and 2019, at both Airports, numbers of rental car transactions decreased relative to numbers of originating passengers as airport access travel choices changed. Over the four years, the propensity to rent as measured by the number of rental car transactions per originating passenger decreased 11.4% at Reagan and 17.2% at Dulles.

The propensity to rent cars increased in 2020 during the early months of the pandemic, but in 2021 and 2022 was again close to the propensity in 2019. Rental revenues received by the Airports Authority were relatively high in 2020 through 2022 largely because a shortage of cars caused rates to increase. At Reagan, in 2019, the average cost per rental was \$197; in 2022 it was \$304. At Dulles, in 2019, the average cost per rental was \$254; in 2022 it was \$359.

Rental car revenues were forecast to increase in proportion to originating passenger numbers assuming inflation-adjusted rental rates return to approximately 2019 levels by 2024, and thereafter increase with price inflation. The CCF and CFC rates were assumed not to change.

# **Ground Transportation**

The Airports Authority collects permit and activity fees from taxicabs, limousines, shared van services, and other providers of commercial ground transportation. Effective November 2015, the Airports Authority began collecting per trip fees from the transportation network companies that pick up and drop off passengers at the terminals. The TNC fee was initially set at \$4.00 (assessed per pick-up and per drop-off) and was increased to \$5.00 effective January 2020.

In 2019, pre-pandemic, at Reagan, commercial ground transportation revenues totaled \$28.3 million, of which \$21.9 million was paid by TNCs. At Dulles,

commercial ground transportation revenues totaled \$17.1 million, of which \$10.8 million was paid by TNCs.

In 2022, at Reagan, ground transportation revenues totaled \$27.1 million (96% of 2019) of which \$22.3 million was paid by TNCs. At Dulles, ground transportation revenues totaled \$13.3 million (78% of 2019) of which \$10.0 million was paid by TNCs.

In 2019, TNCs accounted for 74% of all trips made by TNCs, taxis, limousines, and shared-ride van services at the two Airports. In 2022, the TNC share of such trips at the two Airports was 77%. The increased use of TNCs contributed to the decreased use of all other airport access modes.

Ground transportation revenues were forecast with numbers of originating passengers, assuming a return to pre-pandemic propensities to use TNCs and other modes, with no increase in per trip fees.

# **Terminal Concession Programs**

MarketPlace Washington, LLC, manages the terminal concession programs covering food, beverage, newsstand, and retail concessions at both Airports under a master developer agreement that, following an extension in 2021, expires in December 2023. Under the agreement, MarketPlace develops and manages the programs, but does not operate any concession facilities. MarketPlace negotiates contracts with each concessionaire using a standard lease that has been approved by the Airports Authority. These contracts generally obligate each concessionaire to pay the greater of a percentage of gross revenues (sales) or a MAG. MarketPlace collects all rents and fees from the concessionaires and retains 9.75% of such gross payments (subject to a maximum amount) as its management fee. The concession revenues recorded by the Airports Authority, as shown in Exhibits E-1, E-2, and E-3, are net of the management fee.

Beginning in April 2020, to acknowledge the reduced concession sales during the pandemic, and as many concession outlets were closed, the Airports Authority waived MAGs for all MarketPlace concessionaires and reduced percentage rents. Such waivers and reduced percentage rents were in effect through September 2021. Thereafter, the contractual MAGs and percentage rents (mostly set between 16% and 18% for food and beverage concessions and between 18% and 20% for newsstand and retail concessions) were gradually reinstated.

COVID-19 relief grants received by the Airports Authority to offset the pandemic-related reductions in concession revenues are included as Revenues in Exhibits E-1, E-2, and E-3.

# Food and Beverage

At the end of 2022, at Reagan, 51 food and beverage outlets occupied approximately 56,000 square feet of terminal space, including space added at Concourse E. In 2019, pre-pandemic, sales from food and beverage concessions totaled \$103.7 million, \$8.68 per enplaned passenger. Net revenues received by the Airports Authority were \$18.4 million, equivalent to 17.7% of sales.

In 2022, at Reagan, sales from food and beverage concessions totaled \$103.2 million, 100% of the 2019 amount, and \$8.62 per enplaned passenger. Net revenues received by the Airports Authority were \$17.1 million, equivalent to 16.6% of sales.

At the end of 2022, at Dulles, 45 food and beverage outlets occupied approximately 71,000 square feet of terminal space. In 2019, pre-pandemic, sales from food and beverage concessions were \$89.9 million, \$7.29 per enplaned passenger. Net revenues received by the Airports Authority were \$17.1 million, equivalent to 19.1% of sales.

In 2022, at Dulles, sales from food and beverage concessions were \$82.2 million, 91% of the 2019 amount, and \$7.76 per enplaned passenger. Net revenues received by the Airports Authority were \$17.1 million, equivalent to 20.7% of sales.

Food and beverage sales at both Airports were forecast to increase with enplaned passengers and price inflation. Revenues to the Airports Authority were forecast assuming effective percentage rents similar to those received in 2019 as contractual provisions are fully reinstated.

# **Newsstand and Retail**

At the end of 2022, at Reagan, 40 newsstand and retail outlets occupied approximately 26,000 square feet of terminal space. In 2019, pre-pandemic, gross revenues for newsstand and retail concessions were \$36.9 million, \$3.09 per enplaned passenger. Net revenues received by the Airports Authority were \$5.5 million, equivalent to 14.9% of sales.

In 2022, at Reagan, sales from newsstand and retail concessions totaled \$39.4 million, 107% of the 2019 amount, and \$3.29 per enplaned passenger. Net revenues received by the Airports Authority were \$5.1 million, equivalent to 12.9% of sales.

At the end of 2021, at Dulles, 45 newsstand and retail outlets occupied approximately 36,000 square feet of terminal space. In 2019, pre-pandemic, gross revenues for newsstand and retail concessions were \$41.3 million, \$3.35 per enplaned passenger. Net revenues received by the Airports Authority were \$9.4 million, equivalent to 22.8% of sales.

In 2022, at Dulles, sales from newsstand and retail concessions were \$34.7 million, 84% of the 2019 amount, and \$3.28 per enplaned passenger. Net revenues received by the Airports Authority were \$6.1 million, equivalent to 17.4% of sales.

As with food and beverage, newsstand and retail revenues were forecast with enplaned passengers and price inflation. Revenues to the Airports Authority were forecast assuming effective percentage rents similar to those received in 2019.

# **Duty Free**

Duty free concessions are managed and operated by Dulles Duty Free, LLC under an agreement that became effective in January 2023 and extends through December 2032. Duty free outlets at Dulles occupy approximately 10,000 square feet and are located in Concourses A, B, C, and D. A small duty free location at Reagan was closed in 2020.

Under the prior duty free agreement with Dulles Duty Free, LLC that was in effect through December 2022 and covered both Airports, payments to the Airports Authority were the greater of 22% of duty free sales or a MAG calculated per international enplaned passenger. The MAG was waived effective April 2020, and revenues to the Airports Authority were paid at the 22% rate through 2022.

In 2019, pre-pandemic, duty free sales for the two Airports combined were \$21.7 million, \$4.97 per enplaned international passenger (96% attributable to Dulles). Duty free revenues received by the Airports Authority were \$14.9 million (the MAG then in effect), equivalent to 68.8% of sales.

In 2020 and 2021, international airline service was discontinued and then drastically reduced, duty free sales and revenues likewise decreased. In 2022, as international airline service resumed, duty free sales were \$17.3 million, 80% of the 2019 amount and \$4.72 per international enplaned passenger (100% attributable to Dulles). Revenues to the Airports Authority were \$2.3 million.

Under the new concession agreement, payments to the Airports Authority are the greater of 22% of duty free sales or fixed MAGs, \$8.2 in 2023 and increasing at 4.3% annually thereafter. Duty free revenues were forecast in proportion to numbers of international enplaned passengers assuming sales per passenger consistent with recent history and effective percentage rents increasing gradually from 20% in 2023 to 35% in 2026.

# **Display Advertising**

Effective March 2016, the Airports Authority entered into a concession agreement with Clear Channel Airports for display advertising at the Airports. The agreement

extends to February 2024 (with an option to extend to February 2026) and provides for the payment of the greater of a percentage of gross revenues (between 60% and 70%) or a MAG (increasing to \$17.0 million in 2023). In 2019, pre-pandemic, the Airports Authority received revenues from display advertising of \$7.6 million at Reagan and \$6.9 million at Dulles.

The Airports Authority reduced the MAG for 2020 and 2021 and received revenues of \$8.2 million and \$10.3 million, respectively, for the two Airports. For 2022, the Airports Authority received the MAG of \$16.5 million. Display advertising revenues were forecast assuming that the MAG of \$17.0 million will be received in 2023 and thereafter.

# **Fixed Base Operations**

At Reagan, Signature Flight Support provides fixed base operator (FBO) services to business and general aviation under a contract that expires in November 2023 with provision for a 5-year extension at the Airport Authority's option. Signature pays the greater of a MAG (\$1.8 million for the contract year ending November 2023) or a percentage of gross revenues for various categories of goods and services.

At Dulles, the Airports Authority recently awarded long-term contracts to two FBOs, Atlantic Aviation (effective June 2023) and Signature Flight Support (effective November 2022). Both FBO contracts expire in October 2042 with provision for two 5-year extensions at the Authority's option. Atlantic Aviation and Signature Flight Support will pay the greater of a MAG (\$21.0 million and \$23.0 million, respectively, for the contract year ending October 2023) or a percentage of gross revenues from various categories of goods and services. The operators will pay annual facility rents in addition.

The FBO contract at Reagan provides for the waiver of the MAG payments in any month in which the number of general aviation flights is less than 75% of the number in the same month of the prior year. At Reagan, such waiver was in effect for certain months in 2020 and 2021, but not in 2022. The prior FBO agreements at Dulles provided for the waiver of MAG payments if the number of general aviation flights was less than 75% of the number in the preceding contract year. At Dulles, the waivers were in effect for certain months in 2020, but not in 2021 or 2022.

Revenues from FBO operations were forecast to increase from budgeted 2023 amounts with price inflation.

# In-Flight Catering

The in-flight catering concession at Reagan is operated by LSG Sky Chefs under a lease that expires in April 2024 (with options for two one-year extensions). LSG Sky

Chefs pays the Airports Authority 12% of gross receipts for on-airport sales and 5% of gross receipts for off-airport sales, subject to a MAG (\$1.4 million in 2023), plus premises rent to cover the cost of utilities that are provided by the Airports Authority.

In-flight catering concessions at Dulles are operated by Gate Gourmet International and LSG Sky Chefs under leases that extend to April 2026. The Dulles leases are similar to those at Reagan, with the operators paying the Airports Authority the same percentages of gross receipts, subject to MAGs (for the two operators \$7.7 million in 2023). In addition, Flying Food Groups operates an in-flight catering facility off-airport at Dulles under the terms of a commercial permit that provides for the payment to the Airports Authority of 12% of all gross receipts. The Airports Authority reduced the MAGs in 2020 and 2021 but not in 2022.

In-flight catering revenues were forecast to increase from budgeted 2023 amounts in proportion to the increase in enplaned passenger numbers and with price inflation.

# **Other Operating Revenues**

Other operating revenues are derived from rentals paid by the TSA and other tenants, utility reimbursements, and miscellaneous other sources. Some building rentals are based on market rates and some, including certain hangars and cargo buildings, are based on cost-recovery rates. Revenues from TSA security fees include the reimbursement of the costs of police coverage of passenger screening activities. Revenues from utilities include reimbursements for metered and billed utility services. At some time in the future, the Airports Authority expects to generate additional revenues from the commercial development of land and buildings at Dulles, but such additional revenues were not taken into account in the forecasts.

#### INVESTMENT EARNINGS

Investment earnings included in Revenues are derived from amounts in funds and accounts other than the Construction Fund and the PFC Fund. Investment earnings were forecast assuming increased fund balances associated with the planned issuance of future Bonds, interest rates on Debt Service Reserve and Bond funds similar to prevailing rates, and interest rates on unrestricted funds reduced from recent levels.

#### APPLICATION OF REVENUES

Exhibit F-1 shows the forecast application of Revenues. Under the Indenture, all Revenues (together with any other available funds, including transfers from the General Purpose Fund) are applied in the following priority:

- 1. Pay Operation and Maintenance Expenses
- 2. Deposit to the Operation and Maintenance Fund any amounts necessary to maintain a reserve balance of 25% of budgeted O&M Expenses.
- 3. Deposit to the Bond Fund Principal and Interest Accounts amounts required to pay Bond principal and interest.
- 4. Deposit to the Bond Fund Redemption Account amounts required to redeem Bonds. (No such payments were forecast to be required.)
- 5. Deposit to the Debt Service Reserve Fund any amounts necessary to maintain required debt service reserves. (No such payments were forecast to be required.)
- 6. Pay any required debt service on Subordinated Bonds. (No Subordinated Bonds are outstanding or expected to be issued and no such debt service payments were forecast to be required.)
- 7. Replenish any required Subordinated Bond Reserve Funds. (No such payments were forecast to be required.)
- 8. Pay any required debt service on Junior Lien Obligations. (No such payments were forecast to be required.)
- 9. Make annual payments required under the Federal Lease.
- 10. Replenish any amounts withdrawn from the Emergency Repair and Rehabilitation Fund in the preceding year. (No such payments were forecast to be required.)
- 11. Deposit all remaining amounts into the General Purpose Fund.

Amounts in the General Purpose Fund are not pledged to Bondholders and are available for use by the Airports Authority for any legal purpose, provided that any moneys required to be transferred to the Revenue Fund, including those to be transferred under the provisions of the Airline Agreement, are not to be applied for any other purpose.

Any termination payments under Swap Agreements are payable from funds subordinated to Bonds, Commercial Paper Notes, Subordinated Bonds, and Junior Lien Obligations. (No such payments were forecast to be required.)

#### SHARING OF NET REMAINING REVENUES

Exhibit F-1 shows the forecast calculation of Net Remaining Revenues (NRR) and its allocation between the Airports Authority (transfer to the Capital Fund) and the Signatory Airlines (transfer to the Airline Transfer Account) as provided for under the Airline Agreement.

At Reagan, NRR was or is to be split, for amounts generated in 2019 through 2023, 45% Authority, 55% Signatory Airlines. The sharing of NRR generated in 2024 and thereafter will be as specified in any airline agreement that succeeds the current Airline Agreement. For the financial forecasts, the same 45%-55% split as applies for 2023 was assumed for 2024 through 2028. The Airports Authority may use its share of NRR generated at Reagan to reduce required Signatory Airline rentals, fees, and charges at Dulles in the amounts discussed in the earlier section, "Airline Agreement."

At Dulles, NRR is to be split 50%-50% up to a "plateau" amount, which is to be increased annually with an inflation index. The plateau amount for 2022 was \$18.5 million. Remaining NRR above the plateau amount is to be split 25% to the Airports Authority and 75% to the Signatory Airlines. For the financial forecasts, the same 25%-75% split as applies for 2023 was assumed for 2024 through 2028.

#### APPLICATION OF PFC REVENUES

Exhibits F-2 and F-3 show historical and forecast PFC Revenues (not taking into account investment earnings) and the use of such PFC Revenues to pay PFC-eligible project costs pay-as-you-go or to pay PFC-eligible Bond debt service.

As shown in Exhibit F-2, the Airports Authority intends to use future PFC Revenues generated at Reagan to pay for the station component of the Dulles Metrorail Project (pay-as-you-go), as approved under Reagan PFC Applications 6 and 7, for the track component of the Dulles Metrorail Project (pay-as-you-go), as approved under Reagan PFC Application 8, and for the payment of Bond debt service.

As shown in Exhibit F-3, the Airports Authority intends to use all future PFC Revenues generated at Dulles for the payment of Bond debt service.

#### **DEBT SERVICE COVERAGE**

Exhibit G-1 shows historical and forecast coverage of Bond debt service by Net Revenues for the Aviation Enterprise. Exhibits G-2 and G-3 present historical and forecast debt service coverage for Reagan and Dulles, respectively. The amount of transfers from the General Purpose Fund is assumed to be the entire amount of the Signatory Airlines' share of NRR at each Airport per the Airline Agreement.

Exhibit G-1 also shows the calculation of the sufficiency of forecast Net Revenue to meet the requirements of the Rate Covenant, which requires that Net Revenues be sufficient to provide for the larger of the Indenture Section 6.04(a)(i) requirement or the Indenture Section 6.04(a)(ii) requirement. Net Revenues are projected to be sufficient to meet the requirements of the Rate Covenant each year of the projection period.

#### FINANCIAL FORECASTS AND STRESS TEST PROJECTIONS

Exhibit H-1 through H-3 summarize the financial results under the Base and Stress Test passenger assumptions for the Airports Authority, Reagan, and Dulles, respectively.

For the Stress Test projections, the CCP was assumed to be implemented to the same schedule as for the Base case, notwithstanding the reduced passenger traffic, and to be funded with the same amounts of Bond proceeds and other funds.

Other assumptions underlying the Stress Test projections are the same as those for the Base case, except revenues related to passenger numbers, such as PFC Revenues, concession revenues, parking revenues, and rental car revenues, were projected to be lower. O&M Expenses were assumed to be the same for the Base and Stress Test scenarios.

Under the Stress Test, Bond debt service coverage ratios are projected to exceed the 125% requirement of the Rate Covenant and Extraordinary Coverage Protection Payments from the Signatory Airlines are not projected to be required at either Reagan or Dulles. As shown in Exhibits H-1 through H-3, balances in the PFC Fund would be reduced, and required airline payments per passenger at the Airports would be increased, relative to those for the Base passenger assumptions.

#### Exhibit A

#### CAPITAL CONSTRUCTION PROGRAM

Metropolitan Washington Airports Authority (dollars in thousands)

										Sources	of fu	ınds						
	Inf	ated project					Aiı	ports Authority		Pay-as-you-go					Pr	oposed 2023A		
		costs	FA	AA grants	_	BIL grants		Funds	_	PFC Revenues		WMATA	_	Prior Bonds	_	Bonds	Plar	nned Bonds
Reagan National Airport																		
Projects in progress and planned																		
Concourse E (a)	\$	364,114	\$	-	\$	-	\$	-	\$	29,600	\$	-	\$	325,592	\$	312	\$	8,610
Concourse E enabling projects (a)		156,375		-		-		-		7,900		-		117,618		8,655		22,202
Secure National Hall		296,534		-		-		-		37,500		-		241,599		145		17,290
Terminal 1 rehabilitation		86,610		-		-		-		-		-		14,226		1,051		71,333
New parking garage		78,500		-		-		-		-		-		-		3,269		75,230
Terminal 2 redevelopment		44,684		-		-		-		-		-		-		26,359		18,324
Roadway improvements		14,910		-		-		-		-		-		330		1,518		13,062
Utility system upgrades		99,185		-		-		-		-		-		37,154		17,919		44,112
Airfield pavement rehabilitation		369,108		113,100		-		-		-		-		3,322		11,330		241,356
Other projects		199,184		27,298		-	_	_		-			_	78,518		27,295		66,073
Total CCP for Reagan National Airport	\$	1,709,204	\$	140,398	\$	-	\$	-	\$	75,000	\$	-	\$	818,360	\$	97,854	\$	577,592

Exhibit A (page 2 of 2)

#### CAPITAL CONSTRUCTION PROGRAM

Metropolitan Washington Airports Authority (dollars in thousands)

(action in the action)										Sources	of fu	ınds					
	Inf	lated project					Airp	ports Authority	Р	ay-as-you-go				Pro	posed 2023A		
		costs	F	AA grants		BIL grants		Funds	Р	PFC Revenues		WMATA	Prior Bonds		Bonds	Pla	anned Bonds
Dulles International Airport																	
Projects in progress and planned																	
Tier 2 Concourse (East)	\$	769,078	\$	-	\$	166,953	\$	46,575	\$	-	\$	-	\$ 6,075	\$	49,098	\$	500,377
Airfield improvements		247,910		96,698		-		-		-		-	30,245		28,447		92,520
Contribution to Dulles Metrorail Project		243,494		-		-		-		230,684		12,810	-		-		-
Additional aircraft gates (Z gates)		72,866		-		-		-		-		-	-		3,840		69,026
Main terminal improvements		56,883		-		-		-		-		-	7,134		1,666		48,083
Upgrades to Concourse B		29,013		-		-		-		-		-	8,066		3,353		17,594
Upgrades to Concourses C and D		127,663		-		-		-		-		-	78,512		12,158		36,993
AeroTrain renewal and replacement		66,593		-		-		-		-		-	29,492		7,798		29,302
Mobile lounge rehabilitation		42,428		-		-		-		-		-	579		3,482		38,366
Utility system upgrades		115,707		-		-		-		-		-	47,222		23,193		45,292
Access Highway improvements		39,044		-		-		-		-		-	14,365		8,287		16,392
Parking and roadway projects		12,794		-		-		-		-		-	12,121		-		673
Other projects		150,976		11,796	_	_							80,804		24,780		33,596
Total CCP for Dulles International Airport	\$	1,974,449	\$	108,494	\$	166,953	\$	46,575	\$	230,684	\$	12,810	\$ 314,616	\$	166,101	\$	928,215
Total CCP	\$	3,683,653	\$	248,893	\$	166,953	\$	46,575	\$	305,684	\$	12,810	\$ 1,132,976	\$	263,956	\$	1,505,806

Source: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Project costs include pending and potential claims that are shown as being funded primarily with planned Bonds.

#### Exhibit B

#### SOURCES AND USES OF BOND FUNDS

Metropolitan Washington Airports Authority (dollars in thousands)

#### Proposed 2023A

	 Bonds	Pla	nned Bonds
Sources of funds			
Par amount of Bonds	\$ 311,030	\$	1,833,740
Original issue premium (discount)	8,335		-
Contribution from Debt Service Fund	 -		
Total sources	\$ 319,365	\$	1,833,740
Uses of funds			
Construction Fund	\$ 263,956	\$	1,505,806
Capitalized Interest	30,600		174,600
Debt Service Reserve Fund	21,694		134,992
Costs of issuance	 3,115		18,342
Total uses	\$ 319,365	\$	1,833,740

Source: Frasca & Associates, LLC, March 24, 2023 (based on information provided by the Metropolitan Washington Airports Authority).

Columns may not add to totals shown because of rounding.

#### Exhibit C-1

#### ANNUAL DEBT SERVICE

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

			Histo	orica	ıl						For	ecast	:			
	2019		2020		2021	2022		2023		2024	2025		2026	2027		2028
Bonds by Series																
2003D	\$ 3,442	\$	2,955	\$	1,709	\$ -	\$	-	\$	-	\$ -	\$	-	\$ -	\$	-
2009B-D	28,055		8,936		9,160	1,980		2,008		2,008	2,008		2,008	2,008		2,008
2010A-D & F1	62,173		62,215		27,075	5,095		4,504		4,521	4,537		4,537	4,538		4,538
2011A-D	52,292		52,454		33,132	1,373		1,337		1,347	1,357		1,363	1,365		1,365
2012A-B	27,001		24,218		24,315	16,684		-		-	-		-	-		-
2013A-C	22,303		25,494		25,682	23,939		18,685		17,554	17,555		17,564	17,576		17,573
2014A	43,546		35,741		37,496	49,277		49,146		44,145	26,920		26,620	51,162		60,204
2015A-D	30,523		28,295		22,751	25,355		25,303		22,891	22,991		23,168	23,199		23,201
2016A-B	17,995		18,552		19,791	19,756		19,767		19,777	19,766		19,766	19,905		19,902
2017A	31,755		36,068		43,927	40,510		48,328		45,633	45,968		58,102	39,454		38,329
2018A	27,177		35,184		31,552	50,140		49,921		47,375	39,232		43,342	45,252		47,895
2019A-B	7,795		19,217		25,193	32,727		35,787		35,662	36,696		37,709	37,614		37,802
2020A-B	-		10,613		37,558	45,489		32,976		54,650	35,005		22,091	17,928		15,080
2021A-B	-		-		14,900	58,055		58,570		74,588	78,842		92,135	93,659		80,408
2022A	-	_	-		-	 -	_	23,224	_	22,911	 22,916		22,918	 22,915	_	33,515
Total Outstanding	\$ 354,057	\$	359,941	\$	354,241	\$ 370,380	\$	369,554	\$	393,062	\$ 353,793	\$	371,323	\$ 376,573	\$	381,819
Proposed 2023A Bonds	\$ -	\$	-	\$	-	\$ -	\$	138	\$	1,752	\$ 7,928	\$	15,961	\$ 20,286	\$	21,284
Planned Bonds	\$ 	\$		\$	_	\$ 	\$		\$	536	\$ 10,463	\$	45,169	\$ 101,710	\$	117,694
Total Bonds	\$ 354,057	\$	359,941	\$	354,241	\$ 370,380	\$	369,692	\$	395,349	\$ 372,185	\$	432,454	\$ 498,570	\$	520,798
Less: Application of PFC Revenues																
PFC-approved (b)	\$ (47,400)	\$	(20,580)	\$	(26,263)	\$ (39,000)	\$	(50,400)	\$	(51,000)	\$ (51,300)	\$	(51,800)	\$ (53,800)	\$	(55,900)
PFC-approved (c)	(5,847)		(4,710)		(4,852)	(6,058)		(5,628)		(4,976)	(6,123)		(4,883)	(4,835)		(5,381)
PFC-approved (d)					(8,257)	(16,200)		(15,559)		(15,566)	(15,797)		(15,796)	(15,788)		(15,793)
Total Annual Debt Service	\$ 300,810	\$	334,651	\$	314,869	\$ 309,122	\$	298,105	\$	323,807	\$ 298,965	\$	359,975	\$ 424,147	\$	443,724

Source: Frasca & Associates, LLC, March 24, 2023 (based on information provided by the Metropolitan Washington Airports Authority). Columns may not add to totals shown because of rounding.

<sup>(</sup>b) As approved by the FAA under Dulles PFC Application 4.

<sup>(</sup>c) As approved by the FAA under Reagan PFC Application 6.

<sup>(</sup>d) As approved by the FAA under Reagan PFC Application 7.

Exhibit C-2

#### ANNUAL DEBT SERVICE BY COST CENTER

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

			Histo	orical							For	ecast					
		2019	2020		2021	2022		2023	2024		2025		2026		2027		2028
Reagan National Airport			 						 							_	
Airfield		\$11,767	\$12,753		\$10,930	\$9,978		\$6,113	\$6,814		\$3,232		\$6,107		\$16,903		\$28,664
Terminal 1		4,608	5,544		4,950	4,503		5,633	5,344		5,350		7,805		12,259		12,878
Terminal 2		26,322	25,641		28,301	41,407		45,484	41,650		30,949		34,959		34,068		33,790
Tenant Equipment		1,318	1,318		1,318	1,318		1,318	1,318		1,318						
Subtotal Airline Supported Areas	\$	44,015	\$ 45,256	\$	45,499	\$ 57,205	\$	58,548	\$ 55,125	\$	40,849	\$	48,872	\$	63,230	\$	75,331
Ground Transportation	\$	24,037	\$ 15,874	\$	15,028	\$ 13,195	\$	11,540	\$ 11,772	\$	9,832	\$	11,117	\$	10,646	\$	9,201
Aviation		2,365	3,482		2,597	1,513		1,765	1,505		916		968		908		808
Nonaviation						 								_			_
Subtotal Nonairline Supported Areas	\$	26,402	\$ 19,356	\$	17,626	\$ 14,708	\$	13,304	\$ 13,277	\$	10,748	\$	12,085	\$	11,554	\$	10,009
Maintenance	\$	644	\$ 677	\$	540	\$ 339	\$	411	\$ 439	\$	266	\$	279	\$	268	\$	234
Public Safety		2,728	3,255		3,582	3,038		4,077	4,451		4,435		4,609		4,394		4,886
Administration		3,915	5,461		4,918	4,910		5,753	6,346		7,796		11,238		12,001		12,308
Systems & Services	_	4,370	 6,765		6,454	 5,559	_	6,760	 6,763	_	7,111	_	9,438	_	9,308	_	9,124
Subtotal Indirect Cost Centers	\$	11,657	\$ 16,157	\$	15,494	\$ 13,846	\$	17,000	\$ 17,999	\$	19,608	\$	25,564	\$	25,972	\$	26,552
Total Reagan National Airport	\$	82,074	\$ 80,769	\$	78,619	\$ 85,759	\$	88,853	\$ 86,402	\$	71,205	\$	86,521	\$	100,756	\$	111,892
Allocation of Indirect Cost Centers																	
Airline Supported Areas	\$	10,597	\$ 13,884	\$	13,124	\$ 11,447	\$	14,271	\$ 14,526	\$	15,746	\$	20,388	\$	20,633	\$	21,107
Nonairline Supported Areas		1,060	2,273		2,370	2,399		2,729	3,473		3,863		5,176		5,339		5,445
	\$	11,657	\$ 16,157	\$	15,494	\$ 13,846	\$	17,000	\$ 17,999	\$	19,608	\$	25,564	\$	25,972	\$	26,552

Source: Frasca & Associates, LLC, March 24, 2023 (based on information provided by the Metropolitan Washington Airports Authority).

Columns may not add to totals shown because of rounding.

Exhibit C-3

#### ANNUAL DEBT SERVICE BY COST CENTER

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

		Histo	orica	I							Fore	ecas	t			
	2019	2020		2021		2022		2023		2024	2025		2026		2027	2028
Dulles International Airport			_		_		_		_					_		
Airfield	\$32,229	\$36,266		\$33,543		\$31,455		\$33,663		\$38,500	\$37,536		\$49,593		\$59,482	\$59,388
Concourses C & D	6,014	6,299		7,201		6,030		6,573		10,079	10,975		13,955		15,131	15,159
Concourse B	5,440	6,294		5,589		5,263		3,719		4,107	4,063		4,361		4,853	5,346
Main Terminal	52,081	54,820		49,057		46,867		44,991		48,965	40,137		41,654		44,251	44,474
International Arrivals Building	9,060	9,401		9,677		9,552		10,183		12,864	11,107		10,939		10,104	8,371
Concourse C I A B	493	469		0		0		0		0	0		0		0	0
Concourse A and Tier 2 Concourse (East)	267	303		255		215		305		149	263		9,348		39,551	39,775
Z Gates	351	314		279		237		328		405	838		4,566		8,048	8,399
Passenger Conveyance	44,894	60,581		59,970		61,588		39,844		42,758	36,816		43,378		39,105	45,628
Tenant Equipment	905	894		802		736		912		1,264	627		592		567	211
Subtotal Airline Supported Areas	\$ 151,734	\$ 175,640	\$	166,373	\$	161,944	\$	140,517	\$	159,092	\$ 142,362	\$	178,387	\$	221,091	\$ 226,750
Ground Transportation	\$ 16,394	\$ 18,331	\$	16,887	\$	13,442	\$	17,717	\$	20,786	\$ 22,898	\$	25,088	\$	25,799	\$ 25,260
Aviation	10,582	12,373		11,386		10,225		11,661		13,871	13,514		13,639		14,959	14,774
Nonaviation	1,071	1,324		1,176		652		498		386	704		798		1,269	1,427
Cargo	1,457	1,560		1,340		1,223		1,633		2,332	1,990		1,888		1,871	1,645
Subtotal Nonairline Supported Areas	\$ 29,505	\$ 33,588	\$	30,788	\$	25,542	\$	31,509	\$	37,375	\$ 39,106	\$	41,414	\$	43,898	\$ 43,106
Maintenance	\$ 5,207	\$ 6,434	\$	5,520	\$	5,037	\$	3,162	\$	3,573	\$ 3,309	\$	3,620	\$	3,392	\$ 3,709
Public Safety	3,402	3,864		2,662		2,476		2,815		3,131	3,123		4,604		5,050	5,055
Administration	12,586	15,267		14,020		12,777		13,915		15,329	17,834		20,355		20,992	22,107
Systems & Services	16,303	19,089		16,888		15,588		17,333		18,906	22,025		25,075		28,968	31,105
Subtotal Indirect Cost Centers	\$ 37,498	\$ 44,654	\$	39,091	\$	35,878	\$	37,225	\$	40,939	\$ 46,292	\$	53,654	\$	58,402	\$ 61,976
Total Dulles International Airport	\$ 218,736	\$ 253,883	\$	236,251	\$	223,363	\$	209,252	\$	237,406	\$ 227,760	\$	273,455	\$	323,391	\$ 331,832
Allocation of Indirect Cost Centers																
Airline Supported Areas	\$ 30,786	\$ 31,622	\$	27,817	\$	21,492	\$	24,483	\$	27,712	\$ 31,451	\$	36,680	\$	40,370	\$ 42,883
Nonairline Supported Areas	6,712	13,032		11,274		14,385		12,742		13,226	14,841		16,973		18,032	19,093
	\$ 37,498	\$ 44,654	\$	39,091	\$	35,878	\$	37,225	\$	40,939	\$ 46,292	\$	53,654	\$	58,402	\$ 61,976

Source: Frasca & Associates, LLC, March 24, 2023 (based on information provided by the Metropolitan Washington Airports Authority). Columns may not add to totals shown because of rounding.

#### Exhibit D-1

#### **OPERATION AND MAINTENANCE EXPENSES**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Airports Authority		Histo	orica	l								For	ecas	t		
	 2019	 2020		2021	_	2022	_	2023	_	2024	_	2025		2026	 2027	 2028
Personnel expenses	\$ 188,323	\$ 192,503	\$	182,050	\$	178,798	\$	204,084	\$	214,290	\$	222,860	\$	229,567	\$ 236,454	\$ 243,548
Utilities	26,201	22,343		22,451		31,200		42,260		45,218		47,479		48,903	50,370	51,881
Services	110,361	117,667		117,780		132,701		157,943		168,999		177,451		184,764	190,545	196,586
Supplies and materials	18,292	14,561		18,982		29,115		20,781		22,238		23,351		24,073	24,800	25,547
Miscellaneous	9,932	16,714		14,815		11,111		20,095		21,502		22,575		23,391	24,112	24,878
Equipment and facility expense	 -	-			_										-	
Total Airports (a) (b)	\$ 353,109	\$ 363,788	\$	356,078	\$	382,926	\$	445,163	\$	472,247	\$	493,716	\$	510,699	\$ 526,281	\$ 542,441
Annual percent change	2.0%	3.0%		-2.1%		7.5%		16.3%		6.1%		4.5%		3.4%	3.1%	3.1%

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Expenses for 2019 excludes expenses and fees under the parking management agreement.

<sup>(</sup>b) Excludes the Federal Lease Payment.

#### Exhibit D-2

#### **OPERATION AND MAINTENANCE EXPENSES**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Reagan National Airport			Histo	orica	l								For	ecas	t				
	2019		2020		2021		2022		2023		2024		2025		2026		2027		2028
Summary by Account						_													
Personnel expenses	\$ 88,794	\$	91,511	\$	85,623	\$	84,595	\$	95,468	\$	100,242	\$	104,251	\$	107,378	\$	110,598	\$	113,917
Utilities	9,157		7,474		7,904		10,614		16,036		17,158		18,016		18,556		19,113		19,686
Services	38,899		43,172		43,937		51,185		62,473		66,846		70,188		72,294		74,462		76,974
Supplies and materials	5,773		4,758		6,698		8,697		6,217		6,653		6,986		7,196		7,413		7,638
Miscellaneous	7,550		10,453		9,379		6,654		13,346		14,280		14,993		15,442		15,906		16,420
Equipment and facility expense	 	_		_		_		_		_		_		_		_		_	
Total	\$ 150,173	\$	157,368	\$	153,540	\$	161,745	\$	193,540	\$	205,179	\$	214,434	\$	220,866	\$	227,492	\$	234,635
Summary by Cost Center																			
Airfield	\$ 11,376	\$	10,525	\$	11,411	\$	11,543	\$	13,356	\$	14,212	\$	14,882	\$	15,328	\$	15,788	\$	16,261
Terminal 1	4,064		4,015		5,638		4,614		5,840		6,248		6,560		6,757		6,960		7,488
Terminal 2	 13,932		11,488		12,398		15,593		20,859		22,319		23,435		24,138		24,863		25,609
Subtotal Airline Supported Areas	\$ 29,372	\$	26,028	\$	29,447	\$	31,751	\$	40,055	\$	42,779	\$	44,877	\$	46,223	\$	47,611	\$	49,358
Ground Transportation (a)	\$ 7,363	\$	15,235	\$	14,832	\$	18,689	\$	22,600	\$	24,150	\$	25,340	\$	26,101	\$	26,884	\$	27,691
Aviation	929		837		602		743		1,297		1,388		1,457		1,500		1,544		1,590
Nonaviation	 7		5		5	_	7		9	_	10	_	11		11		11	_	11
Subtotal Nonairline Supported Areas	\$ 8,299	\$	16,078	\$	15,439	\$	19,439	\$	23,906	\$	25,548	\$	26,808	\$	27,612	\$	28,439	\$	29,292
Maintenance	\$ 14,384	\$	13,963	\$	12,758	\$	13,878	\$	15,087	\$	15,900	\$	16,567	\$	17,064	\$	17,575	\$	18,102
Public Safety	29,144		29,078		27,233		25,847		29,023		30,505		31,741		32,693		33,674		34,684
Administration	55,537		58,532		55,087		53,951		62,687		66,174		69,009		71,080		73,213		75,410
Systems & Services	 13,437	_	13,690	_	13,576	_	16,880		22,781		24,273		25,432	_	26,194	_	26,980		27,789
Subtotal Indirect Cost Centers	\$ 112,501	\$	115,263	\$	108,655	\$	110,555	\$	129,578	\$	136,852	\$	142,749	\$	147,031	\$	151,442	\$	155,985
Total	\$ 150,173	\$	157,368	\$	153,540	\$	161,745	\$	193,540	\$	205,179	\$	214,434	\$	220,866	\$	227,492	\$	234,635
Annual percent change	1.4%		4.8%		-2.4%		5.3%		19.7%		6.0%		4.5%		3.0%		3.0%		3.1%
Allocation of Indirect Cost Centers																			
Airline Supported Areas	\$ 98,986	\$	90,272	\$	85,575	\$	85,598	\$	102,213	\$	104,944	\$	109,454	\$	112,737	\$	116,120	\$	119,686
Nonairline Supported Areas	 13,515		24,991		23,079	_	24,957	_	27,365		31,908		33,295		34,294		35,322		36,299
	\$ 112,501	\$	115,263	\$	108,655	\$	110,555	\$	129,578	\$	136,852	\$	142,749	\$	147,031	\$	151,442	\$	155,985

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Expenses for 2019 excludes expenses and fees under the parking management agreement.

#### Exhibit D-3

#### **OPERATION AND MAINTENANCE EXPENSES**

Metropolitan Washington Airports Authority
For Fiscal Years ending December 31
(dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Dulles International Airport				Histo	orica	I								For	ecas	t			
		2019		2020		2021		2022		2023		2024		2025		2026	2027		2028
Summary by Account			_		_		_		_		_		_				 		
Personnel expenses	\$	99,529	\$	100,992	\$	96,427	\$	94,203	\$	108,616	\$	114,048	\$	118,609	\$	122,189	\$ 125,856	\$	129,631
Utilities		17,044		14,869		14,547		20,586		26,225		28,060		29,463		30,347	31,257		32,195
Services		71,462		74,495		73,843		81,516		95,470		102,153		107,263		112,470	116,083		119,612
Supplies and materials		12,519		9,803		12,285		20,419		14,564		15,585		16,365		16,877	17,387		17,909
Miscellaneous		2,383		6,261		5,436		4,456		6,749		7,222		7,582		7,949	8,206		8,458
Equipment and facility expense				-								-		_		_	 _		_
Total	\$	202,936	\$	206,420	\$	202,538	\$	221,181	\$	251,624	\$	267,068	\$	279,282	\$	289,833	\$ 298,789	\$	307,806
Summary by Cost Center																			
Airfield	\$	16,656	\$	9,608	\$	11,291	\$	11,648	\$	12,957	\$	13,841	\$	14,521	\$	14,957	\$ 15,406	\$	15,868
Concourses C & D		4,753		3,733		3,776		4,769		5,632		6,025		6,325		6,515	6,711		6,913
Concourse B		5,210		4,496		4,208		4,715		5,517		5,901		6,195		6,381	6,573		6,771
Main Terminal		11,638		11,727		12,684		12,376		14,861		15,900		16,695		17,197	17,714		18,246
International Arrivals Building		1,875		1,671		1,699		1,816		2,121		2,269		2,383		2,454	2,527		2,602
Concourse C IAB		299		237		240		291		344		369		387		399	411		423
Concourse A and Tier 2 Concourse (East)		1,724		1,344		1,377		1,607		1,878		2,010		2,110		4,345	4,735		4,928
Z Gates		307		56		80		264		297		317		333		343	354		365
Passenger Conveyance		30,276		32,084		31,241		18,016		20,577		21,761		22,715		23,396	 24,098		24,821
Subtotal Airline Supported Areas	\$	72,739	\$	64,955	\$	66,596	\$	55,503	\$	64,184	\$	68,393	\$	71,664	\$	75,987	\$ 78,529	\$	80,937
Ground Transportation (a)	\$	14,762	\$	20,360	\$	19,696	\$	24,014	\$	27,494	\$	29,335	\$	30,758	\$	31,681	\$ 32,632	\$	33,611
Aviation		318		332		274		525		653		700		735		757	780		803
Nonaviation		(1,406)		572		684		1,194		1,431		1,531		1,607		1,655	1,704		1,756
Cargo	_	730		1,106		1,386	_	1,484	_	1,774		1,893	_	1,984	_	2,043	2,103	_	2,166
Subtotal Nonairline Supported Areas	\$	14,405	\$	22,369	\$	22,041	\$	27,217	\$	31,352	\$	33,459	\$	35,084	\$	36,136	\$ 37,219	\$	38,336
Maintenance	\$	26,032	\$	25,404	\$	24,737	\$	26,930	\$	28,474	\$	30,060	\$	31,349	\$	32,289	\$ 33,258	\$	34,256
Public Safety		28,328		28,938		28,691		33,064		35,025		36,898		38,439		39,593	40,781		42,005
Administration		36,832		42,940		39,883		51,552		59,326		62,791		65,570		67,536	69,562		71,649
Systems & Services		24,600		21,813		20,590		26,915		33,263		35,467		37,176		38,292	 39,440		40,623
Subtotal Indirect Cost Centers	\$	115,793	\$	119,095	\$	113,901	\$	138,462	\$	156,088	\$	165,216	\$	172,534	\$	177,710	\$ 183,041	\$	188,533
Total	\$	202,936	\$	206,420	\$	202,538	\$	221,181	\$	251,624	\$	267,068	\$	279,282	\$	289,833	\$ 298,789	\$	307,806
Annual percent change		2.4%		1.7%		-1.9%		9.2%		13.8%		6.1%		4.6%		3.8%	3.1%		3.0%

Exhibit D-3 (page 2 of 2)

#### **OPERATION AND MAINTENANCE EXPENSES**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

<b>Dulles International Airport</b>			Histo	orica	l								For	ecas	t				
	 2019	_	2020	_	2021	_	2022	_	2023	_	2024	_	2025	_	2026	_	2027	_	2028
Allocation of Indirect Cost Centers																			
Airline Supported Areas	\$ 91,178	\$	82,648	\$	78,110	\$	82,610	\$	97,317	\$	106,258	\$	111,000	\$	115,265	\$	119,685	\$	123,290
Nonairline Supported Areas	 24,614		36,448		35,791		55,852		58,771	_	58,958		61,534		62,445		63,356		65,243
	\$ 115,793	\$	119,095	\$	113,901	\$	138,462	\$	156,088	\$	165,216	\$	172,534	\$	177,710	\$	183,041	\$	188,533

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Expenses for 2019 excludes expenses and fees under the parking management agreement.

Exhibit E-1

#### **REVENUES**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Airports Authority				Histo	orica	l								For	ecas	t				
Base Passenger Forecast		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028
Airline revenues			_				_		_				_						_	
Terminal rents and user fees	\$	214,347	\$	206,146	\$	197,458	\$	228,577	\$	192,691	\$	206,796	\$	220,624	\$	257,145	\$	292,977	\$	304,108
Landing and apron fees		89,654		51,932		50,247		72,303		79,430		70,576		90,604		109,445		137,128		151,589
International Arrival Building fees		16,286		4,578		7,072		18,962		17,770		21,624		19,095		21,007		20,586		20,732
Passenger conveyance fees		6,292		2,713		1,555		5,054	_	4,892	_	8,269	_	10,901	_	10,398	_	16,108		18,887
Total airline revenues	\$	326,578	\$	265,369	\$	256,332	\$	324,896	\$	294,783	\$	307,266	\$	341,224	\$	397,995	\$	466,800	\$	495,316
Annual percent change		-3.8%		-18.7%		-3.4%		26.7%		-9.3%		4.2%		11.1%		16.6%		17.3%		6.1%
Airline revenues as a share of total Revenues		42.5%		52.2%		43.8%		40.6%		36.7%		36.3%		38.2%		41.3%		44.5%		45.4%
Concession revenues																				
Landside concession revenues																				
Public parking (a)	\$	97,647	\$	39,071	ċ	79,649	\$	142,676	Ś	156,870	ė	162,404	ė	165,305	Ś	168,205	Ś	171,574	خ	174,943
Rental car	Ş	46,155	Ş	21,838	Ş	39,120	Ą	52,294	Ş	51,918	Ş	53,354	Ş	55,414	Ş	57,135	Ş	59,041	Ą	60,995
Ground transportation		45,428		15,492		20,331		40,335		45,710		48,215		48,898		49,580		50,353		51,125
·	_		_		_		_		_		-		_		_		_		_	
Subtotal	\$	189,230	\$	76,401	\$	139,101	\$	235,304	\$	254,498	\$	263,974	Ş	269,616	\$	274,920	\$	280,967	\$	287,063
Originating passengers		19,140		5,836		10,232		16,705		18,225		18,525		18,825		19,125		19,470		19,815
Revenue per originating passenger	\$	9.89	\$	13.09	\$	13.59	\$	14.09	\$	13.96	\$	14.25	\$	14.32	\$	14.37	\$	14.43	\$	14.49
In-terminal concession revenues																				
Food and beverage	\$	35,509	\$	10,672	\$	14,426	\$	34,136	\$	35,108	\$	38,703	\$	41,844	\$	43,424	\$	45,342	\$	47,320
Newsstand and retail		14,848		4,844		6,208		11,145		13,484		15,880		16,674		17,332		18,146		18,985
Duty free		14,898		3,075		2,232		2,304		4,704		7,499		7,499		8,536		9,128		9,740
Display advertising		14,587		8,245		10,302		16,045		17,000		17,000		17,000		17,000		17,000		17,000
Other concessions		12,431		5,763		6,869		8,152		7,800		8,112		8,355		8,522		8,693		8,867
Subtotal	\$	92,273	\$	32,598	\$	40,037	\$	71,781	\$	78,096	\$	87,193	\$	91,373	\$	94,814	\$	98,308	\$	101,912
Enplaned passengers		24,276		7,851		14,434		22,555		24,700		25,150		25,600		26,050		26,675		27,300
Revenue per enplaned passenger	\$	3.80	\$	4.15	\$	2.77	\$	3.18	\$	3.16	\$	3.47	\$	3.57	\$	3.64	\$	3.69	\$	3.73

Exhibit E-1 (page 2 of 2)

**REVENUES** 

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

Airports Authority	_			Histo	orica	I								For	ecas	t				
		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028
Airside concession revenues																				
Fixed base operator	\$	32,381	\$	25,068	\$	33,443	\$	35,633	\$	40,578	\$	42,201	\$	43,467	\$	44,336	\$	45,223	\$	46,128
Inflight kitchen		19,423	_	9,682	_	12,576	_	17,492	_	15,205	_	16,223	_	17,133	_	17,906	_	18,913	_	19,954
Subtotal	\$	51,804	\$	34,750	\$	46,019	\$	53,125	\$	55,783	\$	58,424	\$	60,600	\$	62,243	\$	64,137	\$	66,081
Total concession revenues	\$	333,307	\$	143,749	\$	225,156	\$	360,211	\$	388,376	\$	409,592	\$	421,588	\$	431,976	\$	443,412	\$	455,056
Annual percent change		3.9%		-56.9%		56.6%		60.0%		7.8%		5.5%		2.9%		2.5%		2.6%		2.6%
COVID-19 relief grants (b)	\$	-	\$	-	\$	5,029	\$	20,115	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Other operating revenues																				
Land and building rentals	\$	44,882	\$	47,048	\$	52,058	\$	52,692	\$	52,425	\$	56,962	\$	57,489	\$	58,862	\$	61,613	\$	62,490
TSA rentals		934		937		934		927		934		971		1,000		1,021		1,042		1,063
Utility reimbursements		8,617		11,760		12,438		13,809		13,918		14,477		14,914		15,214		15,522		15,836
Other revenues		12,115		11,112		21,415		11,677		11,412		11,831		12,158		12,382		12,611	_	12,844
Total other operating revenues	\$	66,549	\$	70,856	\$	86,846	\$	79,105	\$	78,690	\$	84,241	\$	85,561	\$	87,479	\$	90,788	\$	92,233
Annual percent change		-1.3%		6.5%		22.6%		-8.9%		-0.5%		7.1%		1.6%		2.2%		3.8%		1.6%
Investment earnings																				
Debt Service Reserve Fund	\$	8,645	\$	7,718	\$	8,154	\$	8,576	\$	12,863	\$	14,289	\$	15,131	\$	15,997	\$	15,997	\$	15,997
Bond funds		9,449		2,258		614		5,168		15,489		15,845		16,055		16,272		16,272		16,272
Unrestricted funds		23,465		18,135		2,687		2,588		14,068		14,307		14,536		14,754		14,961	_	15,156
Total investment earnings	\$	41,559	\$	28,112	\$	11,455	\$	16,332	\$	42,420	\$	44,441	\$	45,722	\$	47,023	\$	47,230	\$	47,425
Annual percent change		43.6%		-32.4%		-59.3%		42.6%		159.7%		4.8%		2.9%		2.8%		0.4%		0.4%
Total Revenues	\$	767,993	\$	508,085	\$	584,818	\$	800,658	\$	804,269	\$	845,540	\$	894,096	\$	964,474	\$	1,048,230	\$	1,090,030
Annual percent change		1.5%		-33.8%		15.1%	_	36.9%	_	0.5%	_	5.1%		5.7%	_	7.9%	_	8.7%		4.0%

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Parking revenues for 2019 are net of expenses and fees under the parking management agreement.

<sup>(</sup>b) Grants awarded to offset reductions in concession revenues resulting from the waiver of MAGs and other relief to concessionaires.

Exhibit E-2

#### **REVENUES**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Reagan National Airport			Histo	orica									For	ecas	st				
Base Passenger Forecast	2019		2020		2021		2022		2023		2024		2025		2026		2027		2028
Airline revenues								_											
Terminal rents and user fees	\$ 85,241	\$	78,586	\$	92,922	\$	88,443	\$	86,117	\$	84,652	\$	93,390	\$	99,349	\$	106,274	\$	111,715
Landing fees	 52,332		29,534		34,045		45,039		30,933		36,846		40,693		44,888		59,814		73,078
Total airline revenues	\$ 137,573	\$	108,119	\$	126,966	\$	133,482	\$	117,051	\$	121,498	\$	134,083	\$	144,237	\$	166,088	\$	184,792
Annual percent change	1.1%		-21.4%		17.4%		5.1%		-12.3%		3.8%		10.4%		7.6%		15.1%		11.3%
Airline revenues as a share of total Revenues	45.8%		56.3%		51.0%		40.8%		36.4%		36.8%		38.6%		40.1%		43.2%		45.5%
Concession revenues																			
Landside concession revenues																			
Public parking (a)	\$ 41,152	\$	18,914	\$	38,055	\$	68,548	\$	74,555	\$	75,110	\$	75,665	\$	76,220	\$	76,775	\$	77,330
Rental car	26,445		10,997		21,971		27,832		29,016		28,623		29,442		30,078		30,729		31,394
Ground transportation	 28,336		9,828		14,260		27,072		30,225		31,465		31,698		31,930		32,163		32,395
Subtotal	\$ 95,932	\$	39,739	\$	74,286	\$	123,451	\$	133,796	\$	135,198	\$	136,804	\$	138,228	\$	139,666	\$	141,119
Originating passengers	10,579		3,280		5,747		9,494		10,075		10,150		10,225		10,300		10,375		10,450
Revenue per originating passenger	\$ 9.07	\$	12.12	\$	12.93	\$	13.00	\$	13.28	\$	13.32	\$	13.38	\$	13.42	\$	13.46	\$	13.50
In-terminal concession revenues																			
Food and beverage	\$ 18,393	\$	5,647	\$	7,352	\$	17,083	\$	18,098	\$	19,456	\$	21,459	\$	22,057	\$	22,672	\$	23,302
Newsstand and retail	5,469		1,932		2,370		5,088		6,134		6,889		7,151		7,351		7,555		7,765
Duty free	547		111		-		-		-		-		-		-		-		-
Display advertising	7,645		3,944		5,419		8,628		8,500		8,500		8,500		8,500		8,500		8,500
Other concessions	 2,305	_	1,849		2,231	_	2,282	_	2,300	_	2,392	_	2,464	_	2,513	_	2,563	_	2,615
Subtotal	\$ 34,359	\$	13,484	\$	17,372	\$	33,080	\$	35,032	\$	37,237	\$	39,573	\$	40,421	\$	41,290	\$	42,181
Enplaned passengers	11,949		3,768		7,049		11,969		12,700		12,800		12,900		13,000		13,100		13,200
Revenue per enplaned passenger	\$ 2.88	\$	3.58	\$	2.46	\$	2.76	\$	2.76	\$	2.91	\$	3.07	\$	3.11	\$	3.15	\$	3.20

Exhibit E-2 (page 2 of 2)

**REVENUES** 

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

Reagan National Airport		Histo	orical							For	ecas	t				
	2019	2020		2021		2022		2023	2024	2025		2026		2027		2028
Airside concession revenues	 				_		_									
Fixed base operator	\$ 2,148	\$ 1,265	\$	1,612	\$	2,260	\$	2,290	\$ 2,382	\$ 2,453	\$	2,502	\$	2,552	\$	2,603
Inflight kitchen	 2,337	 1,169		1,568		2,198	_	2,306	 2,417	 2,509		2,579	_	2,651		2,725
Subtotal	\$ 4,485	\$ 2,433	\$	3,179	\$	4,458	\$	4,596	\$ 4,799	\$ 4,962	\$	5,081	\$	5,203	\$	5,328
Total concession revenues	\$ 134,777	\$ 55,656	\$	94,838	\$	160,990	\$	173,424	\$ 177,234	\$ 181,340	\$	183,730	\$	186,159	\$	188,628
Annual percent change	2.1%	-58.7%		70.4%		69.8%		7.7%	2.2%	2.3%		1.3%		1.3%		1.3%
COVID-19 relief grants (b)	\$ -	\$ -	\$	2,483	\$	9,934	\$	-	\$ -	\$ -	\$	-	\$	-	\$	-
Other operating revenues																
Land and building rentals	\$9,262	\$9,167		\$10,302		\$9,723		\$9,361	\$9,412	\$8,957		\$9,202		\$9,311		\$9,373
TSA rentals	584	586		584		577		584	607	625		638		651		664
Utility reimbursements	2,603	5,332		4,391		4,874		4,619	4,807	4,954		5,056		5,161		5,267
Other revenues	 3,662	 4,106	_	7,306		2,969		3,127	 3,252	 3,350		3,417		3,485	_	3,554
Total other operating revenues	\$ 16,111	\$ 19,191	\$	22,583	\$	18,143	\$	17,690	\$ 18,078	\$ 17,886	\$	18,313	\$	18,608	\$	18,858
Annual percent change	0.3%	19.1%		17.7%		-19.7%		-2.5%	2.2%	-1.1%		2.4%		1.6%		1.3%
Investment earnings																
Debt Service Reserve Fund	\$ 603	\$ 585	\$	738	\$	2,210	\$	3,359	\$ 3,901	\$ 4,269	\$	4,134	\$	4,002	\$	4,184
Bond funds	1,396	534		125		1,258		3,576	3,637	3,460		3,262		3,198		3,376
Unrestricted funds	 9,970	 7,845	_	1,159	_	1,093	_	6,116	 6,220	 6,320		6,415	_	6,505	_	6,590
Total investment earnings	\$ 11,969	\$ 8,964	\$	2,022	\$	4,562	\$	13,051	\$ 13,758	\$ 14,049	\$	13,811	\$	13,706	\$	14,149
Annual percent change	51.6%	-25.1%		-77.4%		125.6%		186.1%	5.4%	2.1%		-1.7%		-0.8%		3.2%
Total Revenues	\$ 300,430	\$ 191,930	\$	248,893	\$	327,111	\$	321,216	\$ 330,568	\$ 347,358	\$	360,091	\$	384,562	\$	406,428
Annual percent change	2.9%	-36.1%		29.7%		31.4%		-1.8%	 2.9%	5.1%		3.7%		6.8%		5.7%

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Parking revenues for 2019 are net of expenses and fees under the parking management agreement.

<sup>(</sup>b) Grants awarded to offset reductions in concession revenues resulting from the waiver of MAGs and other relief to concessionaires.

Exhibit E-3

#### **REVENUES**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Dulles International Airport				Histor	ical								For	ecas	t		
Base Passenger Forecast				2020		2021		2022	2023		2024		2025		2026	2027	2028
Airline revenues	_																
Terminal rents and user fees	\$	129,105	\$	127,560	\$	104,536	\$	140,134	\$ 106,573	\$	122,144	\$	127,234	\$	157,796	\$ 186,703	\$ 192,393
Landing and apron fees		37,323		22,399		16,203		27,264	48,497		33,730		49,911		64,557	77,314	78,512
International Arrival Building fees		16,286		4,578		7,072		18,962	17,770		21,624		19,095		21,007	20,586	20,732
Passenger conveyance fees		6,292		2,713	_	1,555	_	5,054	4,892		8,269		10,901		10,398	16,108	18,887
Total airline revenues	\$	189,005	\$	157,250	\$	129,366	\$	191,413	\$ 177,732	\$	185,768	\$	207,141	\$	253,758	\$ 300,712	\$ 310,523
Annual percent change		-7.1%		-16.8%		-17.7%		48.0%	-7.1%		4.5%		11.5%		22.5%	18.5%	3.3%
Airline revenues as a share of total Revenues		40.4%		49.7%		38.5%		40.4%	36.8%		36.1%		37.9%		42.0%	45.3%	45.4%
Concession revenues																	
Landside concession revenues																	
Public parking (a)	\$	56,496	\$	20,157	\$	41,594	\$	74,128	\$ 82,315	\$	87,294	\$	89,640	\$	91,985	\$ 94,799	\$ 97,613
Rental car		19,710		10,841		17,149		24,462	22,902		24,731		25,972		27,057	28,312	29,601
Ground transportation		17,092		5,664	_	6,071	_	13,263	15,485	_	16,750	_	17,200	_	17,650	18,190	18,730
Subtotal	\$	93,298	\$	36,662	\$	64,815	\$	111,853	\$ 120,702	\$	128,776	\$	132,811	\$	136,692	\$ 141,301	\$ 145,944
Originating passengers		8,561		2,556		4,485		7,211	8,150		8,375		8,600		8,825	9,095	9,365
Revenue per originating passenger	\$	10.90	\$	14.34	\$	14.45	\$	15.51	\$ 14.81	\$	15.38	\$	15.44	\$	15.49	\$ 15.54	\$ 15.58
In-terminal concession revenues																	
Food and beverage	\$	17,116	\$	5,025	\$	7,074	\$	17,053	\$ 17,010	\$	19,247	\$	20,386	\$	21,367	\$ 22,671	\$ 24,019
Newsstand and retail		9,378		2,912		3,838		6,057	7,350		8,991		9,523		9,981	10,590	11,220
Duty free		14,351		2,964		2,232		2,304	4,704		7,499		7,499		8,536	9,128	9,740
Display advertising		6,942		4,301		4,883		7,417	8,500		8,500		8,500		8,500	8,500	8,500
Other concessions		10,126		3,913		4,639		5,870	5,500		5,720		5,892		6,009	6,130	6,252
Subtotal	\$	57,914	\$	19,115	\$	22,665	\$	38,701	\$ 43,064	\$	49,957	\$	51,800	\$	54,393	\$ 57,018	\$ 59,730
Enplaned passengers		12,327		4,083		7,385		10,586	12,000		12,350		12,700		13,050	13,575	14,100
Revenue per enplaned passenger	\$	4.70	\$	4.68	\$	3.07	\$	3.66	\$ 3.59	\$	4.05	\$	4.08	\$	4.17	\$ 4.20	\$ 4.24

Exhibit E-3 (page 2 of 2)

REVENUES

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

Dulles International Airport									Fore	ecas	t							
		2019	2020	2021		2022		2023		2024		2025		2026		2027		2028
Airside concession revenues							_											
Fixed base operator	\$	30,233	\$ 23,803	\$ 31,831	\$	33,374	\$	38,288	\$	39,820	\$	41,014	\$	41,834	\$	42,671	\$	43,524
Inflight kitchen		17,085	 8,513	11,008		15,294	_	12,899		13,806	_	14,623		15,327		16,262	_	17,229
Subtotal	\$	47,319	\$ 32,316	\$ 42,839	\$	48,667	\$	51,187	\$	53,626	\$	55,638	\$	57,161	\$	58,934	\$	60,754
Total concession revenues	\$	198,530	\$ 88,093	\$ 130,319	\$	199,221	\$	214,953	\$	232,358	\$	240,248	\$	248,246	\$	257,253	\$	266,428
Annual percent change		5.1%	-55.6%	47.9%		52.9%		7.9%		8.1%		3.4%		3.3%		3.6%		3.6%
COVID-19 relief grants (b)	\$	-	\$ -	\$ 2,545	\$	10,181	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
Other operating revenues																		
Land and building rentals		\$35,620	\$37,880	\$41,756		\$42,970		\$43,065		\$47,550		\$48,532		\$49,660		\$52,302		\$53,117
TSA rentals		350	351	350		350		350		364		375		383		391		399
Utility reimbursements		6,014	6,428	8,047		8,934		9,300		9,670		9,960		10,158		10,361		10,569
Other revenues		8,454	 7,005	 14,109		8,708	_	8,285	_	8,579	_	8,808	_	8,965	_	9,126	_	9,290
Total other operating revenues	\$	50,438	\$ 51,665	\$ 64,263	\$	60,962	\$	61,000	\$	66,163	\$	67,675	\$	69,166	\$	72,180	\$	73,375
Annual percent change		-1.8%	2.4%	24.4%		-5.1%		0.1%		8.5%		2.3%		2.2%		4.4%		1.7%
Investment earnings																		
Debt Service Reserve Fund	\$	8,042	\$ 7,133	\$ 7,415	\$	6,365	\$	9,505	\$	10,388	\$	10,862	\$	11,863	\$	11,995	\$	11,813
Bond funds		8,053	1,725	489		3,910		11,913		12,209		12,595		13,010		13,074		12,896
Unrestricted funds		13,494	 10,290	 1,529		1,495		7,952		8,087	_	8,216		8,339		8,456	_	8,566
Total investment earnings	\$	29,590	\$ 19,148	\$ 9,433	\$	11,770	\$	29,369	\$	30,683	\$	31,673	\$	33,212	\$	33,524	\$	33,276
Annual percent change		40.5%	-35.3%	-50.7%		24.8%		149.5%		4.5%		3.2%		4.9%		0.9%		-0.7%
Total Revenues	\$	467,563	\$ 316,155	\$ 335,925	\$	473,547	\$	483,053	\$	514,972	\$	546,738	\$	604,383	\$	663,669	\$	683,602
Annual percent change	<del></del>	0.6%	-32.4%	6.3%		41.0%		2.0%		6.6%		6.2%		10.5%		9.8%		3.0%

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Parking revenues for 2019 are net of expenses and fees under the parking management agreement.

<sup>(</sup>b) Grants awarded to offset reductions in concession revenues resulting from the waiver of MAGs and other relief to concessionaires.

#### Exhibit E-4

#### **CALCULATION OF SIGNATORY AIRLINE PAYMENTS**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Reagan National Airport			Histo	orical							For	ecas	it			
Base Passenger Forecast	2019		2020		2021	2022		2023	2024		2025		2026		2027	2028
Allocated requirements of Airline Supported Areas							_			_						
Direct Operation and Maintenance Expenses (a)	\$ 29,372	\$	26,028	\$	29,447	\$ 31,751	\$	40,055	\$ 42,779	\$	44,877	\$	46,223	\$	47,611	\$ 49,358
Indirect Operation and Maintenance Expenses (a)	98,986		90,272		85 <i>,</i> 575	85,598		102,213	104,944		109,454		112,737		116,120	119,686
O&M Reserve requirement	341		630		(415)	1,853		4,967	1,364		1,652		1,157		1,193	1,328
Direct Debt Service (b)	44,015		45,256		45,499	57,205		58,548	55,125		40,849		48,872		63,230	75,331
Indirect Debt Service (b)	10,597		13,884		13,124	11,447		14,271	14,526		15,746		20,388		20,633	21,107
Debt Service coverage	16,383		17,742		17,587	20,596		21,846	17,413		14,149		17,315		20,966	24,110
Amortization of COMIP Expenditures	1,832		1,720		1,802	1,780		2,090	1,996		1,947		1,949		1,936	1,867
Federal Lease payments	 3,004		2,629		2,734	2,808		2,861	2,887		2,972		3,061	_	3,153	3,251
Total Requirement	\$ 204,531	\$	198,160	\$	195,354	\$ 213,038	\$	246,851	\$ 241,035	\$	231,645	\$	251,702	\$	274,841	\$ 296,038
Less: Utility and TSA reimbursements	\$ 2,521	\$	2,204	\$	2,597	\$ 2,603	\$	2,738	\$ 2,832	\$	2,907	\$	2,960	\$	3,014	\$ 3,069
Net Requirement	\$ 202,010	\$	195,956	\$	192,757	\$ 210,436	\$	244,114	\$ 238,203	\$	228,738	\$	248,742	\$	271,827	\$ 292,970
Signatory Airline Share of Net Requirement	\$ 173,039	\$	163,439	\$	158,941	\$ 174,239	\$	200,399	\$ 196,368	\$	188,824	\$	204,816	\$	225,063	\$ 244,751
Less: Transfer of prior year Signatory Airline share of Net Remaining Revenues (c) Less: COVID-19 relief grants	\$ 35,778	\$	43,321	\$	14,918	\$ 29,084	\$	65,980	\$ 57,503	\$	54,876	\$	60,729	\$	59,162	\$ 60,188
Applied to O&M Expenses	-		-		460	-		-	-		-		-		-	-
Applied to Debt Service	 _	_	12,149		16,701	 11,862		17,491	17,491	_	_		_	_		 
Net Requirement	\$ 137,260	\$	107,968	\$	126,862	\$ 133,293	\$	116,927	\$ 121,374	\$	133,948	\$	144,087	\$	165,900	\$ 184,562
Less: Payments by Signatory Cargo Carriers	\$ 	\$		\$	_	\$ _	\$		\$ 	\$		\$		\$		\$ 
Passenger Signatory Airline payments	\$ 137,260	\$	107,968	\$	126,862	\$ 133,293	\$	116,927	\$ 121,374	\$	133,948	\$	144,087	\$	165,900	\$ 184,562
Signatory enplaned passengers	11,949		3,768		7,047	11,964		12,694	12,794		12,894		12,994		13,094	13,194
Passenger Signatory Airline payments per passenger	\$ 11.49	\$	28.66	\$	18.00	\$ 11.14	\$	9.21	\$ 9.49	\$	10.39	\$	11.09	\$	12.67	\$ 13.99

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) See Exhibit D-2.

<sup>(</sup>b) See Exhibit C-2.

<sup>(</sup>c) See Exhibit F-1.

#### Exhibit E-5

#### **CALCULATION OF SIGNATORY AIRLINE PAYMENTS**

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Dulles International Airport	_			Histo	orica	I						For	ecas	st		
Base Passenger Forecast		2019		2020		2021		2022	 2023	2024		2025		2026	2027	2028
Allocated requirements of Airline Supported Areas	_															
Direct Operation and Maintenance Expenses (a)	\$	72,739	\$	64,955	\$	66,596	\$	55,503	\$ 64,184	\$ 68,393	\$	71,664	\$	75,987	\$ 78,529	\$ 80,937
Indirect Operation and Maintenance Expenses (a)		91,178		82,648		78,110		82,610	97,317	106,258		111,000		115,265	119,685	123,290
O&M Reserve requirement		418		741		(484)		2,073	5,359	3,287		2,003		2,147	1,709	1,503
Direct Debt Service (b)		151,734		175,640		166,373		161,944	140,517	159,092		142,362		178,387	221,091	226,750
Indirect Debt Service (b)		30,786		31,622		27,817		21,492	24,483	27,712		31,451		36,680	40,370	42,883
Debt Service coverage		54,756		62,179		58,257		55,031	49,500	46,701		43,453		53,767	65,365	67,408
Amortization of COMIP Expenditures		4,507		3,862		3,318		3,196	3,043	2,909		2,823		2,710	2,680	2,599
Federal Lease payments	_	1,814		1,572		1,612		1,525	1,583	1,666		1,717		1,787	1,852	1,908
Total Requirement	\$	407,931	\$	423,220	\$	401,598	\$	383,374	\$ 385,987	\$ 416,019	\$	406,473	\$	466,730	\$ 531,281	\$ 547,278
Less: Utility and TSA reimbursements	\$	1,202	\$	227	\$	895	\$	1,554	\$ 1,603	\$ 1,666	\$	1,716	\$	1,750	\$ 1,784	\$ 1,820
Net Requirement	\$	406,730	\$	422,992	\$	400,703	\$	381,819	\$ 384,383	\$ 414,353	\$	404,757	\$	464,980	\$ 529,497	\$ 545,458
Signatory Airline Share of Net Requirement		\$353,675		\$360,459		\$317,251		\$319,845	\$332,760	\$357,530		\$351,864		\$399,855	\$448,623	\$460,364
Less: Transfer of prior year share																
of Net Remaining Revenues (c)	\$	165,251	\$	174,028	\$	51,455	\$	76,794	\$ 127,667	\$ 138,428	\$	145,477	\$	147,810	\$ 150,421	\$ 152,454
Less: COVID-19 relief grants																
Applied to O&M Expenses		-		2,647		3,160		2,132	-	-		-		-	-	-
Applied to Debt Service		-		25,124		132,479		47,967	27,397	33,249		-		-	-	-
Less: Virginia state grants		-		-		-		-	-	-		-		-	-	-
Less: Western Lands Account withdrawal	_	4,950	_	4,571		4,116	_	4,921	 5,000	5,000	_	5,000		5,000	 5,000	5,000
Net Requirement		\$183,474		\$154,089		\$126,040		\$188,030	\$172,695	\$180,854		\$201,387		\$247,045	\$293,202	\$302,910
Less: Payments by Signatory Cargo Carriers	\$	1,030	\$	954	\$	585	\$	853	\$ 1,382	\$ 876	\$	1,389	\$	1,839	\$ 2,170	\$ 2,142
Passenger Signatory Airline payments	\$	182,444	\$	153,135	\$	125,455	\$	187,177	\$ 171,313	\$ 179,978	\$	199,998	\$	245,205	\$ 291,033	\$ 300,768
Signatory enplaned passengers		12,314		4,074		7,375		10,582	11,996	12,346		12,696		13,046	13,571	14,096
Passenger Signatory Airline payments per passenger	\$	14.82	\$	37.59	\$	17.01	\$	17.69	\$ 14.28	\$ 14.58	\$	15.75	\$	18.80	\$ 21.45	\$ 21.34

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) See Exhibit D-3.

<sup>(</sup>b) See Exhibit C-3.

<sup>(</sup>c) See Exhibit F-1.

#### Exhibit E-6

#### SOURCES AND USES OF COVID-19 RELIEF GRANTS

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

			Hist	orical								Fore	cast						
Airports Authority	2019		2020	2	021		2022		2023	2024		2025	202	26	2027	2028		T	otal
Sources of COVID-19 relief grants		_															_		
CARES Act (a)	\$	- \$	229,103	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	- \$	- 5	\$ :	229,103
CRRSA Act (b)																			
Reagan National Airport		-	-		\$18,581		-		-	-		-		-		-	-		18,581
Dulles International Airport		-	-		19,129		-		-	-		-		-		-	-		19,129
American Rescue Plan (c)																			
Reagan National Airport		-	-		\$71,776		-		-	-		-		-		-	-		71,776
Dulles International Airport		-	-		74,083		-		-	-		-		-		-	-		74,083
Total sources	\$	- \$	229,103	\$	183,569	\$		\$	_	\$ _	\$	_	\$		\$	- \$	9	\$ 4	412,672
Uses of COVID-19 relief grants															-				
CARES Act																			
Reagan National Airport																			
O&M Expenses	\$	- \$	4,954	\$	-	\$	-	\$	-	\$ -	\$	-	\$	-	\$	- \$	-		4,954
Debt Service		-	33,259		-		-		-	-		-		-		-	-		33,259
Dulles International Airport																			
O&M Expenses		-	2,647		3,160		-		-			-		-		-	-		5,808
Debt Service			33,511		95,538	_	22,538	_	18,246	 15,249	_					<del>-</del>			185,083
Total CARES Act	\$	- \$	74,371	\$	98,699	\$	22,538	Ş	18,246	\$ 15,249	\$	-	\$	-	\$	- \$	- :	Ş :	229,103
CRRSA Act																			
Reagan National Airport																			
O&M Expenses	\$	- \$	-	\$		\$	-	\$	-	\$ -	\$	-	\$	-	\$	- \$	- 5	\$	-
Debt Service		-	-		18,581		-		-	-		-		-		-	-		18,581
Dulles International Airport																			
O&M Expenses		-	-		-		-		-	-		-		-		-	-		-
Debt Service			-		19,129		-		-	 -		-				-			19,129
Total CRRSA Act	\$	- \$	-	\$	37,710	\$	-	\$	-	\$ -	\$	-	\$	-	\$	- \$	- 5	\$	37,710
American Rescue Plan																			
Reagan National Airport																			
O&M Expenses	\$	- \$	-	\$	460	\$	-	\$	-	\$ -	\$	-	\$	-	\$	- \$	- 5	\$	460
Debt Service		-	-		10,640		25,692		17,491	17,491		-		-		-	-		71,315
Dulles International Airport																			
O&M Expenses		-	-		-		2,132		-	-		-		-		-	-		2,132
Debt Service		-	-		18,333		26,466		9,151	18,000		-		-		-	-		71,950
Total American Rescue Plan	\$	- \$	-	\$	29,433	\$	54,291	\$	26,643	\$ 35,491	\$	-	\$	-	\$	- \$	- ;	\$ :	145,858
Total uses	\$	- \$	74,371	\$	165,843	\$	76,829	\$	44,889	\$ 50,740	\$	-	\$	_	\$	- \$	- 9	\$ .	412,672
Amount remaining	\$	- \$	154,732	_	172,458	\$	95,629	\$	50,740	\$ (0)	\$	(0)	\$	(0)	\$ (	0) \$	(0)		(0)

## Exhibit E-6 (page 2 of 2)

#### SOURCES AND USES OF COVID-19 RELIEF GRANTS

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

(dollars and passengers in thousands)					Histo	orica	I								Fore	cast						
Airports Authority		2019	-	_	2020	_	2021	_	2022	_	2023	_	2024	_	2025	_	2026	2027	-	2028	_	Total
Reagan National Airport																						
O&M Expenses	G-2	\$	-	\$	4,954	\$	460	\$	-	\$	-	\$	-	\$	-	\$	-	\$	- \$	-	\$	5,414
Debt Service	G-2		-		33,259		29,222		25,692		17,491		17,491		-				_			123,156
Total Reagan National Airport		\$	-	\$	38,213	\$	29,682	\$	25,692	\$	17,491	\$	17,491	\$	-	\$	-	\$	- \$	-	\$	128,570
Dulles International Airport																						
O&M Expenses	G-3	\$	-	\$	2,647	\$	3,160	\$	2,132	\$	-	\$	-	\$	-	\$	-	\$	- \$	-	\$	7,940
Debt Service	G-3		-		33,511		133,000		49,004		27,397		33,249						_			276,162
Total Dulles International Airport		\$	_	\$	36,158	\$	136,161	\$	51,137	\$	27,397	\$	33,249	\$		\$		\$	- \$		\$	284,102
Total uses of COVID-19 relief grants		\$	=	\$	74,371	\$	165,843	\$	76,829	\$	44,889	\$	50,740	\$		\$	<u> </u>	\$	- \$		\$	412,672
Reagan National Airport																						
Amount applied to Airline Supported Areas	E-4	\$	-	\$	12,149	\$	17,161	\$	11,862	\$	17,491	\$	17,491	\$	-	\$	-	\$	- \$	-	\$	76,156
Amount applied to Nonairline Supported Areas			_		26,064		12,521	_	13,830	_									_			52,414
Total Reagan National Airport		\$	-	\$	38,213	\$	29,682	\$	25,692	\$	17,491	\$	17,491	\$	-	\$	-	\$	- \$	-	\$	128,570
Dulles International Airport																						
Amount applied to Airline Supported Areas	E-5	\$	-	\$	27,771	\$	135,639	\$	50,099	\$	27,397	\$	33,249	\$	-	\$	-	\$	- \$	-	\$	274,156
Amount applied to Nonairline Supported Areas			-		8,387		521		1,037		_		_						_	_		9,946
Total Dulles International Airport		\$	-	\$	36,158	\$	136,161	\$	51,137	\$	27,397	\$	33,249	\$		\$		\$	- \$		\$	284,102
Total uses of COVID-19 relief grants		\$	-	\$	74,371	\$	165,843	\$	76,829	\$	44,889	\$	50,740	\$	_	\$		\$	- \$		\$	412,672

Columns may not add to totals shown because of rounding.

<sup>(</sup>a) Allocated amounts as published by FAA April 15, 2020.

<sup>(</sup>b) Allocated amounts as published by FAA February 24, 2021.

<sup>(</sup>c) Allocated amounts as published by FAA June 16, 2021.

#### Exhibit F-1

#### APPLICATION OF REVENUES AND ALLOCATION OF NET REMAINING REVENUES

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

100-4-3-4

				Histo	orica	l							For	ecas	t				
	_	2019		2020	_	2021	_	2022	_	2023	 2024		2025	_	2026	_	2027	_	2028
Revenues (a)	\$	767,993	\$	508,085	\$	584,818	\$	800,658	\$	804,269	\$ 845,540	\$	894,096	\$	964,474	\$	1,048,230	\$	1,090,030
Application of Revenues (b)																			
O&M Expenses (c)	\$	353,109	\$	363,788	\$	356,078	\$	382,926	\$	445,163	\$ 472,247	\$	493,716	\$	510,699	\$	526,281	\$	542,441
Required deposits to:																			
Operation and Maintenance Fund (d)		940		1,973		(1,285)		6,069		15,559	6,771		5,367		4,246		3,896		4,040
Principal and Interest Accounts (e)		300,810		334,651		314,869		309,122		298,105	323,807		298,965		359,975		424,147		443,724
Redemption Accounts		-		-		-		-		-	-		-		-		-		-
Debt Service Reserve Funds		-		-		-		-		-	-		-		-		-		-
Subordinated Bond Funds		-		-		-		-		-	-		-		-		-		-
Subordinated Reserve Funds		-		-		-		-		-	-		-		-		-		-
Junior Lien Obligations Fund		-		-		-		-		-	-		-		-		-		-
Federal Lease Fund		5,861		5,936		6,090		6,459		6,495	6,690		6,890		7,097		7,310		7,530
Emergency Repair and Rehabilitation Fund		-		-		-		-		-	-		-		-		-		-
General Purpose Fund		107,273		(198,263)		(90,935)		96,082		38,947	36,024	_	89,157		82,457	_	86,597		92,295
Total Application of Revenues	\$	767,993	\$	508,085	\$	584,818	\$	800,658	\$	804,269	\$ 845,540	\$	894,096	\$	964,474	\$	1,048,230	\$	1,090,030
Calculation of Net Remaining Revenues (f)																			
Deposit to General Purpose Fund	\$	107,273	\$	(198,263)	\$	(90,935)	\$	96,082	\$	38,947	\$ 36,024	\$	89,157	\$	82,457	\$	86,597	\$	92,295
Transfer from Airline Transfer Account (g)		201,029		217,348		66,373		105,878		193,647	195,931		200,353		208,539	_	209,583		212,643
Net Remaining Revenues	\$	308,303	\$	19,085	\$	(24,562)	\$	201,961	\$	232,595	\$ 231,956	\$	289,510	\$	290,997	\$	296,180	\$	304,938
Plus: COVID-19 relief grants		,		,		, , ,		•		,	•		•		,		•		,
Applied to O&M Expenses		_		7,601		3,621		2,132		_	_		_		_		_		-
Applied to Debt Service		_		66,770		162,222		74,697		44,889	50,740		_		_		-		-
Plus: Western Lands Account withdrawal		4,950		4,571		4,116		4,921		5,000	5,000		5,000		5,000		5,000		5,000
Adjusted Net Remaining Revenues	\$	313,253	\$	98,027	\$	145,396	\$	283,711	\$	282,483	\$ 287,696	\$	294,510	\$	295,997	\$	301,180	\$	309,938

#### APPLICATION OF REVENUES AND ALLOCATION OF NET REMAINING REVENUES

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

(dollars in thousands)			Histo	orica	I								For	ecas	it .				
		2019	2020		2021		2022		2023		2024		2025		2026		2027		2028
Allocation of Net Remaining Revenues (f)	_					_										_		_	
Reagan National Airport																			
Authority share (transfer to Capital Fund)	\$	56,725	\$ 15,994	\$	29,149	\$	61,971	\$	54,130	\$	52,182	\$	49,418	\$	48,405	\$	49,245	\$	51,203
Transfer to Dulles		(25,000)	(11,882)		(23,473)		(25,000)		(25,000)		(25,000)		(25,000)		(25,000)		(25,000)		(25,000)
Signatory Airline share (transfer to Airline Transfer Account)	_	43,321	 14,918	_	29,084		65,980	_	57,503	_	54,876	_	60,729	_	59,162	_	60,188	_	62,582
	\$	75,046	\$ 19,030	\$	34,761	\$	102,951	\$	86,634	\$	82,058	\$	85,147	\$	82,568	\$	84,433	\$	88,785
Dulles International Airport																			
Authority share (transfer to Capital Fund)	\$	64,180	\$ 27,542	\$	33,841	\$	53,093	\$	57,422	\$	60,161	\$	61,553	\$	63,008	\$	64,292	\$	65,887
Transfer from Reagan		25,000	11,882		23,473		25,000		25,000		25,000		25,000		25,000		25,000		25,000
Signatory Airline share (transfer to Airline Transfer Account)	_	149,028	 39,573	_	53,322		102,667	_	113,428	_	120,477	_	122,810		125,421	_	127,454	_	130,266
	\$	238,207	\$ 78,997	\$	110,636	\$	180,760	\$	195,850	\$	205,638	\$	209,363	\$	213,429	\$	216,746	\$	221,153
	\$	313,253	\$ 98,027	\$	145,396	\$	283,711	\$	282,483	\$	287,696	\$	294,510	\$	295,997	\$	301,180	\$	309,938
Authority share of Net Remaining Revenues					<u> </u>														·
Reagan National Airport	\$	31,725	\$ 4,112	\$	5,677	\$	36,971	\$	29,130	\$	27,182	\$	24,418	\$	23,405	\$	24,245	\$	26,203
Dulles International Airport	_	64,180	 27,542	_	33,841		53,093	_	57,422		60,161	_	61,553		63,008		64,292	_	65,887
	\$	95,904	\$ 31,654	\$	39,518	\$	90,064	\$	86,552	\$	87,343	\$	85,970	\$	86,413	\$	88,537	\$	92,090
Percent of total		30.6%	32.3%		27.2%		31.7%		30.6%		30.4%		29.2%		29.2%		29.4%		29.7%
Signatory Airline share of Net Remaining Revenues (h)																			
Reagan National Airport	\$	43,321	\$ 14,918	\$	29,084	\$	65,980	\$	57,503	\$	54,876	\$	60,729	\$	59,162	\$	60,188	\$	62,582
Dulles International Airport																			
Transfer from Reagan		25,000	11,882		23,473		25,000		25,000		25,000		25,000		25,000		25,000		25,000
Generated at Dulles	_	149,028	 39,573	_	53,322		102,667	_	113,428	_	120,477	_	122,810		125,421		127,454	_	130,266
	\$	217,348	\$ 66,373	\$	105,878	\$	193,647	\$	195,931	\$	200,353	\$	208,539	\$	209,583	\$	212,643	\$	217,848
Percent of total		69.4%	67.7%		72.8%		68.3%		69.4%		69.6%		70.8%		70.8%		70.6%		70.3%
	\$	313,253	\$ 98,027	\$	145,396	\$	283,711	\$	282,483	\$	287,696	\$	294,510	\$	295,997	\$	301,180	\$	309,938

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

<sup>(</sup>a) See Exhibit E-1.

<sup>(</sup>b) Application per the Indenture.

<sup>(</sup>c) See Exhibit D-1.

<sup>(</sup>d) Annual O&M Reserve increment.

<sup>(</sup>e) Annual Debt Service is shown as a proxy for deposits to Principal and Interest Accounts. See Exhibit C-1.

<sup>(</sup>f) Calculation and allocation per the Airline Agreement.

<sup>(</sup>g) Signatory Airline share of prior year's Net Remaining Revenues.

<sup>(</sup>h) Amounts applied as credits in the calculation of Signatory Airline rentals, fees, and charges. See Exhibit E-4 and Exhibit E-5.

#### Exhibit F-2

#### SOURCES AND USES OF PFC REVENUES

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Reagan National Airport				Histo	orical									For	ecas	t				
Base Passenger Forecast		2019		2020	_	2021	_	2022	_	2023	_	2024	_	2025	_	2026	_	2027	_	2028
Enplaned passengers Percent PFC-eligible Net PFC amount (a) PFC Revenues	\$ \$	11,949 91% 4.39 47,669	\$ \$	3,768 90% 4.39 14,876	\$	7,049 97% 4.39 30,119	\$ \$	11,969 90% 4.39 47,340	\$ \$	12,700 90% 4.39 50,230	\$	12,800 90% 4.39 50,625	\$ \$	12,900 90% 4.39 51,021	\$	13,000 90% 4.39 51,416	\$	13,100 90% 4.39 51,812	\$	13,200 90% 4.39 52,207
PFC Fund beginning balance	\$	70,737	\$	74,413	\$	72,034	\$	81,079	\$	59,855	\$	73,278	\$	103,361	\$	132,462	\$	163,200	\$	194,389
PFC Revenues		47,669		14,876		30,119		47,340		50,230		50,625		51,021		51,416		51,812		52,207
Uses of PFC Revenues Pay-as-you-go expenditures Dulles Metrorail Project (b)(c) Payment of Bond debt service	\$	38,146	\$	12,544	\$	7,965	\$	46,307	\$	15,618	\$	-	\$	-	\$	-	\$	-	\$	-
PFC-approved (d)		5,847 -		4,710 -		4,852 8,257		6,058 16,200		5,628 15,559		4,976 15,566		6,123 15,797		4,883 15,796		4,835 15,788	_	5,381 15,793
Total Uses	\$	43,993	\$	17,254	\$	21,074	\$	68,565	\$	36,806	\$	20,542	\$	21,919	\$	20,679	\$	20,623	\$	21,174
PFC Fund ending balance	\$	74,413	\$	72,034	\$	81,079	\$	59,855	\$	73,278	\$	103,361	\$	132,462	\$	163,200	\$	194,389	\$	225,422

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

<sup>(</sup>a) PFC of \$4.50 less airline collection fee of \$0.11.

<sup>(</sup>b) As approved by the FAA under Reagan PFC Application 6.

<sup>(</sup>c) As approved by the FAA under Reagan PFC Application 8.

<sup>(</sup>d) As approved by the FAA under Reagan PFC Application 7.

#### Exhibit F-3

#### SOURCES AND USES OF PFC REVENUES

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Dulles International Airport				Histo	orical									For	ecas	t				
Base Passenger Forecast	_	2019	_	2020	_	2021	_	2022	-	2023	_	2024	_	2025	_	2026	_	2027	_	2028
Enplaned passengers		12,327		4,083		7,385		10,586		12,000		12,350		12,700		13,050		13,575		14,100
Percent PFC-eligible		90%		87%		90%		90%		90%		90%		90%		90%		90%		90%
Net PFC amount (a)	\$	4.39	\$	4.39	\$	4.39	\$	4.39	\$	4.39	\$	4.39	\$	4.39	\$	4.39	\$	4.39	\$	4.39
PFC Revenues	\$	48,635	\$	15,671	\$	29,257	\$	42,022	\$	47,635	\$	49,024	\$	50,414	\$	51,803	\$	53,887	\$	55,971
PFC Fund beginning balance	\$	3,386	\$	4,621	\$	(288)	\$	2,707	\$	5,729	\$	2,964	\$	988	\$	102	\$	105	\$	193
PFC Revenues		48,635		15,671		29,257		42,022		47,635		49,024		50,414		51,803		53,887		55,971
Uses of PFC Revenues																				
Payment of Bond debt service																				
PFC-approved (b)	\$	47,400	\$	20,580	\$	26,263	\$	39,000	\$	50,400	\$	51,000	\$	51,300	\$	51,800	\$	53,800	\$	55,900
Total Uses	\$	47,400	\$	20,580	\$	26,263	\$	39,000	\$	50,400	\$	51,000	\$	51,300	\$	51,800	\$	53,800	\$	55,900
PFC Fund ending balance	\$	4,621	\$	(288)	\$	2,707	\$	5,729	\$	2,964	\$	988	\$	102	\$	105	\$	193	\$	264

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

<sup>(</sup>a) PFC of \$4.50 less airline collection fee of \$0.11.

<sup>(</sup>b) As approved by the FAA under Dulles PFC Application 4.

#### Exhibit G-1

# DEBT SERVICE COVERAGE AND RATE COVENANT REQUIREMENT

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Airports Authority					Histo	orica	I							For	eca	st				
Base Passenger Forecast			2019		2020		2021	_	2022		2023		2024	2025		2026		2027	_	2028
Debt Service Coverage																				
Revenues (a)		\$	767,993	\$	508,085	\$	584,818	\$	800,658	\$	804,269	\$	845,540 \$	894,096	\$	964,474	\$	1,048,230	\$	1,090,030
Transfer from General Purpose Fund (b)			201,029		217,348		66,373		105,878		193,647		195,931	200,353		208,539		209,583		212,643
		\$	969,022	\$	725,434	\$	651,190	\$	906,537	\$	997,916	\$	1,041,471 \$	1,094,448	\$	1,173,013	\$	1,257,814	\$	1,302,673
Less: O&M Expenses (c)			(353,109)		(363,788)		(356,078)		(382,926)		(445,163)		(472,247)	(493,716)		(510,699)		(526,281)		(542,441)
Plus: COVID-19 relief grants			-		7,601		3,621		2,132		-		-	-		-		-		-
Plus: Western Land Funds		_	_		4,571	_	4,116		4,921	_	5,000		5,000	5,000	_	5,000		5,000		5,000
Net Revenues	[A]	\$	615,914	\$	373,817	\$	302,849	\$	530,665	\$	557,753	\$	574,224 \$	605,732	\$	667,315	\$	736,532	\$	765,232
Bond Debt Service		\$	354,057	\$	359,941	\$	354,241	\$	370,380	\$	369,692	\$	395,349 \$	372,185	\$	432,454	\$	498,570	\$	520,798
Less: COVID-19 relief grants			-		(66,770)		(162,222)		(74,697)		(44,889)		(50,740)	-		-		-		-
Less: PFC Revenues (d)			(47,400)		(20,580)		(26,263)		(39,000)		(50,400)		(51,000)	(51,300)		(51,800)		(53,800)		(55,900)
Less: PFC Revenues (e)			(5,847)		(4,710)		(4,852)		(6,058)		(5,628)		(4,976)	(6,123)		(4,883)		(4,835)		(5,381)
Less: PFC Revenues (f)		_		_		_	(8,257)	_	(16,200)	_	(15,559)	_	(15,566)	(15,797)	_	(15,796)	_	(15,788)		(15,793)
Total Annual Debt Service	[B]	\$	300,810	\$	267,881	\$	152,648	\$	234,425	\$	253,216	\$	273,067 \$	298,965	\$	359,975	\$	424,147	\$	443,724
Debt service coverage ratio	[A/B]		2.05x		1.40x		1.98x		2.26x		2.20x		2.10x	2.03x		1.85x		1.74x		1.72x

Exhibit G-1 (page 2 of 2)

# DEBT SERVICE COVERAGE AND RATE COVENANT REQUIREMENT

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars in thousands)

Airports Authority			Histo	orica	I					Fo	recas	t			
		2019	2020		2021	2022	2023	2024	_	2025		2026	2027	_	2028
Rate Covenant Requirement															
Section 6.04(a)(i) requirement															
Required deposits to:															
Principal and Interest Accounts (g)		\$ 300,810	\$ 267,881	\$	152,648	\$ 234,425	\$ 253,216	\$ 273,067	\$	298,965	\$	359,975	\$ 424,147	\$	443,724
Redemption Accounts		-	-		-	-	-	-		-		-	-		-
Debt Service Reserve Funds		-	-		-	-	-	-		-		-	-		-
Subordinated Bond Funds		-	-		-	-	-	-		-		-	-		-
Subordinated Reserve Funds		-	-		-	-	-	-		-		-	-		-
Junior Lien Obligations Fund		-	-		-	-	-	-		-		-	-		-
Federal Lease Fund		5,861	5,936		6,090	6,459	6,495	6,690		6,890		7,097	7,310		7,530
Emergency Repair and Rehabilitation Fund		-	-		-	-	-	 -		-		_	 -		-
Total Section 6.04(a)(i) requirement	[C]	\$ 306,671	\$ 273,818	\$	158,738	\$ 240,884	\$ 259,711	\$ 279,757	\$	305,855	\$	367,072	\$ 431,457	\$	451,254
Section 6.04(a)(ii) requirement															
Annual Debt Service	[D]	\$ 300,810	\$ 267,881	\$	152,648	\$ 234,425	\$ 253,216	\$ 273,067	\$	298,965	\$	359,975	\$ 424,147	\$	443,724
Coverage factor	[E]	125%	125%		125%	125%	125%	125%		125%		125%	125%		125%
Total Section 6.04(a)(ii) requirement ( $F = D \times E$ )	[F]	\$ 376,012	\$ 334,852	\$	190,809	\$ 293,031	\$ 316,520	\$ 341,334	\$	373,707	\$	449,969	\$ 530,184	\$	554,655
Rate Covenant Requirement															
(greater of [C] or [F])	[G]	\$ 376,012	\$ 334,852	\$	190,809	\$ 293,031	\$ 316,520	\$ 341,334	\$	373,707	\$	449,969	\$ 530,184	\$	554,655
Result must not be less than zero	[A-G]	\$ 239,902	\$ 38,966	\$	112,040	\$ 237,634	\$ 241,233	\$ 232,890	\$	232,026	\$	217,345	\$ 206,349	\$	210,577

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

<sup>(</sup>a) See Exhibit E-1.

<sup>(</sup>b) Airline Transfer Account deposit from prior year. See Exhibit F-1.

<sup>(</sup>c) See Exhibit D-1.

<sup>(</sup>d) As approved by the FAA under Dulles PFC Application 4.

<sup>(</sup>e) As approved by the FAA under Reagan PFC Application 6.

<sup>(</sup>f) As approved by the FAA under Reagan PFC Application 7.

<sup>(</sup>g) Annual debt service is used as a proxy for deposits to the Principal and Interest Accounts.

#### Exhibit G-2

#### DEBT SERVICE COVERAGE

Metropolitan Washington Airports Authority
For Fiscal Years ending December 31
(dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Reagan National Airport			Histo	orica	ıl							For	ecas	t		
Base Passenger Forecast		2019	2020		2021	2022		2023		2024	2	2025		2026	2027	2028
Revenues (a)		\$ 300,430	\$ 191,930	\$	248,893	\$ 327,111	\$	321,216	\$	330,568 \$	\$	347,358	\$	360,091	\$ 384,562	\$ 406,428
Transfer from General Purpose Fund (b)		 35,778	 43,321	_	14,918	 29,084	_	65,980	_	57,503		54,876		60,729	 59,162	 60,188
		\$ 336,208	\$ 235,251	\$	263,810	\$ 356,195	\$	387,196	\$	388,071 \$	ŝ	402,234	\$	420,820	\$ 443,724	\$ 466,616
Less: O&M Expenses (c)		(150,173)	(157,368)		(153,540)	(161,745)		(193,540)		(205,179)	(	214,434)		(220,866)	(227,492)	(234,635)
Plus: COVID-19 relief grants		 <u>-</u>	 4,954		460	<u> </u>				<u> </u>	·	<u> </u>		<u>-</u>	 <u>-</u>	<u>-</u>
Net Revenues	[A]	\$ 186,036	\$ 82,837	\$	110,731	\$ 194,451	\$	193,656	\$	182,892 \$	\$	187,800	\$	199,954	\$ 216,232	\$ 231,981
Bond Debt Service		\$ 87,921	\$ 85,479	\$	91,727	\$ 108,017	\$	110,040	\$	106,944 \$	\$	93,124	\$	107,200	\$ 121,379	\$ 133,066
Less: COVID-19 relief grants		-	(33,259)		(29,222)	(25,692)		(17,491)		(17,491)		-		-	-	-
Less: PFC Revenues (d)		(5,847)	(4,710)		(4,852)	(6,058)		(5,628)		(4,976)		(6,123)		(4,883)	(4,835)	(5,381)
Less: PFC Revenues (e)		 	 <u>-</u>		(8,257)	 (16,200)		(15,559)		(15,566)		(15,797)		(15,796)	 (15,788)	(15,793)
Total Annual Debt Service	[B]	\$ 82,074	\$ 47,510	\$	49,397	\$ 60,066	\$	71,361	\$	68,910 \$	\$	71,205	\$	86,521	\$ 100,756	\$ 111,892
Debt service coverage ratio	[A/B]	2.27x	1.74x		2.24x	3.24x		2.71x		2.65x		2.64x		2.31x	2.15x	2.07x

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

<sup>(</sup>a) See Exhibit E-2.

<sup>(</sup>b) Airline Transfer Account deposit from prior year.

<sup>(</sup>c) See Exhibit D-2.

<sup>(</sup>d) As approved by the FAA under Reagan PFC Application 6.

<sup>(</sup>e) As approved by the FAA under Reagan PFC Application 7.

#### Exhibit G-3

#### DEBT SERVICE COVERAGE

Metropolitan Washington Airports Authority
For Fiscal Years ending December 31
(dollars in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Dulles International Airport			Histo	orica	ıl				For	ecas	t		
Base Passenger Forecast		2019	2020		2021	2022	2023	2024	2025		2026	2027	2028
Revenues (a) Transfer from General Purpose Fund (b)		\$ 467,563 165,251 632,814	\$ 316,155 174,028 490,183	\$	335,925 51,455 387,380	\$ 473,547 76,794 550,342	\$ 483,053 127,667 610,721	\$ 514,972 \$ 138,428 653,400 \$	546,738 145,477 692,215	\$	604,383 147,810 752,193	\$ 663,669 \$ 150,421 814,090 \$	683,602 152,454 836,056
Less: O&M Expenses (c) Plus: COVID-19 relief grants Plus: Western Land Funds Net Revenues	[A]	\$ (202,936) - - - 429,878	\$ (206,420) 2,647 4,571 290,981	\$	(202,538) 3,160 4,116 192,119	\$ (221,181) 2,132 4,921 336,214	\$ (251,624) - 5,000 364,097	\$ (267,068) - 5,000 391,332 \$	(279,282) - 5,000 417,933	\$	(289,833) - 5,000 467,360	\$ (298,789) - 5,000 520,301 \$	(307,806) - 5,000 533,250
Bond Debt Service Less: COVID-19 relief grants Less: PFC-Revenues (d) Total Annual Debt Service	[B]	\$ 266,136 - (47,400) 218,736	\$ 274,463 (33,511) (20,580) 220,372	\$	262,514 (133,000) (26,263) 103,251	\$ 262,363 (49,004) (39,000) 174,359	\$ 259,652 (27,397) (50,400) 181,855	\$ 288,406 \$ (33,249) (51,000) 204,157 \$	279,060 - (51,300) 227,760	·	325,255 - (51,800) 273,455	\$ 377,191 \$ - (53,800) 323,391 \$	387,732 - (55,900) 331,832
Debt service coverage ratio	[A/B]	1.97x	1.32x		1.86x	1.93x	2.00x	1.92x	1.83x		1.71x	1.61x	1.61x

Source for historical and budgeted data: Metropolitan Washington Airports Authority.

<sup>(</sup>a) See Exhibit E-3.

<sup>(</sup>b) Airline Transfer Account deposit from prior year.

<sup>(</sup>c) See Exhibit D-3.

<sup>(</sup>d) As approved by the FAA under Dulles PFC Application 4.

#### Exhibit H-1

#### SUMMARY OF BASE CASE AND STRESS TEST FINANCIAL PROJECTIONS

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

	_			Histo	orica	d					Fore	ecas	st				
Airports Authority		2019		2020		2021	2022	2023		2024	2025		2026		2027		2028
Base Passenger Forecast	_													_			
Total Revenues	\$	767,993	\$	508,085	\$	584,818	\$ 800,658	\$ 804,269	\$	845,540	\$ 894,096	\$	964,474	\$	1,048,230	\$	1,090,030
Plus: Transfer from General Purpose Fund		201,029		217,348		66,373	105,878	193,647		195,931	200,353		208,539	\$	209,583	\$	212,643
Less: Operation and Maintenance Expenses		(353,109)		(363,788)		(356,078)	(382,926)	(445,163)		(472,247)	(493,716)		(510,699)		(526,281)		(542,441)
Plus: COVID-19 relief grants		-		7,601		3,621	2,132	-		-	-		-		-		-
Plus: Western Land Funds	_	-	_	4,571	_	4,116	 4,921	 5,000	_	5,000	5,000		5,000		5,000	_	5,000
Net Revenues	\$	615,914	\$	373,817	\$	302,849	\$ 530,665	\$ 557,753	\$	574,224	\$ 605,732	\$	667,315	\$	736,532	\$	765,232
Bond Debt Service	\$	348,210	\$	355,231	\$	349,389	\$ 364,322	\$ 364,064	\$	390,373	\$ 366,062	\$	427,571	\$	493,735	\$	515,417
Less: COVID-19 relief grants		-		(66,770)		(162,222)	(74,697)	(44,889)		(50,740)	-		-		-		-
Less: Application of PFC Revenues		(47,400)		(20,580)		(34,520)	(55,200)	(65,959)		(66,566)	(67,097)		(67,596)		(69,588)		(71,693)
Total Annual Debt Service	\$	300,810	\$	267,881	\$	152,648	\$ 234,425	\$ 253,216	\$	273,067	\$ 298,965	\$	359,975	\$	424,147	\$	443,724
Debt service coverage ratio		2.05x		1.40x		1.98x	2.26x	2.20x		2.10x	2.03x		1.85x		1.74x		1.72x
PFC Revenues	\$	96,304	\$	30,547	\$	59,376	\$ 89,363	\$ 97,865	\$	99,650	\$ 101,434	\$	103,219	\$	105,699	\$	108,178
PFC Fund balance	\$	79,034	\$	71,747	\$	83,786	\$ 65,583	\$ 76,242	\$	104,350	\$ 132,565	\$	163,305	\$	194,581	\$	225,686
Stress Test																	
Total Revenues	\$	767,993	\$	508,085	\$	584,818	\$ 800,658	\$ 804,276	\$	849,619	\$ 898,880	\$	969,611	\$	1,055,306	\$	1,099,241
Plus: Transfer from General Purpose Fund		201,029		217,348		66,373	105,878	193,647		195,937	200,267		208,540		209,538		212,517
Less: Operation and Maintenance Expenses		(353,109)		(363,788)		(356,078)	(382,926)	(445,163)		(472,247)	(493,716)		(510,699)		(526,281)		(542,441)
Plus: COVID-19 relief grants		-		7,601		3,621	2,132	-		-	-		-		-		-
Plus: Western Land Funds		-		4,571		4,116	4,921	5,000		5,000	5,000		5,000		5,000		5,000
Net Revenues	\$	615,914	\$	373,817	\$	302,849	\$ 530,665	\$ 557,760	\$	578,308	\$ 610,431	\$	672,452	\$	743,562	\$	774,317
Bond Debt Service	\$	348,210	\$	355,231	\$	349,389	\$ 364,322	\$ 364,064	\$	390,373	\$ 366,062	\$	427,571	\$	493,735	\$	515,417
Less: COVID-19 relief grants		-		(66,770)		(162,222)	(74,697)	(44,889)		(50,740)	-		-		-		-
Less: Application of PFC Revenues		(47,400)		(20,580)		(34,520)	(55,200)	 (65,959)		(62,366)	(62,397)		(62,396)		(62,388)	_	(62,393)
Total Annual Debt Service	\$	300,810	\$	267,881	\$	152,648	\$ 234,425	\$ 253,216	\$	277,267	\$ 303,665	\$	365,175	\$	431,347	\$	453,024
Debt service coverage ratio		2.05x		1.40x		1.98x	2.26x	2.20x		2.09x	2.01x		1.84x		1.72x		1.71x
PFC Revenues	\$	96,304		30,547		59,376	\$ 89,363	91,410		90,938	\$ 91,394	\$	91,394		91,394	\$	91,394
PFC Fund balance	\$	79,034	\$	71,747	\$	83,786	\$ 65,583	\$ 69,787	\$	93,383	\$ 116,258	\$	140,373	\$	164,545	\$	188,165

Source: See preceding exhibits and accompanying text.
Columns may not add to totals shown because of rounding.

#### Exhibit H-2

#### SUMMARY OF BASE CASE AND STRESS TEST FINANCIAL PROJECTIONS

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Reagan National Airport				Histo	orica	ıl								For	eca	st			
	2019 202			2020		2021		2022		2023		2024		2025		2026		2027	2028
Base Passenger Forecast	_				_		_		_						_				
Airline revenues	\$	137,573	\$	108,119	\$	126,966	\$	133,482	\$	117,051	\$	121,498	\$	134,083	\$	144,237	\$	166,088	\$ 184,792
Concession revenues		134,777		55,656		97,321		170,924		173,424		177,234		181,340		183,730		186,159	188,628
Other operating revenues		28,081	_	28,155		24,605		22,705	_	30,741		31,836	_	31,935		32,124		32,314	 33,007
Total Revenues	\$	300,430	\$	191,930	\$	248,893	\$	327,111	\$	321,216	\$	330,568	\$	347,358	\$	360,091	\$	384,562	\$ 406,428
Plus: Transfer from General Purpose Fund	\$	35,778	\$	43,321	\$	14,918	\$	29,084	\$	65,980	\$	57,503	\$	54,876	\$	60,729	\$	59,162	\$ 60,188
Less: Operation and Maintenance Expenses		(150,173)		(157,368)		(153,540)		(161,745)		(193,540)		(205,179)		(214,434)		(220,866)		(227,492)	(234,635)
Plus: COVID-19 relief grants				4,954		460					_		_				_		 
Net Revenues	\$	186,036	\$	82,837	\$	110,731	\$	194,451	\$	193,656	\$	182,892	\$	187,800	\$	199,954	\$	216,232	\$ 231,981
Bond Debt Service	\$	82,074	\$	80,769	\$	86,875	\$	101,959	\$	104,412	\$	101,968	\$	87,002	\$	102,316	\$	116,544	\$ 127,685
Less: COVID-19 relief grants		-		(33,259)		(29,222)		(25,692)		(17,491)		(17,491)		-		-		-	-
Less: Application of PFC Revenues		-		-		(8,257)		(16,200)	_	(15,559)		(15,566)		(15,797)		(15,796)		(15,788)	 (15,793)
Total Annual Debt Service	\$	82,074	\$	47,510	\$	49,397	\$	60,066	\$	71,361	\$	68,910	\$	71,205	\$	86,521	\$	100,756	\$ 111,892
Debt service coverage ratio		2.27x		1.74x		2.24x		3.24x		2.71x		2.65x		2.64x		2.31x		2.15x	2.07x
Signatory enplaned passengers		11,949		3,768		7,047		11,964		12,694		12,794		12,894		12,994		13,094	13,194
Passenger Signatory Airline payments per passenger	\$	11.49	\$	28.66	\$	18.00	\$	11.14	\$	9.21	\$	9.49	\$	10.39	\$	11.09	\$	12.67	\$ 13.99
Stress Test																			
Airline revenues	\$	137,573	\$	108,119	\$	126,966	\$	133,482	\$	117,051	\$	121,507	\$	134,097	\$	144,254	\$	166,108	\$ 184,815
Concession revenues		134,777		55,656		97,321		170,924		173,424		177,234		181,340		183,730		186,159	188,628
Other operating revenues		28,081		28,155		24,605		22,705		30,741		31,822	_	31,917		32,103		32,289	 32,978
Total Revenues	\$	300,430	\$	191,930	\$	248,893	\$	327,111	\$	321,216	\$	330,562	\$	347,354	\$	360,087	\$	384,556	\$ 406,422
Plus: Transfer from General Purpose Fund	\$	35,778	\$	43,321	\$	14,918	\$	29,084	\$	65,980	\$	57,503	\$	54,873	\$	60,725	\$	59,158	\$ 60,183
Less: Operation and Maintenance Expenses		(150,173)		(157,368)		(153,540)		(161,745)		(193,540)		(205,179)		(214,434)		(220,866)		(227,492)	(234,635)
Plus: COVID-19 relief grants				4,954		460						-				-			 <u>-</u>
Net Revenues	\$	186,036	\$	82,837	\$	110,731	\$	194,451	\$	193,656	\$	182,887	\$	187,793	\$	199,946	\$	216,222	\$ 231,970
Bond Debt Service	\$	82,074	\$	80,769	\$	86,875	\$	101,959	\$	104,412	\$	101,968	\$	87,002	\$	102,316	\$	116,544	\$ 127,685
Less: COVID-19 relief grants		-		(33,259)		(29,222)		(25,692)		(17,491)		(17,491)		-		-		-	-
Less: Application of PFC Revenues		-	_		_	(8,257)	_	(16,200)	_	(15,559)		(15,566)		(15,797)		(15,796)	_	(15,788)	 (15,793)
Total Annual Debt Service	\$	82,074	\$	47,510	\$	49,397	\$	60,066	\$	71,361	\$	68,910	\$	71,205	\$	86,521	\$	100,756	\$ 111,892
Debt service coverage ratio		2.27x		1.74x		2.24x		3.24x		2.71x		2.65x		2.64x		2.31x		2.15x	2.07x
Signatory enplaned passengers		11,949		3,768		7,047		11,964		11,640		11,320		11,320		11,320		11,320	11,320
Passenger Signatory Airline payments per passenger	\$	11.49	\$	28.66	\$	18.00	\$	11.14	\$	10.05	\$	10.72	\$	11.83	\$	12.73	\$	14.66	\$ 16.31

Source: See preceding exhibits and accompanying text.

#### Exhibit H-3

#### SUMMARY OF BASE CASE AND STRESS TEST FINANCIAL PROJECTIONS

Metropolitan Washington Airports Authority For Fiscal Years ending December 31 (dollars and passengers in thousands)

This exhibit is based on information from the sources indicated and assumptions provided by, or reviewed with and approved by, Airports Authority management, as described in the accompanying text. Inevitably, some of the assumptions used to develop the forecasts 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.

Dulles International Airport				Histo	orica	I								Fo	reca	st				
		2019		2020		2021		2022		2023		2024		2025		2026		2027		2028
Base Passenger Forecast	_				_		_		_								_			
Airline revenues before grants Less: Western Lands Account withdrawal Concession revenues Other operating revenues	\$	193,955 (4,950) 198,530 80,028	\$	161,820 (4,571) 88,093 70,813	\$	133,482 (4,116) 132,864 73,696	\$	196,335 (4,921) 209,402 72,732	\$	182,732 (5,000) 214,953 90,368	\$	190,768 (5,000) 232,358 96,846	\$	212,141 (5,000) 240,248 99,348	\$	258,758 (5,000) 248,246 102,378	\$	305,712 (5,000) 257,253 105,704	\$	315,523 (5,000) 266,428 106,651
Total Revenues	\$	467,563	\$	316,155	\$	335,925	\$	473,547	\$	483,053	\$	514,972	\$	546,738	\$	604,383	\$	663,669	\$	683,602
Plus: Transfer from General Purpose Fund Less: Operation and Maintenance Expenses Plus: COVID-19 relief grants	\$	165,251 (202,936)	\$	174,028 (206,420) 2,647	\$	51,455 (202,538) 3,160	\$	76,794 (221,181) 2,132	\$	127,667 (251,624)	\$	138,428 (267,068)	\$	145,477 (279,282)	\$	(289,833)	\$	150,421 (298,789)	\$	152,454 (307,806)
Plus: Western Land Funds	_			4,571	_	4,116	_	4,921	_	5,000	_	5,000	_	5,000	_	5,000	_	5,000		5,000
Net Revenues	\$	429,878	\$	290,981	\$	192,119	\$	336,214	\$	364,097	\$	391,332	\$	417,933	\$	467,360	\$	520,301	\$	533,250
Bond Debt Service Less: COVID-19 relief grants Less: Application of PFC Revenues	\$	266,136 - (47,400)	\$	274,463 (33,511) (20,580)	\$	262,514 (133,000) (26,263)	\$	262,363 (49,004) (39,000)	\$	259,652 (27,397) (50,400)	\$	288,406 (33,249) (51,000)	\$	279,060 - (51,300)	\$	325,255 - (51,800)	\$	377,191 - (53,800)	\$	387,732 - (55,900)
Total Annual Debt Service	<u>.</u>	218,736	Ś	220,372	ċ	103,251	ċ	174,359	Ś	181,855	Ś		Ś	227,760	Ś		\$	323,391	<u>.</u>	331,832
	ڔ	,	ڔ	,	ڔ	,			ڔ		ڔ	,	ڔ		ڔ		ڔ	,	ڔ	,
Debt service coverage ratio		1.97x		1.32x		1.86x		1.93x		2.00x		1.92x		1.83x		1.71x		1.61x		1.61x
Signatory enplaned passengers Passenger Signatory Airline payments per passenger	Ś	12,314 14.82	¢	4,074 37.59	\$	7,375 17.01	¢	10,582 17.69	\$	11,996 14.28	¢	12,346 14.58	¢	12,696 15.75	¢	13,046 18.80	¢	13,571 21.45	¢	14,096 21.34
	Y	14.02	Ţ	37.33	Ų	17.01	Ţ	17.03	Ļ	14.20	Ţ	14.50	Ų	13.73	Y	10.00	,	21.43	Ų	21.54
Stress Test Airline revenues before grants	Ś	193,955	Ś	161,820	Ś	133,482	ċ	196,335	Ś	182,740	ė	194,852	ċ	216,929	Ś	263,899	Ś	312,792	ċ	324,740
Less: Western Lands Account withdrawal	Ş	(4,950)	Ş	(4,571)	Ş	(4,116)	Ş	(4,921)	Ş	(5,000)	Ş	(5,000)	Ş	(5,000)	Ş	(5,000)	Ş	(5,000)	Ş	(5,000)
Concession revenues		198,530		88,093		132,864		209,402		214,953		232,358		240,248		248,246		257,253		266,428
Other operating revenues		80,028		70,813	_	73,696	_	72,732		90,368		96,846		99,348		102,378		105,704		106,651
Total Revenues	\$	467,563	\$	316,155	\$	335,925	\$	473,547	\$	483,060	\$	519,056	\$	551,526	\$	609,524	\$	670,749	\$	692,819
Plus: Transfer from General Purpose Fund Less: Operation and Maintenance Expenses Plus: COVID-19 relief grants		165,251 (202,936)		174,028 (206,420) 2,647		51,455 (202,538) 3,160		76,794 (221,181) 2,132		127,667 (251,624)		138,433 (267,068)		145,394 (279,282)		147,814 (289,833)		150,380 (298,789)		152,334 (307,806)
Plus: Western Land Funds	_		_	4,571	_	4,116	_	4,921	_	5,000	_	5,000	_	5,000	_	5,000	_	5,000	_	5,000
Net Revenues	\$	429,878	\$	290,981	\$	192,119	\$	336,214	\$	364,104	\$	395,422	\$	422,638	\$	472,506	\$	527,340	\$	542,347
Bond Debt Service Less: COVID-19 relief grants Less: Application of PFC Revenues	\$	266,136 - (47,400)	\$	274,463 (33,511) (20,580)	\$	262,514 (133,000) (26,263)	\$	262,363 (49,004) (39,000)	\$	259,652 (27,397) (50,400)	\$	288,406 (33,249) (46,800)	\$	279,060 - (46,600)	\$	325,255 - (46,600)	\$	377,191 - (46,600)	\$	387,732 - (46,600)
Total Annual Debt Service	\$	218,736	\$	220,372	\$	103,251	\$	174,359	\$	181,855	\$	208,357	\$	232,460	\$	278,655	\$	330,591	\$	341,132
Debt service coverage ratio Signatory enplaned passengers Passenger Signatory Airline payments per passenger	\$	1.97x 12,314 14.82	\$	1.32x 4,074 37.59		1.86x 7,375 17.01	\$	1.93x 10,582 17.69	\$	2.00x 11,421 15.00	\$	1.90x 11,621 15.83	\$	1.82x 11,736 17.44		1.70x 11,736 21.31	\$	1.60x 11,736 25.37	\$	1.59x 11,736 26.37
	_														-					

Source: See preceding exhibits and accompanying text.
Columns may not add to totals shown because of rounding.

# APPENDIX B

# DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

	<u>Page</u>
DEFINITIONS	B-1
SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE	B-19



#### **DEFINITIONS**

The following are definitions of certain terms used in the Official Statement (except as otherwise set forth therein) and a summary of certain provisions of the Indenture.

- "Account" shall mean any account or subaccount created in any Fund created under the Master Indenture or under a Supplemental Indenture.
- "Accreted Value" shall mean (a) with respect to any Capital Appreciation Bonds, as of any date of calculation, the sum of the amount set forth in a Supplemental Indenture as the amount representing the initial principal amount of such Capital Appreciation Bonds plus the interest accumulated, compounded and unpaid thereon as of the most recent compounding date, or (b) with respect to Original Issue Discount Bonds, as of the date of calculation, the amount representing the initial public offering price of such Original Issue Discount Bonds plus the amount of the discounted principal which has accreted since the date of issue; in each case the Accreted Value shall be determined in accordance with the provisions of the Supplemental Indenture authorizing the issuance of such Capital Appreciation Bonds or Original Issue Discount Bonds.
- "Acts" shall mean, collectively, Chapter 598 of the Acts of Virginia General Assembly of 1985, as amended, and the District of Columbia Regional Airports Authority Act of 1985 (D.C. Law 6-67), as amended.
- "Airport Consultant" shall mean a firm or firms of national recognition experienced in the field of planning the development, operation and management of airports and aviation facilities, selected and employed by the Airports Authority from time to time.
- "Airports" shall mean Ronald Reagan Washington National Airport, located in Arlington County, Virginia, Washington Dulles International Airport, located in Fairfax County and Loudoun County, Virginia, and any other airport over which the Airports Authority assumes ownership or operating responsibility and that the Airports Authority designates as a part of the Airports under the Master Indenture; provided, however, that the requirements set forth in the Master Indenture for the issuance of additional Bonds shall be satisfied on the date designated by the Airports Authority for inclusion of such designated airport, assuming the issuance of additional Bonds in an amount equal to the aggregate principal of any indebtedness then outstanding, issued or incurred or otherwise payable from the revenues of such airport if such indebtedness is intended to be secured on a parity basis with the Bonds by the pledge of Net Revenues under the Master Indenture (including revenues of such designated airport).
- "Airports Authority" shall mean the Metropolitan Washington Airports Authority, a public body politic and corporate created by the Commonwealth of Virginia and the District of Columbia with the consent of the Congress of the United States of America.
- "Annual Debt Service" shall mean the amount of payments required to be made for principal of and interest on all Bonds, including mandatory sinking fund redemptions and Regularly Scheduled Hedge Payments to be made by the Airports Authority, and Airports

Authority payments pursuant to Reimbursement Agreements with Credit Providers to reimburse such Credit Providers for debt service payments made, and to pay credit enhancement or liquidity support fees, in each case to the extent secured by the Indenture, scheduled to come due within a specified Fiscal Year, computed as follows:

- (a) In determining the amount of principal to be funded in each year, payment shall (unless a different subsection of this definition applies for purposes of determining principal maturities or amortization) be assumed to be made on Outstanding Bonds (other than Short-Term/Demand Obligations) in accordance with any amortization schedule established by the governing documents setting forth the terms of such Bonds, including, as a principal payment, the Accreted Value of any Capital Appreciation Bonds or Original Issue Discount Bonds maturing or scheduled for redemption in such year; and in determining the amount of interest to be funded in each year, interest payable at a fixed rate shall (except to the extent any other subsection of this definition applies) be assumed to be made at such fixed rate and on the required funding dates.
- (b) Except for any historical period for which the actual rate or rates are determinable and except as otherwise provided in the Master Indenture, Bonds that bear interest at a variable rate shall be deemed to bear interest at a fixed annual rate equal to (i) the average of the daily rates of such indebtedness during the 365 consecutive days (or any lesser period such indebtedness has been Outstanding) next preceding the date of computation; or (ii) with respect to any Bonds bearing interest at a variable rate which are being issued on the date of computation, the initial rate of such indebtedness upon such issuance.
- (c) Any Bonds that bear interest at a variable rate and with respect to which there exists a Hedge Facility that obligates the Airports Authority to pay a fixed interest rate or a different variable interest rate shall (for the period during which such Hedge Facility is reasonably expected to remain in effect) be deemed to bear interest at the effective fixed annual rate or different variable rate thereon as a result of such Hedge Facility. In the case of any Bonds that bear interest at a fixed rate and with respect to which there exists a Hedge Facility that obligates the Airports Authority to pay a floating rate, Annual Debt Service shall (for the period during which such Hedge Facility is reasonably expected to remain in effect) be deemed to include the interest payable on such Bonds, less the fixed amounts received by the Airports Authority under the Hedge Facility, plus the amount of the floating payments (using the convention described in (b) above) to be made by the Airports Authority under the Hedge Facility.
- (d) If all or any portion of an Outstanding Series of Bonds constitute Balloon Maturities, unissued Program Bonds or Short-Term/Demand Obligations, then, for purposes of determining Annual Debt Service, each maturity that constitutes a Balloon Maturity, unissued Program Bonds or Short-Term/Demand Obligations shall, unless otherwise provided in the Supplemental Indenture pursuant to which such Bonds are authorized or unless provision (e) of this definition then applies to such maturity, be treated as if it were to be amortized over a term of not more than 30 years and with substantially level annual debt service funding payments commencing not later than the year following the year in which such Balloon Maturity, unissued Program Bonds or Short-Term/Demand Obligations were issued, and extending not later than 30 years from the date such Balloon Maturity, unissued Program Bonds or Short-Term/Demand Obligations were originally issued; the interest rate used for such computation shall be that rate

B-2

quoted in The Bond Buyer 25 Revenue Bond Index for the last week of the month preceding the date of calculation as published by *The Bond Buyer*, or if that index is no longer published, another similar index designated by an Authority Representative, taking into consideration whether such Bonds bear interest which is or is not excluded from gross income for federal income tax purposes; with respect to any Series of Bonds only a portion of which constitutes Balloon Maturities, unissued Program Bonds or Short-Term/Demand Obligations, the remaining portion shall be treated as described in (a) above or such other provision of this definition as shall be applicable, and with respect to that portion of a Series that constitutes Balloon Maturities, all funding requirements of principal and interest becoming due in any year other than the stated maturity of the balloon indebtedness shall be treated as described in (a) above or such other provision of this definition as shall be applicable.

- (e) Any maturity of Bonds that constitutes a Balloon Maturity as described in provision (d) of this definition and for which the stated maturity date occurs within 12 months from the date such calculation of Annual Debt Service is made, shall be assumed to become due and payable on the stated maturity date, and provision (d) above shall not apply thereto, unless there is delivered to the entity making the calculation of Annual Debt Service a certificate of an Authority Representative stating (i) that the Airports Authority intends to refinance such maturity, (ii) the probable terms of such refinancing and (iii) that the debt capacity of the Airports Authority is sufficient to successfully complete such refinancing; upon the receipt of such certificate, such Balloon Maturity shall be assumed to be refinanced in accordance with the probable terms set out in such certificate and such terms shall be used for purposes of calculating Annual Debt Service; provided that such assumption shall not result in an interest rate lower than that which would be assumed under provision (d) above and shall be amortized over a term of not more than 30 years from the expected date of refinancing.
- (f) In any computation relating to the issuance of additional Bonds or the rate covenant required by the Master Indenture, there shall be excluded from the computation of Annual Debt Service principal of and interest on indebtedness for which funds are, or are reasonably expected to be, available for and which are irrevocably committed to make such payments, including without limitation any such funds in an escrow account or any such funds constituting capitalized interest held in any fund or account created by the Indenture.

# "Authenticating Agent" shall mean the Trustee.

"Authority Facilities" shall have the same definition as such term has from time to time in the Acts.

"Authority Representative" shall mean the Chairperson or the Vice Chairperson of the Board of Directors, any Co-Chair of the Finance Committee of the Board of Directors, the President and Chief Executive Officer, the Senior Vice President and General Counsel, the Senior Vice President for Finance and Chief Financial Officer, or the Manager of Treasury of the Airports Authority, or other representative of the Airports Authority designated as authorized to give directions to the Trustee under the Fifty-sixth Supplemental Indenture.

**"Balloon Maturities"** shall mean, with respect to any Series of Bonds 50% or more of the principal of which matures on the same date or within a Fiscal Year, that portion of such Series, which matures on such date or within such Fiscal Year. For purposes of this definition, the principal amount maturing on any date shall be reduced by the amount of such Bonds scheduled to be amortized by prepayment or redemption prior to their stated maturity date. Commercial paper, bond anticipation notes or other Short-Term/Demand Obligations shall not be Balloon Maturities.

"Bond" or "Bonds" shall mean, for purposes of this summary, any bonds or any other evidences of indebtedness for borrowed money issued from time to time pursuant to the Master Indenture and the Supplemental Indentures. The term "Bond" or "Bonds" shall include notes, bond anticipation notes, commercial paper and other Short-Term/Demand Obligations, Regularly Scheduled Hedge Payments, and other securities, contracts or obligations incurred through lease, installment purchase or other agreements or certificates of participation therein, in each case to the extent secured by the Indenture; provided that Hedge Termination Payments to be made by the Airports Authority shall not be secured by the Indenture on a parity with the Bonds. The terms "Bond" and "Bonds" shall not include Subordinated Bonds or Junior Lien Obligations.

**"Bond Counsel"** shall mean an attorney or firm or firms of attorneys of national recognition, selected or employed by the Airports Authority and acceptable to the Trustee, experienced in the field of municipal bonds whose opinions are generally accepted by purchasers of municipal bonds.

**"Bond Fund"** shall mean the Metropolitan Washington Airports Authority Bond Fund created pursuant to the Master Indenture.

**"Bond Payment Date"** shall mean each April 1 and October 1, commencing October 1, 2023.

**"Book-Entry System"** shall mean the system maintained by the Securities Depository as described in the Fifty-sixth Supplemental Indenture.

"Business Day" shall mean any day of the week other than Saturday, Sunday or a day which shall be, in the Commonwealth of Virginia, the State of New York or in the jurisdiction in which the Corporate Trust Office of the Trustee or the principal office of the Series 2023A Registrar is located, a legal holiday or a day on which banking corporations are authorized or obligated by law or executive order to close.

"Capital Appreciation Bonds" shall mean Bonds all or a portion of the interest on which is compounded and accumulated at the rates and on the dates set forth in a Supplemental Indenture and is payable only upon redemption or on the maturity date of such Bonds. Bonds which are issued as Capital Appreciation Bonds, but later convert to Bonds on which interest is paid periodically shall be Capital Appreciation Bonds until the conversion date and from and after such conversion date shall no longer be Capital Appreciation Bonds, but shall be treated as having a principal amount equal to their Accreted Value on the conversion date.

"Code" shall mean the Internal Revenue Code of 1986, as amended, including applicable Treasury Regulations, rulings and procedures promulgated thereunder or under the Internal Revenue Code of 1954, as amended.

"Common Debt Service Reserve Requirement" shall mean an amount to be on deposit in the Common Reserve Account equal to the lesser of (i) 10% of the original par amount of the Series 2023A Bonds and any other Common Reserve Bonds; (ii) the Maximum Annual Debt Service on the Series 2023A Bonds and any other Common Reserve Bonds in any Fiscal Year; or (iii) 125% of the average Annual Debt Service for the Series 2023A Bonds and any other Common Reserve Bonds; provided that such amount may be recalculated at any time and that such amount shall be recalculated (a) upon the designation by the Airports Authority of any Common Reserve Bonds and (b) in connection with the redemption or purchase and cancellation of any Series 2023A Bonds or Common Reserve Bonds.

"Common Reserve Account" shall mean the account established for the Series 2023A Bonds and any other Common Reserve Bonds in the Debt Service Reserve Fund, as set forth in the Fifty-sixth Supplemental Indenture.

"Common Reserve Bonds" shall mean the Bonds of any other Series issued under the Master Indenture and designated in writing to the Trustee by an Authority Representative as being secured on a parity with the Series 2023A Bonds by amounts on deposit in the Common Reserve Account. As of the date of the issuance of the Series 2023A Bonds, the term Common Reserve Bonds shall include the (i) Taxable Airport System Revenue Refunding Bonds, Series 2013B, (ii) Airport System Revenue and Refunding Bonds, Series 2014A, (iii) Airport System Revenue Refunding Bonds, Series 2016B, (v) Airport System Revenue and Refunding Bonds, Series 2017A, (vi) Airport System Revenue and Refunding Bonds, Series 2019A, (vii) Airport System Revenue Refunding Bonds, Series 2019B, (ix) Airport System Revenue Refunding Bonds, Series 2020B, (xi) Airport System Revenue Refunding Bonds, Series 2021A, (xii) Taxable Airport System Revenue Refunding Bonds, Series 2022A, (xiv) Series 2023A Bonds, and (xv) any future Series of Bonds designated by the Airports Authority as "Common Reserve Bonds".

**"Construction Fund"** shall mean the Metropolitan Washington Airports Authority Construction Fund created pursuant to the Master Indenture.

"Corporate Trust Office" shall mean the office of the Trustee at which its principal corporate trust business is conducted, which at the date hereof is located in Baltimore, Maryland.

"Cost" when used with respect to Authority Facilities, shall have the same definition as such term has in the Acts.

"Credit Facility" or "Credit Facilities" shall mean, with respect to a Series of Bonds, the letter of credit, line of credit, municipal bond insurance, surety policy, or other form of credit enhancement and/or liquidity support, if any, for such Series of Bonds, provided for in the applicable

Supplemental Indenture, including any alternate Credit Facility with respect to such Series of Bonds delivered in accordance with provisions of the Supplemental Indenture providing for the issuance of such Series of Bonds.

- "Credit Provider" shall mean, with respect to a Series of Bonds, the provider of a Credit Facility, including municipal bond insurance, letter of credit, or liquidity support, if any, for such Series of Bonds specified in the applicable Supplemental Indenture.
- **"Debt Service Reserve Fund"** shall mean the Metropolitan Washington Airports Authority Debt Service Reserve Fund created pursuant to the Master Indenture.
  - "DTC" shall mean The Depository Trust Company, New York, New York.
- **"Emergency Repair and Rehabilitation Fund"** shall mean the Metropolitan Washington Airports Authority Emergency Repair and Rehabilitation Fund created pursuant to the Master Indenture.
  - "Event of Default" shall mean any one or more of the events set forth in the Master Indenture.
- **"Exempt Facilities"** shall mean airports and functionally related and subordinate facilities within the meaning of and qualifying under Section 142 of the Code.
- **"Federal Lease"** shall mean the Agreement and Deed of Lease, dated March 2, 1987, between the United States of America, acting through the Secretary of Transportation, and the Airports Authority, as the same may be amended or supplemented.
- **"Federal Lease Fund"** shall mean the Metropolitan Washington Airports Authority Federal Lease Fund created pursuant to the Master Indenture.
- "Fiscal Year" shall mean the fiscal year of the Airports Authority ending as of December 31 of each year or such other date as may be designated from time to time in writing by the Airports Authority to the Trustee.
- **"Fitch"** shall mean Fitch Ratings, Inc. and its successors, if any, and if such corporation shall no longer perform the functions of a securities rating agency, "Fitch" shall mean any other nationally recognized Rating Agency designated by an Authority Representative.
- **"Fifty-sixth Supplemental Indenture"** shall mean the Fifty-sixth Supplemental Indenture of Trust dated as of July 1, 2023, between the Airports Authority and the Trustee relating to the Series 2023A Bonds, which supplements the Master Indenture.
- **"Fund"** shall mean any fund created under the Master Indenture or under a Supplemental Indenture.
- "General Purpose Fund" shall mean the Metropolitan Washington Airports Authority General Purpose Fund created pursuant to the Master Indenture.

"Government Certificates" shall mean (in the case of governmental obligations) evidences of ownership of proportionate interest in future interest or principal payments of Government Obligations, including depository receipts thereof. Investments in such proportionate interest must be limited to circumstances wherein (a) a bank or trust company acts as custodian and holds the underlying Government Obligations; (b) the owner of the investment is the real party in interest and has the right to proceed directly and individually against the obligor of the underlying Government Obligations; and (c) the underlying Government Obligations are held in a special account, segregated from the custodian's general assets, and are not available to satisfy any claim of the custodian, any person claiming through the custodian, or any person to whom the custodian may be obligated. "Government Certificates" shall also mean any other type of security or obligation that the Rating Agencies then maintaining ratings on any Bonds to be defeased have determined are permitted defeasance securities and qualify the Bonds to be defeased thereby for a rating in the highest category, or are otherwise acceptable to, each of the Rating Agencies.

"Government Obligations" shall mean direct and general obligations of, or obligations the timely payment of principal and interest on which are unconditionally guaranteed by, the United States of America.

"Hedge Facility" shall mean any rate swap transaction, basis swap transaction, cap transaction, floor transaction, collar transaction, or similar transaction, 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 an Authority Representative as a Hedge Facility to relate to all or part of one or more Series of Bonds; (b) is with a Qualified Hedge Provider or an entity that has been a Qualified Hedge Provider within the 60 day period preceding the date on which the calculation of Annual Debt Service or Maximum Annual Debt Service is being made; 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.

"Hedge Termination Payment" shall mean an amount payable by the Airports Authority or a Qualified Hedge Provider, in accordance with a Hedge Facility, to compensate the other party to the Hedge Facility for any losses and costs that such other party may incur as a result of an event of default or the early termination of the obligations, in whole or in part, of the parties under such Hedge Facility.

"Holder" or "Bondholder" shall mean the registered owner of any Bond; provided that with respect to any Series of Bonds which is insured by a bond insurance policy, the term "Holder" or "Bondholder" for purposes of all consents, directions, and notices provided for in the Indenture and any applicable Supplemental Indenture, shall mean the issuer of such bond insurance policy as long as such policy issuer has not defaulted under its policy; provided further that unless it is actually the beneficial owner of the Bonds in respect of which consent is requested, the policy issuer shall not have the power to act on behalf of the registered owners of any Bonds to consent to changes that (a) extend the stated maturity of or time for paying the interest on such Bonds, (b) reduce the principal amount of, purchase price for, or redemption premium or rate of interest payable on such Bonds, or (c) result in a privilege or priority of any Bond over any other Bond. A

Qualified Hedge Provider shall only be considered a Bondholder to the extent specified in a Supplemental Indenture.

- "Indenture" shall mean the Master Indenture as amended, supplemented, and restated from time to time in accordance with its terms.
- "Interest Account" shall mean the Account of that name in the Bond Fund created pursuant to the Master Indenture.
- **"Junior Lien Indenture"** shall mean the indenture or other documents of the Airports Authority providing for the issuance of and securing Junior Lien Obligations.
- "Junior Lien Obligations" shall mean the Airports Authority's bonds, or other indebtedness or obligations subordinate to the Bonds and the Subordinated Bonds, but such term shall not include the Federal Lease or Special Facility Bonds. The term "Junior Lien Obligations" shall include notes, bond anticipation notes, commercial paper and other Short-Term/Demand Obligations, Regularly Scheduled Hedge Payments, Hedge Termination Payments, and other securities, contracts or obligations incurred through lease, installment purchase or other agreements or certificates of participation therein, in each case to the extent secured by a Junior Lien Indenture.
- **"Junior Lien Obligations Fund"** shall mean the Metropolitan Washington Airports Authority Junior Lien Obligations Fund created pursuant to the Master Indenture for the purpose of providing all deposits and payments required by any Junior Lien Indenture, including reserves for debt service on Junior Lien Obligations.
- **"Master Indenture"** shall mean the Master Indenture of Trust dated as of February 1, 1990, as amended and restated by the Amended and Restated Master Indenture of Trust dated as of September 1, 2001, as amended, between the Airports Authority and the Trustee.
- "Maximum Annual Debt Service" shall mean the maximum Annual Debt Service with respect to any specified indebtedness for any Fiscal Year during the term of such indebtedness.
- "Moody's" shall mean Moody's Investors Service, Inc., a corporation existing under the laws of the State of Delaware, its successors and assigns, and, if such corporation shall no longer perform the functions of a securities rating agency, "Moody's" shall mean any other nationally recognized rating agency designated by an Authority Representative.
- "Net Revenues" shall mean Revenues, plus transfers, if any, from the General Purpose Fund to the Revenue Fund, after provision is made for the payment of Operation and Maintenance Expenses.
- "Operation and Maintenance Expenses" shall mean for any period, all expenses of the Airports Authority paid or accrued for the operation, maintenance, administration, and ordinary current repairs of the Airports. Operation and Maintenance Expenses shall not include: (a) the principal of, premium, if any, or interest payable on any Bonds, Subordinated Bonds and Junior Lien Obligations; (b) any allowance for amortization or depreciation of the Airports; (c) any other expense

for which (or to the extent to which) the Airports Authority is or will be paid or reimbursed from or through any source that is not included or includable as Revenues; (d) any extraordinary items arising from the early extinguishment of debt; (e) rentals payable under the Federal Lease; and (f) any expense paid with amounts from the Emergency Repair and Rehabilitation Fund.

**"Operation and Maintenance Fund"** shall mean the Metropolitan Washington Airports Authority Operation and Maintenance Fund created pursuant to the Master Indenture.

"Opinion of Bond Counsel" shall mean a written opinion of Bond Counsel.

"Original Issue Discount Bonds" shall mean Bonds which are sold at an initial public offering price of less than face value and which are specifically designated as Original Issue Discount Bonds by the Supplemental Indenture under which such Bonds are issued.

"Outstanding" when used with reference to a Series of Bonds, shall mean, as of any date of determination, all Bonds of such Series theretofore authenticated and delivered except: (a) Bonds of such Series theretofore cancelled by the Trustee or delivered to the Trustee for cancellation; (b) Bonds of such Series which are deemed paid and no longer Outstanding as provided in the Master Indenture; (c) Bonds of such Series in lieu of which other Bonds of such Series have been issued pursuant to the provisions of the Master Indenture relating to Bonds destroyed, stolen or lost, unless evidence satisfactory to the Trustee has been received that any such Bond is held by a bona fide purchaser; (d) after any tender date as may be provided for in the applicable Supplemental Indenture, any Bond of such Series held by a Bondholder who has given a tender notice or was required to tender such Bond in accordance with the provisions of the applicable Supplemental Indenture and which was not so tendered and for which sufficient funds for the payment of the purchase price of which have been deposited with the Trustee or the Paying Agent, if any, or any tender agent appointed under such Supplemental Indenture; and (e) for purposes of any consent or other action to be taken under the Indenture by the Holders of a specified percentage of principal amount of Bonds of a Series or all Series, Bonds held by or for the account of the Airports Authority.

"Participant" shall mean one of the entities which deposit securities, directly or indirectly, in the Book-Entry System of the Securities Depository.

"Payment of a Series of Bonds" shall mean payment in full of all principal of, premium, if any, and interest on a Series of Bonds.

"Permitted Investments" shall mean and include any of the following, if and to the extent the same are at the time legal for the investment of the Airports Authority's money:

- (a) Government Obligations and Government Certificates.
- (b) Obligations issued or guaranteed by any of the following:
  - (i) Federal Home Loan Bank System;
  - (ii) Export-Import Bank of the United States;
  - (iii) Federal Financing Bank;

- (iv) Government National Mortgage Association;
- (v) Farmers Home Administration;
- (vi) Federal Home Loan Mortgage Corporation;
- (vii) Federal Housing Administration;
- (viii) Private Export Funding Corp;
- (ix) Federal National Mortgage Association; and
- (x) Federal Farm Credit Bank;

or any indebtedness issued or guaranteed by any instrumentality or agency of the United States of America.

- (c) Pre-refunded municipal obligations rated at the time of purchase in the highest rating category by, or otherwise acceptable to, the Rating Agencies and meeting the following conditions:
- (i) such obligations are (A) not to be redeemed prior to maturity or the Trustee has been given irrevocable instructions concerning their calling and redemption and (B) the issuer of such obligations has covenanted not to redeem such obligations other than as set forth in such instructions:
- (ii) such obligations are secured by Government Obligations or Government Certificates that may be applied only to interest, principal, and premium payments of such obligations;
- (iii) the principal of and interest on such Government Obligations or Government Certificates (plus any cash in the escrow fund with respect to such pre-refunded obligations) are sufficient to meet the liabilities of the obligations;
- (iv) the Government Obligations or Government Certificates serving as security for the obligations are held by an escrow agent or trustee; and
- (v) such Government Obligations or Government Certificates are not available to satisfy any other claims, including those against the trustee or escrow agent.
- (d) Direct and general long-term obligations of any state of the United States of America or the District of Columbia (a "State"), to the payment of which the full faith and credit of such State is pledged and that at the time of purchase are rated in either of the two highest rating categories by, or are otherwise acceptable to, the Rating Agencies.
- (e) Direct and general short-term obligations of any State, to the payment of which the full faith and credit of such State is pledged and that at the time of purchase are rated in the highest rating category by, or are otherwise acceptable to, the Rating Agencies.
- (f) Interest-bearing demand or time deposits with, or interests in money market portfolios rated AAA-m by Standard & Poor's issued by, state banks or trust companies or national banking associations that are members of the Federal Deposit Insurance Corporation ("FDIC"). Such

deposits or interests must be (i) continuously and fully insured by FDIC, (ii) if they have a maturity of one year or less, with or issued by banks that at the time of purchase are rated in one of the two highest short term rating categories by, or are otherwise acceptable to, the Rating Agencies, (iii) if they have a maturity longer than one year, with or issued by banks that at the time of purchase are rated in one of the two highest rating categories by, or are otherwise acceptable to, the Rating Agencies, or (iv) fully secured by Government Obligations and Government Certificates. Such Government Obligations and Government Certificates must have a market value at all times at least equal to the principal amount of the deposits or interests. The Government Obligations and Government Certificates must be held by a third party (who shall not be the provider of the collateral), or by any Federal Reserve Bank or depositary, as custodian for the institution issuing the deposits or interests. Such third party should have a perfected first lien in the Government Obligations and Government Certificates serving as collateral, and such collateral is to be free from all other third party liens.

- (g) Eurodollar time deposits issued by a bank with a deposit rating at the time of purchase in one of the top two short-term deposit rating categories by, or otherwise acceptable to, the Rating Agencies.
- (h) Long-term or medium-term corporate debt guaranteed by any corporation that is rated in one of the two highest rating categories by, or is otherwise acceptable to, the Rating Agencies.
- (i) Repurchase agreements, (i) the maturities of which are 30 days or less or (ii) the maturities of which are longer than 30 days and not longer than one year provided the collateral subject to such agreements are marked to market daily, entered into with financial institutions such as banks or trust companies organized under State law or national banking associations, insurance companies, or government bond dealers reporting to, trading with, and recognized as a primary dealer by, the Federal Reserve Bank of New York and a member of the Security Investors Protection Corporation, or with a dealer or parent holding company that is rated at the time of purchase investment grade by, or otherwise acceptable to, the Rating Agencies. The repurchase agreement should be in respect of Government Obligations and Government Certificates or obligations described in paragraph (b) of this definition. The repurchase agreement securities and, to the extent necessary, Government Obligations and Government Certificates or obligations described in paragraph (b), exclusive of accrued interest, shall be maintained in an amount at least equal to the amount invested in the repurchase agreements. In addition, the provisions of the repurchase agreement shall meet the following additional criteria:
- (A) the third party (who shall not be the provider of the collateral) has possession of the repurchase agreement securities and the Government Obligations and Government Certificates;
- (B) failure to maintain the requisite collateral levels will require the third party having possession of the securities to liquidate the securities immediately; and
- (C) the third party having possession of the securities has a perfected, first priority security interest in the securities.

- (j) Prime commercial paper of a corporation, finance company or banking institution at the time of purchase rated in the highest short-term rating category by, or otherwise acceptable to, the Rating Agencies.
- (k) Public housing bonds issued by public agencies. Such bonds must be: fully secured by a pledge of annual contributions under a contract with the United States of America; temporary notes, preliminary loan notes or project notes secured by a requisition or payment agreement with the United States of America; or state or public agency or municipality obligations at the time of purchase rated in the highest credit rating category by, or otherwise acceptable to, the Rating Agencies.
- (l) Shares of a diversified open-end management investment company, as defined in the Investment Company Act of 1940, or shares in a regulated investment company, as defined in Section 851(a) of the Code, that is a money market fund that at the time of purchase has been rated in the highest rating category by, or is otherwise acceptable to, the Rating Agencies.
- (m) Money market accounts of any state or federal bank, or bank whose holding parent company is rated at the time of purchase in one of the top two short-term or long-term rating categories by, or is otherwise acceptable to, the Rating Agencies.
- (n) Investment agreements, the issuer of which is at the time of purchase rated in one of the two highest rating categories by, or is otherwise acceptable to, the Rating Agencies.
- (o) Any debt or fixed income security, the issuer of which is rated at the time of purchase in the highest rating category by, or is otherwise acceptable to, the Rating Agencies.
- (p) Investment agreements or guaranteed investment contracts that are fully secured by obligations described in items (a) or (b) of the definition of Permitted Investments which are (i) valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to 103% of the principal amount of the investment, together with the interest accrued and unpaid thereon, (ii) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (iii) subject to a perfected first lien on behalf of the Trustee, and (iv) free and clear from all third-party liens.
- (q) Any other type of investment consistent with Airports Authority policy in which an Authority Representative directs the Trustee to invest and there is delivered to the Trustee a certificate of an Authority Representative stating that each of the Rating Agencies has been informed of the proposal to invest in such investment and each Rating Agency has confirmed that such investment will not adversely affect the rating then assigned by such Rating Agency to any of the Bonds.

"Principal Account" shall mean the Account of that name in the Bond Fund created pursuant to the Master Indenture.

"Program" shall mean a financing program identified in a Supplemental Indenture, including but not limited to a bond anticipation note or commercial paper program, (a) which is authorized and the terms thereof approved by a resolution adopted by the Airports Authority and the items required under the Master Indenture have been filed with the Trustee, (b) wherein the Airports Authority has authorized the issuance, from time to time, of notes, commercial paper or other indebtedness in an authorized amount, and (c) the authorized amount of which has met the additional bonds test set forth in the Master Indenture and the Outstanding amount of which may vary from time to time, but not exceed the authorized amount.

"Qualified Costs of Facilities" shall mean the Costs of Exempt Facilities which (a) will be charged to the Airports' capital account for federal income tax purposes, or which would be so chargeable either with a proper election under the Code or but for a proper election to deduct such amount, and (b) were incurred and paid, or are to be incurred and paid, after the date on which the Airports Authority adopted a resolution or took some other official action toward the issuance of obligations to finance such Costs.

"Qualified Hedge Provider" shall mean a financial institution whose senior long-term debt obligations, or whose obligations under any Hedge Facility are (a) guaranteed by a financial institution, or subsidiary of a financial institution, whose senior long-term debt obligations, are rated at least "A1," in the case of Moody's and "A+," in the case of S&P, or the equivalent thereto in the case of any successor thereto, or (b) fully secured by obligations described in items (a) or (b) of the definition of Permitted Investments which are (i) valued not less frequently than monthly and have a fair market value, exclusive of accrued interest, at all times at least equal to 105% (or such lower percentage as shall be acceptable to the Rating Agencies) of the "notional amount" as defined in the Hedge Facility, together with the interest accrued and unpaid thereon, (ii) held by the Trustee (who shall not be the provider of the collateral) or by any Federal Reserve Bank or a depository acceptable to the Trustee, (iii) subject to a perfected first lien on behalf of the Trustee, and (iv) free and clear from all third-party liens.

"Rating Agency" or "Rating Agencies" shall mean Moody's or Standard & Poor's or Fitch or all of them and, if any such credit rating agency is no longer issuing applicable credit ratings, any other nationally recognized successor rating agency designated by the Airports Authority with the approval of the Trustee; provided that any such rating agency shall, at the time in question, be maintaining a rating on such Series of Bonds at the request of the Airports Authority.

"Rebate Amount" shall mean the amount, if any, determined pursuant to Section 148(f) of the Code to be paid to the United States of America with respect to the Series 2023A Bonds, as described in the Fifty-sixth Supplemental Indenture.

"Record Date" shall mean shall mean the fifteenth (15th) day (regardless of whether a Business Day) of the calendar month immediately preceding a Bond Payment Date.

**"Redemption Account"** shall mean the Account of that name in the Bond Fund created pursuant to the Master Indenture.

"Refunded Bonds" shall mean the Refunded Series 2013A Bonds.

- "Refunded Revolving Loan Note" shall mean the \$1,000,000 currently Outstanding principal amount of the Airport Authority's Airport System Revenue Revolving Loan Note, Subseries A (AMT).
- "Refunded Series 2013A Bonds" shall mean all of the Airports Authority's Airport System Revenue and Refunding Bonds, Series 2013A, currently Outstanding in the principal amount of \$171,090,000.
- "Register" shall mean, with respect to the Series 2023A Bonds, the registration books of the Airports Authority kept to evidence the registration and registration of transfer of the Series 2023A Bonds.
- "Regularly Scheduled Hedge Payments" shall mean the regularly scheduled payments under the terms of a Hedge Facility which are due absent any termination, default or dispute in connection with such Hedge Facility.
- "Reimbursement Agreement" shall mean, with respect to a Series of Bonds, any agreement or agreements in each case between a Credit Provider or Credit Providers and the Airports Authority under or pursuant to which a Credit Facility for such Series of Bonds is issued, and any agreement that replaces such original agreement that sets forth the obligations of the Airports Authority to such Credit Provider or Credit Providers and the obligations of such Credit Provider or Credit Providers to the Airports Authority.
- **"Released Revenues"** shall mean Revenues of the Airports Authority in respect of which the Trustee has received the following:
- (a) a request of an Authority Representative describing such Revenues and requesting that such Revenues be excluded from the pledge and lien of the Master Indenture on Net Revenues;
- (b) either (i) an Airport Consultant's certificate to the effect that, based upon reasonable assumptions, projected Net Revenues after the Revenues covered by the Authority Representative's request are excluded, calculated in accordance with the additional Bonds test set forth in the Master Indenture for each of the three full Fiscal Years following the Fiscal Year in which such certificate is delivered, will not be less than the larger of (A) the amounts needed for making the required deposits to the Principal Accounts, the Interest Accounts, and the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund, and the Emergency Repair and Rehabilitation Fund or (B) an amount not less than 150% of the average Annual Debt Service for each Fiscal Year during the remaining term of all Bonds that will remain Outstanding after the exclusion of such Revenues (disregarding any Bonds that have been or will be paid or discharged); or
- (ii) an Authority Representative's certificate to the effect that Net Revenues in the two most recently completed Fiscal Years, after the Revenues covered by the Authority Representative's request are excluded, were not less than the larger of (A) the amounts

needed for making the required deposits to the Principal Accounts, the Interest Accounts, and the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund, and the Emergency Repair and Rehabilitation Fund or (B) 135% of (1) average Annual Debt Service on all Bonds Outstanding in each such Fiscal Year (disregarding any Bonds that have been paid or discharged), plus (2) average Annual Debt Service with respect to any additional Bonds issued since the completion of such Fiscal Year or proposed to be issued at the time such certificate is delivered;

- (c) an Opinion of Bond Counsel to the effect that (i) the conditions set forth in the Master Indenture to the release of such Revenues have been met and (ii) the exclusion of such Revenues from the pledge and lien of the Master Indenture will not, in and of itself, cause the interest on any Outstanding Bonds to be included in gross income for purposes of federal income tax;
- (d) written confirmation from each of the Rating Agencies to the effect that the exclusion of such Revenues from the pledge and lien of the Master Indenture will not cause a withdrawal of or reduction in any unenhanced rating then assigned to the Bonds; and
- (e) evidence that notice of the proposed Released Revenues was given to all current Credit Providers in respect of any Bonds at least 15 days prior to the proposed effective date of the release of such Revenues.

Upon the Trustee's receipt of such documents, the Revenues described in the Authority Representative's request shall be excluded from the pledge and lien of the Indenture, and the Trustee shall take all reasonable steps requested by the Authority Representative to evidence or confirm the release of such pledge and lien on the Released Revenues.

"Revenue Fund" shall mean the Metropolitan Washington Airports Authority Revenue Fund created pursuant to the Master Indenture.

"Revenues" shall mean all revenues of the Airports Authority received or accrued except (a) interest income on, and any profit realized from, the investment of moneys in any fund or account to the extent that such income or profit is not transferred to, or retained in, the Revenue Fund or the Bond Fund; (b) interest income on, and any profit realized from, the investment of moneys in any fund or account funded from the proceeds of Special Facility Bonds; (c) amounts received by the Airports Authority from, or in connection with, Special Facilities, unless such funds are treated as Revenues by the Airports Authority; (d) the proceeds of any passenger facility charge or similar charge levied by, or on behalf of, the Airports Authority, unless such funds are treated as Revenues by the Airports Authority; (e) grants-in-aid, donations, and/or bequests; (f) insurance proceeds which are not deemed to be revenues in accordance with generally accepted accounting principles; (g) the proceeds of any condemnation awards; (h) the proceeds of any sale of land, buildings or equipment; and (i) any other amounts which are not deemed to be revenues in accordance with generally accepted accounting principles or which are restricted as to their use. Unless otherwise provided in a Supplemental Indenture, there shall also be excluded from the term "Revenues" (a) any Hedge Termination Payments received by the Airports Authority and (b) any

- Released Revenues in respect of which the Airports Authority has filed with the Trustee the request of Authority Representative, Airport Consultant's or Authority Representative's certificate, Opinion of Bond Counsel and the other documents contemplated in the definition of the term "Released Revenues."
- "Securities Depository" shall mean DTC, or its nominees and the successors and assigns of such nominee, or any successor appointed under the Fifty-sixth Supplemental Indenture.
- "Series 2013A Refunding Agreement" shall mean the refunding agreement dated as of July 1, 2023, between the Airports Authority and the Trustee relating to the Refunded Series 2013A Bonds.
- "Series 2023A Bonds" shall mean the Airport System Revenue and Refunding Bonds, Series 2023A, authorized to be issued pursuant to the Master Indenture and the Fifty-sixth Supplemental Indenture.
- "Series 2023A Cost of Issuance Subaccount" shall mean the subaccount established for the Series 2023A Bonds in the Construction Fund, as set forth in the Fifty-sixth Supplemental Indenture.
- "Series 2023A Custodian" shall mean Manufacturers and Traders Trust Company or its successor as custodian and bailee for the Trustee holding the Series 2023A Cost of Issuance Subaccount and the Series 2023A Project Account pursuant to provisions of the Master Indenture.
- "Series 2023A Interest Account" shall mean the account established for the Series 2023A Bonds in the Bond Fund, as set forth in the Fifty-sixth Supplemental Indenture.
- "Series 2023A Paying Agent" shall mean, for all purposes of the Indenture with respect to the Series 2023A Bonds, the Trustee or such other paying agent appointed by the Trustee.
- "Series 2023A Principal Account" shall mean the account established for the Series 2023A Bonds in the Bond Fund, as set forth in the Fifty-sixth Supplemental Indenture.
- "Series 2023A Project Account" shall mean the account established for the Series 2023A Bonds in the Construction Fund, as set forth in the Fifty-sixth Supplemental Indenture.
- "Series 2023A Redemption Account" shall mean the account established for the Series 2023A Bonds in the Bond Fund, as set forth in the Fifty-sixth Supplemental Indenture.
- "Series 2023A Registrar" shall mean, with respect to the Series 2023A Bonds, the keeper of the Register, which shall be the Trustee.
- "Series of Bonds" or "Bonds of a Series" or "Series" shall mean a series of Bonds issued pursuant to the Master Indenture and a Supplemental Indenture.
- "Short-Term/Demand Obligations" shall mean each Series of Bonds issued pursuant to the Master Indenture, the payment of principal of which is either (a) payable on demand by or at

the option of the Holder at a time sooner than a date on which such principal is deemed to be payable for purposes of computing Annual Debt Service, or (b) scheduled to be payable within one year from the date of issuance and is contemplated to be refinanced for a specified period or term either (i) through the issuance of additional Short-Term/Demand Obligations pursuant to a commercial paper, auction Bond or other similar Program, or (ii) through the issuance of long-term Bonds pursuant to a bond anticipation note or similar Program.

"Special Facility" shall mean any facility, improvement, structure, equipment or assets acquired or constructed on any land or in or on any structure or building at the Airports, the cost of construction and acquisition of which are paid for (a) by the obligor under a Special Facility Agreement, or (b) from the proceeds of Special Facility Bonds, or (c) both.

"Special Facility Agreement" shall mean an agreement entered into by the Airports Authority and one or more other parties, relating to the design, construction, and/or financing of any facility, improvement, structure, equipment, or assets acquired or constructed on any land or in or on any structure or building at the Airports, all or a portion of the payments under which (a) are intended to be excluded from Revenues and (b) may be pledged to the payment of revenue bonds, notes, or other obligations of the Airports Authority other than Bonds, Subordinated Bonds, or Junior Lien Obligations.

"Special Facility Bonds" shall mean any revenue bonds, notes, or other obligations of the Airports Authority other than Bonds, Subordinated Bonds or Junior Lien Obligations, issued to finance any facility, improvement, structure, equipment or assets acquired or constructed on any land or in or on any structure or building at the Airports, the payment of principal of, premium, if any, and interest on which are payable from and secured by the proceeds thereof and rentals, payments, and other charges payable by the obligor under a Special Facility Agreement.

"Standard & Poor's" or "S&P" shall mean S&P Global Ratings, a corporation organized and existing under the laws of the State of New York, and its successors and assigns and, if such corporation shall no longer perform the functions of a securities rating agency, Standard & Poor's shall mean any other nationally recognized securities rating agency designated by an Authority Representative.

**"Subordinated Bond Funds"** shall mean the bond funds created pursuant to the Subordinated Indenture with respect to each series of Subordinated Bonds, held by the Subordinated Indenture Trustee, in which amounts are held to pay debt service on such series of Subordinated Bonds.

"Subordinated Bond" or "Subordinated Bonds" shall mean the Airports Authority's general airport subordinated revenue bonds or other obligations secured by the Subordinated Indenture. The term "Subordinated Bond" or "Subordinated Bonds" shall include notes, bond anticipation notes, commercial paper and other Short-Term/Demand Obligations, Regularly Scheduled Hedge Payments, Hedge Termination Payments, and other securities, contracts or obligations incurred through lease, installment purchase or other agreements or certificates of participation therein, in each case to the extent secured by the Subordinated Indenture.

**"Subordinated Indenture"** shall mean the Master Indenture of Trust relating to the Subordinated Bonds, dated as of March 1, 1988, between the Airports Authority and the Subordinated Indenture Trustee, as supplemented and amended.

**"Subordinated Indenture Trustee"** shall mean The National Bank of Washington, or its successor as trustee, under the Subordinated Indenture.

**"Subordinated Reserve Funds"** shall mean the debt service reserve funds created pursuant to the Subordinated Indenture with respect to certain series of Subordinated Bonds, held by the trustee under the Subordinated Indenture.

**"Supplemental Indenture"** shall mean an indenture supplementing or modifying the provisions of the Master Indenture entered into by the Airports Authority and the Trustee in accordance with the Master Indenture.

"Trustee" shall mean Manufacturers and Traders Trust Company, and any successor to its duties under the Master Indenture.

#### SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

The following, in addition to certain information provided under the heading "INTRODUCTION" and "THE SERIES 2023A BONDS" in the forepart of this Official Statement, is a summary of certain provisions of the Master Indenture and the Fifty-sixth Supplemental Indenture. This summary does not purport to be complete or definitive and reference is made to the Master Indenture and the Fifty-sixth Supplemental Indenture for a complete recital of the terms of such documents. During the offering period for the Series 2023A Bonds, copies of the Master Indenture and the Fifty-sixth Supplemental Indenture may be obtained from the Airports Authority.

#### General

The Master Indenture and the Fifty-sixth Supplemental Indenture constitute an assignment by the Airports Authority to the Trustee, in trust, to secure payment of the Bonds, of the Airports Authority's interest in Net Revenues and sets forth the conditions of such assignments. The Master Indenture and the Fifty-sixth Supplemental Indenture also provide for the issuance of the Series 2023A Bonds, define the terms thereof and determine the duties of the Trustee and the rights of the Bondholders.

# **Security for Bonds, Including Series 2023A Bonds**

The Series 2023A Bonds are issued pursuant to and secured by the Master Indenture and the Fifty-sixth Supplemental Indenture. All Bonds, including the Series 2023A Bonds, issued under the Master Indenture and at any time Outstanding shall be equally and ratably secured with all other Outstanding Bonds with the same right, lien and preference with respect to Net Revenues, without preference, priority or distinction on account of the date or dates or the actual time or times of the issuance or maturity of the Bonds. All Bonds of a particular Series shall in all respects be equally and ratably secured and shall have the same right, lien and preference established for the benefit of such Series of Bonds under the Master Indenture, including, without limitation, rights in any related Series Account in the Construction Fund, the Bond Fund or the Debt Service Reserve Fund. No mortgage, lien or security interest in the Airports or operating property of the Airports Authority has been pledged to secure the Bonds.

# **No Pledge of Certain Revenues**

In addition to certain other revenues of the Airports Authority not pledged under the Master Indenture, revenues of the Dulles Corridor Enterprise Fund established by Resolution No. 07-16 of the Airports Authority are not pledged to the payment of the Airports Authority's obligations under the Master Indenture or the Fifty-sixth Supplemental Indenture.

# **Revenues and Funds**

<u>Creation of Funds and Accounts.</u> Pursuant to the Master Indenture and the Fifty-sixth Supplemental Indenture, the following Funds, Accounts, and Subaccounts are established:

- (a) With respect to the Series 2023A Bonds, there are established the following accounts and subaccounts:
  - (i) Within the Bond Fund, to be held by the Trustee:
    - (1) Series 2023A Interest Account;
    - (2) Series 2023A Principal Account; and
    - (3) Series 2023A Redemption Account.
  - (ii) Within the Construction Fund, to be held by the Series 2023A Custodian;
    - (1) Series 2023A Cost of Issuance Subaccount; and
    - (2) Series 2023A Project Account.
  - (iii) Within the Debt Service Reserve Fund, to be held by the Trustee:
    - (1) Common Reserve Account.
  - (b) Revenue Fund, to be held by the Airports Authority.
  - (c) Operation and Maintenance Fund, to be held by the Airports Authority.
  - (d) Junior Lien Obligation Fund, to be held by the Airports Authority.
  - (e) Emergency Repair and Rehabilitation Fund, to be held by the Airports Authority.
  - (f) Federal Lease Fund, to be held by the Airports Authority.
  - (g) General Purpose Fund, to be held by the Airports Authority.

Amounts in the Revenue Fund are not pledged to secure Holders of the Bonds. Amounts in the Operation and Maintenance Fund are required to be used by the Airports Authority to pay Operation and Maintenance Expenses and are not pledged to secure Holders of the Bonds. Amounts in the Emergency Repair and Rehabilitation Fund may be used by the Airports Authority to pay the costs of emergency repairs and replacements to the Airports and are not pledged to secure Holders of the Bonds. Amounts in the General Purpose Fund will be available for use by the Airports Authority for any lawful purpose and are not pledged to secure Holders of the Bonds.

# <u>Application of Series 2023A Bond Proceeds</u>. There will be deposited, paid or transferred:

(a) to the Trustee, amounts, as set forth in the Series 2013A Refunding Agreement, to refund the Series 2013A Bonds;

- (b) to the Trustee, amounts for the prepayment of the Refunded Revolving Loan Note;
- (c) to the Series 2023A Custodian, amounts to be deposited in the Series 2023A Cost of Issuance Subaccount; provided, however, that to the extent any funds in the Series 2023A Cost of Issuance Subaccount are not used to pay costs of issuance for the Series 2023A Bonds such funds may be used by the Airports Authority for any legally permitted purpose under the Fifty-sixth Supplemental Indenture; and provided further, however, that such amount may be subject to overnight investment by the Trustee;
  - (d) to the Trustee, amounts to be deposited in the Common Reserve Account; and
- (e) to the Series 2023A Custodian, amounts to be deposited in the Series 2023A Project Account, which amounts include capitalized interest on the Series 2023A Bonds and on certain previously issued Bonds. Amounts in the Series 2023A Project Account shall be applied to the payment of Costs of the Series 2023A Projects in accordance with the requirements of the Master Indenture and this Fifty-sixth Supplemental Indenture. The foregoing amounts may be subject to overnight investment by the Trustee.

## **Flow of Funds**

The Indenture provides that on the first Business Day of each month (a) amounts in the Revenue Fund, excluding any transfers from the General Purpose Fund during the current Fiscal Year, and (b) 1/12 of the amount of any transfers from the General Purpose Fund for the current Fiscal Year, shall be withdrawn from the Revenue Fund and deposited or transferred as set forth under the heading, "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS--Flow of Funds" in the forepart of this Official Statement.

# **Required Deposits**

Moneys are required to be deposited with respect to the Series 2023A Bonds as described below. The Supplemental Indenture setting forth the terms of any additional Series of Bonds may require deposits to the applicable debt service and debt service reserve accounts and subaccounts with respect to such Series of Bonds, and, if such Series of Bonds is subject to mandatory purchase at the option of the Bondholder, will require deposits to a purchase fund for such Series of Bonds.

## Required Deposits for Series 2023A Bonds

<u>Debt Service Deposits for Series 2023A Bonds</u>. So long as any Series 2023A Bonds are Outstanding, the Fifty-sixth Supplemental Indenture requires that payments be made to the Trustee for the purposes of debt service payments on Series 2023A Bonds in the following manner:

Beginning on October 2, 2023, and on the first (1st) Business Day of each month thereafter, an amount equal to one-twelfth (1/12) of the next principal payment due after such date with respect to the Series 2023A Bonds shall be deposited to the Series 2023A Principal Account. On August 1, 2023, and on September 1, 2023, an amount equal to one-half (1/2) of the interest

payment due on October 1, 2023, and thereafter beginning on October 2, 2023, and on the first (1st) Business Day of each month thereafter, an amount equal to one-sixth (1/6) of the interest payment due on the immediately following Bond Payment Date with respect to the Series 2023A Bonds shall be deposited to the Series 2023A Interest Account; *provided, however*, the Airports Authority shall be entitled to a credit immediately before each Bond Payment Date for interest earned on the monthly deposits made by the Airports Authority.

# <u>Debt Service Reserve Fund Deposit.</u>

Beginning on the first (1st) Business Day of each month after a withdrawal from the Common Reserve Account in the Debt Service Reserve Fund to pay interest on the immediately preceding Bond Payment Date, and on the first (1st) Business Day of each month thereafter except April and October, an amount equal to one-fifth (1/5) of any deficiency resulting from such payment shall be deposited to the Common Reserve Account, (A) beginning on the first (1st) Business Day of each month after a withdrawal from the Common Reserve Account to pay principal on the immediately preceding Bond Payment Date, and the first (1st) Business Day of each month thereafter except each October, an amount equal to one-eleventh (1/11) of any deficiency resulting from a payment on the immediately preceding Bond Payment Date shall be deposited in the Common Reserve Account, and (B) beginning on the first (1st) Business Day of each month except each January, an amount equal to one-eleventh (1/11) of the amount necessary to cure any deficiency in the Common Reserve Account determined by the valuation pursuant to Section 514(b) of the Master Indenture, as of the beginning of the current Fiscal Year resulting from a change in market valuation of assets shall be deposited to the Common Reserve Account. See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS--Debt Service Reserve Fund" in the forepart of this Official Statement.

Subject to the requirements of Section 506 of the Master Indenture and upon instructions from the Authority Representative, the Trustee may substitute a Credit Facility in lieu of cash or investments, or cash and investments in lieu of Credit Facility in order to satisfy the Common Debt Service Reserve Requirement.

Subject to the requirements of Section 506 of the Master Indenture and upon instructions from the Authority Representative, the Trustee may substitute a Credit Facility in lieu of cash or investments, or cash and investments in lieu of Credit Facility in order to satisfy the Common Debt Service Reserve Requirement.

# **Computation and Payment of Rebate Amount**

Except as otherwise expressly provided in the Code, the Airports Authority will compute and pay any Rebate Amount required by the Code with respect to the Series 2023A Bonds. Rebate Amounts will be paid from the Net Revenues of the Airports or from such other legally available sources. Net Revenues used to pay a Rebate Amount will be subordinate in priority to the application of Net Revenues required to make the monthly payment to the Federal Lease Fund.

No payment shall be made if the Airports Authority obtains an Opinion of Bond Counsel to the effect that such payment is no longer required or that some further action is required to maintain the exclusion from federal income tax of interest on the Series 2023A Bonds.

# **Investment of Moneys**

Moneys in all Funds and Accounts shall be invested as soon as practicable upon receipt in Permitted Investments, as directed by the Airports Authority or as selected by the Trustee in the absence of direction by the Airports Authority; provided that the maturity date on which such Permitted Investments may be redeemed at the option of the holder thereof shall coincide as nearly as practicable with (but in no event later than) dates on which moneys in the Funds and Accounts for which the investments were made will be required for the purposes thereof and provided further that in the absence of direction from the Airports Authority the Trustee shall select Permitted Investments in accordance with prudent investment standards.

# **Additional Bonds**

The Airports Authority has issued, and expects to issue in the future, additional Bonds. Under the Indenture, the Airports Authority is permitted to issue one or more Series of additional Bonds on a parity with the outstanding Bonds, if:

The Airports Authority has provided to the Trustee the following evidence indicating that, as of the date of issuance of such additional Bonds, the Airports Authority is in compliance with the rate covenant established by the Indenture (the "Rate Covenant") (discussed under "Rate Covenant" below) as evidenced by: (a) the Airports Authority's most recent audited financial statements, and the Airports Authority's unaudited statements for the period, if any, from the date of such audited statements through the most recently completed Fiscal Year quarter, and (b) if applicable, evidence of compliance with the Indenture's requirement of remedial action (discussed under "Rate Covenant" below); and either

- (i) an Airport Consultant has provided to the Trustee a certificate stating that, based upon reasonable assumptions, projected Net Revenues will be sufficient to satisfy the Rate Covenant (disregarding any Bonds that have been or will be paid or discharged immediately after the issuance of the additional Bonds proposed to be issued) for each of the next three full Fiscal Years following issuance of the additional Bonds, or each full Fiscal Year from issuance of the additional Bonds through two full Fiscal Years following completion of the Projects financed by the additional Bonds proposed to be issued, whichever is later; provided that, if Maximum Annual Debt Service with respect to all Bonds to be Outstanding following the issuance of the proposed additional Bonds in any Fiscal Year is greater than 110% of Annual Debt Service for such Bonds in any of the test years, then the last Fiscal Year of the test must use such Maximum Annual Debt Service; provided further, that if capitalized interest on any Bonds and proposed additional Bonds is to be applied in the last Fiscal Year of the period described in this sentence, the Airport Consultant shall extend the test through the first full Fiscal Year for which there is no longer capitalized interest, or
- (ii) an Authority Representative has provided to the Trustee a certificate stating that Net Revenues in the most recently completed Fiscal Year were not less than the larger of (1) the

amounts needed for making the required deposits to the Principal Accounts, the Interest Accounts, and the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund, and the Emergency Repair and Rehabilitation Fund or (2) 125% of (a) Annual Debt Service on Bonds Outstanding in such Fiscal Year (disregarding any Bonds that have been paid or discharged or will be paid or discharged immediately after the issuance of such additional Bonds proposed to be issued, plus (b) Maximum Annual Debt Service with respect to such additional Bonds proposed to be issued.

With respect to additional Bonds proposed to be issued to refund Outstanding Bonds, the Airports Authority may issue such refunding Bonds if the test described above is met, or if the Airports Authority has provided to the Trustee evidence that (a) the aggregate Annual Debt Service in each Fiscal Year with respect to all Bonds to be Outstanding after issuance of such refunding Bonds will be less than the aggregate Annual Debt Service in each such Fiscal Year through the last Fiscal Year in which Bonds are Outstanding prior to the issuance of such refunding Bonds, and (b) the Maximum Annual Debt Service with respect to all Bonds to be Outstanding after issuance of such refunding Bonds will not exceed the Maximum Annual Debt Service with respect to all Bonds outstanding immediately prior to such issuance.

The issuance of the Series 2023A Bonds will be in compliance with paragraph (i) above.

# **General Covenants of the Airports Authority**

The covenants set forth below apply to the Series 2023A Bonds and to any other Series of Bonds issued under the Master Indenture.

<u>Payment of Principal and Interest</u>. The Airports Authority covenants to promptly pay or cause to be paid from Net Revenues (except to the extent payable from bond proceeds or other limited sources of payment specified in the Master Indenture) the principal of, premium, if any, and interest on each Bond, as and when due.

<u>Pledge of Net Revenues</u>. As security for the payment of the principal of, and interest and any premium on, the Bonds, the Airports Authority has granted to the Trustee a pledge of and lien on Net Revenues, as and when received by the Airports Authority, from and after the date of the Master Indenture without any physical delivery thereof or further act.

The Airports Authority has covenanted and agreed that it will not create any pledge, lien or encumbrance upon, or permit any pledge, lien or encumbrance to be created on, Revenues or Net Revenues except for a pledge, lien or encumbrance subordinate to the pledge and lien granted by the Master Indenture for the benefit of the Bonds and the pledge and lien granted by the Subordinated Indenture for the benefit of the Subordinated Bonds. The Airports Authority has previously issued Subordinated Bonds secured by a pledge of Net Revenues that is subordinated to the pledge of Net Revenues securing the Bonds as to moneys that have not been transferred by the Trustee to the Subordinated Indenture Trustee. See "AIRPORTS AUTHORITY INDEBTEDNESS FOR THE AVIATION ENTERPRISE FUND -- Subordinated Bonds for the Aviation Enterprise Fund" in the forepart of this Official Statement.

In addition to Bonds issued under the Master Indenture, the Airports Authority may issue, at any time and from time to time, in one or more series (a) Special Facility Bonds, (b) other bonds, notes or other obligations payable solely from and secured solely by revenues other than Revenues and Net Revenues, and (c) bonds, notes or other obligations payable from Net Revenues on a basis subordinate to the Bonds (including the Series 2023A Bonds) and the Subordinated Bonds.

Management of Airports. The Airports Authority has covenanted not to take, or allow any person to take, any action which would cause the Federal Aviation Administration (the "FAA"), or any successor to the powers and authority of the FAA to suspend or revoke the Airports' operating certificates. The Airports Authority will comply with all valid acts, including the Acts, rules, regulations, orders and directives of any governmental, legislative, executive, administrative or judicial body applicable to the Airports and with the Federal Lease, unless the same shall be contested in good faith, all to the end that the Airports will remain in operation at all times.

Operation and Maintenance of Airports. The Airports Authority has covenanted that it will operate and maintain the Airports as a revenue producing enterprise in accordance with the Federal Lease and the Acts. The Airports Authority will make such repairs to the Airports as shall be necessary or appropriate in the prudent management thereof. The Airports Authority has covenanted that it will operate and maintain the Airports in a manner which will entitle it at all times to charge and collect fees, charges and rentals in accordance with airport use agreements, if any, or as otherwise permitted by law, and shall take all reasonable measures permitted by law to enforce prompt payment to it of such fees, charges and rentals when and as due.

<u>Insurance</u>. The Airports Authority has covenanted that it will at all times (a) carry insurance, or cause insurance to be carried, with a responsible insurance company or companies authorized and qualified under the laws of any state of the United States of America to assume the risk thereof, covering such properties of the Airports as are customarily insured, and against loss or damage from such causes as are customarily insured against, by enterprises engaged in a similar type of business, or (b) have adopted and maintain a risk financing plan for property and casualty losses in accordance with the Federal Lease.

<u>Financial Records and Statements</u>. The Airports Authority has covenanted to have an annual audit made by independent certified public accountants of recognized standing and shall within 120 days after the end of each of its Fiscal Years furnish to the Trustee copies of the balance sheet of the Airports Authority as of the end of such Fiscal Year and complete audited financial statements of the Airports Authority for such Fiscal Year, all in reasonable detail.

# **Rate Covenant**

Pursuant to the Indenture, the Airports Authority has covenanted that it will take all lawful measures to fix and adjust from time to time the fees and other charges for the use of the Airports, including services rendered by the Airports Authority, pursuant to airport use agreements or otherwise, calculated to be at least sufficient to produce Net Revenues to provide for the larger of either:

- (a) The amounts needed for making the required deposits in each Fiscal Year to the Principal Accounts, the Interest Accounts, and the Redemption Accounts, the Debt Service Reserve Fund, the Subordinated Bond Funds, the Subordinated Reserve Funds, the Junior Lien Obligations Fund, the Federal Lease Fund and the Emergency Repair and Rehabilitation Fund; or
- (b) An amount not less than 125% of the Annual Debt Service with respect to Bonds for such Fiscal Year.

Provided that any computation required above shall exclude from Net Revenues any capital gain resulting from any sales or revaluation of Permitted Investments.

The Airports Authority has covenanted that if, upon the receipt of the audit report for a Fiscal Year, the Net Revenues in such Fiscal Year are less than the amount specified above, the Airports Authority will require the Airport Consultant to make recommendations as to the revision of the Airports Authority's schedule of rentals, rates, fees and charges, and upon receiving such recommendations or giving reasonable opportunity for such recommendations to be made, the Airports Authority, on the basis of such recommendations and other available information, will take all lawful measures to revise the schedule of rentals, rates, fees and charges for the use of the Airports as may be necessary to produce the specified amount of Net Revenues in the Fiscal Year following the Fiscal Year covered by such audit report.

In the event that Net Revenues for any Fiscal Year are less than the amount specified above, but the Airports Authority has promptly taken in the next Fiscal Year all available lawful measures to review the schedule of rentals, rates, fees and charges for the use of the Airports to comply with these remedial requirements, there will be no Event of Default under the Indenture; provided, however, that if, after the Airports Authority has complied with these remedial requirements, Net Revenues are not sufficient to provide for the specified amount in the Fiscal Year in which such adjustments are required to be made (as evidenced by the audit report for such Fiscal Year), such failure will be an Event of Default under the Indenture.

#### **Tax Covenants**

The Airports Authority has covenanted to comply with certain tax covenants with respect to the tax exemption of the Series 2023A Bonds, including, among other matters, the use, expenditure and investment of proceeds and the rebate of certain "arbitrage profit" to the United States Treasury. See "TAX MATTERS" in the forepart of this Official Statement.

The Airports Authority has covenanted not to (1) make any use of the proceeds of the Series 2023A Bonds, any funds reasonably expected to be used to pay the principal of or interest on the Series 2023A Bonds, or any other funds of the Airports Authority; (2) make or permit any use of Authority Facilities refinanced with proceeds of the Series 2023A Bonds; or (3) take (or omit to take) any other action with respect to the Series 2023A Bonds, the proceeds thereof, or otherwise, if such use, action or omission would, under the Code, cause the interest on the Series 2023A Bonds to be included in gross income for federal income tax purposes.

In particular, without limitation, the Airports Authority has covenanted to cause an amount not less than ninety-five percent (95%) of the proceeds of the Series 2023A Bonds and investment income therefrom to be allocated for federal income tax purposes to Qualified Costs of Facilities, taking into account Qualified Costs of Facilities refinanced with proceeds of the Series 2023A Bonds, and agreed to make or to direct the Trustee to make any transfers necessary to satisfy such covenant.

The Airports Authority has covenanted not to take (or omit to take) or permit or suffer any action to be taken, if the result of the same causes the Series 2023A Bonds to be "arbitrage bonds" within the meaning of Section 148 of the Code.

## **Default and Remedies**

Events of Default. The Master Indenture provides that an Event of Default with respect to one Series of Bonds shall not cause an Event of Default with respect to any other Series of Bonds unless such event or condition on its own constitutes an Event of Default with respect to such other Series of Bonds. Each of the following is defined as an "Event of Default" with respect to each Series of Bonds under the Master Indenture:

- (a) If payment by the Airports Authority in respect of any installment of interest on any Bond of such Series shall not be made in full when the same becomes due and payable;
- (b) If payment by the Airports Authority in respect of the principal of any Bond of such Series shall not be made in full when the same becomes due and payable, whether at maturity or by proceedings for redemption or otherwise;
- (c) If payment of the purchase price of any Bond of such Series tendered for optional or mandatory tender for purchase, if provided for in the Supplemental Indenture providing for the issuance of such Series, shall not be paid in full as and when due in accordance therewith;
- (d) If the Airports Authority shall fail to observe or perform any covenant or agreement on its part under the Master Indenture (other than the Rate Covenant) for a period of 60 days after the date on which written notice of such failure, requiring the same to be remedied, shall have been given to the Airports Authority by the Trustee, or to the Airports Authority and the Trustee by the Holders of at least 25% in aggregate principal amount of Bonds of a Series then Outstanding. If the breach of covenant or agreement is one which cannot be completely remedied within 60 days after written notice has been given, it shall not be an Event of Default with respect to such Series as long as the Airports Authority has taken active steps within the 60 days after written notice has been given to remedy the failure and is diligently pursuing such remedy;
- (e) If the Airports Authority is required under the Rate Covenant to take measures to revise the schedule of rentals, rates, fees and charges for the use of the Airports and Net Revenues in the Fiscal Year in which such adjustments are made are less than the amount specified in the Rate Covenant contained in the Master Indenture (See "SECURITY AND SOURCE OF PAYMENT FOR THE BONDS--Rate Covenant") in the forepart of this Official Statement; and

(f) If the Airports Authority shall institute proceedings to be adjudicated a bankrupt or insolvent, or shall consent to the institution of bankruptcy or insolvency proceedings against it, or shall file a petition, answer or consent seeking reorganization or relief under the federal Bankruptcy Code or any other similar applicable federal or state law, or shall consent to the filing of any such petition or to the appointment of a receiver, liquidator, assignee, trustee or sequestrator (or other similar official) of the Airports Authority or of any substantial part of its property, or shall make an assignment for the benefit of creditors, or shall admit in writing its inability to pay its debts generally as they become due.

<u>No Acceleration or Cross Default</u>. There shall be no rights of acceleration with respect to any Bonds, including the Series 2023A Bonds. An Event of Default with respect to one Series of Bonds shall not cause an Event of Default with respect to any other Series of Bonds unless such event or condition on its own constitutes an Event of Default with respect to such other Series of Bonds.

Remedies and Enforcement of Remedies. The Master Indenture provides that upon the occurrence and continuance of any Event of Default with respect to a Series of Bonds, the Trustee may, or, upon the written request of the Holders of not less than 25% in an aggregate principal amount of such Series of Bonds, together with indemnification of the Trustee to its satisfaction therefor shall, proceed forthwith to protect and enforce its rights and the rights of the Bondholders under the Master Indenture and under the Acts and such Bonds by such suits, actions, injunction, mandamus or other proceedings, as the Trustee, being advised by counsel, shall deem expedient.

Regardless of the happening of an Event of Default, the Trustee, if requested in writing by the Holders of not less than 25% in aggregate principal amount of a Series of Bonds, shall, upon being indemnified to its satisfaction therefor, institute and maintain such suits and proceedings as it may be advised shall be necessary or expedient (a) to prevent any impairment of the security under the Master Indenture by any acts or omissions to act which may be unlawful or in violation thereof, or (b) to preserve or protect the interests of the Holders of such Series of Bonds, provided that such request is in accordance with law and the provisions of the Master Indenture, and, in the sole judgment of the Trustee, is not unduly prejudicial to the interest of the Holders of Bonds of each Series not making such request.

The remedies provided for in the Master Indenture with respect to reaching Funds or Accounts thereunder shall be limited to the Funds or Accounts thereunder pledged to the applicable Series of Bonds with respect to which an Event of Default exists.

Application of Revenues and Other Moneys After Default. The Master Indenture provides that during the continuance of an Event of Default with respect to any Series of Bonds, all moneys received by the Trustee with respect to such Series of Bonds pursuant to any right given or action taken under the provisions of the Master Indenture shall, after payment of the costs and expenses of the proceedings which resulted in the collection of such moneys and of the fees, expenses and advances incurred or made by the Trustee with respect thereto, be applied according to the accrued debt service deposits or payments with respect to each such Series as follows:

(a) Unless the principal amounts of all such Outstanding Bonds shall have become due and payable:

<u>First</u>: To the payment to the persons entitled thereto of all installments of interest then due on such Bonds in the order of maturity of such installments, and, if the amount available shall not be sufficient to pay in full any installment or installments maturing on the same date, then to the payment thereof ratably, according to the amounts due thereon to the persons entitled thereto, without any discrimination or preference; and

Second: To the payment to the persons entitled thereto of the unpaid principal amounts of any Bonds which shall have become due (other than Bonds of such Series previously called for redemption for the payment of which moneys are held pursuant to the provisions of the Master Indenture), whether at maturity or by proceedings for redemption or otherwise or upon the tender of any Bond pursuant to the terms of the Supplemental Indenture providing for the issuance of such Bonds, in the order of their due dates, and if the amounts available shall not be sufficient to pay in full all the Bonds of such Series due on any date, then to the payment thereof ratably, according to the principal amounts due on such date, to the persons entitled thereto, without any discrimination or preference.

(b) If the principal amounts of all Outstanding Bonds shall have become due and payable, to the payment of the principal amounts and interest then due and unpaid upon such Bonds without preference or priority of principal over interest or of interest over principal, or of any installment of interest over any other installment of interest, or of any Bond over any other such Bond, ratably, according to the amounts due respectively for principal and interest, to the persons entitled thereto without any discrimination or preference.

Whenever moneys are to be applied by the Trustee as described in (a) and (b) above, such moneys shall be applied on the date fixed by the Trustee and, upon such date, interest on the principal amounts to be paid on such dates shall cease to accrue if so paid.

<u>Remedies Not Exclusive</u>. No remedy conferred upon or reserved to the Trustee or the Bondholders or any Credit Provider under the Master Indenture is intended to be exclusive of any other remedy, but each and every such remedy shall be cumulative and shall be in addition to every other remedy given under the Master Indenture or existing at law or in equity or by statute (including the Acts) on or after the date of the Master Indenture.

Remedies Vested in the Trustee. All rights of action (including the right to file proof of claims) under the Master Indenture or under any of the Bonds of any Series may be enforced by the Trustee without the possession of any of the Bonds of such Series or the production thereof in any trial or other proceedings relating thereto. Any such suit or proceeding instituted by the Trustee may be brought in its name as the Trustee without the necessity of joining as plaintiffs or defendants any Holders of the applicable Series of Bonds. Subject to the provisions of the Master Indenture, any recovery or judgment shall be for the equal benefit of the Holders of the Outstanding Bonds of such Series.

<u>Control of Proceedings</u>. If an Event of Default with respect to a Series of Bonds shall have occurred and be continuing, the Master Indenture provides that the Holders of a majority in aggregate principal amount of Bonds of such Series then Outstanding shall have the right, at any time, by any

instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting any proceeding to be taken with respect to funds or assets solely securing such Series of Bonds in connection with the enforcement of the terms and conditions thereof, provided that such direction is in accordance with law and the provisions of the Master Indenture (including indemnity to the Trustee as provided in the Master Indenture) and, in the sole judgment of the Trustee, is not unduly prejudicial to the interest of the Bondholders of each Series of Bonds not joining in such direction, and provided further, that nothing in this section shall impair the right of the Trustee in its discretion to take any other action under the Master Indenture which it may deem proper and which is not inconsistent with such direction by Bondholders.

If an Event of Default with respect to all Series of Bonds shall have occurred and be continuing, the Holders of a majority in aggregate principal amount of all Bonds then Outstanding shall have the right, at any time, by any instrument in writing executed and delivered to the Trustee, to direct the method and place of conducting any proceeding to be taken with respect to Net Revenues or other assets securing all Bonds in connection with the enforcement of the terms and conditions of the Master Indenture, provided that such direction is in accordance with law and the provisions of the Master Indenture (including indemnity to the Trustee as provided in the Master Indenture) and, in the sole judgment of the Trustee, is not unduly prejudicial to the interest of Bondholders not joining in such direction and provided further that nothing shall impair the right of the Trustee in its discretion to take any other action under the Master Indenture which it may deem proper and which is not inconsistent with such direction by Bondholders.

<u>Individual Bondholder Action Restricted</u>. No Holder of any Bond of a Series shall have any right to institute any suit, action or proceeding in equity or at law for the enforcement of the Master Indenture or for the execution of any trust thereunder or for any remedy thereunder unless:

- (i) an Event of Default has occurred with respect to such Series (A) under paragraph (a), (b) or (c) of "Events of Default" of which the Trustee is deemed to have notice, or (B) under paragraph (d), (e) or (f) of "Events of Default" of which the Trustee has actual knowledge or as to which the Trustee has been notified in writing;
- (ii) the Holders of at least 25% in aggregate principal amount of the applicable Series of Bonds of such Series then Outstanding shall have made written request to the Trustee to proceed to exercise the powers granted in the Master Indenture or to institute such action, suit or proceeding in its own name;
- (iii) such Bondholders shall have offered the Trustee indemnity as provided in the Master Indenture;
- (iv) the Trustee shall have failed or refused to exercise the powers granted under the Master Indenture or to institute such action, suit or proceeding in its own name for a period of 60 days after receipt by it of such request and offer of indemnity; and
- (v) during such 60-day period, no direction inconsistent with such written request has been delivered to the Trustee by the Holders of a majority in aggregate principal amount of Bonds of such Series then Outstanding as provided in the Master Indenture.

No one or more Holders of Bonds shall have any right in any manner whatsoever to affect, disturb or prejudice the security of the Master Indenture or to enforce any right thereunder except in the manner provided therein and for the equal benefit of the Holders of all Bonds of such Series then Outstanding.

Nothing contained in the Master Indenture shall affect or impair, or be construed to affect or impair, the right of the Holder of any Bond (i) to receive payment of the principal of or interest on such Bond on or after the due date thereof, or (ii) to institute suit for the enforcement of any such payment on or after such due date; provided, however, no Holder of any Bond may institute or prosecute any such suit or enter judgment therein if, and to the extent that, the institution or prosecution of such suit or the entry of judgment therein would, under applicable law, result in the surrender, impairment, waiver or loss of the lien of the Master Indenture on the moneys, funds and properties pledged under the Master Indenture for the equal and ratable benefit of all Holders of Bonds of such Series.

Waiver of Event of Default. No delay or omission of the Trustee, of any Holder of Bonds or, if provided by Supplemental Indenture, any Credit Provider to exercise any right or power accruing upon any Event of Default shall impair any such right or power or shall be construed to be a waiver of any such Event of Default or an acquiescence therein. Every power and remedy given by the Master Indenture to the Trustee, the Holders of Bonds and, if provided by Supplemental Indenture, any Credit Provider may be exercised from time to time and as often as may be deemed expedient by them.

The Trustee with the consent of the Credit Provider, if provided by Supplemental Indenture (provided, however, that such Credit Provider's consent may be required only in connection with an Event of Default on a Series of Bonds with respect to which such Credit Provider is providing a Credit Facility) may waive any Event of Default with respect to the Bonds, which, in the Trustee's opinion, shall have been remedied at any time, regardless of whether any suit, action or proceeding has been instituted before the entry of final judgment or decree in any suit, action or proceeding instituted by the Trustee under the provisions of the Master Indenture, or before the completion of the enforcement of any other remedy under the Master Indenture.

Notwithstanding anything contained in the Master Indenture to the contrary, the Trustee, upon the written request of the applicable Credit Provider, if any, or Holders of at least a majority of the aggregate principal amount of Bonds of a Series then Outstanding, with respect to an Event of Default affecting only such Series (or a majority of the aggregate principal amount of all Bonds then Outstanding, with respect to an Event of Default affecting all Series of Bonds) shall waive any Event of Default under the Master Indenture and its consequences, provided, however, that, a default in the payment of the principal amount of, premium, if any, or interest on any Bond, when the same shall become due and payable by the terms thereof or upon call for redemption, may not be waived without the written consent of the Holders of all the Bonds of such Series at the time Outstanding to which an Event of Default applies and the consent of the Credit Provider, if any.

In case of any waiver by the Trustee of an Event of Default under the Master Indenture, the Airports Authority, the Trustee, the Credit Provider, if any, and the Bondholders shall be restored to

their former positions and rights under the Master Indenture, but no such waiver shall extend to any subsequent or other Event of Default or impair any right consequent thereon. The Trustee shall not be responsible to any one for waiving or refraining any Event of Default in accordance with the Master Indenture.

## The Trustee

<u>Trustee Not Required to Take Action Unless Indemnified</u>. Except as expressly required in the Master Indenture, the Trustee shall not be required to institute any proceeding in which it may be a defendant or to take any action to enforce its rights and expose it to liability, or be deemed liable for failure to take such action, unless and until the Trustee shall have been indemnified against all reasonable costs, liability and damages.

Right to Deal in Bonds and Take Other Actions. The Trustee may in good faith buy, sell or hold and deal in any Bonds of any Series, including the Series 2023A Bonds, as if it were not such Trustee and may commence or join any action which a Holder is entitled to take with like effect as if the Trustee were not the Trustee.

<u>Trustee's Fees and Expenses</u>. If the Airports Authority fails to properly pay any reasonable fees, costs or expenses of the Trustee incurred in the performance of its duties, the Trustee may reimburse itself from any surplus moneys on hand in any Fund or Account held by it except any amounts in the Bond Fund.

Removal and Resignation of Trustee. The Trustee may resign at any time. Written notice of such resignation shall be given to the Airports Authority and such resignation shall take effect upon the appointment and qualification of a successor Trustee. In addition, the Trustee may be removed at any time by the Airports Authority but only for cause by Supplemental Indenture so long as (a) no Event of Default shall have occurred and be continuing, and (b) the Airports Authority determines, in such Supplemental Indenture, that the removal of the Trustee shall not have an adverse effect upon the rights or interests of the Bondholders. In the event of the resignation or removal of the Trustee or in the event of the Trustee is dissolved or otherwise becomes incapable to act as the Trustee, the Airports Authority shall be entitled to appoint a successor Trustee.

## **Supplemental Indentures**

<u>Supplemental Indentures Not Requiring Consent of Bondholders</u>. The Airports Authority and the Trustee may, without the consent of or notice to any of the Holders, enter into one or more Supplemental Indentures for one or more of the following purposes:

- (a) To cure any ambiguity or formal defect or omission in the Indenture;
- (b) To correct or supplement any provision in the Indenture which may be inconsistent with any other provision therein, or to make any other provision with respect to matters or questions arising thereunder which shall not materially adversely affect the interests of the Holders;

- (c) To grant or confer upon the Holders any additional rights, remedies, powers or authority that may lawfully be granted to or conferred upon them;
- (d) To secure additional revenues or provide additional security or reserves for payment of the Bonds;
- (e) To preserve the excludability of interest on the Bonds from gross income for purposes of federal income taxes or to change the tax covenants set forth in the Master Indenture or any Supplemental Indenture pursuant to an Opinion of Bond Counsel that such action will not adversely affect such excludability;
  - (f) To provide for the issuance of a Series of Bonds under the Master Indenture;
  - (g) To remove the Trustee in accordance with the Master Indenture; and
- (h) To add requirements the compliance with which is required by a Rating Agency in connection with issuing a rating with respect to a Series of Bonds.
- (i) To accommodate the technical, operational and structural features of Bonds which are issued or are proposed to be issued or of a Program which has been authorized or is proposed to be authorized, including, but not limited to, changes needed to accommodate bond anticipation notes, commercial paper, auction Bonds, Hedge Facilities, Short-Term/Demand Obligations and other variable rate or adjustable rate Bonds, Capital Appreciation Bonds, Original Issue Discount Bonds and other discounted or compound interest Bonds or other forms of indebtedness which the Airports Authority from time to time deems appropriate to incur;
- (j) To accommodate the use of a Credit Facility for specific Bonds or a specific Series of Bonds; and
- (k) To comply with the requirements of the Code as are necessary, in the Opinion of Bond Counsel, to prevent the federal income taxation of the interest on any of the Bonds, including, without limitation, the segregation of Revenues into different funds.

Supplemental Indentures Requiring Consent of Bondholders. The Holders of not less than a majority in aggregate principal amount of the Bonds Outstanding may consent to or approve, from time to time, which consent to or approval shall be in writing and shall not be withheld unreasonably, the execution by the Airports Authority and the Trustee of such Supplemental Indentures as shall be deemed necessary and desirable by the Airports Authority for the purpose of modifying, altering, amending, adding to or rescinding any of the terms or provisions contained in the Indenture; provided, that if any Supplemental Indenture modifying, altering, amending, adding to or rescinding any of the terms and provisions of the Indenture contains provisions which affect the rights and interests of less than all Series of Bonds and the section of the Master Indenture relating to Supplemental Indentures not requiring consent of Holders is inapplicable, then such Supplemental Indenture shall require the consent only of the Holders of a majority in Outstanding principal amount of the Series of Bonds so affected; and provided further, that nothing shall permit or be construed as permitting a Supplemental Indenture that would:

- (a) extend the stated maturity of or time for paying interest on any Bond or reduce the principal amount of or the redemption premium or rate of interest payable on any Bond, without the consent of the Holder of such Bond;
- (b) prefer or give a priority to any Bond over any other Bond, without the consent of the Holder of each Bond then Outstanding not receiving such preference or priority; or
- (c) reduce the aggregate principal amount of Bonds then Outstanding the consent of the Holders of which is required to authorize such Supplemental Indenture, without the consent of the Holders of all Bonds then Outstanding.

If the Holders of the required principal amount or number of the Bonds Outstanding shall have consented to and approved the execution of a Supplemental Indenture as provided in the Master Indenture, no Holder of any Bond shall have any right to object to the execution thereof, or to object to any of the terms and provisions contained therein or to the operation thereof, or in any manner to question the propriety of the execution thereof, or to enjoin or restrain the Trustee or the Airports Authority from executing the same or from taking any action pursuant to the provisions thereof.

# Satisfaction and Discharge

If payment of all principal of, premium, if any, and interest on a Series of Bonds in accordance with the terms of such Bonds is made, or is provided for as described below, and if all other sums payable by the Airports Authority under the Master Indenture with respect to such Series of Bonds shall be paid or provided for then the liens, estates and security interests granted thereby shall cease with respect to such Series of Bonds, provided that the rebate provisions, if any, of the related Supplemental Indenture shall survive so long as there is any amount due to the federal government pursuant to such Supplemental Indenture.

Payment of a Series of Bonds, including the Series 2023A Bonds, may be provided for by the deposit with the Trustee of moneys, noncallable Government Obligations, noncallable Government Certificates or pre-refunded municipal obligations (as described in paragraph (c) of the definition of Permitted Investments in the Master Indenture) or any combination thereof. The moneys and the maturing principal and interest income on such Government Obligations, noncallable Government Certificates, or pre-refunded municipal obligations, if any, shall be sufficient and available to pay, when due, the principal of, whether at maturity or upon fixed redemption dates, premium, if any, and interest on such Bonds. The moneys, Government Obligations, noncallable Government Certificates and pre-refunded municipal obligations shall be held by the Trustee irrevocably in trust for the Holders of such Bonds solely for the purpose of paying the principal or redemption price of, including premium, if any, and interest on such Bonds as the same shall mature or become payable upon prior redemption, and, if applicable, upon simultaneous direction, expressed to be irrevocable, to the Trustee as to the dates upon which any such bonds are to be redeemed prior to their respective maturities.

If payment of any of the Series 2023A Bonds is so provided for, the Trustee shall mail a notice so stating to each Holder of such Series 2023A Bonds.

Bonds, the payment of which has been provided for, shall no longer be deemed Outstanding under the Master Indenture. The obligation of the Airports Authority in respect of such Bonds shall nevertheless continue but the Holders thereof shall thereafter be entitled to payment only from the moneys, Government Obligations, Government Certificates, and pre-refunded municipal obligations deposited with the Trustee to provide for the payment of such a series of Bonds.

No Bond may be so provided for if, as a result thereof or of any other action in connection with which the provision for payment of such Bond is made, the interest payable on any Bond with respect to which an Opinion of Bond Counsel has been rendered that such interest is excluded from gross income for federal income tax purpose is made subject to federal income taxes. The Trustee shall receive and may rely upon an Opinion of Bond Counsel (which may be based upon a ruling or rulings of the Internal Revenue Service) to the effect that the provisions of this paragraph will not be breached by so providing for the payment of any Bonds.

# **Non-Presentment of Series 2023A Bonds**

If any Series 2023A Bond is not presented for payment of principal of, premium, if any, and interest on the Series 2023A Bond within two (2) years after delivery of such funds to the Trustee and absent knowledge by the Trustee of any continuing Event of Default, the moneys shall, upon request by the Airports Authority, be paid to the Airports Authority free of any trust or lien and thereafter the Holder of such Series 2023A Bond shall look only to the General Purpose Fund of the Airports Authority and then only to the extent of the amounts so received by the Airports Authority without interest thereon. Prior to the transfer of any moneys, the Trustee shall give notice of such transfer to each affected Holder and publish such notice in a newspaper of general circulation in the Washington, D.C. metropolitan area. The Trustee shall have no further responsibility with respect to such moneys or payment of principal of, premium, if any, and interest on the Series 2023A Bonds.

# **Governing Law**

The Master Indenture, the Fifty-sixth Supplemental Indenture and the Series 2023A Bonds shall be governed and construed in accordance with the laws of the Commonwealth of Virginia.



#### APPENDIX C

# SUMMARY OF CERTAIN PROVISIONS OF THE AIRPORT USE AGREEMENT AND PREMISES LEASE

The following is a summary of certain provisions of the Airport Use Agreement and Premises Lease (the "Airline Agreement"), to which reference is made for a complete statement of its provisions and contents. The Airline Agreement signed by each of the Signatory Airlines is substantially identical except for provisions relating to the Premises leased by, and the Aircraft Parking Positions assigned to, each Signatory Airline. The Airline Agreement governs both Airports. An airline may become a Signatory Airline at one or both of the Airports.

#### **DEFINITIONS**

Certain words and terms used in this summary are defined in the Airline Agreement and have the same meanings in this summary, except as defined otherwise in the Official Statement. Some, but not all, of the definitions in the Airline Agreement are set forth below. Certain of these definitions have been abbreviated or modified for purposes of this summary.

- "Additional Projects" shall mean capital expenditures for construction, acquisitions, and improvements related to the Airports, other than small capital items includable as O&M Expenses in accordance with Airports Authority policy and other than those Projects included in the Capital Construction Program.
- "Airfield Net Requirement" shall mean at each Airport the Total Requirement attributable to the Airfield Cost Center, less (i) Ramp Area Charges, if any; (ii) direct utility or other reimbursements attributable or allocable to the Airfield Cost Center; and (iii) Transfers, if any, allocable to the Airfield Cost Center.
  - "Airline" shall mean the Scheduled Air Carrier executing the Airline Agreement.
- "Airline Supported Areas" shall mean for each Airport the Airfield, Terminal and Equipment Cost Centers at that Airport and at Dulles International Airport shall also include the International Arrivals Building Federal Inspectional Services Facility ("IAB FIS"), Midfield C FIS and the Passenger Conveyance System Cost Centers.
  - "Bonds" shall mean Senior Bonds, Subordinated Bonds, and Other Indebtedness.
  - "Capital Charges" shall mean (i) Debt Service and (ii) Amortization Requirements.
- "Capital Construction Program" shall mean the planning, design, construction, acquisitions and improvements to the Airports, as more particularly described in Exhibits N-H, N-I, D-H, D-H Supplement, D-I and D-I Supplement attached to the Airline Agreements.
- "Common Use Charges" shall mean those charges, in any Rate Period, payable by the Airline to the Airports Authority for the use of Common Use Premises at each Airport, determined in accordance with Paragraph 8.03.4 of the Airline Agreement.

"Common Use Premises" shall mean those areas at the Airport which two or more Scheduled Air Carriers are authorized to use, as shown on Exhibits N-B-1 and D-B-1 attached to the Airline Agreement. For purposes of calculating rentals, fees, and charges under the Airline Agreement, such Common Use Premises shall be deemed Rentable Space; provided, however, no leasehold interests shall accrue to or be acquired by any authorized user thereof.

"Cost Centers" shall mean those areas of functional activities established by the Airports Authority at each Airport, as set forth in Exhibits N-E and D-E attached to the Airline Agreement, and as may be amended by the Airports Authority.

"Debt Service" shall mean, as of any date of calculation for any Rate Period, the amounts required pursuant to the terms of any Indenture to be collected during said period for the payment of Bonds, plus fees and amounts payable to providers of any form of credit enhancement used in connection with Bonds.

"Debt Service Coverage" shall mean at both Airports, for Fiscal Years 2015 through 2017, an amount equal to thirty-five percent (35%) of the portion of Debt Service attributable to Senior Bonds and Subordinated Bonds which is not funded with PFC revenue or federal grant assistance; at Reagan National Airport, for Fiscal Years 2018 through 2023, an amount equal to thirty percent (30%) of the portion of Debt Service attributable to Senior Bonds and Subordinated Bonds which is not funded with PFC revenue or federal grant assistance; at Reagan National Airport, for Fiscal Year 2024, an amount equal to twenty-five percent (25%) of the portion of Debt Service attributable to Senior Bonds and Subordinated Bonds which is not funded with PFC revenue or federal grant assistance; at Dulles International Airport for Fiscal Years 2018 through 2023, an amount equal to thirty percent (30%) of the portion of Debt Service attributable to Senior Bonds and Subordinated Bonds which is not funded with PFC revenue or federal grant assistance; and, at Dulles International Airport for Fiscal Year 2024, an amount equal to twenty-five percent (25%) of the portion of Debt Service attributable to Senior Bonds and Subordinated Bonds which is not funded with PFC revenue or federal grant assistance; plus, in each of the Fiscal Years 2015 through 2024, such other amounts as may be established by any financing agreement or arrangement with respect to Other Indebtedness.

**"Dulles Toll Road"** shall mean the toll roadway between Virginia Route 28 on the west and Virginia Route 123 on the east that was constructed by the State of Virginia under the 1983 Deed of Easement and additional easements and is located immediately adjacent to the Dulles Airport Access Highway on land leased to the Airports Authority by the United States Department of Transportation.

**"Equipment"** shall mean the equipment and devices owned by the Airports Authority and leased to the Airline, which may include but shall not be limited to, Common Use Terminal Equipment ("CUTE"), baggage make-up and baggage claim conveyors and devices, loading bridges, 400 Hz, and preconditioned air units.

**"Equipment Charges"** shall mean those amounts payable by the Airline, if applicable, for the use of Equipment in accordance with Section 8.05 of the Airline Agreement.

**"Equipment Sub-Centers"** shall mean those individual facilities at each Airport that are included in the Equipment Cost Center at that Airport, as described in Exhibits N-E and D-E to the Airline Agreement.

- **"Extraordinary Coverage Protection Payments"** shall mean those payments, if any, required to be paid by the Signatory Airlines at an Airport in any Fiscal Year in which the amount of Revenues plus Transfers less Operating and Maintenance Expenses at that Airport is projected to be less than one hundred twenty-five percent (125%) of the sum of Debt Service on Senior Bonds and Debt Service on Subordinated Bonds at the Airport.
- **"Federal Lease"** shall mean the Agreement and Deed of Lease, dated March 2, 1987, between the United States of America, acting through the Secretary of Transportation, and the Airports Authority, as the same may be amended or supplemented.
- **"Fiscal Year"** shall mean the annual accounting period for the Airports Authority for its general accounting purposes which, at the time of entering into the Airline Agreement, is the period of twelve consecutive months beginning with the first day of January of any year.
- **"Five CCP Projects"** shall mean the Commuter Concourse and its Enabling Projects, the Secure National Hall and its Enabling Projects, and the Terminal A Preliminary Planning and Design Projects, all at Reagan National Airport and as summarized in Exhibit N-H and described in Exhibit N-I to the Airline Agreement.
- **"Ground Transportation Cost Center"** shall mean the Cost Center described in Exhibits N-E and D-E to the Airline Agreement.
- **"Indenture"** shall mean the Senior Indenture, Subordinated Indenture, or Other Indenture, including amendments, supplements, and successors thereto.
- "International Arrivals Building Federal Inspectional Services Facility (or "IAB FIS")" shall mean the building adjacent to the Dulles Main Terminal containing facilities provided by the Airports Authority for the processing by U.S. Customs and Border Patrol of arriving international passengers requiring such processing.
- **"Landing Fees"** shall mean those fees, calculated in accordance with Section 8.02 of the Airline Agreement, payable by the Airline for the use of the Airfield.
- "Majority-in-Interest" shall mean, at each Airport, (i) for the Airfield Cost Center, fifty percent (50%) in number of all Signatory Airlines and Signatory Cargo Carriers at such Airport which together landed more than sixty percent (60%) of Signatory Airlines' and Signatory Cargo Carriers' landed weight at that Airport during the most recent six (6) full month period for which the statistics are available, and (ii) for the Airline Supported Areas (excluding the Airfield Cost Center), fifty percent (50%) in number of Signatory Airlines at such Airport which together were obligated to pay more than sixty percent (60%) of the sum of Terminal Rentals, Common Use Charges, FIS Charges, Passenger Conveyance Charges, and Equipment Charges at such Airport during the most recent six (6) full month period for which statistics are available.
- "Midfield C Federal Inspection Services Facility" or "Midfield C FIS" shall mean those facilities provided by the Airports Authority at Concourse C at Dulles International Airport for the processing by U.S. Customs and Border Patrol of arriving international passengers requiring such processing.

- "Operation and Maintenance Expenses" or "O&M Expenses" shall mean for any period all expenses of the Airports Authority paid or accrued for the operation, maintenance, administration, and ordinary current repairs of the Airports. Operations and Maintenance Expenses shall not include (i) the principal of, premium, if any, or interest payable on any Bonds; (ii) any allowance for amortization or depreciation of the Airports; (iii) any other expense for which (or to the extent to which) the Airports Authority is or will be paid or reimbursed from or through any source that is not included or includable as Revenues; (iv) any extraordinary items arising from the early extinguishment of debt; (v) rentals payable under the Federal Lease; and (vi) any expense paid with amounts from the Emergency R&R Fund.
- "Original Cost Estimate" shall mean for one or more or all of the Projects in the Capital Construction Program (as the context shall determine) the amount specified for such Project in Exhibits N-I and D-I to the Airline Agreement.
- "Other Indebtedness" shall mean any financing instrument or obligation of the Airports Authority, except the Federal Lease, payable from Revenues on a basis subordinate to the Airports Authority's obligation to pay Subordinated Bonds.
- **"Passenger Conveyances"** shall mean the Dulles International Airport mobile lounges, buses, Aerotrain or other airside ground transportation devices provided by the Airports Authority at Dulles International Airport for the movement of passengers and other persons.
- **"Passenger Conveyance Charges"** shall mean those charges payable by the Airline pursuant to Section 8.07 of the Airline Agreement.
- "Premises" shall mean areas at the Airports leased by the Airline pursuant to Article 6 of the Airline Agreement. Premises shall include Exclusive, Preferential, and Joint Use Premises.
- **"Project"** shall mean any discrete, functionally complete portion of the Capital Construction Program identified as a separate project in Exhibits N-I and D-I to the Airline Agreement, as revised from time to time.
- "Ramp Area" shall mean the aircraft parking and maneuvering areas adjacent to the Terminals and any other areas at an Airport designated by the Airports Authority for aircraft parking and maneuvering, and shall include within its boundaries all Aircraft Parking Positions. At Dulles International Airport, the Ramp Area shall also include the Dulles Jet Apron, but it shall not include the Dulles Cargo Apron.
- **"Ramp Area Charges"** shall mean Aircraft Parking Position Charges and Dulles Jet Apron Fees, as set forth in Section 8.04 of the Airline Agreement.
- "Revenues" shall mean all revenues of the Airports Authority received or accrued except (i) interest income on, and any profit realized from, the investment of moneys in any fund or account to the extent that such income or profit is not transferred to, or retained in, the Revenue Fund or the Bond Fund created by the Senior Indenture or the Bond Funds created by the Subordinated Indenture; (ii) interest income on, and any profit realized from, the investment of moneys in any fund or account funded from the proceeds of Special Facility Bonds; (iii) amounts received by the Airports Authority from, or in connection with, Special Facilities, unless such funds are treated as Revenues by the Airports Authority; (iv) amounts received by the Airports Authority from, or in connection with, the

Dulles Toll Road, unless such funds are treated as Revenues by the Airports Authority; (v) the proceeds of any passenger facility charge or similar charge levied by, or on behalf of, the Airports Authority, unless such funds are treated as Revenues by the Airports Authority; (vi) grants-in-aid, donations, and/or bequests; (vii) insurance proceeds which are not deemed to be revenues in accordance with generally accepted accounting principles; (viii) the proceeds of any condemnation awards; and (ix) any other amounts which are not deemed to be revenues in accordance with generally accepted accounting principles or which are restricted as to their use.

"Rentable Space" shall mean, for each Terminal Sub-Center at each Airport, the total of all areas in that Terminal Sub-Center which constitute Premises, Common Use Premises, Dulles Permit Space, or areas otherwise available for lease to airlines or non-airline tenants.

"Scheduled Air Carrier" shall mean any company performing, pursuant to published schedules, commercial air transportation of persons, property, and/or mail over specified routes to and from an Airport and holding the necessary authority from the appropriate Federal or state agencies to provide such air transportation services.

"Senior Bonds" shall mean any bonds or other financing instrument or obligation issued pursuant to the Senior Indenture.

"Senior Indenture" shall mean the Amended and Restated Master Indenture of Trust dated as of September 1, 2001, securing the Airports Authority's Airport System Revenue Bonds, as such has been and may be amended or supplemented.

"Signatory Airline" shall mean a Scheduled Air Carrier which has an agreement with the Airports Authority substantially similar to the Airline Agreement.

"Special Facility" shall mean any facility, improvement, structure, equipment, or assets acquired or constructed on any land or in or on any structure or building at the Airports, the cost of construction and acquisition of which are paid for (i) by the obligor under the special facility agreement, or (ii) from the proceeds of Special Facility Bonds, or (iii) both.

"Special Facility Bonds" shall mean revenue bonds, notes, or other obligations of the Airports Authority, issued to finance any Special Facility, the payment of principal of, premium, if any, and interest on which are payable from and secured by the proceeds thereof and rentals, payments, and other charges payable by the obligor under the Special Facility Agreements.

"Sub-Center" shall mean either a Terminal or Equipment Sub-Center.

**"Subordinated Bonds"** shall mean any bonds or other financing instrument or obligation issued pursuant to the Subordinated Indenture.

**"Subordinated Indenture"** shall mean the Master Indenture of Trust dated March 1, 1988, securing the Airports Authority's General Airport Subordinated Revenue Bonds, as such may be supplemented or amended.

"Terminal Rentals" shall mean those amounts payable by the Airline, calculated in accordance with Section 8.03 of the Airline Agreement, for the lease of its Exclusive, Preferential, and Joint Use Premises.

**"Terminal Sub-Centers"** shall mean those individual facilities at each Airport that are included in the Terminal Cost Center at that Airport, and described in Exhibits N-E and D-E of the Airline Agreement. At Reagan National Airport, Terminal Sub-Centers shall mean Terminal A and Terminal B/C and, after it is established, Terminal B/C/D. At Dulles International Airport, Terminal Sub-Centers shall mean Dulles Main Terminal, Concourse A, Concourse B, Concourse C, Concourse D and Z Gates.

"Terminal Sub-Center Net Requirement" shall mean, for each Terminal Sub-Center at each Airport, the Total Requirement attributable or allocable to each such Terminal Sub-Center, less direct utility or other reimbursements attributable or allocable to said Terminal Sub-Center.

"Total Requirement" shall mean, with respect to any Direct Cost Center or Terminal or Equipment Sub-Center, that portion of the sum of (i) O&M Expenses; (ii) required deposits under the Senior Indenture to maintain the O&M Reserve; (iii) Capital Charges; (iv) Debt Service Coverage; (v) required deposits to any Debt Service Reserve Fund; (vi) Federal Lease payments; (vii) required deposits to the Emergency R&R Fund; and (viii) Extraordinary Coverage Protection Payments, if any, properly attributable or allocable to each said Direct Cost Center or Sub-Center.

"Transfers" shall mean the amounts to be transferred by the Airports Authority to reduce Signatory Airline rentals, fees, and charges as set forth in Section 9.05 of the Airline Agreement.

#### **TERM**

On January 1, 2015, the Airline Agreement replaced the previously existing agreement (which became effective in February 1990 and terminated on December 31, 2014), and became effective with nearly all of the airlines providing service at Reagan National Airport and Dulles International Airport. For airlines operating at Reagan National Airport, the term of the Airline Agreement is 10 years, from the effective date (January 1, 2015) to December 31, 2024. For airlines operating at Dulles International Airport, the term of the Airline Agreement was originally three years, starting from the effective date (January 1, 2015) to December 31, 2017; however, the Airports Authority and the airlines signed the First Universal Amendment to the 2015 Metropolitan Washington Airports Authority Airport Use Agreement and Premises Lease, as it Applies to Washington Dulles International Airport, on July 27, 2016 (the "First Universal Amendment"), extending the term of the agreement for Dulles International Airport to December 31, 2024 to be coterminous with the agreement at Reagan National Airport. On September 10, 2018, the Airports Authority and the airlines entered into a Second Universal Amendment to the 2015 Metropolitan Washington Airports Authority Use Agreement and Premises Lease as it applies to Washington Dulles International Airport (the "Second Universal Amendment") in connection with the use of proceeds from the sale of the 424-acre parcel that was part of Dulles International Airport, known as the Western Lands.

#### **COST CENTERS**

The Airline Agreement divides each of the Airports into areas (the "Cost Centers") which are described both in terms of geographic location and function. The Airline Agreement establishes separate Cost Centers for Reagan National Airport and Dulles International Airport. The Cost Centers at each Airport are divided into two groups: the Direct Cost Centers (Airfield, Terminal, Equipment, Ground Transportation, Aviation and Non-Aviation, and, at Dulles International Airport only, IAB FIS, Midfield C FIS, Cargo, and Passenger Conveyance System) and the Indirect Cost Centers (Maintenance, Public Safety, Systems and Services, and Administrative). In addition, there are Sub-

Centers created with the Terminal and Equipment Cost Centers. The Direct Cost Centers and Sub-Centers are used to account for both costs and revenues. The Indirect Cost Centers primarily serve to accumulate certain costs which are in turn allocated to the Direct Cost Centers and Sub-Centers.

The Signatory Airlines pay rentals, fees and charges based on their lease of Premises in, and usage of, those Direct Cost Centers and Sub-Centers which are within the Airline Supported Areas. The Airline Supported Areas at Reagan National Airport are the Airfield, Terminal and Equipment Cost Centers and at Dulles International Airport, they are the Airfield, Terminal, Equipment, IAB FIS, Midfield C FIS and Passenger Conveyance System Cost Centers.

# REVENUE-SHARING; CALCULATION OF TRANSFERS

The Airports Authority and the Signatory Airlines at each Airport have agreed to share in the Net Remaining Revenue ("NRR") of the Airport each Fiscal Year. The Airports Authority's share of the Airport's NRR is deposited into the Airports Authority's Capital Fund. The Signatory Airlines' share of NRR is deposited into an Airline Transfer Account in the Revenue Fund and used as a credit to reduce rentals, fees and charges in the following Fiscal Year ("Transfers"). This reduction is accomplished by allocating Transfers to the various Cost Centers and Sub-Centers in the Airline Supported Areas.

To calculate the Airports Authority's and the Signatory Airlines' respective shares of NRR, at the end of each Fiscal Year, the total amount of NRR at each Airport is calculated. This calculation takes the total Revenues at the Airport (plus Transfers, if any, from the previous Fiscal Year) and subtracts from that amount various costs and expenses, including O&M Expenses, Debt Service, Federal Lease payments, various reserve and fund deposit requirements, but excluding Debt Service Coverage.

Under the formula set forth in the Airline Agreement, the Airports Authority will retain an increased share of NRR from Reagan National Airport (compared with its share under the prior agreement) and have the ability to use such NRR at Dulles International Airport, including to reduce the requirement for airline rentals, fees and charges at that Airport, up to a maximum of \$40 million in years 2014 through 2016 and lower amounts in subsequent years. The amount of NRR so calculated for Reagan National Airport is allocated between the Airports Authority and the Signatory Airlines as follows:

Year in Which NRR is Generated	NRR Sharing at Reagan National Airport	Maximum Amount of Airports Authority Share Usable at Dulles International Airport in Year Following Year of Generation
2014, 2015, 2016	100% Airports Authority/ 0% Airlines	\$40 million
2017	55% Airports Authority/ 45% Airlines	\$35 million
2018	55% Airports Authority/ 45% Airlines	\$30 million
2019 through 2023	45% Airports Authority/ 55% Airlines	\$25 million
2024	NRR allocation between the Airports Authority and the Airlines, as well as any limitation on the use of the Airports Authority's share at Dulles International Airport, to be described in a new airport use and lease agreement, which would be effective in 2025, or, if none, in accordance with the allocation for NRR generated in 2023, as described above.	

The amount of NRR for Dulles International Airport was divided equally between the Airports Authority and the Signatory Airlines up to a plateau amount of \$15.6 million (in 2014 dollars) escalated by the U.S. Implicit Price Deflator Index from the base date of January 1, 2016 through 2019. The remainder is then split with 25% allocated to the Airports Authority and 75% allocated to the Signatory Airlines. NRR generated in the final year of the Airline Agreement at each Airport will be allocated between the Airports Authority and the Signatory Airlines either in accordance with a new airport use and lease agreement applicable to the Airport or if no agreement, substantially in accordance with the methodology set forth in the Airline Agreement for the immediately preceding Fiscal Year.

In addition, the Airports Authority's share of NRR from Reagan National Airport is to be increased in the event any new legislation is enacted which allows additional non-stop flights to and from Reagan National Airport in excess of the 1,250 mile perimeter. For each new pair of beyond-perimeter flights, the Airports Authority will be entitled to \$1.5 million from NRR at Reagan National Airport, before any sharing of NRR occurs with the Signatory Airlines.

# AIRLINE RENTALS, FEES AND CHARGES

Terminal Rentals for Premises are charged to each of the Signatory Airlines on a square footage basis. These rentals are calculated by first determining the Terminal Sub-Center Net Requirement for the Signatory Airlines' share of each Terminal Sub-Center. This amount is then reduced by Transfers allocable to such Sub-Center to determine the adjusted requirement. An average rental rate per square foot is determined for each Terminal Sub-Center by dividing this adjusted requirement by the total square footage of rentable area in that Sub-Center. This average rental rate is then weighted for the various types of Signatory Airline space within each Terminal Sub-Center, and these weighted rates are applied to the Signatory Airlines' rented space to determine the amount of Terminal Rentals.

Landing Fees are charged to the Signatory Airlines on the basis of landed weight of aircraft. The Airfield Net Requirement for each Airport is determined by subtracting Transfers and certain other Revenues allocable to the Airfield from the Total Requirement of the Airfield. The Landing Fee rate

is calculated by dividing each Airport's Airfield Net Requirement by the total estimated landed weight of aircraft of all air transportation companies and general aviation operating at that Airport. Each Signatory Airline pays Landing Fees which are determined as the product of the appropriate Airport's Landing Fee rate and such Signatory Airline's total landed weight. Each Signatory Airline also pays Common Use Charges (or, if the Signatory Airline is a commuter airline and its number of Enplaning Passengers is below a certain threshold, Low Volume Common Use Fees), Equipment Charges and, at Dulles International Airport, Passenger Conveyance Charges, Ramp Area Charges and FIS charges.

## COMMITMENT TO PAY AIRPORT FEES AND CHARGES

The Airports Authority shall include in the calculation of rentals, fees and charges at an Airport Extraordinary Coverage Protection Payments if and to the extent necessary to ensure that total Revenues of that Airport, plus Transfers from the previous year, less Operation and Maintenance Expenses at the Airport, are at least equal to 125% of the Debt Service on Senior Bonds and Subordinated Bonds at the Airport.

## MAJORITY-IN-INTEREST APPROVAL PROCEDURES

The Airports Authority shall initiate the Majority-in-Interest approval process in connection with certain Additional Projects that are to be debt-financed by delivering the request for approval to the Signatory Airlines at the appropriate Airport for the appropriate Cost Center. The request will be deemed to have been approved unless the Airports Authority receives, within thirty (30) days, written notice of disapproval from the Signatory Airlines representing a Majority-in-Interest at such Airport for such cost center. (See the section below entitled "Additional Projects" for further discussion of Majority-in-Interest procedures.)

# **BILLING OF AIRPORT FEES AND CHARGES**

Approximately sixty days prior to the end of each Fiscal Year, the Airports Authority is required to notify the Signatory Airlines of the estimated rates for rentals, fees and charges for the next ensuing Fiscal Year. Such rates are based on estimates of the activity at each Airport during that Fiscal Year, O&M Expenses budgeted for the Fiscal Year, and estimates of Transfers, Capital Charges, Debt Service Coverage, Federal Lease payments, and other costs in the Fiscal Year. Rentals for Exclusive, Preferential, and Joint Use Premises, Common Use Charges, Passenger Conveyance Charges, Equipment Charges, and Aircraft Parking Position Charges are due and payable in advance, without demand or invoice, on the first calendar day of each month. Payment for Landing Fees, Low Volume Common Use Fees, Dulles International Airport Jet Apron Fees, and FIS Charges for each month are due and payable on the tenth calendar day of the next month without demand or invoice.

Payment for all other fees and charges under the Airline Agreement are due within twenty days of the date of the Airports Authority's invoice for such fees and charges. The Airports Authority is required to make an annual adjustment to Signatory Airlines' rentals, fees and charges, effective on the first day of each Fiscal Year. The Airports Authority is authorized, but not required, to make a mid-year adjustment to the Signatory Airlines' rentals, fees and charges if warranted by revised estimates of activity and costs, and the impact of the prior Fiscal Year audits, at the Airports. The Airports Authority may also adjust Signatory Airlines' rentals, fees, and charges at any time under certain circumstances, including when it is projected that total rentals, fees and charges at their current rates would vary by more than five percent from the total rentals, fees and charges that would be payable if rates were based on more current financial and activity data then available. The rental, fees and charges

payable by the Signatory Airlines may also be recalculated and increased as appropriate as Projects in the Capital Construction Program are completed and as their costs become allocable to the Airline Supported Areas.

# GRANT OF RIGHTS; OBLIGATIONS OF AIRPORTS AUTHORITY AND SIGNATORY AIRLINES

Each Signatory Airline is granted the right to operate its air transportation business at each Airport at which it is Signatory Airline and to perform all operations and functions incidental, necessary or proper thereto. The Airports Authority has agreed not to grant to any airline any rates or terms and conditions at the Airports more favorable to such airline than those granted or available to a Signatory Airline, unless the more favorable rates and conditions are offered to the Signatory Airlines. This grant includes the right to use, subject to certain restrictions, the Signatory Airline's leased Premises and Equipment, the Common Use Premises and certain other support facilities at the Airports. Each of the Signatory Airlines and the Airports Authority have certain specified obligations with respect to the maintenance and operation of the Airports. The Airports Authority has certain specified insurance obligations with respect to the Airports, and each Signatory Airline has certain public liability and property insurance obligations.

# LEASE OF PREMISES; ACCOMMODATION PROVISIONS

Premises at each Airport are leased to the Signatory Airlines on an exclusive, preferential or joint use basis, although some space at Dulles International Airport is provided to Signatory Airlines by permit. The Airports Authority will have the right to periodically reallocate leased space as follows: 1) once every twenty-four months beginning on January 1, 2017 at Reagan National Airport; 2) once during calendar year 2017 and, thereafter, once every twenty-four months beginning on or after January 1, 2020 at Dulles International Airport; and 3) in accordance with a utilization study conducted by the Airports Authority. In addition, the Airports Authority has the right to require accommodation by a Signatory Airline of another airline on the Signatory Airline's leased Premises in order to meet the needs of expanding airlines and new entrants.

#### SUBLEASE AND ASSIGNMENT

All subleases and assignments of leased Premises, and handling agreements, must be approved by the Airports Authority. No sublease, voluntary assignment or handling agreement relieves a Signatory Airline from primary liability for the payment of rentals, fees and charges.

## NO ABATEMENT OR SUSPENSION OF PAYMENTS

The Airline Agreement provides that the Signatory Airlines shall not abate, suspend, postpone, set-off or discontinue any payments of Airport rentals, fees and charges which they are obligated to pay thereunder if such abatement would interfere with the Airports Authority's ability to meet the rate covenant or any additional bonds test under the Indenture.

#### CAPITAL CONSTRUCTION PROGRAM

The Airline Agreement contains as exhibits thereto a list of Projects which were approved by the Signatory Airlines under the prior Airline Agreement and new Projects approved by the Signatory Airlines under the new Airline Agreement, as amended by the First Universal Amendment, including the Five CCP Projects at Reagan National Airport. The Airports Authority may issue Bonds to fund the Capital Construction Program and, to the extent Bond proceeds are available, has covenanted to build the Projects of the Capital Construction Program. So long as the cost of the Capital Construction Program does not exceed the Original Cost Estimate, adjusted for inflation and airline approved scope changes, plus an agreed upon contingency (25% at Reagan National Airport; 25% at Dulles International Airport), no further Signatory Airline approvals are required. If the cost exceeds that amount, certain cost control measures apply, and, under certain circumstances, Signatory Airline approvals may be required.

## ADDITIONAL PROJECTS

The Airports Authority may build projects at the Airports in addition to those in the Capital Construction Program ("Additional Projects") from funds in the Airports Authority Capital Fund or from the proceeds of Bonds. Except as described in the following sentence, Additional Projects are not subject to Signatory Airline approval. An Additional Project which is in Airline Supported Areas and which is to be funded from the proceeds of Bonds may be undertaken by the Airports Authority without any Majority-in-Interest or other approval of the Airlines in such Airline Supported Areas if (i) the project falls within certain specified types of projects (e.g., safety projects, replacement of airport capacity projects, government required projects, fully Federal funded Airfield projects) or (ii) the estimated cost of the project is less than \$40,000,000.

If an Additional Project is not within one of the two specified categories above, then the Airports Authority may issue Bonds to fund the project if Majority-in-Interest approval is obtained for the project. In the event such an Additional Project receives a Majority-in-Interest disapproval, the Airports Authority may only issue Bonds to fund the project if it defers the issuance of such Bonds for one year from the date of Majority-in-Interest disapproval; thereafter, the Airports Authority may issue such Bonds and proceed with the project (i) after obtaining Majority-in-Interest approval, or (ii) after requesting but not obtaining Majority-in-Interest approval, the Airports Authority gives each Signatory Airline affected by the Bond issuance a sixty-day option to terminate the Airline Agreement upon 180 days written notice to the Airports Authority.

## DULLES TOLL ROAD AND RAIL SYSTEM TO DULLES INTERNATIONAL AIRPORT

The Airline Agreement provides, that unless and until additional costs are agreed upon in writing by the Majority-in-Interest of the Signatory Airlines at Dulles International Airport for the Airfield Cost Center, the aggregate of all capital costs of any Rail System to Dulles which the Airports Authority may pay from Revenues is \$10,000,000, and that all such costs are to be allocated to the Ground Transportation Cost Center at Dulles International Airport. Further, the agreement provides that no operation and maintenance costs associated with any Rail System to Dulles may be paid from Revenues (other than from the Airports Authority's share of NRR in the Airports Authority's Capital Fund), unless otherwise agreed to in writing by the Majority-in-Interest of Signatory Airlines at Dulles International Airport for the Airfield Cost Center.

The Airline Agreement also provides (i) that each Airline disclaims any right to share in the revenue of the Dulles Toll Road, (ii) that any expenditure by the Airports Authority of Dulles Toll Road revenue, or other funds not constituting Revenues, to acquire, operate, maintain and improve the Dulles Toll Road and to plan, design, construct and operate and maintain the Rail System to Dulles will not be a Project or an Additional Project within the Airline Supported Areas, will not require any

approval by the Airline, and may not be recovered through rentals, fees and charges of an Airline, and (iii) that no Airline will be responsible to the Airports Authority or to any holder of Dulles Toll Road Revenue Bonds for the payment of principal and interest on any such bonds.

## **DEFAULT BY SIGNATORY AIRLINES**

The following, among others, are defined as Events of Default: (1) the failure of a Signatory Airline to pay any rentals, fees or charges when due or after the expiration of any applicable grace period; (2) the dissolution, receivership, insolvency or bankruptcy of a Signatory Airline; (3) the discontinuance by a Signatory Airline of its air transportation business at the Airports; (4) the failure by a Signatory Airline to cure its default in the performance of any material covenant or provision in the Airline Agreement upon thirty days of receipt of notice of such failure or, if impossible to cure within such time, the failure to diligently pursue steps to cure within a reasonable period of time; (5) the failure of a Signatory Airline to cease any unauthorized business, practice, or act within thirty days of receipt of notice from the Airports Authority to do so; or (6) the taking of any appropriate judicial or governmental action which substantially limits or prohibits a Signatory Airline's operations at the Airports for a period of thirty days.

## SUBORDINATION TO INDENTURE

The Airline Agreement and all rights granted to the Signatory Airlines under it are expressly subordinated and subject to the lien and provisions of the pledges made by the Airports Authority in any prior Indenture, or any Indenture executed by the Airports Authority after the Airline Agreement, to issue Bonds.

## **TERMINATION**

The Airports Authority may terminate a Signatory Airline's Agreement upon the happening of certain Events of Default, and the expiration of any cure period as described in the Airline Agreement. So long as Bonds are outstanding, a Signatory Airline has no right to terminate its Airline Agreement other than as described under "Term" and "Additional Projects" above.

#### APPENDIX D

#### **BOOK-ENTRY ONLY SYSTEM**

## INFORMATION REGARDING DTC AND THE BOOK-ENTRY ONLY SYSTEM

The description that follows of the procedures and record keeping with respect to beneficial ownership interests in the Series 2023A Bonds, payments of principal, premium, if any, and interest on the Series 2023A Bonds to DTC, its nominee, Participants, defined below, or Beneficial Owners, defined below, confirmation and transfer of beneficial ownership interests in the Series 2023A Bonds and other bond-related transactions by and between DTC, Participants and Beneficial Owners is based solely on information furnished by DTC, and neither the Airports Authority, the Trustee, nor the Underwriters make any representation as to the accuracy of such information.

General. The Depository Trust Company, New York, New York ("DTC") will act as securities depository for the Series 2023A Bonds. The Series 2023A 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 Series 2023A Bond will be issued for each maturity of the Series 2023A Bonds in the aggregate principal amount 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 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"). DTC has Standard & Poor's rating of "AA+". The DTC Rules applicable to DTC and its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Series 2023A Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for such Series 2023A Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2023A 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 Series 2023A 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 Series 2023A Bonds, except in the event that use of the book-entry system for the Series 2023A Bonds is discontinued.

To facilitate subsequent transfers, all Series 2023A 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 Series 2023A Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2023A Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2023A 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.

Redemption notices will be sent to DTC. If less than all of the Series 2023A Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Series 2023A 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 Airports 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 the Series 2023A Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Redemption proceeds, distributions and dividend payments on the Series 2023A 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 Airports Authority or the Trustee, on payable date in accordance with their respective holdings shown on DTC's records. Payments by 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 Participant and not of DTC, the Trustee, or the Airports Authority, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by the authorized representative of DTC) is the responsibility of the Airports Authority or the Trustee, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Series 2023A Bonds at any time by giving reasonable notice to the Airports Authority or the Trustee. Under such circumstances, in the event that a successor securities depository is not obtained, Series 2023A Bond certificates are required to be printed and delivered. The Airports Authority may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Series 2023A Bond certificates will be printed and delivered.

So long as Cede & Co. is the registered owner of the Series 2023A Bonds, as nominee for DTC, references herein to Bondholders or registered owners of the Series 2023A Bonds shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the Series 2023A Bonds.

NEITHER THE AIRPORTS AUTHORITY NOR THE TRUSTEE WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DTC PARTICIPANTS, TO INDIRECT PARTICIPANTS, OR TO ANY BENEFICIAL OWNER WITH RESPECT TO (i) THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC, ANY DTC PARTICIPANT, OR ANY INDIRECT PARTICIPANT; (ii) ANY NOTICE THAT IS PERMITTED OR REQUIRED TO BE GIVEN TO THE OWNERS OF THE SERIES 2023A BONDS UNDER THE INDENTURE; (iii) THE PAYMENT BY DTC OR ANY DTC PARTICIPANT OR INDIRECT PARTICIPANT OF ANY AMOUNT WITH RESPECT TO THE PRINCIPAL OR INTEREST DUE WITH RESPECT TO THE SERIES 2023A BONDS; (iv) ANY CONSENT GIVEN OR OTHER ACTION TAKEN BY DTC AS THE OWNER OF SERIES 2023A BONDS; OR (v) ANY OTHER MATTER.



## APPENDIX E

#### FORM OF OPINION OF BOND COUNSEL

To: Metropolitan Washington Airports Authority Washington, D.C.

We have served as bond counsel to our client the Metropolitan Washington Airports Authority (the "Airports Authority") in connection with the issuance by the Airports Authority of its \$436,225,000 Airport System Revenue and Refunding Bonds, Series 2023A (AMT) (the "Series 2023A Bonds"), dated the date of this letter.

The Series 2023A Bonds are issued pursuant to the authority of Va. Code Ann. § 5.1-152 et. seq. (2001) (codifying Chapter 598 of the Acts of Virginia General Assembly of 1985, as amended) and the District of Columbia Regional Airports Authority Act of 1985, as amended, codified at D.C. Official Code Ann. § 9-901 et. seq. (2001) (together, the "Acts"), the Metropolitan Washington Airports Act of 1986 (Title VI of Public Law 99-500 as re-enacted in Public Law 99-591, effective October 18, 1986, as amended) codified at 49 U.S.C. § 49101 et. seq. (the "Federal Act"), and Resolution No. 23-8, adopted by the Board of Directors of the Airports Authority (the "Board of Directors") on May 17, 2023 (the "Resolution"), as supplemented by a Pricing Certificate dated May 24, 2023 (the "Pricing Certificate"), executed by the Chairperson of the Board of Directors and one of the Co-Chairs of the Finance Committee of the Board of Directors (the Resolution and the Pricing Certificate together, the "Authorizing Resolution"). The Series 2023A Bonds are issued and secured under the Amended and Restated Master Indenture of Trust dated as of September 1, 2001, as amended (the "Master Indenture"), between the Airports Authority and Manufacturers and Traders Trust Company, as trustee (the "Trustee"), as supplemented by the Fifty-sixth Supplemental Indenture of Trust dated as of July 1, 2023 (the "Fifty-sixth Supplemental Indenture" and, together with the Master Indenture, the "Indenture"), between the Airports Authority and the Trustee. Capitalized terms not otherwise defined in this letter are used as defined in the Indenture.

In our capacity as bond counsel, we have examined the transcript of proceedings relating to the issuance of the Series 2023A Bonds, the signed and authenticated Bond of the first maturity of the Series 2023A Bonds, the Authorizing Resolution, an executed counterpart of the Master Indenture, an executed counterpart of the Fifty-sixth Supplemental Indenture, and such other documents, matters and law as we deem necessary to render the opinions set forth in this letter.

Based on that examination and subject to the limitations stated below, we are of the opinion that under existing law:

- 1. The Series 2023A Bonds and the Indenture are valid and binding obligations of the Airports Authority, enforceable in accordance with their respective terms.
- 2. The Series 2023A Bonds constitute limited obligations of the Airports Authority, and the principal of and interest on (collectively, "debt service") the Series 2023A Bonds, together with debt service on any other Bonds issued and outstanding on a parity with the Series 2023A Bonds as provided in the Master Indenture, are

payable from and secured solely by the Net Revenues and other sources provided therefor in the Indenture. The payment of debt service on the Series 2023A Bonds is not secured by an obligation or pledge of any money raised by taxation, and the Series 2023A Bonds do not represent or constitute a general obligation or a pledge of the faith and credit of the Airports Authority, the Commonwealth of Virginia or the District of Columbia or any political subdivision thereof. The Airports Authority has no taxing power.

3. Interest on the Series 2023A Bonds is excluded from gross income for federal income tax purposes under Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), except interest on any Series 2023A Bond for any period during which it is held by a "substantial user" of the facilities financed or a "related person," as those terms are used in Section 147(a) of the Code, and is an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. Interest on the Series 2023A Bonds is exempt from income taxation by the Commonwealth of Virginia and is exempt from all taxation by the District of Columbia, except estate, inheritance and gift taxes. We express no opinion as to any other tax consequences regarding the Series 2023A Bonds.

The opinions stated above are based on an analysis of existing laws, regulations, rulings and court decisions and cover certain matters not directly addressed by such authorities. In rendering all such opinions, we assume, without independent verification, and rely upon (i) the accuracy of the factual matters represented, warranted or certified in the proceedings and documents we have examined, (ii) the due and legal authorization, execution and delivery of those documents by, and the valid, binding and enforceable nature of those documents upon, any parties other than the Airports Authority and (iii) the due authorization, signing and delivery by, and the binding effect upon and enforceability against, the Trustee of the Indenture.

We express no opinion herein regarding the priority of the lien on the Net Revenues or other funds created by the Indenture.

In rendering those opinions with respect to treatment of the interest on the Series 2023A Bonds under the federal tax laws, we further assume and rely upon compliance with the covenants in the proceedings and documents we have examined, including those of the Airports Authority. Failure to comply with certain of those covenants subsequent to issuance of the Series 2023A Bonds may cause interest on the Series 2023A Bonds to be included in gross income for federal income tax purposes retroactively to their date of issuance.

The rights of the owners of the Series 2023A Bonds and the enforceability of the Series 2023A Bonds and the Indenture are subject to bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance or transfer, and other laws relating to or affecting the rights and remedies of creditors generally; to the application of equitable principles, whether considered in a proceeding at law or in equity; to the exercise of judicial discretion; and to limitations on legal remedies against public entities.

No opinions other than those expressly stated herein are implied or shall be inferred as a result of anything contained in or omitted from this letter. The opinions expressed in this letter are

stated only as of the time of its delivery and we disclaim any obligation to revise or supplement this letter thereafter. Our engagement as bond counsel in connection with the original issuance and delivery of the Series 2023A Bonds is concluded upon delivery of this letter.

Respectfully submitted,



#### APPENDIX F

## FORM OF AMENDED AND RESTATED CONTINUING DISCLOSURE AGREEMENT

This Amended and Restated Continuing Disclosure Agreement (the "Disclosure Agreement"), dated as of July 3, 2019, is executed and delivered by the Metropolitan Washington Airports Authority (the "Issuer") and Digital Assurance Certification, L.L.C., as exclusive Disclosure Dissemination Agent (the "Disclosure Dissemination Agent" or "DAC") and amends and restates the Continuing Disclosure Agreement dated as of June 1, 2002 executed and delivered by the Issuer and the Disclosure Dissemination Agent, as amended by the Amendment to Continuing Disclosure Agreement dated as of June 1, 2009 and the Second Amendment to Continuing Disclosure Agreement dated as of December 1, 2010 (collectively, the "Prior Agreement"), for the benefit of the Holders (hereinafter defined) of the Bonds (hereinafter defined) and in order to assist the Issuer in processing certain continuing disclosure with respect to the Bonds in accordance with Rule 15c2-12 of the United States Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time (the "Rule").

The services provided under this Disclosure Agreement solely relate to the execution of instructions received from the Issuer through use of the DAC system and do not constitute "advice" within the meaning of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Act"). DAC will not provide any advice or recommendation to the Issuer or anyone on the Issuer's behalf regarding the "issuance of municipal securities" or any "municipal financial product" as defined in the Act and nothing in this Disclosure Agreement shall be interpreted to the contrary. DAC is not a "Municipal Advisor" as such term is defined in Section 15B of the Securities Exchange Act of 1934, as amended, and related rules.

SECTION 1. <u>Definitions</u>. Capitalized terms not otherwise defined in this Disclosure Agreement shall have the meaning assigned in the Rule or, to the extent not in conflict with the Rule, in the Official Statement (hereinafter defined). The capitalized terms shall have the following meanings:

"Annual Filing Date" means the date, set in Sections 2(a) and 2(f) hereof, by which the Annual Report is to be filed with the MSRB.

"Annual Financial Information" means annual financial information as such term is used in paragraph (b)(5)(i) of the Rule and specified in Section 3(a) of this Disclosure Agreement.

"Annual Report" means an Annual Report containing Annual Financial Information described in and consistent with Section 3 of this Disclosure Agreement.

"Audited Financial Statements" means the annual financial statements of the Issuer for the prior fiscal year, certified by an independent auditor as prepared in accordance with generally accepted accounting principles or otherwise, as such term is used in paragraph (b)(5)(i)(B) of the Rule and specified in Section 3(b) of this Disclosure Agreement.

"Bonds" means all of the bonds with respect to which the Prior Agreement applies and the bonds as listed on the attached Exhibit A, with the 9-digit CUSIP numbers relating thereto, as supplemented from time to time by the Issuer.

"Certification" means a written certification of compliance signed by the Disclosure Representative stating that the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure delivered to the Disclosure Dissemination Agent is the Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure required to be submitted to the MSRB under this Disclosure Agreement. A Certification shall accompany each such document submitted to the Disclosure Dissemination Agent by the Issuer and include the full name of the Bonds and the 9-digit CUSIP numbers for all Bonds to which the document applies.

"Disclosure Dissemination Agent" means Digital Assurance Certification, L.L.C, acting in its capacity as Disclosure Dissemination Agent hereunder, or any successor Disclosure Dissemination Agent designated in writing by the Issuer pursuant to Section 9 hereof.

"Disclosure Representative" means the Chief Financial Officer of the Issuer or his or her designee, or such other person as the Issuer shall designate in writing to the Disclosure Dissemination Agent from time to time as the person responsible for providing Information to the Disclosure Dissemination Agent.

"Failure to File Event" means the Issuer's failure to file an Annual Report on or before the Annual Filing Date.

"Financial obligation" as used in this Disclosure Agreement is defined in the Rule as (i) a debt obligation; (ii) derivative instrument entered into in connection with, or pledged as a security or a source of payment for, an existing or planned debt obligation; or (iii) guarantee of (i) or (ii). The term "financial obligation" shall not include municipal securities as to which a final official statement has been provided to the MSRB consistent with the Rule.

"Force Majeure Event" means: (i) acts of God, war, or terrorist action; (ii) failure or shutdown of the Electronic Municipal Market Access system maintained by the MSRB; or (iii) to the extent beyond the Disclosure Dissemination Agent's reasonable control, interruptions in telecommunications or utilities services, failure, malfunction or error of any telecommunications, computer or other electrical, mechanical or technological application, service or system, computer virus, interruptions in Internet service or telephone service (including due to a virus, electrical delivery problem or similar occurrence) that affect Internet users generally, or in the local area in which the Disclosure Dissemination Agent or the MSRB is located, or acts of any government, regulatory or any other competent authority the effect of which is to prohibit the Disclosure Dissemination Agent from performance of its obligations under this Disclosure Agreement.

"Holder" means any person (a) having 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 (b) treated as the owner of any Bonds for federal income tax purposes.

"Information" means, collectively, the Annual Reports, the Audited Financial Statements, the Notice Event notices, the Failure to File Event notices, the Voluntary Event Disclosures and the Voluntary Financial Disclosures.

"MSRB" means the Municipal Securities Rulemaking Board, or any successor thereto, established pursuant to Section 15B(b)(1) of the Securities Exchange Act of 1934.

"Notice Event" means any of the events enumerated in paragraph (b)(5)(i)(C) of the Rule and listed in Section 4(a) of this Disclosure Agreement.

"Obligated Person" means any person, including the Issuer, who is either generally or through an enterprise, fund, or account of such person committed by contract or other arrangement to support payment of all, or part of the obligations on the Bonds (other than providers of municipal bond insurance, letters of credit, or other liquidity facilities), as shown on Exhibit A.

"Official Statement" means that Official Statement prepared by the Issuer in connection with the Bonds, as listed in Exhibit A.

"Trustee" means the institution, if any, identified as such in the document under which the Bonds were issued.

"Voluntary Event Disclosure" means information of the category specified in any of subsections (e)(vi)(1) through (e)(vi)(10) of Section 2 of this Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(a) of this Disclosure Agreement.

"Voluntary Financial Disclosure" means information of the category specified in any of subsections (e)(vii)(1) through (e)(vii)(9) of Section 2 of this Disclosure Agreement that is accompanied by a Certification of the Disclosure Representative containing the information prescribed by Section 7(b) of this Disclosure Agreement.

## SECTION 2. Provision of Annual Reports.

- (a) The Issuer shall provide, annually, an electronic copy of the Annual Report and Certification to the Disclosure Dissemination Agent, together with a copy for the Trustee, not later than the Annual Filing Date. Promptly upon receipt of an electronic copy of the Annual Report and the Certification, the Disclosure Dissemination Agent shall provide an Annual Report to the MSRB not later than May 31 after the end of each fiscal year of the Issuer, commencing with the fiscal year ending December 31, 2019. Such date and each anniversary thereof is the Annual Filing Date. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may cross-reference other information as provided in Section 3 of this Disclosure Agreement.
- (b) If on the fifteenth (15th) day prior to the Annual Filing Date, the Disclosure Dissemination Agent has not received a copy of the Annual Report and Certification, the Disclosure Dissemination Agent shall contact the Disclosure Representative by telephone and in writing (which may be by e-mail) to remind the Issuer of its undertaking to provide the Annual Report pursuant to Section 2(a). Upon such reminder, the Disclosure Representative shall either

- (i) provide the Disclosure Dissemination Agent with an electronic copy of the Annual Report and the Certification no later than two (2) business days prior to the Annual Filing Date, or (ii) instruct the Disclosure Dissemination Agent in writing that the Issuer will not be able to file the Annual Report within the time required under this Disclosure Agreement, state the date by which the Annual Report for such year will be provided and instruct the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form attached as Exhibit B, which may be accompanied by a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.
- (c) If the Disclosure Dissemination Agent has not received an Annual Report and Certification by 10:00 a.m. Eastern time on Annual Filing Date (or, if such Annual Filing Date falls on a Saturday, Sunday or holiday, then the first business day thereafter) for the Annual Report, a Failure to File Event shall have occurred and the Issuer irrevocably directs the Disclosure Dissemination Agent to immediately send a Failure to File Event notice to the MSRB in substantially the form attached as Exhibit B without reference to the anticipated filing date for the Annual Report, which may be accompanied by a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.
- (d) If Audited Financial Statements of the Issuer are prepared but not available prior to the Annual Filing Date, the Issuer shall, when the Audited Financial Statements are available, provide at such time an electronic copy to the Disclosure Dissemination Agent, accompanied by a Certification, together with a copy for the Trustee, if any, for filing with the MSRB.
  - (e) The Disclosure Dissemination Agent shall:
    - (i) verify the filing specifications of the MSRB each year prior to the Annual Filing Date;
    - (ii) upon receipt, promptly file each Annual Report received under Sections 2(a) and 2(b) hereof with the MSRB;
    - (iii) upon receipt, promptly file each Audited Financial Statement received under Section 2(d) hereof with the MSRB;
    - (iv) upon receipt, promptly file the text of each Notice Event received under Sections 4(a) and 4(b)(ii) hereof with the MSRB, identifying the Notice Event as instructed by the Issuer pursuant to Section 4(a) or 4(b)(ii) hereof (being any of the categories set forth below) when filing pursuant to Section 4(c) of this Disclosure Agreement:
      - 1. "Principal and interest payment delinquencies;"
      - 2. "Non-Payment related defaults, if material;"
      - 3. "Unscheduled draws on debt service reserves reflecting financial difficulties;"
      - 4. "Unscheduled draws on credit enhancements reflecting financial difficulties;"

- 5. "Substitution of credit or liquidity providers, or their failure to perform;"
- 6. "Adverse tax opinions, IRS notices or events affecting the tax status of the security;"
- 7. "Modifications to rights of securities holders, if material;"
- 8. "Bond calls, if material, and tender offers;
- 9. "Defeasances;"
- 10. "Release, substitution, or sale of property securing repayment of the securities, if material;"
- 11. "Rating changes;"
- 12. "Bankruptcy, insolvency, receivership or similar event of the obligated person;"
- 13. "Merger, consolidation, or acquisition of the obligated person, if material;"
- 14. "Appointment of a successor or additional trustee, or the change of name of a trustee, if material;"
- 15. "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 security holders, if material;" and
- 16. "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 reflect financial difficulties.
- (v) upon receipt (or irrevocable direction pursuant to Section 2(c) of this Disclosure Agreement, as applicable), promptly file a completed copy of Exhibit B to this Disclosure Agreement with the MSRB, identifying the filing as "Failure to provide annual financial information as required" when filing pursuant to Section 2(b)(ii) or Section 2(c) of this Disclosure Agreement;
- (vi) upon receipt, promptly file the text of each Voluntary Event Disclosure received under Section 7(a) hereof with the MSRB, identifying the Voluntary Event Disclosure as instructed by the Issuer pursuant to Section 7(a) (being any of the categories set forth below) when filing pursuant to Section 7(a) of this Disclosure Agreement:

- 1. "amendment to continuing disclosure undertaking;"
- 2. "change in obligated person;"
- 3. "notice to investors pursuant to bond documents;"
- 4. "certain communications from the Internal Revenue Service;"other than those communications included in the Rule;
- 5. "secondary market purchases;"
- 6. "bid for auction rate or other securities;"
- 7. "capital or other financing plan;"
- 8. "litigation/enforcement action;"
- 9. "change of tender agent, remarketing agent, or other on-going party;" and
- 10. "other event-based disclosures."
- (vii) upon receipt, promptly file the text of each Voluntary Financial Disclosure received under Section 7(b) hereof with the MSRB, identifying the Voluntary Financial Disclosure as instructed by the Issuer pursuant to Section 7(b) (being any of the categories set forth below) when filing pursuant to Section 7(b) of this Disclosure Agreement:
  - 1. "quarterly/monthly financial information;"
  - 2. "Timing of annual disclosure (120 days);"
  - 3. "change in fiscal year/timing of annual disclosure;"
  - 4. "change in accounting standard;"
  - 5. "interim/additional financial information/operating data;"
  - 6. "budget;"
  - 7. "investment/debt/financial policy;"
  - 8. "information provided to rating agency, credit/liquidity provider or other third party;"
  - 9. "consultant reports;" and
  - 10. "other financial/operating data."

- (viii) provide the Issuer evidence of the filings of each of the above when made, which shall be by means of the DAC system, for so long as DAC is the Disclosure Dissemination Agent under this Disclosure Agreement.
- (f) The Issuer may adjust the Annual Filing Date upon change of its fiscal year by providing written notice of such change and the new Annual Filing Date to the Disclosure Dissemination Agent, Trustee (if any) and the MSRB, provided that the period between the existing Annual Filing Date and new Annual Filing Date shall not exceed one year.
- Information received by the Disclosure Dissemination Agent before 6:00 p.m. Eastern time on any business day that it is required to file with the MSRB pursuant to the terms of this Disclosure Agreement and that is accompanied by a Certification and all other information required by the terms of this Disclosure Agreement will be filed by the Disclosure Dissemination Agent with the MSRB no later than 11:59 p.m. Eastern time on the same business day; provided, however, the Disclosure Dissemination Agent shall have no liability for any delay in filing with the MSRB if such delay is caused by a Force Majeure Event provided that the Disclosure Dissemination Agent uses reasonable efforts to make any such filing as soon as possible.

## SECTION 3. Content of Annual Reports.

Each Annual Report shall contain Annual Financial Information with respect to the Issuer, including the information provided in the Official Statement under the headings for each Bond Issue described in Exhibit A.

Audited Financial Statements as described in the Official Statement will be included in the Annual Report. If audited financial statements are not available, then unaudited financial statements, prepared in accordance with GAAP as described in the Official Statement will be included in the Annual Report. In such event, Audited Financial Statements (if any) will be provided pursuant to Section 2(d).

Any or all of the items listed above may be included by specific reference from other documents, including official statements of debt issues with respect to which the Issuer is an "obligated person" (as defined by the Rule), which have been previously filed with the Securities and Exchange Commission or available on the MSRB Internet Website. If the document incorporated by reference is a final official statement, it must be available from the MSRB. The Issuer will clearly identify each such document so incorporated by reference.

If the Annual Financial Information contains modified operating data or financial information different from the Annual Financial Information agreed to in the continuing disclosure undertaking related to the Bonds, the Issuer is required to explain, in narrative form, the reasons for the modification and the impact of the change in the type of operating data or financial information being provided.

## SECTION 4. Reporting of Notice Events.

(a) The occurrence of any of the following events with respect to the Bonds constitutes a Notice Event:

- 1. Principal and interest payment delinquencies;
- 2. Non-payment related defaults, if material;
- 3. Unscheduled draws on debt service reserves reflecting financial difficulties;
- 4. Unscheduled draws on credit enhancements reflecting financial difficulties;
- 5. Substitution of credit or liquidity providers, or their failure to perform;
- 6. 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;
- 7. Modifications to rights of Bond holders, if material;
- 8. Bond calls, if material, and tender offers;
- 9. Defeasances;
- 10. Release, substitution, or sale of property securing repayment of the Bonds, if material;
- 11. Rating changes;
- 12. Bankruptcy, insolvency, receivership or similar event of the Obligated Person;
- 13. **Note to subsection (a)(12) of this Section 4:** For the purposes of the event described in subsection (a)(12) of this Section 4, the event is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent or similar officer for an Obligated Person in a proceeding under the U.S. Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the Obligated Person, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the Obligated Person.
- 14. 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;
- 15. Appointment of a successor or additional trustee or the change of name of a trustee, if material:

- 16. Incurrence of a financial obligation of an Obligated Person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of an Obligated Person, any of which affect security holders, if material; and
- 17. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of an Obligated Person, any of which reflect financial difficulties.

The Issuer shall, in a timely manner not later than nine (9) business days after its occurrence, notify the Disclosure Dissemination Agent in writing of the occurrence of a Notice Event. Such notice shall instruct the Disclosure Dissemination Agent to report the occurrence pursuant to subsection (c) and shall be accompanied by a Certification. Such notice or Certification shall identify the Notice Event that has occurred (which shall be any of the categories set forth in Section 2(e)(iv) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth business day after the occurrence of the Notice Event).

- (b) The Disclosure Dissemination Agent is under no obligation to notify the Issuer or the Disclosure Representative of an event that may constitute a Notice Event. In the event the Disclosure Dissemination Agent so notifies the Disclosure Representative, the Disclosure Representative will within two business days of receipt of such notice (but in any event not later than the tenth business day after the occurrence of the Notice Event, if the Issuer determines that a Notice Event has occurred), instruct the Disclosure Dissemination Agent that either (i) a Notice Event has not occurred and no filing is to be made or (ii) a Notice Event has occurred and the Disclosure Dissemination Agent is to report the occurrence pursuant to subsection (c) of this Section 4, together with a Certification. Such Certification shall identify the Notice Event that has occurred (which shall be any of the categories set forth in Section 2(e)(iv) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information (provided that such date is not later than the tenth business day after the occurrence of the Notice Event).
- (c) If the Disclosure Dissemination Agent has been instructed by the Issuer as prescribed in subsection (a) or (b)(ii) of this Section 4 to report the occurrence of a Notice Event, the Disclosure Dissemination Agent shall promptly file a notice of such occurrence with MSRB in accordance with Section 2 (e)(iv) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-1.

SECTION 5. <u>CUSIP Numbers</u>. The Issuer will provide the Dissemination Agent with the CUSIP numbers for (i) new bonds at such time as they are issued or become subject to the Rule and (ii) any Bonds to which new CUSIP numbers are assigned in substitution for the CUSIP numbers previously assigned to such Bonds.

SECTION 6. Additional Disclosure Obligations. The Issuer acknowledges and understands that other state and federal laws, including but not limited to the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the Issuer, and that the duties and responsibilities of the Disclosure Dissemination Agent under this Disclosure Agreement do not extend to providing legal advice regarding such laws. The Issuer acknowledges and understands that the duties of the Disclosure Dissemination Agent relate exclusively to execution of the mechanical tasks of disseminating information as described in this Disclosure Agreement.

## SECTION 7. Voluntary Filing.

- (a) The Issuer may instruct the Disclosure Dissemination Agent to file a Voluntary Event Disclosure with the MSRB from time to time pursuant to a Certification of the Disclosure Representative. Such Certification shall identify the Voluntary Event Disclosure (which shall be any of the categories set forth in Section 2(e)(vi) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information. If the Disclosure Dissemination Agent has been instructed by the Issuer as prescribed in this Section 7(a) to file a Voluntary Event Disclosure, the Disclosure Dissemination Agent shall promptly file such Voluntary Event Disclosure with the MSRB in accordance with Section 2(e)(vi) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-2.
- (b) The Issuer may instruct the Disclosure Dissemination Agent to file a Voluntary Financial Disclosure with the MSRB from time to time pursuant to a Certification of the Disclosure Representative. Such Certification shall identify the Voluntary Financial Disclosure (which shall be any of the categories set forth in Section 2(e)(vii) of this Disclosure Agreement), include the text of the disclosure that the Issuer desires to make, contain the written authorization of the Issuer for the Disclosure Dissemination Agent to disseminate such information, and identify the date the Issuer desires for the Disclosure Dissemination Agent to disseminate the information. If the Disclosure Dissemination Agent has been instructed by the Issuer as prescribed in this Section 7(b) hereof to file a Voluntary Financial Disclosure, the Disclosure Dissemination Agent shall promptly file such Voluntary Financial Disclosure with the MSRB in accordance with Section 2(e)(vii) hereof. This notice may be filed with a cover sheet completed by the Disclosure Dissemination Agent in the form set forth in Exhibit C-3.
- (c) The parties hereto acknowledge that the Issuer is not obligated pursuant to the terms of this Disclosure Agreement to file any Voluntary Event Disclosure pursuant to Section 7(a) hereof or any Voluntary Financial Disclosure pursuant to Section 7(b) hereof.
- (d) Nothing in this Disclosure Agreement shall be deemed to prevent the Issuer from disseminating any other information through the Disclosure Dissemination Agent using the means of dissemination set forth in this Disclosure Agreement or including any other information in any Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure, in addition to that required by this Disclosure Agreement. If the Issuer chooses to include any information in any Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event

Disclosure or Voluntary Financial Disclosure in addition to that which is specifically required by this Disclosure Agreement, the Issuer shall have no obligation under this Disclosure Agreement to update such information or include it in any future Annual Report, Audited Financial Statements, Notice Event notice, Failure to File Event notice, Voluntary Event Disclosure or Voluntary Financial Disclosure.

SECTION 8. <u>Termination of Reporting Obligation</u>. The obligations of the Issuer and the Disclosure Dissemination Agent under this Disclosure Agreement shall terminate with respect to the Bonds upon the legal defeasance, prior redemption or payment in full of all of the Bonds, when the Issuer is no longer an obligated person with respect to the Bonds, or upon delivery by the Disclosure Representative to the Disclosure Dissemination Agent of an opinion of counsel expert in federal securities laws to the effect that continuing disclosure is no longer required.

SECTION 9. <u>Disclosure Dissemination Agent</u>. The Issuer has appointed Digital Assurance Certification, L.L.C. as exclusive Disclosure Dissemination Agent under this Disclosure Agreement. The Issuer may, upon thirty days written notice to the Disclosure Dissemination Agent and the Trustee, replace or appoint a successor Disclosure Dissemination Agent. Upon termination of DAC's services as Disclosure Dissemination Agent, whether by notice of the Issuer or DAC, the Issuer agrees to appoint a successor Disclosure Dissemination Agent or, alternately, agrees to assume all responsibilities of Disclosure Dissemination Agent under this Disclosure Agreement for the benefit of the Holders of the Bonds. Notwithstanding any replacement or appointment of a successor, the Issuer shall remain liable to the Disclosure Dissemination Agent until payment in full for any and all sums owed and payable to the Disclosure Dissemination Agent. The Disclosure Dissemination Agent may resign at any time by providing thirty days' prior written notice to the Issuer.

SECTION 10. Remedies in Event of Default. In the event of a failure of the Issuer or the Disclosure Dissemination Agent to comply with any provision of this Disclosure Agreement, the Holders' rights to enforce the provisions of this Agreement shall be limited solely to a right, by action in mandamus or for specific performance, to compel performance of the parties' obligation under this Disclosure Agreement. Any failure by a party to perform in accordance with this Disclosure Agreement shall not constitute a default on the Bonds or under any other document relating to the Bonds, and all rights and remedies shall be limited to those expressly stated herein.

## SECTION 11. Duties, Immunities and Liabilities of Disclosure Dissemination Agent.

(a) The Disclosure Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Agreement. The Disclosure Dissemination Agent's obligation to deliver the information at the times and with the contents described herein shall be limited to the extent the Issuer has provided such information to the Disclosure Dissemination Agent as required by this Disclosure Agreement. The Disclosure Dissemination Agent shall have no duty with respect to the content of any disclosures or notice made pursuant to the terms hereof. The Disclosure Dissemination Agent shall have no duty or obligation to review or verify any Information or any other information, disclosures or notices provided to it by the Issuer and shall not be deemed to be acting in any fiduciary capacity for the Issuer, the Holders of the Bonds or any other party. The Disclosure Dissemination Agent shall have no responsibility for the Issuer's failure to report to the Disclosure Dissemination Agent a Notice Event or a duty to determine the materiality thereof. The Disclosure Dissemination Agent shall have no duty to determine, or

liability for failing to determine, whether the Issuer has complied with this Disclosure Agreement. The Disclosure Dissemination Agent may conclusively rely upon Certifications of the Issuer at all times.

The obligations of the Issuer under this Section shall survive resignation or removal of the Disclosure Dissemination Agent and defeasance, redemption or payment of the Bonds.

- (b) The Disclosure Dissemination Agent may, from time to time, consult with legal counsel (either in-house or external) of its own choosing in the event of any disagreement or controversy, or question or doubt as to the construction of any of the provisions hereof or its respective duties hereunder, and shall not incur any liability and shall be fully protected in acting in good faith upon the advice of such legal counsel. The reasonable fees and expenses of such counsel shall be payable by the Issuer.
- (c) All documents, reports, notices, statements, information and other materials provided to the MSRB under this Agreement shall be provided in an electronic format and accompanied by identifying information as prescribed by the MSRB.

SECTION 12. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Agreement, the Issuer and the Disclosure Dissemination Agent may amend this Disclosure Agreement and any provision of this Disclosure Agreement may be waived, if such amendment or waiver is supported by an opinion of counsel expert in federal securities laws acceptable to both the Issuer and the Disclosure Dissemination Agent to the effect that such amendment or waiver does not materially impair the interests of Holders of the Bonds and would not, in and of itself, cause the undertakings herein to violate the Rule if such amendment or waiver had been effective on the date hereof but taking into account any subsequent change in or official interpretation of the Rule; provided neither the Issuer or the Disclosure Dissemination Agent shall be obligated to agree to any amendment modifying their respective duties or obligations without their consent thereto.

Notwithstanding the preceding paragraph, the Disclosure Dissemination Agent shall have the right to adopt amendments to this Disclosure Agreement necessary to comply with modifications to and interpretations of the provisions of the Rule as announced by the Securities and Exchange Commission from time to time by giving not less than 20 days written notice of the intent to do so together with a copy of the proposed amendment to the Issuer. No such amendment shall become effective if the Issuer shall, within 10 days following the giving of such notice, send a notice to the Disclosure Dissemination Agent in writing that it objects to such amendment.

SECTION 13. <u>Beneficiaries</u>. This Disclosure Agreement shall inure solely to the benefit of the Issuer, the Trustee, if any, for the Bonds, the Disclosure Dissemination Agent, the underwriter, and the Holders from time to time of the Bonds, and shall create no rights in any other person or entity.

SECTION 14. <u>Governing Law</u>. This Disclosure Agreement shall be governed by the laws of the Commonwealth of Virginia (other than with respect to conflicts of laws).

SECTION 15. <u>Counterparts</u>. 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 Disclosure Dissemination Agent and the Issuer have caused this Continuing Disclosure Agreement to be executed, on the date first written above, by their respective officers duly authorized.

DIGITAL ASSURANCE CERTIFICATION, L.L.C., as Disclosure Dissemination Agent

By:
Name:
Title:
METROPOLITAN WASHINGTON AIRPORTS AUTHORITY, as Issuer as Issuer
By:
Name: Warner H. Session

Title: Chairman

#### **EXHIBIT A**

#### NAME AND CUSIP NUMBERS OF BONDS

Name of Issuer: Metropolitan Washington Airports Authority

Obligated Person(s): None

Name of Bond Issue: Airport System Revenue and Refunding Bonds, Series 2023A

Date of Issuance: July 12, 2023 Date of Official Statement: May 24, 2023

Underwriter(s): Barclays Capital Inc., as representative

**CUSIP** Numbers:

## SERIES 2023A

CUSIP No. 592647
LG4
LH2
LJ8
LK5
LL3
LM1
LN9
LP4
LQ2
LR0
LS8
LT6
LU3
LV1
LW9
LX7
LY5
LZ2
MA6
MB4
MC2
MD0
ME8

Content of Annual Reports: Each Annual Report shall contain financial information or operating data with respect to the Issuer and the Airports ("Annual Financial Information"), including information substantially similar to the types set forth in the Official Statement under the following captions or in the following appendices: "AIRPORTS AUTHORITY HISTORICAL FINANCIAL INFORMATION" and "THE AIRPORTS SERVICE REGION AND AIRPORTS ACTIVITY — Airports Activity," and "Historical Enplanement Activity" in the Official Statement and in the Report of the Airport Consultant which is included as Appendix A to the Official Statement. Annual Financial Information may but is not required to, include Audited Financial Statements and may be provided by delivery of the Issuer's Comprehensive Annual Financial Report or in any other format deemed convenient by the Issuer.

# **EXHIBIT B**

# NOTICE TO MSRB OF FAILURE TO FILE ANNUAL REPORT

Issuer:	
Obligated Person:	
Name(s) of Bond Issue(s):	
Date(s) of Issuance:	
respect to the above-named Bonds a and Digital Assurance Certification,	EN that the Issuer has not provided an Annual Report with as required by the Disclosure Agreement between the Issue, L.L.C., as Disclosure Dissemination Agent. The Issuer has an Agent that it anticipates that the Annual Report will be filed
	Digital Assurance Certification, L.L.C., as Disclosure Dissemination Agent, on behalf of the

# EXHIBIT C-1 EVENT NOTICE COVER SHEET

This cover sheet and accompanying "event notice" may be sent to the MSRB, pursuant to Securities and Exchange Commission Rule 15c2-12(b)(5)(i)(C) and (D).

Issuer's and/or Other Obligated Person's Name:		
Issuer's Six-I	Digit CUSIP Number:	
or Nine-Digit	CUSIP Number(s) of the bonds to which this event notice relates:	
Number of pa	ages attached:	
Descrip	tion of Notice Events (Check One):	
7	"Unscheduled draws on credit enhancements reflecting financial difficulties;"  "Substitution of credit or liquidity providers, or their failure to perform;"  "Adverse tax opinions, IRS notices or events affecting the tax status of the security;"  "Modifications to rights of securities holders, if material;"  "Bond calls, if material;" Tender offers;  "Defeasances;"  "Release, substitution, or sale of property securing repayment of the securities, if material;"  "Rating changes;"  "Bankruptcy, insolvency, receivership or similar event of the obligated person;"  "Merger, consolidation, or acquisition of the obligated person, if material;"  "Appointment of a successor or additional trustee, or the change of name of a trustee, if material;"	
Failur	e to provide annual financial information as required.	
I hereby repro	esent that I am authorized by the issuer or its agent to distribute this information publicly:	
2151141410.		
Name:	Title:	
	Digital Assurance Certification, L.L.C. 315 E. Robinson Street, Suite 300	

Digital Assurance Certification, L.L.C 315 E. Robinson Street, Suite 300 Orlando, FL 32801 407-515-1100

Date:

# EXHIBIT C-2 VOLUNTARY EVENT DISCLOSURE COVER SHEET

This cover sheet and accompanying "voluntary event disclosure" may be sent to the MSRB, pursuant to the Disclosure Dissemination Agent Agreement dated as of between the Issuer and DAC.					
Issuer's and/or Other Obligated Person's Name:					
Issuer's Six-Dig	git CUSIP Number:				
or Nine-Digit C	USIP Number(s) of the bonds to which this notice relates:				
Number of page	es attached:				
Descript	on of Voluntary Event Disclosure (Check One):				
4 5 6 7 8 9					
I hereby represe Signature:	ent that I am authorized by the issuer or its agent to distribute this information publicly:				
Name:	Title:				
	Digital Assurance Certification, L.L.C. 315 E. Robinson Street Suite 300 Orlando, FL 32801 407-515-1100				

Date:

## EXHIBIT C-3 VOLUNTARY FINANCIAL DISCLOSURE COVER SHEET

This cover sheet and accompanying "voluntary financial disclosure" may be sent to the MSRB, pursuant to the Disclosure Dissemination Agent Agreement dated as of between the Issuer and DAC.
Issuer's and/or Other Obligated Person's Name:
Issuer's Six-Digit CUSIP Number:
or Nine-Digit CUSIP Number(s) of the bonds to which this notice relates:
Number of pages attached:
Description of Voluntary Financial Disclosure (Check One):  1 "quarterly/monthly financial information;" 2 "change in fiscal year/timing of annual disclosure;" 3 "change in accounting standard;" 4 "interim/additional financial information/operating data;" 5 "budget;" 6 "investment/debt/financial policy;" 7 "information provided to rating agency, credit/liquidity provider or other third party;" 8 "consultant reports;" and 9 "other financial/operating data."  I hereby represent that I am authorized by the issuer or its agent to distribute this information publicly:
Signature:
Name:

Date:

## **APPENDIX G**

## SCHEDULE OF REFUNDED BONDS

A portion of the proceeds of the Series 2023A Bonds will be used to redeem on October 1, 2023 the following maturities and principal amounts of the Refunded Bonds at a redemption price of 100% of the principal amount thereof plus accrued interest to the redemption date.

	Maturity Date			
Series	(October 1)	Par Amount	$\mathbf{CUSIP}^{\dagger}$	
Series 2013A	2023*	\$ 9,025,000	5926465B5	
Series 2013A	2024	9,465,000	5926465C3	
Series 2013A	2025	9,940,000	5926465D1	
Series 2013A	2026	10,435,000	5926465E9	
Series 2013A	2027	10,965,000	5926465F6	
Series 2013A	2028	11,510,000	5926465G4	
Series 2013A	2029	12,085,000	5926465H2	
Series 2013A	2030	12,690,000	5926465J8	
Series 2013A	2031	13,325,000	5926465K5	
Series 2013A	2032	13,995,000	5926465L3	
Series 2013A	2033	14,695,000	5926465M1	
Series 2013A	2038	18,870,000	5926465N9	
Series 2013A	2043	24,090,000	5926465P4	

<sup>\*</sup> Paid at maturity

<sup>†</sup> CUSIP® is a registered trademark of the American Bankers Association. CUSIP Global Services (CGS) is managed on behalf of the American Bankers Association by FactSet Research Systems Inc. Copyright© 2023 CUSIP Global Services. All rights reserved. CUSIP® data herein is provided by CUSIP Global Services. This data is not intended to create a database and does not serve in any way as a substitute for the CGS database. CUSIP® numbers are provided for convenience of reference only. None of the Authority, the Underwriters or their agents or counsel assume responsibility for the accuracy of such numbers.





