NEW ISSUE-Book-Entry Only **Ratings: See "RATINGS."**

In the opinion of Bond Counsel, under existing law and subject to the conditions described in "TAX MATTERS" herein, interest on the Series 2019 Bonds (i) is not included in gross income for federal income tax purposes, (ii) is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations, and (iii) is exempt from income taxation by the Commonwealth of Virginia. See "TAX MATTERS" herein.

NORFOLK AIRPORT AUTHORITY

NORFOLK AIRPORT AUTHORITY
$54,435,000
Airport Revenue Bonds
Series 2019 (Non-AMT)

Dated: Date of Delivery **Due: July 1, as shown on the inside cover**

The Series 2019 Bonds of the Norfolk Airport Authority, a political subdivision of the Commonwealth of Virginia (the "Authority"), will be issued as fully registered bonds and when issued will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the Series 2019 Bonds under a book-entry only system. So long as Cede & Co. is registered owner of the Series 2019 Bonds, as the nominee for DTC, (1) references herein to the owner or registered owner shall mean Cede & Co. and (2) principal, premium, if any, and interest shall be payable to Cede & Co., as nominee for DTC, which will, in turn, remit such principal, premium, if any, and interest to the DTC participants for subsequent disbursements to the beneficial owners of the Series 2019 Bonds. Individual purchases will be made in book-entry form only, in Authorized Denominations, as defined herein. Bond certificates will be held at DTC and will not be available for delivery to investors as described herein.

The Series 2019 Bonds will bear interest from the date of delivery, payable semiannually on January 1 and July 1, commencing January 1, 2020.

The Series 2019 Bonds will be subject to optional redemption prior to maturity as more fully set forth herein.

Proceeds of the Series 2019 Bonds will be used to (a) finance the design, acquisition, construction and equipping of a new parking garage at Norfolk International Airport, (b) pay capitalized interest on the Series 2019 Bonds through the period ending July 1, 2021, (c) provide for a deposit to the Debt Service Reserve Account, and (d) pay costs associated with the issuance of the Series 2019 Bonds. See "2019 PARKING PROJECT; SOURCES AND USES OF FUNDS."

The Series 2019 Bonds are payable from General Revenues of the Authority and certain funds and accounts established under the Indenture (hereinafter defined) and constitute General Revenue Bonds of the Authority, all as described herein. Neither the Authority, the Commonwealth of Virginia nor any political subdivision thereof shall be obligated to pay the Series 2019 Bonds or the interest thereon or other costs incident thereto except from the revenues and moneys pledged therefor in accordance with the Indenture, and neither the faith nor credit nor the taxing power of the Commonwealth of Virginia or any political subdivision thereof shall be pledged thereto. The Authority has no taxing power.

(FOR MATURITIES, AMOUNTS, INTEREST RATES AND PRICES OR YIELDS, SEE INSIDE COVER)

The Series 2019 Bonds are offered when, as and if issued, and received by the Underwriters and subject to the approval of validity by Kaufman & Canoles, P.C., Richmond, Virginia, Bond Counsel, and certain other conditions. Certain legal matters will be passed upon for the Authority by Vandeventer Black LLP, Norfolk, Virginia, and for the Underwriters by Butler Snow LLP, Richmond, Virginia. It is expected that the Series 2019 Bonds will be available through the facilities of DTC for delivery in New York, New York, on or about June 20, 2019.

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

Raymond James

Siebert Cisneros Shank & Co., L.L.C. **UBS**

June 4, 2019

MATURITIES, AMOUNTS, INTEREST RATES AND PRICES OR YIELDS

$54,435,000
Norfolk Airport Authority
Airport Revenue Bonds, Series 2019 (Non-AMT)

Maturity (July 1)	Amount	Interest Rate	Yield	Price	CUSIP†
2022	$1,415,000	5.000%	1.430%	110.550%	655857 DQ0
2023	1,485,000	5.000	1.460	113.807	655857 DR8
2024	1,560,000	5.000	1.500	116.897	655857 DS6
2025	1,635,000	5.000	1.550	119.789	655857 DT4
2026	1,720,000	5.000	1.640	122.225	655857 DU1
2027	1,805,000	5.000	1.720	124.503	655857 DV9
2028	1,895,000	5.000	1.810	126.465	655857 DW7
2029	1,990,000	5.000	1.890	128.294	655857 DX5
2030	2,090,000	5.000	1.980	127.350*	655857 DY3
2031	2,195,000	5.000	2.070	126.415*	655857 DZ0
2032	2,300,000	5.000	2.150	125.590*	655857 EA4
2033	2,415,000	5.000	2.210	124.976*	655857 EB2
2034	2,540,000	5.000	2.250	124.569*	655857 EC0
2035	2,665,000	5.000	2.290	124.163*	655857 ED8
2036	2,800,000	5.000	2.330	123.758*	655857 EE6
2037	2,940,000	5.000	2.350	123.557*	655857 EF3
2038	3,085,000	5.000	2.390	123.155*	655857 EG1
2039	3,240,000	5.000	2.430	122.754*	655857 EH9

$14,660,000 5.000% Term Bond due July 1, 2043, priced at 121.760%* to yield 2.530%, CUSIP No. 655857 EJ5

* Priced to the first optional redemption date of July 1, 2029.

† CUSIP is a registered trademark of the American Bankers Association. CUSIP Global Services (CGS) is managed on behalf of the American Bankers Association by S&P Global Market Intelligence. The CUSIP numbers are not intended to create a database and do not serve in any way as a substitute for the CUSIP Service. CUSIP numbers have been assigned by an independent company not affiliated with the Authority and are included solely for the convenience of the registered owners of the Bonds. None of the Authority, the Financial Advisor (as hereinafter defined) nor the Underwriters (as hereinafter defined) are responsible for the selection or uses of these CUSIP numbers, and no representation is made as to their correctness on the applicable Bonds or as included herein. The CUSIP number for a specific maturity is subject to being changed after the issuance of the Bonds as a result of various subsequent actions including, but not limited to, a refunding in whole or in part or as a result of the procurement of secondary market portfolio insurance and other similar enhancement by investors that is applicable to all or a portion of certain maturities of the Bonds.

NORFOLK AIRPORT AUTHORITY
2200 NORVIEW AVENUE
NORFOLK, VIRGINIA 23518-5807
ROBERT S. BOWEN, EXECUTIVE DIRECTOR
(757) 857-3351

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Malcolm P. Branch, *Vice Chair*
Deborah H. Painter, *Treasurer*
Peter G. Decker, III, Esquire, *Commissioner*
Paul D. Fraim, Esquire, *Commissioner*
Mekbib Gemeda*, Commissioner*
William L. Nusbaum, Esquire, *Commissioner*
Bruce B. Smith, *Commissioner*
Chris G. Stephanitsis, *Commissioner*

Robert S. Bowen, *Executive Director and Secretary*
Anthony E. Rondeau, *Deputy Executive Director*
Steven C. Sterling, *Deputy Executive Director and Assistant Secretary*
Jarred M. Roenker, *Director of Finance*

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Norfolk, Virginia
General Counsel

Kaufman & Canoles, P.C.
Richmond, Virginia
Bond Counsel

PFM Financial Advisors LLC
Largo, Florida
Financial Advisor

DKMG Consulting LLC
Guilford, Indiana
Airport Consultant

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REGARDING THIS OFFICIAL STATEMENT

This Official Statement is being used in connection with the initial offering and sale of the Series 2019 Bonds and may not be reproduced or be used, whether in whole or in part, for any other purpose. Certain information contained in, or incorporated by reference in, this Official Statement has been derived from information provided by the Authority and other sources that are believed to be reliable. No guaranty is made, however, as to the accuracy or completeness of information obtained from such other sources by the Authority or the Underwriters of the Series 2019 Bonds as shown on the cover page of this Official Statement (the "Underwriters"). The delivery of this Official Statement does not imply that the information in it is correct as of any time subsequent to its date.

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, its responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Underwriters do not guarantee the accuracy or completeness of such information.

No broker, dealer salesperson, or other person has been authorized by the Authority to give any information or to make any representations in connection with the offering of the Series 2019 Bonds other than those contained in this Official Statement and the Appendices hereto, and, if given or made, such information or representation must not be relied upon as having been authorized by the Authority. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy any securities other than those described on the cover page hereof, nor shall there be any offer to sell, solicitation of an offer to buy or sale of such securities by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. Neither this Official Statement nor any statement that may have been made verbally or in writing is to be construed as a contract with the registered or beneficial owners of the Series 2019 Bonds.

This Official Statement contains certain projections or estimates, as well as assumptions made by and information currently available to the Authority. When information presented herein is not a recitation of historical fact, it constitutes "forward looking statements." When used in this Official Statement, the words, "anticipate," "estimate," "expect" and similar expressions are intended to identify projections and estimates. Such statements are subject to certain risks, uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or expected. The assumptions and expectations concerning the receipt in future years of General Revenues (as defined herein) that secure the Series 2019 Bonds are subject to various uncertainties that may adversely affect the amount of General Revenues the Authority collects. Hence, readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof.

IN MAKING AN INVESTMENT DECISION, INVESTORS MUST RELY ON THEIR OWN REVIEW OF THE TERMS OF THE SERIES 2019 BONDS, THE OFFERING THEREOF AND THE SECURITY THEREFOR, INCLUDING BUT NOT LIMITED TO THE COLLECTION OF GENERAL REVENUES AS THE PRINCIPAL SOURCE OF PAYMENT OF THE SERIES 2019 BONDS, AND THE MERITS AND RISKS INVOLVED IN A DECISION TO PURCHASE SERIES 2019 BONDS. THE SERIES 2019 BONDS HAVE NOT BEEN APPROVED, DISAPPROVED OR RECOMMENDED BY THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION OR ANY OTHER FEDERAL OR STATE SECURITIES COMMISSION OR REGULATORY AUTHORITY. FURTHER, THE FOREGOING AUTHORITIES HAVE NOT CONFIRMED OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The Series 2019 Bonds are exempt from registration under the Securities Act of 1933, as amended, and are also exempt from registration under the securities laws of the Commonwealth of Virginia.

Any references to website addresses presented in this Official Statement 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 offering document for purposes of, and as that term is defined in, Securities and Exchange Commission Rule 15c2-12, as amended.

U.S. Bank National Association, as Trustee, has neither reviewed nor participated in the preparation of this Official Statement.

THE PRICES AT WHICH THE SERIES 2019 BONDS ARE OFFERED TO THE PUBLIC BY THE UNDERWRITERS MAY VARY FROM THE INITIAL PUBLIC OFFERING PRICES AND YIELDS APPEARING ON THE INSIDE FRONT COVER PAGE HEREOF. IN ADDITION, THE UNDERWRITERS MAY ALLOW CONCESSIONS OR DISCOUNTS FROM SUCH INITIAL PUBLIC OFFERING PRICES TO DEALERS AND OTHERS. FURTHERMORE, THE UNDERWRITERS MAY ENGAGE IN TRANSACTIONS INTENDED TO STABILIZE THE PRICES OF THE SERIES 2019 BONDS AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET IN ORDER TO FACILITATE THEIR DISTRIBUTION. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

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OFFICIAL STATEMENT

NORFOLK AIRPORT AUTHORITY

Relating to the Issuance of

$54,435,000
AIRPORT REVENUE BONDS
SERIES 2019 (NON-AMT)

INTRODUCTION

The purpose of this Official Statement, including the information contained in the cover page, the inside cover page and the attached Appendices, is to furnish information relating to (a) the Norfolk Airport Authority (the "Authority") and Norfolk International Airport (the "Airport"), (b) the Authority's $54,435,000 Airport Revenue Bonds, Series 2019 (Non-AMT) (the "Series 2019 Bonds"), and (c) the terms of and security for the Series 2019 Bonds and investment considerations with respect to the purchase thereof. This Official Statement has been authorized by the Authority for use in connection with the sale of the Series 2019 Bonds.

Certain capitalized terms not otherwise defined in this Official Statement have the meanings set forth in Appendices C and D to this Official Statement. See "DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE" and "SUMMARY OF CERTAIN PROVISIONS OF AIRLINE USE AND LEASE AGREEMENT" included as APPENDIX C and APPENDIX D, respectively, to this Official Statement.

The Series 2019 Bonds

The Authority will issue the Series 2019 Bonds pursuant to a Master Indenture of Trust dated as of April 1, 2001 (the "Master Indenture"), by and between the Authority and U.S. Bank National Association, as Trustee (the "Trustee"), as previously supplemented and amended by a First Supplemental Indenture dated as of April 1, 2001 (the "First Supplemental Indenture"), a Second Supplemental Indenture dated as of May 1, 2011 (the "Second Supplemental Indenture"), a Third Supplemental Indenture dated as of October 1, 2011 (the "Third Supplemental Indenture"), and as further supplemented by a Fourth Supplemental Indenture (the "Fourth Supplemental Indenture") dated as of June 1, 2019 (the Master Trust Indenture, the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, and the Fourth Supplemental Indenture being hereinafter collectively referred to as the "Indenture").

The Series 2019 Bonds are limited obligations of the Authority, which is authorized to issue revenue bonds under the Constitution and the laws of the Commonwealth of Virginia, including the Authority's Charter, Chapter 463 of the 1948 Acts of the General Assembly (as amended and in effect from time to time, the "Act"), and are payable solely from certain revenues of the Authority.

The Series 2019 Bonds will bear interest from their dated date at the interest rates and will mature on the dates set forth on the inside front cover page hereof. Interest on the Series 2019 Bonds will be initially payable on January 1, 2020 and semi-annually on each January 1 and July 1 thereafter and will be computed on the basis of a 360-day year of twelve 30-day months. The Series 2019 Bonds will be issued only in book-entry form in the name of Cede & Co., as nominee of The Depository Trust Company

("DTC"), in denominations of $5,000 or integral multiples thereof. For information on DTC and its Book-Entry Only System, see APPENDIX G.

Purpose of the Issue

The Authority will use the net proceeds of the Series 2019 Bonds, together with other funds of the Authority, to (a) finance the design, acquisition, construction and equipping of a new parking garage at the Airport, (b) pay capitalized interest on the Series 2019 Bonds through the period ending July 1, 2021, (c) provide for a deposit to the Debt Service Reserve Account, and (d) pay costs associated with the issuance of the Series 2019 Bonds. See "2019 PARKING PROJECT; SOURCES AND USES OF FUNDS."

Certain Investment Considerations

The Series 2019 Bonds may not be suitable for all investors and may involve investment risk. Prospective purchasers of the Series 2019 Bonds should read this entire Official Statement, including "AVIATION AND OTHER INVESTMENT CONSIDERATIONS." Such sections contain a discussion of certain risks relating to the Series 2019 Bonds and the airline industry in particular.

Factors Affecting the Airline Industry

Many factors and events affect the air transportation industry, many of which the industry cannot control. For example, general economic conditions, international conflicts, increased security requirements in air transportation, the threat of future domestic and international terrorist attacks, significant increases in fuel costs and the outbreak and transmission of certain communicable sicknesses (such as avian flu, SARS and the Zika virus), a growing shortage of airline pilots, and airline consolidation have adversely affected the air transportation industry, including operations of the airlines at the Airport, in recent years or may do so in the future. For a more complete discussion of recent events affecting the Airport and the airlines that use the Airport, see "AIRPORT OPERATIONS AND THE AIR TRADE AREA – Airline Service" and "AVIATION AND OTHER INVESTMENT CONSIDERATIONS."

Security for the Series 2019 Bonds

Pursuant to the Indenture, the Authority has irrevocably pledged the General Revenues of the Airport and certain funds created under the Indenture to the payment of the Bonds (as defined below), including the Series 2019 Bonds. Passenger facility charges ("PFCs") collected in respect of the Airport are not pledged as security for the Series 2019 Bonds. Customer facility charges ("CFCs") collected in respect of the Airport's rental car facilities are included as a component of General Revenues. The Series 2019 Bonds are also secured by amounts maintained in the Debt Service Reserve Account, which amounts are also available to make payments on certain other Series of Bonds secured on a parity with the Series 2019 Bonds. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS – Debt Service Reserve Account."

The Series 2019 Bonds will be limited obligations of the Authority and are secured solely by the revenues and receipts pledged therefore and by certain funds and accounts created under the Indenture. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS." The Series 2019 Bonds are not secured by any mortgage or other interest in the Airport or the projects financed with the proceeds of the Series 2019 Bonds.

The Series 2019 Bonds will be issued on a parity basis with the Authority's Series 2011A Bonds, Series 2011B Bonds and Series 2011C Bonds maturing on July 1 in the years 2019 through 2031, which are currently outstanding in the aggregate principal amount of $38,775,000. See "DEBT SERVICE REQUIREMENTS" and Note 6 in Notes to Financial Statements in APPENDIX B – "AUDITED FINANCIAL STATEMENTS OF THE NORFOLK AIRPORT AUTHORITY AS OF AND FOR THE YEARS JUNE 30, 2017 and 2018." The Series 2019 Bonds and Series 2011 Bonds referenced above, along with any Additional Bonds issued from time to time under the Indenture, are sometimes referred to in this Official Statement as the "General Revenue Bonds," as further described herein.

The Series 2019 Bonds are special, limited obligations of the Authority payable solely from the trust estate established under the Indenture. Neither the Authority, the Commonwealth of Virginia nor any political subdivision thereof shall be obligated to pay the Series 2019 Bonds or the interest thereon or other costs incident thereto except from the revenues and moneys pledged therefor in accordance with the Indenture, and neither the faith nor credit nor the taxing power of the Commonwealth of Virginia or any political subdivision thereof shall be pledged thereto. The Authority has no taxing power.

The principal sources of General Revenues are the rates and charges generated under the Authority's airport use and lease agreements (collectively, the "Airline Agreement") with certain airlines (the "Signatory Airlines") that have entered into the Airline Agreement with the Authority, fees received from non-signatory airlines using the Airport, parking revenues, and payments and rentals under concession and lease agreements for various terminal, aviation and non-aviation facilities at the Airport. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS" and "CERTAIN AGREEMENTS FOR USE OF THE AUTHORITY'S FACILITIES."

Rate Covenant

The Authority has covenanted and agreed at all times while any Series 2019 Bonds are outstanding and unpaid to prescribe, fix, maintain, and collect rates, fees, and other charges for the services and facilities of the Airport such that General Revenues will be fully sufficient at all times to (i) provide for 100% of the Operating Expenses of the Airport and for the accumulation in the Revenue Fund of a reasonable reserve therefor, and (ii) produce Net Revenues in each Fiscal Year which will: (a) equal, for General Revenues, at least 125% of the Debt Service Requirement on all related Bonds secured by General Revenues then Outstanding for the Sinking Fund Year ending on the next July 1 and, for other categories of Revenues, such percentages that may be established pursuant to a Supplemental Indenture; (b) enable the Authority to make all required payments, if any, into any Debt Service Reserve Account and the Rebate Fund and on any Contracts or Other Airport Obligations; (c) enable the Authority to accumulate an amount to be held in the Renewal and Extension Fund, which in the judgment of the Authority is adequate to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the Airport, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the Airport; and (d) remedy all deficiencies in required payments into any of the funds and accounts mentioned in the Indenture from prior Fiscal Years. See "SECURITY FOR THE SERIES 2019 BONDS – Rate Covenant."

The Authority's ability to prescribe, fix, maintain and collect certain rates, fees and other charges may be limited by various contractual obligations to third parties. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS – Airport Agreements."

Redemption

The Series 2019 Bonds will be subject to optional redemption prior to their respective maturities as described in "THE SERIES 2019 BONDS – Optional Redemption and – Mandatory Redemption."

Report of the Airport Consultant

The Authority has engaged DKMG Consulting LLC, Guilford, Indiana (the "Airport Consultant"), in connection with the issuance of the Series 2019 Bonds. The Report of the Airport Consultant (the "Airport Consultant Report" or "Report") is attached hereto as APPENDIX A and should be read in its entirety to obtain a more complete description of the Airport, its operations, the 2019 Parking Project and the forecasts made therein. See "REPORT OF THE AIRPORT CONSULTANT" and APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT."

The Airport

The Airport is located in the City of Norfolk approximately eight miles from the City's downtown area and less than 20 miles from the City of Virginia Beach, Virginia. The Airport has provided regular commercial air passenger service to the region since 1938 and is owned and operated by the Authority. Airfield facilities include two carrier runways (with associated taxiways) and 23 air carrier gates. The primary runway has a usable runway length of approximately 8,000 feet.

The Airport is primarily an origin and destination airport, does not serve as a hub for any major airline and is classified by the Federal Aviation Administration (FAA) as a "small hub" airport. The Airport is served by six national air carrier networks (Allegiant Airlines ("Allegiant"), American Airlines ("American"), Delta Air Lines ("Delta"), Frontier Airlines ("Frontier"), Southwest Airlines ("Southwest") and United Airlines ("United")), consisting of six major or national passenger commercial air carriers with affiliated service by eleven regional or commuter passenger air carriers, in addition to two principal all-cargo carriers, and charter operations. In the Authority's Fiscal Year ("Fiscal Year" or "FY") ended June 30, 2018, the Airport served over 1.7 million enplaned passengers. As of March 31, 2019, airlines at the Airport serve 25 airports nonstop with an average of 74 daily flight departures.

From FY 2016 through FY 2018, enplaned passengers at the Airport increased at an average rate of 6.3% per year, after declining 5.7% in FY 2015 and 4.3% in FY 2014. During FY 2018, enplaned passengers at the Airport were 1,741,125, an increase of 6.9% over FY 2017. For the nine-month period ended March 31, 2019, enplanements increased by 10.8% over the same period for the preceding year.

For a more detailed description of the Airport, its facilities and its operations, see "AIRPORT OPERATIONS AND THE AIR TRADE AREA" and APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT."

Continuing Disclosure

The Authority has undertaken to comply with the provisions of Rule 15c2-12, as it may be amended from time to time (the "Rule"), promulgated by the Securities and Exchange Commission (the "SEC") and as in effect on the date hereof by providing annual financial information and operating data and event notices required by the Rule. See the section herein "CONTINUING DISCLOSURE" and "FORM OF CONTINUING DISCLOSURE CERTIFICATE" included as APPENDIX F to this Official Statement.

Prospective Financial Information

The Authority's management believes that the prospective financial information from its FY 2019 budget (see "AUTHORITY FINANCIAL INFORMATION– Fiscal Year 2019 Budget") and the Airport Consultant Report (included in 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 Authority's expected course of action and future financial performance. However, any prospective financial information is subject to uncertainties. Generally, 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.

Additional Information

Inquiries regarding information contained in this Official Statement may be directed to the Authority, 2200 Norview Avenue, Norfolk, Virginia 23515, Attention: Jarred M. Roenker, Director of Finance (757-857-3459).

General

All information presented in this Official Statement has been provided by the Authority and other sources that are believed to be reliable. The presentation of information is intended to show current information and is not intended, unless specifically stated, to indicate projections or expectations with respect to the Airport's future operations and financial performance. No one subject discussed in this Official Statement should be considered less important than any other by reason of its location in the text. Reference should be made to laws, reports or other documents referred to in this Official Statement, including the Indenture and the Airline Agreements for more complete information regarding their contents.

This Official Statement refers to and contains summaries of federal, Commonwealth and local laws, including but not limited to the Constitution of the Commonwealth of Virginia, the Code of Virginia, the Act, as well as various documents, agreements and court decisions, including summaries of the Indenture, the Airline Agreement and the terms of and security for the Series 2019 Bonds, together with descriptions of the Airport and its operations. ***Such summaries and descriptions do not purport to be comprehensive or definitive, and all such references are qualified in their entirety by references to the definitive forms of each such agreement or document, copies of which are generally available to the public or available for inspection during normal business hours at the Authority's office. Prospective purchasers of the Series 2019 Bonds are referred to the Indenture for the complete terms thereof, and references to the Series 2019 Bonds are qualified in their entirety by reference to the form of the Series 2019 Bonds included in the Fourth Supplemental Indenture.*** During the offering period of the Series 2019 Bonds, copies of the Indenture may be obtained from the Underwriters.

THE NORFOLK AIRPORT AUTHORITY

The Authority was established on July 1, 1948, as a political subdivision of the Commonwealth of Virginia pursuant to the Act. The Authority was created to carry out those functions assigned to it as prescribed in the Act. The Authority is managed by a management staff headed by an Executive Director who is appointed by the Board of Commissioners and serves at the pleasure of the Board of Commissioners.

On May 1, 1949, the Authority was given "supervision" responsibility for the operation and maintenance of what was then called the "Norfolk Municipal Airport" and what is now known as the "Norfolk International Airport". On January 1, 1950, the Authority received full responsibility for the Airport's operation, maintenance and development. The Authority owns the Airport. See "AIRPORT OPERATIONS AND THE AIR TRADE AREA – Agreement with the City of Norfolk."

Authority Commissioners

The Authority is governed by a Board of Commissioners of at least seven (7) but not more than nine (9) members appointed for four-year terms by the City Council (the "City Council") of the City of Norfolk (the "City"). Certain information regarding the Authority's Commissioners follows:

Ms. Blythe Ann Scott, Esquire, Chair. Term expires August 19, 2020. Initially appointed as a Commissioner on September 27, 2005. Ms. Scott is Chief Deputy Commissioner of the Revenue for the City.

Mr. Malcolm P. Branch, Vice Chair. Term expires August 19, 2020. Initially appointed as a Commissioner on October 6, 2009. Mr. Branch is retired from the U.S. Navy.

Ms. Deborah H. Painter, Treasurer. Term expires June 28, 2019. Initially appointed as a Commissioner on September 13, 2011. Ms. Painter retired as the Executive Vice President Planning and Chief Information Officer for Norfolk Southern Corporation.

Mr. Peter G. Decker, III, Esquire, Commissioner. Term expires June 28, 2019. Initially appointed as a Commissioner on July 21, 2015. Mr. Decker is an attorney with Decker, Cardon, Thomas, Weintraub & Neskis, PC.

Mr. Paul D. Fraim, Esquire, Commissioner. Term expires August 19, 2020. Initially appointed as a Commissioner on February 27, 2018. Mr. Fraim is an attorney with Fraim & Fiorella and former Mayor of the City.

Mr. Mekbib Gemeda, Commissioner. Term expires June 30, 2022. Initially appointed as a Commissioner on July 21, 2015. Mr. Gemeda is the Vice President of Diversity and Inclusion at Eastern Virginia Medical School.

Mr. William L. Nusbaum, Esquire, Commissioner. Term expires June 30, 2022. Initially appointed as a Commissioner on October 5, 2010. Mr. Nusbaum is an attorney with Williams Mullen, P.C.

Mr. Bruce B. Smith, Commissioner. Term expires June 30, 2022. Initially appointed as a Commissioner on July 1, 2018. Mr. Smith is the owner of Bruce Smith Enterprises, LLC.

Mr. Chris G. Stephanitsis, Commissioner. Term expires August 19, 2020. Initially appointed as a Commissioner on September 27, 2005. Mr. Stephanitsis is the owner of Norfolk Coffee and Tea Company.

Authority Senior Management

The key members of the Authority's staff with brief biographies are set forth below:

Robert S. Bowen joined the Authority in January 1988 as the Director of Operations. He served as Deputy Executive Director from 2009 until he was promoted to serve as Executive Director in March 2016. Prior to joining the Authority, he worked for Piedmont Aviation at the Airport from July 1977 through December 1987 where he held progressive positions in operations, administration and management. Mr. Bowen holds a Bachelor of Science Degree in Business Management from Old Dominion University, is an Accredited Member of the American Association of Airport Executives and is a member of the Southeast Chapter of the American Association of Airport Executives. He represents the Authority as an Executive Member of the Virginia Airport Operators Council and serves on its Board of Directors.

Steven C. Sterling currently serves as Deputy Executive Director for Administration and Operations for the Authority. Prior to his appointment as Deputy Executive Director, Steve served as the Director of Operations for the Authority for six years. Prior to being appointed as Director of Operations, Mr. Sterling was the Police Chief of the Authority Police Department for two years and previously spent twenty-two years with the Portsmouth Police Department, attaining the position of Assistant Police Chief. He holds a Bachelor of Arts Degree in Human Resources from St. Leo University, holds a Certified Member designation with the American Association of Airport Executives, and is a graduate of the FBI National Academy (221st Session). He is also a Certified Member of the American Association of Airport Executives.

Jarred M. Roenker joined the Authority in March 2018 as the Director of Finance. Prior to joining the Authority, he worked in the audit practice of KPMG LLP for nine years. Through various promotions he rose to the level of Senior Manager. During his time at KPMG, he specialized in the audits of government entities. Mr. Roenker holds a Bachelor of Science Degree in Business from Virginia Tech, majoring in Accounting and Information Systems. He is a Certified Public Accountant in the Commonwealth of Virginia.

Anthony E. Rondeau joined the Authority in September 2009 as the Director of Facilities until he was promoted to serve as Deputy Executive Director of Engineering and Facilities in 2016. Prior to joining the Authority, he worked as a Project Manager for a local engineering firm. He holds a Bachelor of Science Degree in Civil Engineering from Virginia Military Institute. He is a registered Professional Engineer and is a Certified Member of the American Association of Airport Executives.

THE SERIES 2019 BONDS

General

The Series 2019 Bonds will be issued pursuant to the Act, the Indenture, and an authorizing resolution adopted by the Commissioners of the Authority on May 23, 2019. The City Council approved the issuance of the Series 2019 Bonds and the project financed thereby, to the extent required by the Act, on May 14, 2019.

The Series 2019 Bonds are special, limited obligations of the Authority payable solely from the trust estate established under the Indenture (hereinafter defined). Neither the Authority, the Commonwealth of Virginia nor any political subdivision thereof shall be obligated to pay the Series 2019 Bonds or the interest thereon or other costs incident thereto except from the revenues and

moneys pledged therefor in accordance with the Indenture, and neither the faith nor credit nor the taxing power of the Commonwealth of Virginia or any political subdivision thereof shall be pledged thereto. The Authority has no taxing power. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS."

The Series 2019 Bonds will be issued in authorized denominations of $5,000. The Series 2019 Bonds will be held in book-entry only form by The Depository Trust Company, New York, New York ("DTC"), or its nominee, as securities depository with respect to the Series 2019 Bonds as described below.

The Series 2019 Bonds will be dated the date of their delivery, and will mature on July 1 in the years and amounts and bear interest at the rates set forth on the inside cover page of this Official Statement.

Interest on the Series 2019 Bonds.

Interest on the Series 2019 Bonds will be payable semiannually on January 1 and July 1, commencing January 1, 2020. Interest is payable to the owners of the Series 2019 Bonds identified on the registration books with respect to the Series 2019 Bonds on the fifteenth day of the month preceding each interest payment date.

Optional Redemption

The Series 2019 Bonds maturing on or after July 1, 2030, will be subject to redemption prior to their respective maturities at any time on or after July 1, 2029, at the option of the Authority, in whole or in part (in increments of $5,000), at par plus accrued interest to the date of redemption.

Mandatory Sinking Fund Redemption

The Series 2019 Bonds maturing on July 1, 2043, are required to be redeemed on July 1 in years and amounts upon payment of 100% of the principal amount thereof plus interest accrued to the redemption date, as follows:

Year	Amount
2040	$3,400,000
2041	3,570,000
2042	3,750,000
2043 (final maturity)	3,940,000

The principal amount of Series 2019 Bonds to be redeemed on each date set forth in the subsections above may be reduced, at the option of the Authority, by the principal of such Series 2019 Bonds of the same maturity that have been previously purchased and cancelled by the Authority and that have not theretofore been the basis of such a reduction.

Method of Selecting Series 2019 Bonds for Redemption

If less than all of the Series 2019 Bonds are to be redeemed, the maturities to be redeemed or their method of selection shall be determined by the Authority. If less than all of the Series 2019 Bonds of a single maturity within a series are to be redeemed, the Series 2019 Bonds of such maturity of such series to be redeemed will be selected by lot or other random method by the Trustee in such a manner as the

Trustee may determine. So long as The Depository Trust Company ("DTC") acts as securities depository for the Series 2019 Bonds, determinations of persons entitled to payment of principal, premium, if any, and interest shall be the responsibility of DTC and shall be effected pursuant to rules and procedures established by DTC. For information on DTC and its Book-Entry Only System, see APPENDIX G.

Notice of Redemption

When and only when the Trustee shall receive notice from the Authority of its election or direction to redeem the Series 2019 Bonds, and when redemption of the Series 2019 Bonds is authorized or required as described above, the Trustee shall give notice, in the name of the Authority, of the redemption of such Series 2019 Bonds, which notice shall specify the series and maturities of the Series 2019 Bonds to be redeemed, the redemption date and the place or places where amounts due upon such redemption date will be payable and, if less than all of the Series 2019 Bonds are to be redeemed, the letters and numbers or other distinguishing marks of such Series 2019 Bonds so to be redeemed, and, in the case of the Series 2019 Bonds to be redeemed in part only, such notices shall also specify the respective portions of the principal amounts thereof to be redeemed. Such notice shall further state that on such redemption date there shall become due and payable upon each Series 2019 Bond to be redeemed the redemption price thereof, or the redemption price of the specified portions of the principal thereof, in the case of the Series 2019 Bonds to be redeemed in part only, together with interest accrued to the redemption date, and that from and after such date interest thereon shall cease to accrue and be payable. The Trustee shall mail a copy of such notice by first class mail postage prepaid, not less than 30 days nor more than 60 days before the redemption date, to the owner of any Series 2019 Bonds, or portions of Series 2019 Bonds which are to be redeemed, at their last addresses, if any, appearing upon the Register.

The Trustee's obligation to give such notice shall not be conditioned upon the prior payment to the Trustee of funds sufficient to pay the redemption price of the Series 2019 Bonds to which such notice relates or interest thereon to the redemption date and may be given in conditional form, specifying that the redemption is subject to receipt by the Trustee of moneys sufficient to pay the redemption price of the Series 2019 Bonds to be redeemed or to other conditions. The failure to give notice to any Bondholder of any Series 2019 Bond or portion thereof to be redeemed shall not affect the validity of any proceedings for the redemption of any other Series 2019 Bond for which such notice has been duly given.

As long as the book-entry only system is used for determining ownership of the Series 2019 Bonds, the Authority shall send notice of redemption to DTC or its nominee, or its successor. Any failure of DTC or its nominee or of a Direct Participant or Indirect Participant to notify a Direct Participant, Indirect Participant or Beneficial Owner of any Series 2019 Bond called for redemption will not affect the validity of the proceedings for the redemption of such Series 2019 Bond. For information on DTC and its Book-Entry Only System, see APPENDIX G.

SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS

The Series 2019 Bonds are General Revenue Bonds under the Indenture payable from and secured by a Senior Lien on the Revenues of the Authority constituting General Revenues.

"Revenues" are defined in the Indenture as (i) all revenues, income, receipts and money derived from the ownership and operation of the Airport, including without limitation all rentals, charges, landing fees, use charges and concession revenues received by or on behalf of the Authority, Investment Earnings (other than Investment Earnings on the Project Fund), and all other income earned and accreted from, and deferred gain from, securities and other investments, and amounts earned on amounts deposited in funds and accounts under the Indenture or otherwise maintained with respect to the Airport, computed in accordance with generally accepted accounting principles, and (ii) all gifts, grants, reimbursements or payments received from governmental units or public agencies for the benefit of the Airport which are (y) not restricted by law or the payor to application for a particular purpose, and (z) otherwise lawfully available for payment of Revenue Obligations or Contracts. The term "Revenues" does not include proceeds of insurance so long as such proceeds are to be paid to a party separate from the Authority in respect of a liability or are to be used to repair or replace portions of the Airport.

General Revenues

The Indenture defines "General Revenues" to mean all Revenues of the Authority other than PFC Revenues, Special Purpose Revenues and Released Revenues. CFCs are included as a component of General Revenues.

The Series 2019 Bonds will not be secured by PFC Revenues (as further described below) or by Special Purpose Revenues, any of which Special Purpose Revenues may be pledged to secure other bonds and obligations under the Indenture. The Indenture also provides that, under certain circumstances, a separable category or portion of General Revenues may be withdrawn from General Revenues and thereafter be treated as Released Revenues for all purposes – including ceasing to secure the Series 2019 Bonds. No such category of Released Revenues has been so withdrawn.

In addition, the Series 2019 Bonds are secured by amounts in a subaccount of the Debt Service Reserve Account (see "— Debt Service Reserve" hereafter), and other intended purposes, and amounts in other funds and accounts derived from General Revenues. A detailed description of the application of General Revenues is described in this Official Statement in "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS – Revenue Fund" below.

The Indenture does not permit the Authority to issue any obligation that has a lien on General Revenues senior to the lien of the Series 2019 Bonds and any Additional Bonds issued on a parity therewith. Additional Bonds with a lien on all or a portion of General Revenues subordinate to the lien securing the Series 2019 Bonds are permitted under the Indenture. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS — Additional Bonds" below.

PFC Revenues

The Series 2019 Bonds are not secured by a lien on the PFC Revenues.

The Indenture permits Bonds of the Authority to be secured by PFC Revenues, and the Authority's Series 2011B Bonds, which are secured by a parity lien on General Revenues, are additionally secured by a lien on PFC Revenues to the extent same are legally available to pay such bonds.

"PFC Revenues" are defined as all income and revenue received by or required to be remitted to the Authority from the PFCs imposed by the Authority pursuant to the PFC Act and the PFC Regulations, including any interest earned after such charges have been remitted to the Authority as provided in the PFC Regulations, all of which may be pledged pursuant to the PFC Act and PFC Regulations §158.13; provided, the term "PFC Revenues" also includes any interest or other gain in any of the accounts or subaccounts created in the Indenture or in any Supplemental Indenture resulting from any investments and reinvestments of PFC Revenues.

Pursuant to the Master Indenture, the PFC Revenues pledged to secure obligations of the Authority may only secure (A) PFC Revenue Obligations, (B) Subordinate Lien Obligations, (C) Hybrid Obligations which have a lien on PFC Revenues, and (D) any Contracts with respect to such Revenue Obligations. As set forth above, the only obligations that PFC Revenues currently secure are the Authority's Series 2011B Bonds, and PFC eligibility for the use of PFC Revenues for this purpose expires during FY 2019.

See "AVIATION AND OTHER INVESTMENT CONSIDERATIONS – Availability of Funding" and " – Considerations Regarding Passenger Facility Charges" for information regarding PFC Revenues and the Authority's program in respect thereof.

Debt Service Reserve for the Series 2019 Bonds and the Outstanding Series 2011 Bonds

The Fourth Supplemental Indenture establishes a Debt Service Reserve Requirement for the Series 2019 Bonds and the Outstanding Series 2011 Bonds in an amount equal to the lesser of (a) 125% of the average annual Debt Service Requirement for the Series 2019 Bonds and the Outstanding Series 2011 Bonds, (b) 10% of the original issue price of the Series 2019 Bonds and the Outstanding Series 2011 Bonds, and (c) the Maximum Annual Debt Service Requirement for the Series 2019 Bonds and the Outstanding Series 2011 Bonds. If at any time the amount determined under (a) or (c) of the preceding sentence is less than the amount originally determined, the Debt Service Reserve Requirement can be re-determined based on such lesser amount. The Indenture does not require a debt service reserve for any other series of Bonds issued pursuant to the Indenture as Additional Bonds.

Upon the issuance of the Series 2019 Bonds, the Authority shall have on deposit the Series Debt Service Reserve Requirement for the Series 2019 Bonds and the Outstanding Series 2011 Bonds. After the issuance of any Additional Bonds, any increases in the amount of the Debt Service Reserve Requirement resulting from the issuance of Additional Bonds which also are secured by a Debt Service Reserve Requirement may be accumulated in either the same or a separate subaccount in the Debt Service Reserve Account. The balance of each subaccount of the Debt Service Reserve Account shall be maintained at an amount equal to the Debt Service Reserve Requirement for the related Bonds.

The Authority may elect to satisfy in whole or in part the Debt Service Reserve Requirement for any Bonds by means of a Reserve Account Credit Facility, subject to restrictions provided in the Indenture. Any such Reserve Account Credit Facility shall be pledged to the benefit of the owners of all of the Bonds secured by it. The Authority reserves the right, if it deems it necessary in order to acquire such a Reserve Account Credit Facility, to amend the Indenture without the consent of any of the owners of the Bonds in order to grant to the Reserve Account Credit Facility Provider such additional rights as it may demand, provided that such amendment shall not, in the written opinion of Bond Counsel filed with the Authority, impair or reduce the security granted to the owners of Bonds or any of them.

Funds Created by the Indenture and Flow of Funds

The Indenture creates and requires the Authority to maintain the following funds with respect to the Airport:

(1) the Revenue Fund (held by the Authority) and therein the following five accounts:

- (a) General Revenue Account,
- (b) PFC Revenue Account,
- (c) Special Purpose Revenue Account,
- (d) Released Revenue Account, and
- (e) Identified Revenue Account;

(2) the Sinking Fund (held by the Trustee) and therein the following two accounts:

- (a) Payments Account, and
- (b) Debt Service Reserve Account;

(3) the Renewal and Extension Fund (held by the Authority);

(4) the Rebate Fund (held by the Trustee);

(5) the Project Fund (held by the Authority); and

(6) the General Reserve Fund (held by the Authority).

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APPLICATION OF REVENUES (FLOW OF FUNDS)

Revenue Fund (held by Authority) [(1)]

Depository for all Revenues

Amounts deposited shall be allocated to the account within the Revenue Fund designated therefor: (1) General Revenue Account; (2) PFC Revenue Account; (3) Special Purpose Revenue Account; (4) Released Revenue Account; and (5) Identified Revenue Account

Excess

Sinking Fund (held by Trustee)

Payments Account
Sufficient moneys shall be paid in periodic installments from the Revenue Fund into subaccounts in the Payments Account for the purpose of paying Revenue Obligations and making payments under Contracts.

Debt Service Reserve Account
To pay debt service on the applicable series of Bonds

Renewal and Extension Fund (held by Authority)

Depository for all termination payments received under any Hedge Agreements. Must be used first to prevent default on principal and interest payments on General Revenue Bonds and subsequently can be used in the order of priority determined by the Authority: (1) for purposes of which moneys held in Revenue Fund can be used, (2) to pay any amounts due under any Hedge Agreement, (3) to pay any governmental charges or assessments, (4) to make requisitions, betterments, extensions repairs, etc. to the Airport deemed necessary to the Authority, and (5) to acquire Senior Lien Revenue Obligations (other than Special Purpose Revenue Obligations) by redemption or by purchase in the open market.

Rebate Fund (held by Trustee)

For required arbitrage rebate payments

Project Fund (held by Trustee)

Applied to payment of the Costs of Project

General Reserve Fund (held by Authority)

May be used by the Authority for any lawful purpose

[(1)] All moneys held in the Revenue Fund are applied by the Authority in the order of priority determined by the Authority: (a) to pay Operating Expenses; (b) to deposit into the Sinking Fund, (c) to deposit into the Debt Service Reserve Account; (d) to deposit into the Rebate Fund, (e) to pay any party to a Contract; (f) to pay amounts with respect to any Other Airport Obligations; (g) for transfer to the Renewal and Extension Fund; (h) for transfer to the General Reserve Fund; and (i) for any other lawful purposes related to the Airport.

Revenue Fund. The Indenture requires the Authority to deposit and continue to deposit all Revenues of the Authority in the Revenue Fund when received. The amounts deposited shall be immediately allocated to the account within the Revenue Fund designated therefor: General Revenues other than Identified Revenues to the General Revenue Account; PFC Revenues to the PFC Revenue Account; Special Purpose Revenues to the Special Purpose Revenue Account; Released Revenues to the Released Revenue Account; and Identified Revenues to the Identified Revenue Account. **Under the terms of the Indenture, the Trustee does not have a perfected security interest in the moneys in the Revenue Fund, and moneys in the Revenue Fund are held by and are to be applied by the Authority from time to time to the following purposes and, prior to the occurrence and continuation of an Event of Default under the Indenture, in the order of priority determined by the Authority in its sole discretion:** (a) to pay Operating Expenses, (b) to deposit into the Payments Account within the Sinking Fund the amounts required for debt service on the Bonds and certain related Contracts, (c) to deposit into the Debt Service Reserve Account within the Sinking Fund any required amounts, (d) to deposit into the Rebate Fund the amounts required to make provision for arbitrage rebate payment to the United States government, (e) to pay to any party to a Contract the amounts due thereon, including additional interest, continuing commission or commitment fees, remarketing agent fees and repayment of amounts equivalent to principal on related Bonds, (f) to pay any amounts required to be paid with respect to any Other Airport Obligations, (g) for transfer to the Renewal and Extension Fund, (h) for transfer to the General Reserve Fund, and (i) for any other lawful purpose related to the Airport, provided (1) amounts from each account in the Revenue Fund are only to be used for Operating Expenses, Bonds, Contracts, Other Airport Obligations and other purposes related to the category of Revenues allocated thereto, and (2) no deposit may be made to the General Reserve Fund unless the Sinking Fund contains sufficient money to make the next payment of principal and interest on all Revenue Obligations and Contracts and each Debt Service Reserve subaccount contains the applicable Debt Service Reserve Requirement.

Payments Account. The Indenture requires the Authority to deposit sufficient moneys in periodic installments from the Revenue Fund into subaccounts of the Payments Account within the Sinking Fund related to particular series of Bonds for the purpose of paying debt service on such Bonds and additional parity bonds (collectively, the "Senior Lien Bonds" and, for Senior Lien Bonds secured by General Revenues, "General Revenue Bonds") when due and for the purpose of paying amounts (other than termination, indemnity, and expense payments) due to providers of credit facilities, hedge agreements (such as interest rate swap agreements) and other Contracts relating to Senior Lien Bonds.

Debt Service Reserve Account. Upon the issuance of the Series 2019 Bonds, the Authority will have on deposit $7,664,653.98 (which equals the initial Debt Service Reserve Requirement for the Series 2019 Bonds and the Outstanding Series 2011 Bonds) in the Debt Service Reserve Account, to be used to prevent default in the payment of debt service on the Series 2019 Bonds and the Outstanding Series 2011 Bonds whenever there are insufficient moneys in the related subaccounts of the Payments Account available to make such payments. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS – Debt Service Reserve for the Series 2019 Bonds and the Outstanding Series 2011 Bonds" above for discussion of the Debt Service Reserve Requirement.

Renewal and Extension Fund. Under the terms of the Indenture, amounts held in the Renewal and Extension Fund must be used first to prevent default in the payment of interest on or principal of any General Revenue Bonds when due and then will be applied by the Authority from time to time, as and when the Authority shall determine, to the following purposes and, prior to the occurrence and continuation of an Event of Default under the Indenture, in the order of priority determined by the Authority in its sole discretion: (a) for the purposes of which moneys held in the Revenue Fund may be applied as described above, (b) to pay any amounts which may then be due and owning under any Hedge Agreement relating to the Bonds (including termination payments, fees, expenses, and indemnity payments), (c) to pay any governmental charges and assessments against the Airport or any part thereof which may then be due and owing, (d) to make acquisitions, betterments, extensions, repairs, or replacements or other capital improvements (including the purchase of equipment) to the Airport deemed necessary to the Authority (including payments under contracts with vendors, suppliers, and contractors for the foregoing purposes), and (e) to acquire Senior Lien Bonds (other than Special Purpose Revenue Bonds) by redemption or by purchase in the open market. Notwithstanding the preceding sentence, any PFC Revenues or Released PFC Revenues in the Renewal and Extension Fund may only be used for PFC Revenue Bonds, Released Revenue Bonds secured by Released PFC Revenues, related Contracts and Costs of PFC Facilities.

General Reserve Fund. All deposits made to the General Reserve Fund may be used by the Authority for any lawful purpose.

Rate Covenant

The Authority has covenanted and agreed at all times while any Series 2019 Bonds are outstanding and unpaid to prescribe, fix, maintain, and collect rates, fees, and other charges for the services and facilities of the Airport such that General Revenues will be fully sufficient at all times to (i) provide for 100% of the Operating Expenses of the Airport and for the accumulation in the Revenue Fund of a reasonable reserve therefor, and (ii) produce Net Revenues in each Fiscal Year which will: (a) equal, for General Revenues, at least 125% of the Debt Service Requirement on all related Bonds secured by General Revenues then Outstanding for the Sinking Fund Year ending on the next July 1 and, for other categories of Revenues, such percentages that may be established pursuant to a Supplemental Indenture; (b) enable the Authority to make all required payments, if any, into any Debt Service Reserve Account and the Rebate Fund and on any Contracts or Other Airport Obligations; (c) enable the Authority to accumulate an amount to be held in the Renewal and Extension Fund, which in the judgment of the Authority is adequate to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the Airport, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the Airport; and (d) remedy all deficiencies in required payments into any of the funds and accounts mentioned in the Indenture from prior Fiscal Years. In the Indenture, the definition of Debt Service Requirement contains a number of provisions governing how debt service will be calculated in certain circumstances, including, without limitation, a provision that debt service will not include amounts to the extent that the PFC Revenues are available in funds under the Indenture to make payments of Revenue Obligations. See the definition of "Debt Service Requirement" in APPENDIX C – "DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

If the Authority fails to prescribe, fix, maintain, and collect rates, fees, and other charges, or to revise such rates, fees, and other charges in accordance with the Indenture in any Fiscal Year, but the Authority in the next Fiscal Year has promptly taken all available measures to revise such rates, fees and other charges as advised by an Airport Consultant, there shall be no Event of Default until the end of such next Fiscal Year and only then if Net Revenues are less than the amount required. The rates, fees, and other charges shall be classified in a reasonable manner to cover users of the services and facilities furnished by the Airport so that, as nearly as practicable, such rates, fees, and other charges shall be uniform in application to all users falling within any reasonable class.

The Authority's ability to prescribe, fix, maintain and collect certain rates, fees and other charges may be limited by various contractual obligations to third parties. See "SECURITY AND SOURCES OF PAYMENT FOR THE SERIES 2019 BONDS – Airport Agreements."

Additional Bonds

Upon satisfaction of certain conditions, the Indenture permits the Authority to issue additional revenue bonds without express limit as to principal amount to finance capital improvements to or expansions of the Airport (or to refinance obligations issued for such purposes), which will be equally and ratably secured on a parity basis with the Series 2019 Bonds. The Indenture allows revenue bonds issued to refund General Revenue Bonds to constitute parity bonds if the Authority obtains a report from an independent certified public accountant or a financial advisor, demonstrating that the refunding will reduce the total debt service payments on Outstanding General Revenue Bonds, on a present value basis. The Series 2019 Bonds are being issued pursuant to this provision of the Indenture.

The Indenture also allows revenue bonds to constitute parity bonds if the Authority obtains either:

(a) a report by an Independent Certified Public Accountant to the effect that the historical Net General Revenues for each of the two most recent audited Fiscal Years, were equal to at least 125% of the Maximum Annual Debt Service Requirement on all General Revenue Bonds which will be Outstanding immediately after the issuance of the proposed parity bonds; or

(b) a report by an Airport Consultant to the effect that in each Fiscal Year of the Forecast Period the Net General Revenues are forecast to equal at least 125% of the Annual Debt Service Requirement during such period on all General Revenue Bonds which will be Outstanding immediately after the issuance of the proposed parity bonds.

The Indenture also allows the Authority to issue obligations (including, without limitation, Subordinate Lien Bonds) secured by Pledged Revenues which are junior and subordinate to outstanding General Revenue Bonds as to lien and right of payment. The Indenture permits the accession of Subordinate Lien Bonds and related hedge agreements to the status of complete parity with General Revenue Bonds and related hedge agreements if, among other things, as of the date of accession, the report described in paragraph (a) above is obtained on a basis which includes all outstanding General Revenue Bonds and such Subordinate Lien Bonds.

Released Revenues

A separable category or portion of revenues, income, receipts and money relating to a definable service, facility or program of the Airport may be withdrawn from General Revenues and thereafter treated as Released Revenues for all purposes, including the security for Released Revenue Bonds if, among other things, (i) the Authority obtains a report of an Independent Certified Public Accountant to the effect that historical Net General Revenues, excluding the category of Revenues proposed to become Released Revenues, for the most recent audited Fiscal Year prior to the date of such report were equal to at least 125% of the Maximum Annual Debt Service Requirement on all General Revenue Bonds which will be Outstanding after the category of Revenues becomes released Revenues, and (ii) the Authority obtains Rating Agency confirmation that the ratings on the Outstanding General Revenue Bonds will not be reduced as a result of such withdrawal of Released Revenues. There are no Released Revenue Bonds outstanding.

Special Purpose Revenue Bonds

The Authority may designate facilities at the Airport as Special Purpose Facilities if such facilities meet the tests stated in the definition thereof: facilities which (i) will not result, upon completion, in a material reduction in Net General Revenues, and (ii) will not be of such a type or design that the subsequent closing thereof will materially impair the general operations of the Airport. If a facility meets such tests and is so designated, the revenues arising therefrom or generated thereby shall not be General Revenues for the period during which any Special Purpose Revenue Bonds for such facility are Outstanding.

Maintenance, Insurance and Sale of the Airport; Annual Budget; Tax Covenants

The Authority covenants in the Indenture to (i) maintain the Airport in good repair and in sound operating condition; (ii) carry adequate public liability, fidelity, and property insurance or self-insurance, such as is maintained by similar airports; and (iii) before the start of each Fiscal Year, adopt an annual budget for the Airport in compliance with the rate covenant described above.

The Authority also covenants in the Indenture not to sell, lease, encumber, or in any manner dispose of the Airport as a whole or in part, except for property not necessary, useful, or profitable in the operation of the Airport or property the disposition of which will be advantageous to the Airport and will not adversely affect the security for the Bonds.

The Authority reserves the right in the Indenture to sell any portion of the Airport or to transfer the Airport as a whole to any political subdivision or authority or agency of one or more political subdivisions of the State, provided that the Authority obtains an approving opinion of Bond Counsel and an opinion of an Airport Consultant expressing the view that such sale will not result in any diminution of Net Revenues to the extent that in any future Fiscal Year of the Authority the Net Revenues will be less than 100% of the annual Debt Service Requirement on all Senior Lien Bonds to be outstanding after such sale, in the then current or any succeeding Fiscal Year of the Authority.

The Authority also covenants in the Indenture to take all actions to assure the tax-exempt status of interest on tax-exempt Bonds and to refrain from taking any action which would adversely affect such status.

Events of Default and Remedies

The Indenture defines an "Event of Default" to mean, among other things, (i) failure to pay debt service on Senior Lien Bonds when due, (ii) failure to perform any obligation with respect to the Debt Service Reserve Account, which remains unremedied for more than 30 days, (iii) certain events of insolvency affecting the Authority, (iv) the appointment of a receiver of the Airport or the funds held under the Indenture, (v) failure to perform any other covenant contained in the Indenture for 90 days (or 180 days if such default cannot be cured in 90 days and if corrective action is instituted and diligently pursued) after notice from the owners of (or a Credit Issuer securing) at least 25% in aggregate principal amount of Senior Lien Bonds, (vi) an Event of Default under any Supplemental Indenture relating to Senior Lien Bonds, (vii) failure by any Credit Issuer to pay the purchase price of Senior Lien Bonds, (viii) delivery of notice that an "Event of Default" has occurred under any agreement relating to a Credit Facility supporting Senior Lien Bonds, and (ix) delivery of notice that an "Event of Default" has occurred under a hedge agreement relating to Senior Lien Bonds; provided if the Event of Default relates solely to Bonds related to a particular category of Revenues and no other event has occurred which could become an Event of Default with respect to any other Bonds then Outstanding, such Event of Default shall be deemed to apply solely to the related Bonds and Contracts and the provisions of the Indenture shall otherwise remain in full force and effect with respect to all other Bonds and related Contracts.

Upon the happening and continuance of any Event of Default (except for events described in clauses (vii), (viii) and (ix) above), the Indenture allows the owners of more than 50% in aggregate principal amount of outstanding Senior Lien Bonds affected thereby or a Credit Issuer securing more than 50% in aggregate principal amount of the outstanding Senior Lien Bonds affected thereby to accelerate such Bonds affected thereby. If the Authority cures the Event of Default, the Indenture allows the owners of more than 50% in aggregate principal amount of outstanding Senior Lien Bonds to waive the acceleration, subject to the consent of each Credit Issuer securing Senior Lien Bonds.

The Indenture provides that, upon the occurrence and continuation of an Event of Default, the Authority or a receiver appointed for the purpose must apply all Pledged Revenues as follows and in the following order of priority: (i) first, to the payment of the reasonable and proper charges, expenses, and liabilities of the receiver and any paying agent and bond registrar under the Indenture (with such amounts payable, if related to a particular series and therefore to a particular category of Revenues, first from such category), (ii) second, to the payment of all reasonable and necessary expenses of operation and maintenance of the Airport and major renewals and replacements to the Airport, and (iii) third, to the payment of debt service on Senior Lien Bonds and amounts (other than termination, indemnity, and expense payments) due under hedge agreements relating to Senior Lien Bonds.

If the Authority were to default on the Bonds, the realization of value from the pledge of the Pledged Revenues to secure the payment of the Bonds would depend upon the exercise of various remedies specified by the Indenture and Virginia law. These remedies may require judicial actions, which are often subject to discretion and delay and which may be difficult to pursue. The enforceability of rights or remedies with respect to the Bonds may be limited by state and federal laws, rulings, and decisions affecting remedies and by bankruptcy, insolvency, or other laws affecting creditors' rights or remedies heretofore or hereafter enacted.

Chapter 9 of the United States Bankruptcy Code (the "Bankruptcy Code") permits a municipality such as the Authority, if insolvent or otherwise unable to pay its debts as they become due, to file a voluntary petition for the adjustment of debts provided that such municipality is "specifically authorized, in its capacity as a municipality or by name, to be a debtor. . . ." Bankruptcy Code, §109(c)(2). **Current Virginia statutes do not expressly authorize the Authority or municipalities generally to file under Chapter 9.** Chapter 9 does not authorize the filing of involuntary petitions against municipalities such as the Authority.

Bankruptcy proceedings by the Authority, if they should hereafter become authorized for the Authority under state law and proceed, would likely have adverse effects on owners of the Series 2019 Bonds, including (i) delay in the enforcement of their remedies, (ii) subordination of their claims to claims of those supplying goods and services to the Authority after the initiation of bankruptcy proceedings and to the administrative expenses of bankruptcy proceedings, and (iii) imposition without their consent of a plan of reorganization reducing or delaying payment of the Series 2019 Bonds. The Bankruptcy Code contains provisions intended to ensure that, in any plan of reorganization not accepted by at least a majority of any class of creditors, such as the owners of the Series 2019 Bonds, such class of creditors will have the benefit of their original claim or its "indubitable equivalent", although such "equivalent" may not provide for payment of the Series 2019 Bonds in full. The effect of these and other provisions of the Bankruptcy Code cannot be predicted and may be significantly affected by judicial interpretation.

Defeasance

The Indenture provides that Senior Lien Bonds for the payment or redemption of which sufficient moneys or sufficient direct obligations of, or obligations fully guaranteed by, the United States of America have been deposited with the paying agent or the depository of the Sinking Fund (whether upon or prior to the maturity or the redemption date of such bonds) will be deemed to be paid and no longer outstanding under the Indenture.

If all Bonds and obligations secured by a lien on a category of Revenues have been paid or provision for payment thereof made as set forth in the preceding paragraph, at the option of the Authority the terms and provisions of the Indenture relating solely to such category of Revenues may be determined as void and of no further force or effect; provided the other terms and provisions of the Indenture shall remain in effect until the election of the Authority after payment or provision for payment of all Bonds and obligations secured by a lien created pursuant to the Indenture on any Revenues.

THE 2019 PARKING PROJECT

The 2019 Parking Project

The Series 2019 Bonds are being issued to (a) finance the design, acquisition, construction and equipping of a new parking garage at the Airport (the "2019 Parking Project"), (b) pay capitalized interest on the Series 2019 Bonds through the period ending July 1, 2021, (c) provide for a deposit to the Debt Service Reserve Account, and (d) pay costs associated with the issuance of the Series 2019 Bonds. The 2019 Parking Project is expected to cost approximately $69.7 million.

The plan of finance for the 2019 Parking Project consists of approximately $11.2 million contributed from available funds of the Authority and $58.6 million from the Series 2019 Bonds. Construction of the 2019 Parking Project is estimated to be completed by summer 2021. The 2019 Parking Project will be located adjacent to existing terminal facilities and will consist of a 3,208 space parking garage totaling approximately 1,048,325 square feet, including one double threaded helix vehicular access ramp for parking on levels one through eight. See APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT." Traffic circulation throughout the garage will be two-way, with parking stalls perpendicular to the drive aisles.

Although the construction of the 2019 Parking Project, to be known as Garage D, will result in a slight increase in overall parking spaces, the Authority is undertaking the 2019 Parking Project primarily to re-purpose several elements of its existing parking inventory and the land on which such parking facilities are located. The relocation of approximately 2,134 surface lot public parking spaces into Garage D will result in 725,000 square feet of land becoming available for aircraft parking and future airport development. The relocation into Garage D of approximately 596 surface parking lot spaces used by employees will result in 210,000 square feet of land becoming available for future non-aeronautical use. Additionally, the Authority relocated approximately 323 rental car return spaces into Garage A, thereby providing a location closer to the terminal for rental car return and enhancing the service amenities for rental car patrons at the Airport. As a result of the foregoing, approximately 3,053 spaces will be relocated to Garage D, representing an increase of 155 public parking spaces once Garage D is placed into service and the foregoing relocations are effected.

SOURCES AND USES OF FUNDS

The proceeds of the Series 2019 Bonds are expected to be used as shown below:

Estimated Sources of Funds	
Par Amount of Series 2019 Bonds	$54,435,000.00
Plus Original Issue Premium	12,441,109.65
	$66,876,109.65
Estimated Uses of Funds	
Costs of the 2019 Parking Project	$57,668,356.85
Capitalized Interest	5,423,014.16
Deposit to Debt Service Reserve Account	3,121,921.64
Costs of Issuance[1]	662,817.00
	$66,876,109.65

[1] Includes underwriters' discount, fees and expenses of attorneys, financial advisors and consultants, printing and other costs associated with the issuance of the Series 2019 Bonds.

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DEBT SERVICE REQUIREMENTS

As of the date hereof, the following table sets forth for each year ending July 1 the total principal or sinking fund and interest requirements with respect to the existing outstanding Bonds and the Series 2019 Bonds, which are Airport Revenue Bonds secured on a parity Senior Lien basis. See "AUTHORITY FINANCIAL INFORMATION –Existing Indebtedness."

Year Ending	Outstanding Bonds *		Series 2019 Bonds		Total Debt Service
July 1	Principal	Interest	Principal	Interest	Requirements
2019	$2,475,000	$1,799,050			$4,274,050
2020	2,580,000	1,698,388		$2,804,915	7,083,302
2021	2,715,000	1,572,863		2,721,750	7,009,613
2022	2,850,000	1,440,788	$1,415,000	2,721,750	8,427,538
2023	3,160,000	1,315,813	1,485,000	2,651,000	8,611,813
2024	3,310,000	1,157,813	1,560,000	2,576,750	8,604,563
2025	3,205,000	992,313	1,635,000	2,498,750	8,331,063
2026	2,745,000	830,588	1,720,000	2,417,000	7,712,588
2027	2,885,000	693,338	1,805,000	2,331,000	7,714,338
2028	3,010,000	570,725	1,895,000	2,240,750	7,716,475
2029	3,135,000	442,800	1,990,000	2,146,000	7,713,800
2030	3,280,000	301,725	2,090,000	2,046,500	7,718,225
2031	3,425,000	154,125	2,195,000	1,942,000	7,716,125
2032			2,300,000	1,832,250	4,132,250
2033			2,415,000	1,717,250	4,132,250
2034			2,540,000	1,596,500	4,136,500
2035			2,665,000	1,469,500	4,134,500
2036			2,800,000	1,336,250	4,136,250
2037			2,940,000	1,196,250	4,136,250
2038			3,085,000	1,049,250	4,134,250
2039			3,240,000	895,000	4,135,000
2040			3,400,000	733,000	4,133,000
2041			3,570,000	563,000	4,133,000
2042			3,750,000	384,500	4,134,500
2043			3,940,000	197,000	4,137,000
	$38,775,000	$12,970,325	$54,435,000	$42,067,915	$148,248,240

* Consists of the Authority's Airport Revenue Refunding Bonds, Series 2011A, Series 2011B and Series 2011C.

AIRPORT OPERATIONS AND THE AIR TRADE AREA

Norfolk International Airport

The Airport provides air transportation services for the Hampton Roads region—the second-largest metropolitan area in Virginia and the 36th-largest metropolitan area in the United States—as well as northeastern North Carolina. The Airport occupies approximately 1,088 acres of land in the City approximately eight miles from the City's downtown area. The airfield contains two carrier runways (with associated taxiways) one of which is approximately 8,000 feet in length and is equipped with an instrument landing system for air carrier operations and the other of which is 4,875 feet in length and is primarily for general aviation operation. Other airfield facilities include airport equipment storage and maintenance, air traffic control tower, and aircraft rescue and firefighting (ARFF).

The passenger terminal complex consists of two buildings, one housing the main terminal and the other the arrivals terminal, connected by a 362-foot pedestrian bridge. The main terminal is a three-story building of approximately 485,000 square feet with two passenger concourses. The first level contains the airline ticketing functions, outbound baggage make-up and airline operations space on Concourses A and B. The second level is comprised of the two TSA screening checkpoints, 23 air carrier gates on Concourses A and B, a Federal Inspection Services facility, airport administration offices, and concession space. The arrivals terminal is a three-level facility consisting of 243,000 square feet. The first level consists of a basement, while the second level contains airline baggage claims and ground transportation center. The third level has administrative offices and the military welcome center. The arrivals terminal is connected to the main terminal building by the pedestrian bridge.

Public parking facilities include both surface and garage parking options and provide over 8,576 parking spaces in total. Surface lots include two short-term lots, two long term lots, employee lots and permit lots. Structured parking consists of three parking garages (Garages A, B and C) adjacent to the arrivals terminal. The parking facilities currently provide space for up 7,252 public parking spaces, 636 rental cars, 596 for employee parking and 92 for permit parking. All parking facilities are located within a short walking distance from the passenger terminal complex. See "2019 PARKING PROJECT" for a description of the 2019 Parking Project, which will change the overall configuration of various parking facilities at the Airport.

Other facilities at the Airport include air cargo and general aviation facilities, and the fuel farm. Two air cargo terminals providing users with 88,000 square feet of space facilitate approximately 65 million pounds of air cargo shipped through the Airport annually. Signature Flight Support provides general aviation services based out of a 54,000 square-foot facility.

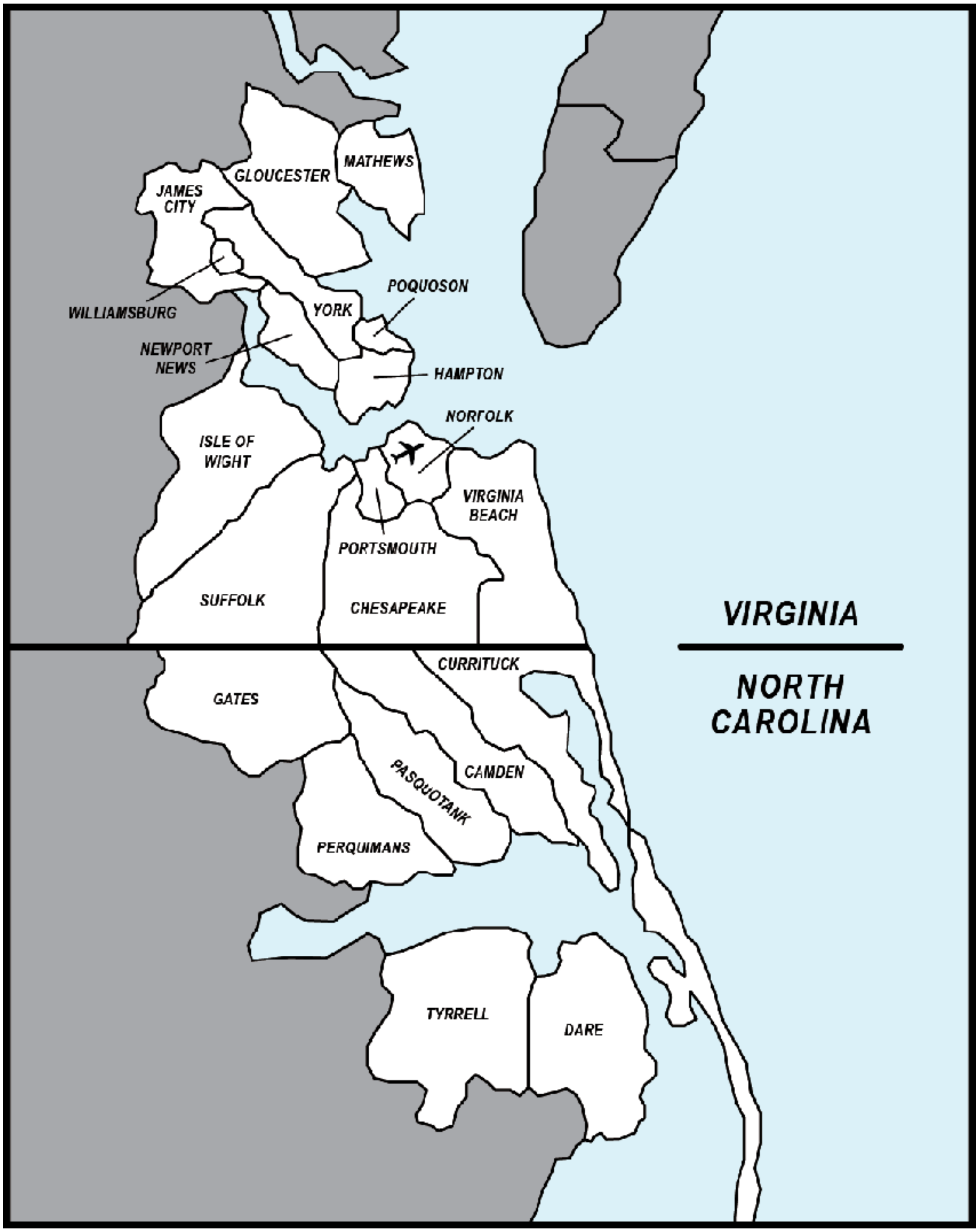
See APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT - Airport Facilities."

The Authority currently employs 210 persons none of whom are represented by labor unions. Thirty-three percent of the Authority's employees have been employed at the Airport in excess of ten years. The Authority believes that its relationship with its employees is favorable and stable.

Air Trade Area

The Airport is the primary commercial air service facility serving the Hampton Roads metropolitan area and the surrounding region. The Airport is primarily an origin and destination ("O&D") airport. In FY 2018, approximately 97% of the Airport's enplaned passengers were O&D passengers, according to the Airport Consultant Report and based on U.S. Department of Transportation ("DOT") data.

The demand for air transportation at an O&D airport to a large degree is dependent upon the demographic and economic characteristics of an airport's "air trade area" – the geographical region that serves as the Airport's primary air service catchment area. The primary Air Trade Area for the Airport is the Virginia Beach-Norfolk, VA-NC Combined Statistical Area ("CSA"), as defined by the federal government's Office of Management and Budget. The federal government generally defines a CSA as two or more defined areas with social and economic ties, which are measured by commuting; the ties are not as strong as those within a Metropolitan Statistical Area, which reflect broader social and economic interactions. The economic strength of the CSA provides the primary base for supporting air transportation at the Airport. As shown by the following map, the CSA comprises 21 jurisdictions, including the cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach and Williamsburg and the counties of Gloucester, Isle of Wight, James City, Mathews, and York, all in Virginia, and the counties of Camden, Currituck, Dare, Gates, Pasquotank, Perquimans, and Tyrrell in North Carolina. The Air Trade Area encompasses approximately 7,000 square miles.



Source: Airport Consultant Report.

The Hampton Roads region has a somewhat diverse economy, having considerable involvement in commerce and industry, education and government. The Air Trade Area's concentration of employment among industries varies from that of the U.S., with a higher concentration of employment in government and military and a lower concentration in the business and financial services industry than experienced throughout the U.S. In order to protect the local economy from periodic economic downturns, governments and other organizations in the Air Trade Area are making efforts to diversify the local economy.

See APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT - Economic Base for Air Transportation" for further information regarding the Air Trade Area.

Airline Service

As of March 2019, the Airport enjoyed scheduled service provided by six U.S. passenger carriers and two all-cargo carriers, as listed in the table below.

AIRLINES SERVING THE AIRPORT **Norfolk International Airport**	
Passenger	All-Cargo Carriers
Allegiant	Federal Express [d]
American [a]	UPS Airlines
Delta [b]	
Frontier	
Southwest	
United [c]	

[a] As of March 2019, code-sharing service was provided by Envoy, Piedmont, PSA, Republic, and SkyWest.
[b] As of March 2019, code-sharing service was provided by Endeavor, GoJet, and SkyWest.
[c] As of March 2019, code-sharing service was provided by Air Wisconsin, CommutAir, ExpressJet, Mesa, and Republic.
[d] As of March 2019, code-sharing service was provided by Mountain Air Cargo.

Source: Authority records; Official Airline Guide via PlaneStats.com

As scheduled for March 2019, the Airport offered nonstop service to 25 airports, which includes 19 airports with daily service and 6 airports with less than daily service. See APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT – Air Traffic – Table 2-3" for the top domestic origin and destination markets (all accounting for 1% or more of the Airport's originating passengers) and the number of average daily scheduled nonstop departures from the Airport by domestic destination.

Historical Passenger Activity

The following table summarizes numbers of enplaned passengers at the Airport. During the first nine months of FY 2019, the number of enplaned passengers increased (10.8%) compared with the same period in FY 2018. A global economic recession, record-high fuel costs that prompted airlines to moderate service across respective routes, and decreased Department of Defense spending in the Air

Trade Area, followed by federal budget sequestration, led to declines in the Airport's enplaned passengers in FY 2010 through FY 2015 with the exception of a slight increase in 2013. However, the Airport's enplaned passengers have grown in each of the last three Fiscal Years with higher load factors than those experienced historically and increases in enplaned passengers on each of the carriers serving the Airport.

HISTORICAL ENPLANED PASSENGERS

Fiscal Year	Enplaned Passengers	Percent Change
2009	1,728,361	--
2010	1,652,353	(4.4)%
2011	1,638,947	(0.8)
2012	1,603,060	(2.2)
2013	1,606,669	0.2
2014	1,537,557	(4.3)
2015	1,450,388	(5.7)
2016	1,553,605	7.1
2017	1,628,353	4.8
2018	1,741,125	6.9
First 9 months		
2018	1,260,976	
2019	1,397,180	10.8

Sources: Authority records.

The following table presents historical airline shares of enplaned passengers at the Airport. As shown, the market share is well distributed among the airlines. American, Delta, and Southwest, with their affiliates, enplaned approximately 82.3% of the passengers at the Airport in FY 2018.

ENPLANED PASSENGER SHARES BY AIRLINE

	FY 2014		FY 2015		FY 2016		FY 2017		FY 2018	
Airline	Number	Share	Number	Share	Number	Share	Number	Share	Number	Share
American (1)	484,138	31.5%	488,945	33.7%	503,843	32.4%	532,112	32.7%	580,461	33.3%
Delta (2)	446,013	29.0	472,613	32.6	495,500	31.9	504,382	31.0	513,143	29.5
Southwest (3)	389,021	25.3	265,038	18.3	312,139	20.1	331,289	20.3	339,297	19.5
United (4)	218,385	14.2	223,792	15.4	242,123	15.6	260,570	16.0	278,868	16.0
Allegiant (5)	0	0.0	0	0.0	0	0.0	0	0.0	29,356	1.7
TOTAL	1,537,557	100.0%	1,450,388	100.0%	1,553,605	100.0%	1,628,353	100.0%	1,741,125	100.0%

(1) Includes enplaned passengers on the following code-sharing partners: Air Wisconsin, Envoy, Mesa, Piedmont, PSA, Republic, SkyWest, and Trans States. Also includes enplaned passengers on US Airways and its code-sharing partners.
(2) Includes enplaned passengers on the following code-sharing partners: Chautauqua, Compass, Endeavor, ExpressJet, GoJet, Republic, Shuttle America, and SkyWest.
(3) Includes enplaned passengers on AirTran.
(4) Includes enplaned passengers on the following code-sharing partners: Air Wisconsin, CommutAir, ExpressJet, GoJet, Mesa, Republic, Shuttle America, SkyWest, and Trans States.

Source: Authority records.

Certain other metrics of aviation activity, including aircraft operations and landed weight, are described in the Report of the Airport Consultant. See APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT – Air Traffic."

The Authority maintains an Air Service Development Incentive Program in order to attract new entrant airlines and otherwise to increase air service at the Airport. Incentives under this program may include fee waivers, fee abatements and reductions in facility charges, as well as assistance with promotional expenses related to marketing and advertising the new service.

The Airport has recently experienced new service from multiple airlines and additional service from existing airlines as follows:

- New entrant airline Allegiant began service at the Airport in October 2017 with year round and seasonal service to St. Pete-Clearwater, Orlando, Fort Lauderdale and Jacksonville. Allegiant has also announced upcoming summer 2019 service to Cleveland and Cincinnati.
- New entrant airline Frontier began service in August 2018 with year round and seasonal service to Las Vegas, Orlando, Denver, Phoenix and Tampa.
- Southwest has recently announced weekend services to San Diego and Nashville coming in summer 2019.
- United added new daily nonstop service to Denver in 2018.
- Delta converted their seasonal Minneapolis-Saint Paul service to year round in 2018.

Airline Service at the Airport and Other Area Airports

Due to the Airport's positioning as an O & D airport, the number of passengers depends primarily on the attractiveness of the Air Trade Area as a business and leisure destination and the propensity of its residents to travel, as well as the air service offered by other airports in the region.

Portions of the Air Trade Area are also served by Newport News/Williamsburg International Airport (Newport News), located approximately 25 miles northwest of the Airport, and Richmond International Airport (Richmond), located approximately 90 miles northwest of the Airport (see "AIRPORT OPERATIONS AND THE AIR TRADE AREA − Air Trade Area"). Certain travelers, particularly those beginning or ending their journeys in the northern parts of the Air Trade Area, have choices of airline service at the three airports. See APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT - Airport Traffic – Proximity of Alternative Facilities."

In the past, airline traffic and enplaned passenger volumes at the Airport have fluctuated in part as a result of airline service levels and air fares offered at the Airport and at the other airports in the region, particularly with respect to the presence of low-cost carriers at such airports. Although these factors can be expected to affect somewhat airline traffic and enplaned passenger volumes at the Airport, the Airport has successfully competed for airline capacity and airline passengers with these alternative facilities, due to the convenience of the Airport to the Air Trade Area as well as the quality, quantity and cost of air service available at the Airport. However, the Authority cannot predict whether the current level of passenger traffic will continue at its current level, nor can it predict what events, occurring domestically or internationally, might adversely affect such passenger traffic in the future.

AUTHORITY FINANCIAL INFORMATION

Annual Budget

The Executive Director of the Authority prepares the Authority's annual budget for the next Fiscal Year in preliminary form and submits it to the Board of Commissioners for approval in March of each year. The proposed budget is submitted to the Signatory Airlines on April 1 for review and comment. The Signatory Airlines, through the chairman of an Airline Affairs Committee, have thirty days after the forwarding of the proposed budget by the Authority to request a meeting with the Authority to discuss the proposed budget. Under the Airport Agreements, the Authority is required to fully consider the comments of the Signatory Airlines prior to finalizing the budget. The Authority's Board of Commissioners approves the final annual budget in May or June and the Airlines are advised of the rates and charges to be effective for the Fiscal Year beginning July 1. An unaudited monthly financial and activity report is prepared by the Authority's Director of Finance reflecting budgeted and actual revenues and expenses and is submitted to the Authority's Executive Director and Board of Commissioners for review. A quarterly financial and activity report is prepared by the Executive Director and submitted to the Board of Commissioners for review and discussion.

Internal Controls

The Authority complies with Government Accounting Standards Board policies with respect to accounting and financial reporting. The Authority utilizes internal accounting controls which are designed to comply with such standards and to provide safeguards for the use and disposition of assets, maintaining accountability of assets and insuring the reliability of financial records for preparing financial statements. The Director of Finance is responsible for these activities and for developing and enforcing policies and procedures with respect to accounting and financial controls.

Existing Indebtedness

As of March 31, 2019, the Authority had bonds outstanding in the principal amount of $38,775,000. This amount consists of the Authority's Airport Revenue Refunding Bonds, Series 2011A, Series 2011B and Series 2011C. Debt service was approximately $4.2 million in FY 2018. The Authority has FAA approval to utilize PFC Revenues to make payments on debt service for a portion of the debt service on the Series 2011B Bonds, while the remainder is included in the assessment of rates and charges to the Airlines (other than debt service on the parking deck refinanced with proceeds of the 2011A Bonds which is paid from revenues associated with such parking deck and other available General Revenues). In January 2001, the Authority incurred certain indebtedness secured by revenues from the Airport's fixed base operations to construct an aircraft storage hanger and a ground service equipment maintenance facility. As of March 31, 2019, approximately $127,732 of such indebtedness is outstanding.

Grants

Over the three years FY 2016 through FY 2018, the Authority received approximately $4,500,000 annually in federal grants, primarily through the FAA's Airport Improvement Program, and $2,000,000 annually in state grants which were used to pay for various capital improvement projects and eliminated the need for the expenditure of Authority revenues or the assumption of indebtedness.

Annual Payments to the City of Norfolk

The Authority's property is not subject to taxation by the City. However, the Authority has entered into an agreement with the City (the "City Agreement") whereby the Authority makes annual payments in lieu of taxes ("PILOT") to the City on each July 1. Such annual PILOT arrangement was entered into on January 18, 2000, and the Authority made an initial payment to the City of $3,000,000. Annual payments have been set at $2,500,000 from FY 2015 through FY 2020 and $2,650,000 from FY 2021 through 2025. The City Agreement has been approved by the FAA. The annual payments under the agreement are subject to FAA approval and must be consistent with Federal law and the FAA's revenue diversion policy. The City and the Authority will agree to the annual payment amount after July 1, 2024 (FY 2025).

Risk Management and Insurance

The Authority is exposed to a variety of risks or losses that may arise from events such as injuries to employees, damage to property, destruction or theft of assets, or natural disasters. The Authority purchases insurance through the Commonwealth of Virginia and commercial insurance carriers for specific types of coverage to cover these risks, and also maintains self-insurance plans to cover certain specific areas of risk as described in the following paragraphs.

The Authority participates in a risk management self-insurance plan for public officer's liability coverage through the Commonwealth of Virginia, administered by the Division of Risk Management. Through this plan, the Authority obtains public officers' liability coverage of $1,000,000 per occurrence. The Comprehensive Annual Financial Report of the Commonwealth of Virginia contains disclosure of the Commonwealth's estimated claims payable and estimated losses for all self-insurance plans at June 30, 2018 and 2017, including the plan used by the Authority.

The Authority participates in a self-insurance program for workers' compensation coverage through VaCorp (a self-insurance risk pool among Virginia local governments). Through this program, the Authority obtains coverage for bodily injury by accident or disease of $1,000,000 per occurrence.

Through commercial insurance carriers, the Authority has direct and indirect property coverage, including business interruption, termination and equipment coverage of $361,236,813 annually, property insurance coverage of $300,000,000 annually, general liability coverage of $50,000,000 per occurrence, airport liability coverage of $300,000,000 annually, business auto coverage of $1,000,000 per occurrence, disability coverage of $78,000 annually, cyber coverage of $1,000,000, crime insurance of $1,000,000 per occurrence, worker's compensation coverage for bodily injury of $1,000,000 per occurrence and pollution coverage of $10,000,000 annually.

Retirement Plans

The Authority participates in the Virginia Supplemental Retirement System ("VRS") and also maintains an Executive Supplemental Retirement Plan. See Note 8 to the Authority's audited financial statements for FY 2018, included as APPENDIX B to this Official Statement, for information concerning the retirement plan's description, funding status and progress, including significant actuarial assumptions, actuarial value of assets (including a recent change to asset valuation method), unfunded actuarial accrued liability, funded ratio, including over- and under-funded amounts, annual covered payroll, and amounts over- and under-funded as a percentage of covered payroll. The Authority's liability was 92.24% funded as of the most recent report, and the Authority expects to continue its practice of funding annual contributions at recommended actuarial levels.

See Note 10 to the Authority's audited financial statements for FY 2018, included as APPENDIX B to this Official Statement, for information concerning the Executive Supplemental Retirement Plan for certain key executives, which is funded in part with whole life insurance policies owned by the Authority and naming the Authority as the beneficiary.

Historical Financial Results

The Authority operates as a self-supporting entity. The following two tables present a summary of the Authority's revenues, expenses and changes in net assets for the Fiscal Year periods 2014 through 2018 and the nine-month periods ended March 31, 2018 and 2019. Data for all Fiscal Year periods was derived from the Authority's audited financial statements; the information for the periods ended March 31 is preliminary, unaudited and subject to change. In the opinion of the Authority, there has been no material adverse change in the financial condition of the Authority since June 30, 2018, the date of the last audited financial statements.

Financial statements for the Fiscal Years ended June 30, 2017 and 2018 are included in this Official Statement as APPENDIX B – "AUDITED FINANCIAL STATEMENTS OF THE NORFOLK AIRPORT AUTHORITY AS OF AND FOR THE YEARS JUNE 30, 2017 and 2018." The financial information presented in this section should be read in conjunction with the Authority's financial statements and "Management's Discussion of Recent Trends and Developments and Finances."

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STATEMENT OF CHANGES IN NET POSITION
Norfolk Airport Authority
Fiscal Years ended June 30

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
OPERATING REVENUES					
Parking	$13,146,184	$14,059,807	$14,611,343	$15,135,831	$15,465,667
Landing fees	6,887,483	7,273,143	8,813,538	8,991,845	7,699,906
Concession	7,704,107	7,722,778	7,695,510	7,580,914	7,010,567
Rental	5,551,779	5,762,704	6,269,171	6,602,430	6,792,428
Apron fees	2,642,643	2,637,216	2,759,475	2,922,036	3,249,504
Other	187,103	177,325	268,352	488,010	646,989
Total	$36,119,299	$37,632,973	$40,417,389	$41,721,066	$40,865,061
OPERATING EXPENSES					
Salaries and Fringe Benefits	14,137,795	13,812,488	14,973,786	16,069,061	16,119,948
Utilities	2,463,916	2,467,172	2,468,192	2,502,248	2,734,661
Maintenance and Repairs	3,250,411	3,370,284	3,458,833	3,505,388	3,662,659
Administrative	730,490	746,215	825,280	847,556	810,716
Professional services	691,032	405,291	520,672	483,703	623,101
Advertising and promotion	878,475	906,037	912,909	895,189	987,631
Insurance	646,648	671,925	799,943	920,554	987,936
Security and other services	3,077,233	3,126,832	3,491,232	4,451,058	3,874,357
Sanitation	617,086	628,605	639,203	651,992	696,342
City tax assessment	2,065,500	5,127,465	2,500,000	2,500,000	2,500,000
Capital asset impairment	—	—	—	1,424,535	—
Other	341,841	350,879	341,694	389,428	382,280
Total	$28,900,427	$31,613,193	$30,931,744	$34,640,712	$33,379,631
Operating Income Before Depreciation	7,218,872	6,019,780	9,485,645	7,080,354	7,485,430
DEPRECIATION	9,939,655	10,162,197	10,355,409	10,029,660	10,951,169
Operating Loss	$(2,720,783)	$(4,142,417)	$(869,764)	$(2,949,306)	$(3,465,739)
NONOPERATING INCOME (EXPENSES)					
Federal grant revenues	$3,156,569	$4,656,069	$5,438,342	$1,373,734	$9,299,601
State grant revenues	2,000,000	2,000,000	2,000,000	2,000,000	2,001,500
Passenger Facility Charges	6,126,168	5,900,809	6,316,588	6,580,824	7,201,183
Customer Facility Charges	867,737	1,009,873	1,021,106	1,031,792	1,432,100
State grant interest income	38,519	19,120	80,503	11,628	164,035
Passenger facility charges interest income (expense)	(17,823)	8,410	84,835	(21,945)	78,837
Other income	416,851	470,094	202,223	158,530	337,694
Interest income	178,957	115,932	200,182	188,538	441,259**
Interest expense	(1,859,641)	(1,812,706)	(1,298,383)	(764,513)	(1,746,874)
Net nonoperating revenues	10,907,337	12,367,601	14,045,396	10,558,588	19,209,335
Change in net position	8,186,554	8,225,184	13,175,632	7,609,282	15,743,596
Total net position, beginning of the year	$160,722,063	$168,908,617	$172,482,801	$185,658,433	$193,267,715
Opening adjustment of net position*	—	(4,651,000)	—	—	(1,843,000)
Total net position, end of year	$168,908,617	$172,482,801	$185,658,433	$193,267,715	$207,168,311

* The Authority adopted GASB Statements 68 and 71 during FY 2015. The result of this adoption was an opening adjustment to net position to record pension liabilities in accordance with these standards. The Authority adopted GASB Statement 75 during FY 2018. The result of this adoption was an opening adjustment to net position to record OPEB liabilities in accordance with this standard.

** The Authority's adoption of GASB Statement 89 resulted in an increase in interest income in FY 2018.

The Authority's unaudited financial results for the first nine months of FY 2019 are presented in the table below.

Norfolk Airport Authority
Statement of Changes in Net Position (*UNAUDITED)*
Nine-Month Periods Ended March 31

	03/31/2018	03/31/2019
OPERATING REVENUES		
Parking	$11,785,037	$12,484,744
Landing fees	6,909,919	5,932,860
Concession	2,784,912	3,194,673
Rental Cars	4,989,605	5,200,682
Rent	6,392,090	5,523,852
Other	36,631	108,644
Total	32,898,194	32,445,455
OPERATING EXPENSES		
Salaries and Fringe Benefits	12,273,573	12,839,153
Utilities	2,025,407	2,041,567
Maintenance and Repairs	2,311,579	2,215,018
Administrative	114,633	113,878
Professional services	417,112	316,623
Advertising and promotion	821,972	618,543
Insurance	827,435	548,132
Security and other services	2,918,761	3,135,369
Sanitation	513,771	555,215
City tax assessment	1,874,997	1,874,997
Supplies	508,082	429,702
Other	723,824	297,796
Total	25,331,146	24,985,993
Operating Income Before Depreciation	7,567,048	7,459,462
DEPRECIATION	7,294,376	9,050,124
Operating Income (Loss)	272,672	(1,590,662)
NONOPERATING INCOME (EXPENSES)		
Capital grant revenues	4,370,135	2,982,566
Passenger Facility Charges	4,519,923	4,953,779
Customer Facility Charges	1,032,204	1,893,736
Other income	254,702	223,298
PFC interest income	40,925	179,720
Interest income	281,418	636,374
Interest expense	(1,437,183)	(1,353,184)
Net nonoperating revenues	9,062,124	9,516,289
Change in net position	9,334,796	7,925,627

Fiscal Year 2020 Budget

The Authority's budget for FY 2020, approved on May 23, 2019, is based on projected amounts from FY 2019, estimated annual enplanements and other relevant factors. In the FY 2020 budget, revenues are budgeted to increase approximately 7.6% over the 2019 Fiscal Year projections, with landing fees and airline rentals increasing, due to an increase in landing fee and rental rates, and ground transportation revenues increasing due to increases in parking, rental car concessions, CFCs, and transportation network company pick-up and drop-off fees. Expenses are projected to increase by approximately 6.1%, primarily due to not all positions being filled and higher professional services, administrative, advertising, insurance and sanitation costs. See "-- Management's Discussion of Recent Financial Performance – Fiscal Year 2019 Results Through March 31, 2019" for a brief discussion of FY 2019 results through March 31, 2019, as compared to budget.

Norfolk Airport Authority
Operating Budget for Fiscal Years 2019 and 2020

	Fiscal Year 2019	Fiscal Year 2020
Operating Revenues:		
Parking	$15,501,000	$18,185,000
Landing Fees	7,755,600	8,008,000
Rent	7,325,300	7,490,000
Rental Cars	7,000,000	7,000,000
Concessions	3,178,000	3,498,000
Other	563,500	939,000
Total Operating Revenues	$41,323,400	$45,119,000
Operating Expenses:		
Salaries and fringe benefits	$17,023,700	$17,792,000
Utilities	2,801,460	2,735,000
Maintenance and repairs	3,733,000	3,706,000
Administrative	854,235	947,000
Parking	772,800	-
Professional services	651,500	727,000
Advertising and promotion	1,045,600	1,059,300
Insurance	920,000	960,000
Security and other services	3,560,000	4,304,000
Sanitation	762,000	991,000
City tax assessment	2,500,000	2,500,000
Other	652,750	552,000
Total Operating Expenses	$35,277,025	$36,273,000
Operating Income Before Depreciation	$6,046,375	$8,846,000

The Authority has begun preparation of its budget for FY 2020, which it expects to present for board approval in late spring 2019.

Management's Discussion of Recent and Budgeted Financial Results

Budgeted information included in this section is hereby identified as "forward-looking statements". The Authority cautions investors that such forward-looking statements, including, without limitation, those related to the Authority's future revenues or financial performance, are subject to risks and uncertainties that could cause actual results to differ materially from those indicated in the forward-looking statements.

The Authority's operating revenues include fees and charges paid by the airlines which consist of landing fees, terminal rental fees, and certain reimbursable expenses. Such airline revenues accounted for $12.1 million, or 29.5% of operating revenues in FY 2018. The major sources of nonairline revenue are parking fees and rental car fees, which accounted for $28.8 million in FY 2018, representing 70.5% of operating revenues.

Total operating revenues increased from $40.4 million in FY 2016 to $40.9 million in FY 2018, a 1.2% increase over the two-year period. Operating revenues increased each year. FY 2019 projected operating revenues reflect an increase of 2.6% to approximately $41.9 million over FY 2018 actuals. FY 2020 budgeted operating revenues reflect an increase of 7.6% to approximately $45.1 million over FY 2019 projections.

Operating expenses (less depreciation and amortization) increased from $30.9 million in FY 2016 to $33.4 million in FY 2018, a 8.0% increase over the two-year period. The increase in operating expenses between FY 2018 and FY 2019 is primarily due to increases in salaries and fringe benefits, including retirement plans. See "Retirement Plans," above.

Fiscal Year 2019 (Nine Months Through March 31, 2019. Based on interim and unaudited data through March 31, 2019, the Authority has produced operating income before depreciation approximately $2.8 million greater than was budgeted for the nine-month period ended March 31, 2018. This higher than budgeted income is primarily a result of higher than budgeted passenger counts driving concessions and parking revenues coupled with lower than budgeted operating expenses.

YEAR-TO-DATE FINANCIAL RESULTS
Norfolk International Airport
Nine months ended March 31, 2019 (unaudited)

	YTD Actual	YTD Budget	Variance
Operating revenues	$32,445,455	$31,443,182	$1,002,273
Operating expenses (excluding depreciation)	24,985,993	26,773,824	(1,787,831)
Operating income excluding depreciation	7,459,462	4,669,358	2,790,104
Non-operating other revenue	9,062,124	14,178,525	(5,116,401)
Net income excluding depreciation	**$16,521,586**	**$18,847,883**	**$(2,326,297)**

Historical Debt Service Coverage

The following table presents the calculation of historical debt service coverage in Fiscal Years 2014 through 2018.

CALCULATION OF DEBT SERVICE COVERAGE

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Operating revenue	$36,119,299	$37,632,973	$40,417,389	$41,721,066	$40,865,061
Nonoperating revenue					
Federal grants – K9	181,500	189,375	151,500	151,500	151,500
State grants	2,000,000	2,000,000	2,000,000	2,000,000	2,001,500
Customer facility charges	867,737	1,009,873	1,021,106	1,031,792	1,432,100
State grants revenues interest income	38,519	19,120	80,503	11,628	164,035
Other income	416,851	470,094	202,223	158,530	337,694
Interest income	178,957	115,932	200,182	188,538	441,259
Total general revenues	$39,802,863	$41,437,367	$44,072,903	$45,263,054	$45,393,149
Total Operating Expenses	$38,840,082	$41,775,390	$41,287,153	$44,670,372	$44,330,800
Depreciation	(9,939,655)	(10,162,197)	(10,355,409)	(10,029,660)	(10,951,169)
Net operating expenses	28,900,427	31,613,193	30,931,744	34,640,712	33,379,631
Net revenue	10,902,436	9,824,174	13,141,159	10,622,342	12,013,518
Debt service	9,148,250	9,051,475	6,947,675	4,212,775	4,219,075
PFC revenues for debt service	(4,929,288)	(4,548,313)	(2,733,230)	(40,231)	--
Debt service requirement	$4,218,962	$4,503,162	$4,214,445	$4,172,544	$4,219,075
Debt service coverage	**258%**	**218%**	**312%**	**255%**	**285%**

There can be no assurances that the Authority will meet the debt service coverage tests in future years. See "AVIATION AND OTHER INVESTMENT CONSIDERATIONS."

Parking

Parking revenues are the Authority's largest non-airline revenue source, representing 37.8% of total operating revenues and 53.7% of non-airline revenues in FY 2018. Parking revenues are derived from the public garages and surface lots, as well as the employee lot. Parking is expected to comprise approximately $15.5 million in FY 2018 and are budgeted to increase to approximately $18.2 million in FY 2020. The Authority manages the Airport's parking operations. Parking rates were last increased in 2014, with long term rates increasing to $9.00 per day, and the Authority plans on increasing parking rates by $1.00 per day in the fall of 2019, which is FY 2020. The Authority plans on reviewing its parking rate structure annually to determine if further increases are warranted.

Passenger Facility Charges

The authority for airport operators to impose a PFC was granted by Congress in the Aviation Safety and Expansion Act of 1990 and the Wendell H. Ford Aviation Investment and Reform Act of 2000. An airport must apply to the Federal Aviation Administration (the "FAA") for the authority to impose a PFC and for the authority to use the PFC Revenues collected for specific FAA-approved projects. If a medium or large hub airport collects PFCs, federal entitlement grant moneys which would otherwise be received under the Airport Improvement Program are reduced by up to 50 percent. Due to its classification as a small hub, the federal entitlement grant moneys for the Airport currently are not subject to any such reduction.

Unless specifically designated, PFC Revenues are not included in the definition of General Revenues under the Indenture and are not pledged to secure Bonds, and PFCs have not been designated or pledged to secure the Series 2019 Bonds.

See "AVIATION AND OTHER INVESTMENT CONSIDERATIONS – Availability of Funding" and " – Considerations Regarding Passenger Facility Charges."

CERTAIN AGREEMENTS FOR USE OF THE AUTHORITY'S FACILITIES

General Revenues are derived primarily from landing fees and terminal rentals paid by airlines ("Airline Revenues"), parking fees and rental car concession revenues, and terminal concession revenues ("Nonairline Revenues").

Airline Agreements

Airline Revenues are determined in accordance with the formulae and procedures set forth in the Airline Agreements between the Authority and the Signatory Airlines, presently consisting of American, Delta, Southwest and United. Although Federal Express Corporation ("FedEx") and UPS Airlines ("UPS") are not signatory to the Airline Agreement, these cargo airlines meet the minimum number of flights required to pay signatory rates and therefore pay signatory landing fees. Allegiant and Frontier are the only non-signatory airlines operating at the Airport.

The Airline Agreements became effective July 1, 2013, and, upon reaching their stated expiration date of June 30, 2018, were amended to extend their term through June 30, 2021. The Airline Agreements shall be automatically renewed for two additional terms of one year each unless either party gives notice of its intent to terminate 90 days prior to the end of the then current term. The Airline Agreements provide for a calculation methodology for the calculation of the rents, fees and charges of the Signatory Airlines for the use of facilities, rights, licenses, and privileges to operate at the Airport, which is a compensatory rate-setting methodology with a revenue-sharing mechanism. Non-signatory airlines pay a fee that is 1.25 times higher than the rates paid by the Signatory Airlines.

The Airline Agreements provide for the rental of space and the use of certain facilities by the Signatory Airlines, the establishment of cost accounting centers and the periodic adjustment of the rentals, charges and fees to be paid by the Signatory Airlines as determined by the costs and expenses associated with certain direct cost centers (including airfield, terminal, passenger loading bridges, ground transportation, and other) and Indirect Cost Centers (administrative, maintenance, janitorial, police, and fire).

The Airline Agreements permit the Authority to undertake capital expenditures to preserve, protect, enhance, expand or otherwise improve the Airport, or any part thereof and include such costs in the airlines' rates, fees, and charges without Signatory Airline approval.

<u>Expiration of Airline Agreement</u>. Each Airline Agreement expires June 30, 2021, unless extended. At such time, the Authority can give no assurances that it and the airlines then servicing the Airport will enter into new airline agreements that will permit the Authority to recover from the airlines,

through rates, fees and charges, amounts sufficient to pay debt service on Bonds or to otherwise meet its obligations under the Indenture. The Authority expects to extend its contractual relationships with the Signatory Airlines. Even without written agreements with the Airlines, the Authority's enabling legislation authorizes the Authority to set rates, fees and charges for the use of its facilities. The ability of the Authority to set such rates, fees and charges, however, is limited to some extent by federal law and FAA policies as described in "**Airlines and the Air Transportation Industry – Federal Regulation Regarding Rates and Charges**."

See "**Airlines and the Air Transportation Industry"** for certain information pertaining to the air transportation industry, especially the subsection *"Effect of Airline Bankruptcies"* for a description of the effect of an airline bankruptcy on an airline's Airline Agreement.

For a further description of the Airline Agreement, see APPENDIX D – "SUMMARY OF CERTAIN PROVISIONS OF AIRLINE USE AND LEASE AGREEMENT".

Airline landing fees comprised 18.8% of total operating revenues in FY 2018, while airline terminal rental revenues comprised 10.6% of total operating revenues in FY 2018.

Concession Agreements

The Authority has entered into concession agreements for rental car services with Alamo, Avis, Budget, Dollar, Enterprise, Hertz, National, and Thrifty. The initial term of such agreements expires on July 31, 2023 but can be extended for up to five years. Under these agreements, each company pays rent, a CFC, and a concession fee equal to 10% of gross revenues.

Rental car concession revenues represented 16.6% of total operating revenues and 23.6% of non-airline revenues in FY 2018.

Retail, food and beverage concessions are located throughout the main terminal building and in both airline concourses. Hudson-NIA Norfolk manages all Airport retail operations. As of January 2019, retail shops located in the Airport included Hudson News & Book Corner, Discover Hampton Roads, KidsWorks and Tech on the Go and Sweet Indulgences.

HMS Host Corporation manages food and beverage operations at the Airport, including restaurants and lounges throughout the facility. As of January 2019, offerings included The Local @ ORF, Starbucks, Burger King, Great American Bagel Bakery, Here's to the Heroes, LaTapenade, James River Grill, Back Bay Bistro, and ORF|MKT.

FBO concession revenues (described below) represented 0.8% of total operating revenues and 1.1% of nonairline revenue in FY 2018.

Terminal concession revenues represented 8% of total operating revenues and 11.3% of non-airline revenues in FY 2018.

Building Rentals

Building rent comprised 2.7% of total revenue and 3.8% of non-airline revenue in FY 2018. In June 2009, the Authority entered into a concession agreement with Landmark Aviation, which was later bought by Signature Flight Support ("Signature") to conduct FBO operations at the Airport. Signature's lease expires on June 30, 2024 and has one option year. This revenue category includes the rent that Signature pays the Authority based on a fixed schedule detailed in the lease. Signature also pays a fuel flowage fee and a gross receipts fee based on services and sales, which revenue is included in concession revenue.

THE AUTHORITY'S CAPITAL IMPROVEMENT PROGRAM

Over the next several years, the Authority expects to undertake Airport capital projects, including, in the near term, the 2019 Parking Project, refurbishing and improving terminal facilities, acquiring equipment, environmental studies and pavement rehabilitation. In the long term, the Authority expects to construct a new parallel runway 5R-23L, which would require a significant capital investment. These near and long term projects comprise the capital improvement program (the "CIP").

In March 2019, the Authority submitted the 2020 through 2024 CIP to the FAA. While most projects are demand-based, others are dictated by design standards, safety, federal requirements, or rehabilitation needs. There is a higher level of uncertainty as to the estimated cost and schedule of projects in the later years of the CIP, as compared to those scheduled to be undertaken within the next few years. The Authority is in the process of updating its Master Plan (originally adopted in 2005) pursuant to which a new planning forecast will be developed to determine future needs beyond the next five years and the options to accommodate the projected long-term growth.

The estimated cost of the Authority's five-year CIP is approximately $238.7 million, of which $69.7 million is for the 2019 Parking Project. Various components of the CIP and their funding sources include PFCs ($58.0 million), AIP grants ($68.1 million), state grants ($37.3 million), general revenues of the Authority ($16.7 million) and Series 2019 Bond proceeds ($58.6 million). For further information on the CIP, see APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT - Airport Facilities."

The CIP is subject to change from time to time as capital improvement priorities change as a result of airport activity, airline industry requirements and national or local economic conditions. The estimated costs of, and the projected schedule for, and the funding plan for the CIP are also subject to uncertainties. Such future projects will only be undertaken in response to identified demand and as economically justified. The near term projects are expected to be funded with federal and state grants. The long term CIP is anticipated to be funded by net revenues of the Airport, bond proceeds, federal grants, state grants, and PFC Revenues. The Authority has not committed to issuing any Additional Bonds to finance the CIP. The funding plan for the CIP assumes that various grants from the FAA will be received in amounts and at times necessary to pay a portion of the costs of the CIP. See "AVIATION AND OTHER INVESTMENT CONSIDERATIONS – CIP Costs and Schedule."

REPORT OF THE AIRPORT CONSULTANT

The Airport Consultant Report is attached hereto as APPENDIX A and should be read in its entirety to obtain a more complete description of the Airport, its operations, the 2019 Parking Project and other proposed forecasts. See "REPORT OF THE AIRPORT CONSULTANT" and APPENDIX A – "REPORT OF THE AIRPORT CONSULTANT."

The Airport Consultant Report provides an overview of the economic base of the Air Trade Area and of the primary economic and demographic variables (including population, personal income, gross regional and domestic product, employment, consumer prices and other economic conditions and events) nationally and in the Air Trade Area that drive demand for passenger and cargo air transportation services and a forecast of such variables for Fiscal Years 2019 through 2028, the "forecast period." The Report also describes air service at the Airport currently, identifies the primary factors that affect demand for air travel that influence passenger and cargo airline profitability and decisions, and summarizes the Airport Consultant's forecast, and the assumptions behind the forecast, of air traffic, including passenger enplanements, aircraft operations and landed weights, at the Airport for the forecast period.

The Report also includes the Airport Consultant's review of existing Airport facilities and a review of the Airport's capital improvement program and existing Airport agreements and obligations. The Airport Consultant prepared the aviation activity and financial forecasts included in the Report, along with underlying assumptions, evaluating the ability of the Authority to generate General Revenues sufficient to meet the funding requirements and obligations established by the Indenture during the forecast period.

The Airport Consultant notes, however, that although it believes that the approach and assumptions used by the Airport Consultant and by the Airport are reasonable and provide an appropriate basis for the financial forecasts, any forecast is subject to uncertainties, that some assumptions used as basis of the forecasts will not be realized, that unanticipated events and circumstances may occur, that there are likely to be differences between the financial forecast and actual financial results and that those variations could be material. The Report should be read in its entirety for an understanding of the forecasts and the underlying assumptions contained in such report. The Airport Consultant has no responsibility to update the Report because of events and transactions occurring after the date of the Report.

The following table, which has been extracted from the Report, presents the forecast of the Airport Consultant of debt service coverage through FY 2028, assuming the issuance of the Series 2019 Bonds. Such table is subject in all respects to the qualifications, conditions and assumptions set forth in the Report. The forecast indicates compliance with the rate covenant under the Indenture. See APPENDIX A - "REPORT OF THE AIRPORT CONSULTANT – Debt Service Coverage." Such exhibits provide the projections of the Airport Consultant regarding Airport Revenues, Operating Expenses and Net Revenue for such Fiscal Years in determining forecasts of debt service ratios.

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Debt Service Coverage Ratio Table (000s)

	Estimated	Preliminary Budget	Forecast							
	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Operating revenues	$41,946	$45,119	$46,006	$50,069	$51,070	$52,092	$52,941	$53,783	$54,809	$55,847
Non-operating revenues										
Customer facility charge	1,906	2,860	2,907	2,955	3,003	3,049	3,095	3,142	3,190	3,237
Unrestricted State grants	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Unrestricted federal grants - K9	152	152	155	158	161	164	167	170	173	176
Other income	557	300	300	300	300	300	300	300	300	300
Interest income on State grants	35	35	35	35	35	35	35	35	35	35
Investment income/(loss)	0	0	0	0	0	0	0	0	0	0
General Revenues	$46,596	$50,466	$51,403	$55,517	$56,569	$57,640	$58,538	$59,430	$60,507	$61,595
Less: Operating Expenses	($34,189)	($36,273)	($37,440)	($37,882)	($38,939)	($40,027)	($41,146)	($42,450)	($43,640)	($44,864)
Net Revenues	$12,407	$14,193	$13,963	$17,635	$17,630	$17,613	$17,392	$16,980	$16,867	$16,731
Debt Service Requirement										
Debt service	$4,219	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
Less: PFC-eligible debt service	(1,116)	0	0	0	0	0	0	0	0	0
Total Debt Service Requirement	$3,102	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
Debt service coverage ratio	**399.9%**	**336.0%**	**331.2%**	**305.1%**	**197.6%**	**193.8%**	**191.7%**	**192.8%**	**206.0%**	**204.1%**

Source: Airport Consultant Report

Columns may not add to totals shown due to rounding.

AVIATION AND OTHER INVESTMENT CONSIDERATIONS

General Factors Affecting the Airline Industry

Historically, the financial performance of the airline industry generally has correlated with the strength of the national and global economy. Certain factors that may materially affect the Airport and the airlines include, but are not limited to: (i) growth of population and the economic health of the region and the nation, (ii) airline service and route networks, (iii) national and international economic and political conditions, (iv) changes in demand for air travel, (v) service and cost competition, (vi) mergers and bankruptcy of any airlines, (vii) the availability and cost of aviation fuel and other necessary supplies, (viii) levels of air fares, fixed costs and capital requirements, (ix) the cost and availability of financing, (x) the capacity of the national air traffic control system, (xi) national and international disasters and hostilities, (xii) public health concerns, such as the spread of influenza and severe acute respiratory syndrome, (xiii) the cost and availability of employees and labor relations within the airline industry, (xiv) regulation by the federal government, (xv) environmental risks, noise abatement concerns and regulation (xvi) acts of war or terrorism, (xvii) aviation accidents, and (xviii) other risks. As a result of these and other factors, many airlines have operated at a loss in the past and many (including some that served the Airport) have filed for bankruptcy, ceased operations and/or merged with other airlines. In addition, the so-called legacy carriers have taken many actions to restructure and reduce costs including reducing their workforce, renegotiating their labor agreements, reducing routes served, consolidating connecting activity and replacing mainline jets with regional jets.

General Factors Affecting the Level of Airline Traffic

The Authority's ability to collect General Revenues and PFC Revenues are dependent primarily on the level of aviation activity and enplaned passenger traffic at the Airport. Key factors affecting airline traffic at the Airport include, among others, population growth and the economic and political conditions of the region and the nation, national and international disasters and hostilities, safety concerns arising from international conflicts, the possibilities of terrorist or other attacks, the financial health of the airline industry and of individual airlines, airline service, and routes, airline competition and airfares, airline consolidation and alliances, availability and price of aviation and other fuel, capacity of the national air traffic control system and various other local, regional, national and international factors. Many of these factors, most of which are outside of the Authority's control, are discussed in detail in APPENDIX A — "REPORT OF THE AIRPORT CONSULTANT." If aviation activity at the Airport does not meet forecast levels, a corresponding reduction is likely to occur both in forecast General Revenues (absent an increase in the Authority's rentals, rates, fees and charges).

Pilot Shortage

A thinning supply of pilots and an upturn in pilot retirements has led to a growing shortage of airline pilots. Other factors contributing to the shortage are limited training opportunities and continued growth in military aviation. This has led to higher pilot salaries, which cuts into profits as labor costs are the number one expense for the airlines. Unions are also pushing for more benefits. Pilot demand was boosted by new pilot duty and rest rules (FAR117) that went into effect in January 2014. If economic growth and aviation traffic continue to grow, it may be difficult for the air carriers to meet the demand for pilots.

Conversely, large pilot pay rate increases and the recent uptick in hiring at legacy airlines has resulted in a sharp increase in enrollments at flight schools. Moreover, higher fuel prices cause U.S. airlines to moderate growth, and while the amount of available pilots will likely not meet the demand in the near-term, the pilot shortage is expected to be less of a problem after the next several years.

Growth of Low-Cost Carriers

A low-cost carrier or ultra-low-cost carrier (each an "LCC" or "ULCC") is an airline that generally has lower fares for customers and which is able to take advantage of an operating cost structure that is significantly lower than the cost structures of the network carriers. These lower costs can include lower labor costs, a streamlined aircraft fleet and more efficient operations. Because of these lower cost structures, LCCs/ULCCs can conceivably remain profitable while offering lower fares to the traveling public.

Over the last decade, as larger U.S. carriers consolidated and became more focused on capacity discipline, the ticket prices for their flights began to increase. LCCs/ULCCs emerged in markets where passenger levels were significant enough that the LCCs/ULCCs could overcome any barrier to entry. The low cost structure of the LCCs/ULCCs stimulated traffic and budget conscious travelers to emerge as an underserved segment of the traveling public.

There can be no assurance that the LCCs/ULCCs will continue to maintain such levels in the future. The continued presence of the LCCs/ULCCs serving at the Airport, and the levels at which such airlines might provide service at the Airport, are a function of a variety of factors, including: airline fares and competition; airline industry economics, including labor costs and the price of aviation fuel; capacity of the Airport and competition from other airports; and the strength of the O&D market at the Airport. Most of these factors are beyond the control of the Authority. Accordingly, no assurance can be given as to the levels of aviation activity that the LCCs/ULCCs will provide at the Airport.

Airline Mergers, Acquisitions, and Alliance

In response to competitive pressures and increased cost, airlines have merged and acquired competitors in an attempt to combine operations in order to increase cost synergies and become more competitive. In 2009, Delta Air Lines merged with Northwest Airlines. In 2009, Republic Airways Holdings, a regional airline, acquired Frontier and Midwest Airlines but, in 2013, sold Frontier to Indigo Partners LLC, a private equity firm. In 2010, United Airlines and Continental Airlines completed the merger of two airlines, now operating as United Airlines, and in 2011, Southwest announced the closing of its acquisition of AirTran Holdings, Inc., the former parent company of AirTran Airways, Inc. ("AirTran"). The acquisition extended Southwest's route network and added new markets, such as Atlanta (the largest domestic market Southwest did not previously serve) and Reagan National Airport in Washington, D.C. It also provided Southwest with access to international leisure markets in the Caribbean and Mexico. The FAA granted Southwest a single operating certificate on March 1, 2012, allowing Southwest to complete full integration of AirTran in 2014. In April 2015, American and US Airways completed their merger which created the largest airline in the world in terms of operating revenue and revenue passenger miles. In 2016, Alaska Air Group acquired Virgin America and became the fifth largest airline in the United States.

In addition, all of the large U.S. airlines are members of alliances with foreign-flag airlines. These alliances 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. Any further airline consolidation could change airline service patterns. At this time, it is not possible to predict the effect of any future airline consolidation at the Airport.

Aviation Security Concerns

With enactment of the Aviation and Transportation Security Act ("ATSA") in November 2001, the TSA was created and established different and improved security processes and procedures. ATSA mandates certain individual, cargo and baggage screening requirements, security awareness programs for airport personnel and deployment of explosive detection devices. ATSA also permits the deployment of air marshals on all flights and requires air marshals on all "high-risk" flights. The federal government controls aviation industry security requirements, which can significantly impact the economics of the industry. Additional security requirements due to unexpected events could increase costs directly and indirectly to the industry and could have an adverse effect on passenger demand.

Cost of Aviation Fuel

Airline profitability is significantly affected by the price of aviation fuel. According to Airlines for America, fuel is the 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 and refining facilities 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.

Public Health Risks

Public health concerns affect air travel demand from time to time. In 2003, concerns about the spread of severe acute respiratory syndrome ("SARS") led public health agencies to issue advisories against nonessential travel to certain regions of the world. In 2009, concerns about the spread of influenza caused by the HINI 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. More recently, 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 has spread, a list that included more than 50 countries and territories.

Effect of Bankruptcy of Air Carriers

Treatment of Airline Agreements in Airline Bankruptcies. If a bankruptcy case is filed with respect to an airline operating at the Airport, the Airline Agreement to which the debtor airline is a party will be treated as an executory contract or unexpired lease pursuant to Section 365 of the United States Bankruptcy Code (the "Bankruptcy Code"). Under Section 365, a trustee in bankruptcy or the airline as debtor-in-possession might reject the Airline Agreement to which such airline is a party, in which case, among other things, the rights of that airline to continued possession of the facilities subject to the Airline Agreement (including gates and boarding areas) would terminate. Such facilities could ultimately be leased by the Authority to other airlines. The Authority's ability to lease such facilities to other airlines may depend on the state of the airline industry in general, on the nature and extent of the increased capacity at the Airport, if any, resulting from the airline's bankruptcy, and on the need for such facilities by other airlines. The rejection of the Airline Agreement in connection with the bankruptcy of an airline operating at the Airport may result in the loss of General Revenues to the Authority and a resulting increase in the costs per enplaned passenger for the other airlines at the Airport. In addition, in any airline bankruptcy the Authority may be required to repay landing fees, terminal rentals and other amounts paid by the airline to the Authority during the 90-day period prior to the date of the bankruptcy filing. Such payments are considered "preferential" and are avoidable in a bankruptcy case pursuant to Section 547 of the Bankruptcy Code. The Authority would, however, likely have defenses to any claim brought under Section 547 of the Bankruptcy Code, including that the subject payments were made in the ordinary course of business or that the Authority provided subsequent new value to the airline.

Also, under the Bankruptcy Code, any rejection of the Airline Agreement could result in the Authority holding a claim for rents and other items that would have accrued in the future, which claim would rank as that of a general unsecured creditor of an airline, in addition to pre-bankruptcy amounts owed.

Treatment of PFCs in Airline Bankruptcies. The PFC Act provides that PFCs collected by the Collecting Carriers constitute a trust fund held for the beneficial interest of the eligible public agency (i.e., the 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 for financial statements. However, the Collecting Carriers are permitted to commingle PFC collections with other revenues and are also entitled to retain interest earned on PFC collections until such PFC collections are remitted.

In the event of a bankruptcy, the PFC Act, as amended in December 2003 by Vision 100 (as hereinafter defined) provides certain statutory protections to eligible public agencies imposing PFCs, including the Authority, with respect to PFC collections. It is unclear, however, whether the Authority would be able to recover the full amount of PFC trust funds collected or accrued with respect to a Collecting Carrier in the event of its liquidation or cessation of business. Vision 100 requires an airline that files for bankruptcy protection, or that has an involuntary bankruptcy proceeding commenced against it, to segregate PFC revenue in a separate account for the benefit of the eligible public agencies entitled to such revenue. Prior to the amendments made by Vision 100 allowing PFCs collected by airlines to constitute a trust fund, at least one bankruptcy court indicated that PFC Revenues held by an airline in bankruptcy would not be treated as a trust fund and would instead be subject to the general claims of the unsecured creditors of such airline. In connection with another bankruptcy proceeding prior to Vision 100, a different bankruptcy court entered a stipulated order establishing a PFC trust fund for the benefit of various airports to which the bankrupt airline was not current on PFC payments. Although Vision 100 should provide some protection for eligible public agencies in connection with PFC Revenues collected by an airline in bankruptcy, no assurances can be given as to the approach bankruptcy courts will follow in the future.

The Authority also cannot predict whether a Collecting Carrier operating at the Airport that files for bankruptcy would have properly accounted for PFCs owed to the Authority or whether the bankruptcy estate would have sufficient moneys to pay the Authority in full for PFCs owed by such Collecting Carrier. Based on Vision 100, it is expected, although no assurance is given, that the Authority would be treated as a secured creditor with respect to PFCs held by a Collecting Carrier which becomes involved in a bankruptcy proceeding.

The cessation of operations by a Signatory Airline with significant operations at the Airport would have a material adverse effect on operations, General Revenues (with the resultant effect on repayment of the Series 2019 Bonds), PFC Revenues and the cost to the other airlines of operating at the Airport. Currently, domestic gates and related facilities at the Airport are preferentially leased by the Authority to the Signatory Airlines pursuant to the Airline Agreements. In the event of a Signatory Airline default, the Authority has the power to terminate the Airline Agreement and exclude such Signatory Airline from its leased premises and assigned aircraft parking positions. See APPENDIX D – "SUMMARY OF CERTAIN PROVISIONS OF AIRLINE USE AND LEASE AGREEMENT."

Impact of Regional and National Economic Conditions on the Airport

The demographic and economic characteristics of the Air Trade Area comprise the underlying components of air transportation demand for passengers and commercial goods. This relationship is particularly true for the O&D passenger traffic, which is an important component of demand at the Airport. Although the economic base of the Air Trade Area is considered capable of supporting increased demand for air travel at the Airport, employment and other economic indices of the Air Trade Area may negatively impact forecasted results. While the ATA projects a gross regional product ("GRP") annual growth rate to be positive during the forecast period, it remains lower than the Commonwealth of Virginia and U.S. annual growth rate projections. Most of these factors are beyond the control of the Authority. Accordingly, no assurance can be given as to the impact of regional and national economic conditions at the Airport. See APPENDIX A — "REPORT OF THE AIRPORT CONSULTANT."

Construction Risks – Delays and Cost Increases; Additional Bonds

The estimated costs of, and schedules for, the 2019 Parking Project are subject to a number of uncertainties. The completion of the 2019 Parking Project may be adversely affected by a number of factors, including: (i) estimating errors, (ii) design and engineering errors, (iii) changes to the scope of the 2019 Parking Project, (iv) delays in contract awards, (v) material and/or labor shortages, (vi) unforeseen site conditions, (vii) adverse weather conditions or other casualty events, (viii) contractor defaults, (ix) labor disputes, (x) unanticipated levels of inflation, and (xi) environmental and/or permitting issues.

Climate Change Issues and Possible New Regulations

Climate change concerns are shaping laws and regulations at the federal and state levels that could have a material adverse effect on airlines operating at the Airport and could also affect ground operations at the Airport. Studies report that airplane emissions equal approximately 12% of all U.S. transportation and more than 3% of total U.S. greenhouse gas emissions. While the United States Environmental Protection Agency (the "EPA") does not currently regulate greenhouse gas ("GHG") emissions from aircrafts, it could do so in the future. When drafting aircraft emission regulations, the EPA must consult with the Administrator of the FAA and the Secretary of Transportation, and such regulations must not significantly increase noise or adversely affect safety. The President may also disapprove if the Secretary of Transportation advises that the regulations create a hazard to aircraft safety. The Authority can provide no assurance as to the likelihood or potential impact of any such future proposed or enacted regulations.

Hurricanes, Flooding, Sea-Level Rise and Other Natural Risks

The Airport is located in the Mid-Atlantic region of the east coast of the United States. The Mid-Atlantic region is an area that is periodically susceptible to damaging storms, storm surge, and flooding. The risk of hurricanes, tropical storms or other major weather events affecting the Air Trade Area and interrupting commerce and military activities within Hampton Roads is a material risk that could negatively affect the regional economy and the overall aviation activity level at the Airport to pay debt service on the Series 2019 Bonds. Further, storm and flooding-related risks are likely to intensify over time if scientific projections about climate change and sea-level rise are correct. In addition, the Airport is located within a seismic zone that has experienced earthquakes in the past 15 years, and there can be no assurance that Airport facilities would not be damaged in any future earthquakes.

Environmental Regulations

The FAA has jurisdiction over flying operations generally, including personnel, aircraft, ground facilities and other technical matters, as well as certain environmental matters. Environmental regulations of general applicability (such as hazardous waste handling and disposition requirements, underground storage tank rules, stormwater permitting requirements, and the like) which are enforced by the Federal Environmental Protection Agency and the Virginia Department of Environmental Quality, not FAA, apply to the Airport; compliance with those requirements may impose costs from time to time.

Capacity of the Airport

In addition to any future constraints that may be imposed by the capacity of the national air traffic control and airport systems, future growth in airline traffic at the Airport will depend on the provision of increased capacity at the Airport itself. No significant capacity constraints now exist at the Airport and none are foreseen for many years. Planned additions to terminal, parking, and other facilities are also intended to ensure that Airport capacity will be available to accommodate forecast passenger demand.

In the long term, the Authority has plans to construct a second parallel runway, and in the nearer term intends to rehabilitate significant portions of its primary air carrier runway. See the section "THE AUTHORITY'S CAPITAL IMPROVEMENT PLAN." The runway pavement rehabilitation project is expected to be conducted in phases, with construction occurring in the overnight hours outside of scheduled airline service.

CIP Costs and Schedule

The estimated costs of, and the projected schedule for, the projects in the CIP for the Airport depend on various sources of funding, and are subject to a number of uncertainties. The ability of the Authority to complete these projects within the current budgets and on the current schedules may be adversely affected by various factors including: (1) estimating errors, (2) design and engineering errors, (3) changes to the scope of the projects, (4) delays in contract awards, (5) material and/or labor shortages, (6) delays due to airline operational needs, (7) unforeseen site conditions, (8) adverse weather conditions, (9) contractor defaults, (10) labor disputes, (11) unanticipated levels of inflation, (12) litigation, and (13) environmental issues.

No assurance can be given that the costs of these projects will not exceed the current budget for these projects or that the completion 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. The issuance of Additional Bonds may result in increased costs per enplaned passenger to the airlines. At present, the Authority is unable to estimate the costs associated with each of the risks identified above and the total impact of these risks if such events were to occur. In addition, the Authority may ultimately decide not to proceed with certain capital projects or may proceed with them on a different schedule.

Cybersecurity

Similar to other large organizations, the Authority and other airlines rely on electronic systems and technologies to conduct operations. Computer networks and data transmission and collection are vital to the safe and efficient operations of the Airport, the airlines that serve the Airport and other tenants of the Airport. Despite security measures, information technology and infrastructure of the Airport, any of the airlines serving the Airport or any other tenants at the Airport 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 in the efficiency of the operation of the Airport and/or the airlines serving the Airport and the services provided at the Airport, thereby adversely affecting the ability of the Airport to generate revenue. The Authority maintains a security posture designed to deter cyber-attacks and is committed to deterring attacks on its electronic systems and responding to such attacks to minimize their impact on operations. However, no assurances can be given that the Authority's security measures will prevent cyber-attacks, and no assurances can be given that any cyber-attacks, if successful, will not have a material adverse effect on the operations or financial condition of the Authority.

Growth of Transportation Network Companies

A significant source of non-airline revenues is generated from ground transportation activity, including use of on-Airport parking facilities, rental car transactions, trip fees paid by taxi, limousine, and transportation network companies such as Uber and Lyft ("TNCs") that connect paying passengers with drivers who provide the transportation using their own commercial and non-commercial vehicles. The relative market share of these sources of revenue is shifting – as an example, the popularity of TNCs has increased because of the increasing number of cities where TNCs operate, the other technological innovations in ground transportation, convenience of requesting a ride through a mobile application, the ability to pay for this service without providing cash or other payment to the hired driver and competitive pricing.

In late 2016, the Authority negotiated leases with Uber and Lyft. In August 2018 (FY 2019), the Authority approved a rate increase for the TNCs to $2.50 per trip through June 30, 2021. This rate increase was not reflected in the FY 2019 budget amount, and as a result, TNC revenues are forecast to increase 25% in FY 2020. The Authority reserves the right to adjust the fee after June 30, 2021. TNCs accounted for 262,131 total trips in the nine-month period ended March 31, 2019, which constitutes a 42.0% increase from the 184,561 total trips in the nine-month period ended March 31, 2018. During the same period, the sum of parking revenue and TNC revenue increased by 10.8%, and there was an increase in enplanements of 10.8%. Although it currently does not appear that TNCs have had a significant effect on revenues generated through ground transportation, it is possible that further growth in and use of TNCs may have a material adverse impact on the Authority's parking revenues which may or may not be replaced by revenues from the Authority's agreements with TNCs. Such risks may have an effect on the assumption in the Airport Consultant Report that parking revenues will always rise with enplanements.

Technological Innovations in Ground Transportation

New technologies (such as autonomous vehicles and connected vehicles) and innovative business strategies in established markets such as commercial ground transportation and car rental may continue to occur and may result in further changes in Airport passengers' choice of ground transportation mode. While the Authority makes every effort to anticipate demand shifts, there may be times when the Authority's expectations differ from actual outcomes. In such event, revenue from one or more ground transportation modes may be lower than expected. The Authority cannot predict with certainty what impact such new technologies, innovations in ground transportation or new business strategies will have over time on revenues from non-airline sources such as parking, rental cars and other ground transportation services.

Availability of Funding

The Authority's plan of finance for many of the completed capital improvement plan projects at the Airport assumed that PFC Revenues would be available in certain amounts and at certain times for the payment of debt service on related PFC obligations issued to pay the costs of several of such projects. In addition, the Authority's plan of finance for its five-year capital improvement plan assumes that federal grants will be received in certain amounts and at certain times to pay certain capital project costs. See "AVIATION AND OTHER INVESTMENT CONSIDERATIONS – Capital Improvement Program" above. No assurance can be given that these sources of funds actually will be available in the amounts or on the schedule assumed.

Also, as discussed above, the assumptions with respect to entitlement and discretionary funding, although considered reasonable by the Authority, are inherently subject to certain uncertainties and contingencies. Actual entitlement and/or discretionary funding levels and timing may vary and such differences may be material.

To the extent that any portion of the funding assumed in the plan of finance for capital projects at the Airport is not available as anticipated, the Authority may be required to issue Additional Bonds to pay the costs of such capital projects and to increase airline rates and charges to pay debt service on the Bonds and to fund the required coverage thereon. As an alternative to issuing Additional Bonds, the Authority may ultimately decide not to proceed with certain capital projects or may proceed with them on a different schedule.

The amount of PFC revenue collected for the Airport in past years has varied, and in future years will vary, based upon the actual number of passenger enplanements at the Airport. No assurance can be given that any level of enplanements will be realized. The adverse impact of decreased enplanements could be direct or indirect. For example, PFC shortfalls could result in increases in terminal rentals or other rates and charges at the Airport, thereby negatively impacting the airlines' desire to operate at the Airport. Furthermore, under the terms of the PFC Acts (as defined below), the FAA may terminate the Authority's authority to impose a PFC as described in the following subsection.

Passenger Facility Charge background. Pursuant to the Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101-508), the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (P.L. 106-181) and the 2003 FAA Reauthorization Act (collectively, the "PFC Acts"), the FAA has approved the Authority's applications to require airlines to collect and remit to the Authority a $4.50 PFC on each enplaning revenue passenger at the Airport. **PFCs are an important element of the Authority's funding for its capital improvement program but PFC Revenues are not part of the security pledged to support payment of the Series 2019 Bonds.** See "THE AUTHORITY'S CAPITAL IMPROVEMENT PROGRAM" and "APPENDIX A — "REPORT OF THE AIRPORT CONSULTANT."

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 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 for financial statements. Airlines are permitted, however, to commingle PFC collections with other revenues and also are entitled to retain interest earned on PFC collections until such PFC collections are remitted.

In 2003, the Vision 100 – Century of Aviation Reauthorization Act ("Vision 100") became effective. Vision 100 requires an airline that files for bankruptcy protection, or that has an involuntary bankruptcy proceeding commenced against it, to segregate passenger facility revenue in a separate account for the benefit of the eligible agencies entitled to such revenue. Prior to the amendments made by Vision 100 to allow PFCs collected by airlines to constitute a trust fund, at least one bankruptcy court indicated that the PFC Revenues held by an airline in bankruptcy would not be treated as a trust fund and would instead be subject to the general claims of the unsecured creditors of such airline.

The Authority cannot predict whether an airline that files for bankruptcy protection would have properly accounted for the PFCs or whether the bankruptcy estate would have sufficient moneys to pay the Authority in full for the PFCs owed by such airline. *PFCs are not pledged to the repayment of the Series 2019 Bonds.*

Under the terms of the PFC Acts, the FAA may terminate the Authority's authority to impose a PFC if the Authority's PFC Revenues are not being used for approved projects in accordance with the FAA's approval, the PFC Acts or the regulations promulgated thereunder, or if the Authority otherwise violates the PFC Acts or regulations. The FAA may also terminate the Authority's authority to impose a PFC for a violation by the Authority of the Airport Noise and Capacity Act. The PFC termination provisions contained in the regulations provide both informal and formal procedural safeguards. In addition, although the FAA's PFC regulations require Collecting Carriers (as defined in the PFC Acts) to account for PFC collections separately, and indicate that such funds are to be regarded as trust funds held by the Collecting Carriers for the beneficial interest of the public agency imposing the PFC, recent bankruptcy court decisions indicate that in a bankruptcy proceeding involving a Collecting Carrier, it is likely that PFCs will not be treated as trust funds and that airports are not entitled to any priority over other creditors of the Collecting Carrier as to such funds.

Considerations Regarding Passenger Facility Charges

The amount of PFC Revenues collected by the Authority in future years will vary based upon (i) continuing authorization of the FAA to impose PFCs, and (ii) the actual number of passenger enplanements at the Airport. No assurance can be given that the authority to impose PFCs will continue beyond the current PFC authority or that passenger enplanement will increase or be maintained at their current levels. The Authority's authority to impose the PFC and use PFC Revenues is subject to certain terms and conditions provided in the PFC Acts, the federal regulations relating to PFCs and each specific authorization to impose PFCs (the "PFC Authority"). If the Authority fails to comply with these requirements, the FAA may take action to terminate or to reduce the Authority's authority to impose or to use PFCs. Some of the events that could cause the Authority to violate these provisions are not within the Authority's control. In addition, failure to comply with the provisions of federal law relating to airport noise may lead to termination of the Authority's authority to impose PFCs. The PFC termination provisions contained in the regulations provide both informal and formal procedural safeguards, including a process that must last a minimum of 180 days before the FAA could terminate the Authority's authority to impose a PFC for a violation of the PFC Act. There is no assurance that the PFC Act will not be repealed or amended or that the PFC regulations or any PFC Authority will not be amended in a manner that would adversely affect the Authority's ability to collect and use PFC Revenues. The Authority believes that it is in compliance with all applicable requirements of the PFC Act, the PFC regulations and the PFC Authority.

Federal Funding; Impact of Federal Sequestration

On October 3, 2018, Congress passed a five-year reauthorization bill for the FAA, known as the "FAA Reauthorization Act of 2018," which was signed into law on October 5, 2018 by the President. The FAA Reauthorization Act of 2018, among other things, authorizes the FAA's programs for five federal fiscal years, and increases funding for the Airport Improvement Program ("AIP"). 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 set asides and the national priority ranking system). Between 2007 and the prior reauthorization bill in 2012, there were 23 short-term extensions of the FAA's authority and a two-week partial shutdown of the FAA in summer 2011. There can be no assurance that Congress will enact and the President will sign future FAA reauthorization acts or provide for additional extensions before the current authorization expires. Failure to adopt such legislation may have a material adverse impact on the AIP grant program and the Airport. In addition, the AIP could be affected by the automatic across-the-board spending cuts known as sequestration, described in more detail below. The 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 Authority for the Airport, such reduction could (i) increase by a corresponding amount the capital expenditures that the Authority would need to fund from other courses (including operating revenues, Additional Bonds, or Additional PFC Bonds), (ii) result in decreases to the CIP, or (iii) extend the timing for completion of certain projects. See "THE AUTHORITY'S CAPITAL IMPROVEMENT PROGRAM" and "APPENDIX A — "REPORT OF THE AIRPORT CONSULTANT."

Federal funding received by the Airport also could be adversely affected by implementation of certain provisions of sequestration, a budgetary feature first introduced in the Budget Control Act of 2011. Sequestration could adversely affect FAA operations, TSA budgets, and the availability of certain federal grant funds typically received annually by the Airport. This may cause the FAA or TSA to implement furloughs of their employees and hiring freezes, including air traffic controllers, and result in flight delays and flight cancellations. The full impact of such sequestration measures on the Airport is unknown at this time, and hence the Authority cannot predict future sequestration funding cuts or furloughs of federal employees responsible for federal airport security screening, air traffic control or the impact of such actions on airline traffic at the Airport or the Authority's revenues.

Sequestration measures affecting Department of Defense spending would also have an adverse effect on the Authority. According to Department of Defense's spending by state report, the Commonwealth of Virginia ranked second in the nation in defense spending with $46.2 billion in the federal Fiscal Year ended September 30, 2017, making defense spending the largest contributor to the Commonwealth of Virginia's GRP. Specifically, the Air Trade Area was estimated to receive $20 billion in direct Department of Defense spending in 2017.

Rate Covenant Implications

The Authority has covenanted in its Resolution that it will impose and prescribe such schedule of rates, rentals, fees and charges for the use and services of the facilities and commodities furnished by the Airport and will revise the same from time to time whenever necessary; and will collect the income, receipts and other moneys derived therefrom, so as to produce General Revenues which will be sufficient to pay all operation and maintenance costs; to pay the principal of and interest and premium, if any, on any General Revenue Bonds when due, to pay the City all amounts required to be paid to them by reason of the payment by them of the principal of and interest on bonds, notes or other evidences of indebtedness (including general obligation bonds) issued by them to finance all or any portion of the Airport; to pay all claims, charges or obligations payable from General Revenues; and to carry out all provisions and covenants of the Indenture. At all times when General Revenue Bonds are Outstanding and in any and all events, such rates, rentals, fees and charges shall be imposed, prescribed, adjusted, enforced and collected which will yield General Revenues in an amount at least equal to 125% of the Debt Service Requirement on all General Revenue Bonds. See APPENDIX C – "DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE."

Implementation of an increase in the schedule of rates, rentals, fees and charges for the use of the Airport could have a detrimental impact on the operations of the Airport by making the cost of operating therein unattractive to airlines, concessionaires and others, and/or by reducing the operating efficiency of the Airport.

Enforceability of Remedies

The rights of the owners of the Series 2019 Bonds and the enforceability of the Authority's obligation to make payments on the Series 2019 Bonds may be subject to bankruptcy, insolvency, reorganization, moratorium and similar laws affecting creditors' rights under existing law or under laws enacted in the future and may also be subject to the exercise of judicial discretion under certain circumstances. The opinion of Bond Counsel delivered at the time of the initial issuance of the Series 2019 Bonds will provide that the rights of the holders of the Series 2019 Bonds under the Indenture and under the Series 2019 Bonds and the enforceability of such rights may be subject to the valid exercise of judicial discretion, and to valid bankruptcy, insolvency, reorganization, moratorium and other laws for the relief of debtors. See APPENDIX E— "FORM OF OPINION OF BOND COUNSEL."

Ratings on the Series 2019 Bonds

The ratings of the Series 2019 Bonds may be lowered or withdrawn depending on various factors, including the ratings agencies' assessment of the Authority's financial strength.

Two credit rating agencies have assigned preliminary credit ratings to the Series 2019 Bonds. The ratings of the Series 2019 Bonds are not a recommendation to purchase, hold or sell the Series 2019 Bonds, and the ratings do not comment on the market price or suitability of the Series 2019 Bonds for a particular investor. The ratings of the Series 2019 Bonds may not remain for a given period of time and may be lowered or withdrawn depending on, among other things, each ratings agency's assessment of the Authority's financial strength and changes in each rating agency's methodology in assigning a credit rating to the Series 2019 Bonds. The Authority is not required to maintain a specified rating in respect to the Series 2019 Bonds.

Risk of Future Legislative and/or Court Decisions

Legislation affecting tax-exempt obligations is regularly considered by the United States Congress and may also be considered by the Virginia General Assembly. Court proceedings may also be filed, the outcome of which could modify the tax treatment of obligations such as the Series 2019 Bonds. There can be no assurance that legislation enacted or proposed, or actions by a court, after the date of issuance of the Series 2019 Bonds will not have an adverse effect on the tax status of the interest on the Series 2019 Bonds or the market value or marketability of the Series 2019 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 2019 Bonds from gross income for federal or state income tax purposes for all or certain taxpayers.

Additionally, investors in the Series 2019 Bonds should be aware that future legislative actions (including federal income tax reform) may retroactively change the treatment of all or a portion of the interest on the Series 2019 Bonds for federal income tax purposes for all or certain taxpayers. In all such events, the market value of the Series 2019 Bonds may be affected and the ability of holders to sell their Series 2019 Bonds in the secondary market may be reduced. The Series 2019 Bonds are not subject to special mandatory redemption, and the interest rates on the Series 2019 Bonds are not subject to adjustment, in the event of any such change in the tax treatment of interest on the Series 2019 Bonds.

Assumptions in the Report of the Airport Consultant

The Airport Consultant Report should be read in its entirety for an understanding of the forecasts and the underlying assumptions. As noted in the Airport Consultant Report, any financial forecast is subject to uncertainties. Inevitably, some assumptions used to develop the forecasts will not be realized, and unanticipated events and circumstances may occur. The actual financial results achieved by the Authority over time may vary from the forecasts in the Airport Consultant Report, and the variations may be material. Further, the Airport Consultant Report does not cover the entire period through maturity of the Series 2019 Bonds, so bondholders must consider any current or future commitment to purchase and hold bonds over periods for which no forecast is provided. See APPENDIX A - "REPORT OF THE AIRPORT CONSULTANT."

AIRLINE INDUSTRY INFORMATION

The Authority's ability to generate General Revenues will depend on the ability of the Signatory Airlines, individually and collectively, to meet their obligations under the Airline Agreements. Many of the Signatory Airlines or their parent corporations are subject to the information reporting requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith file periodic reports and other information with the Securities and Exchange Commission (SEC). Such reports may be inspected and copied at the public reference facilities maintained by the SEC, which can be located by calling the SEC at 1-800-SEC-0330. The SEC also maintains a website containing reports, proxy statements, and other information statements regarding registrants that file electronically with the SEC. Information filed by airlines with the SEC is also typically available at the websites of the individual airlines. In addition, each domestic airline is required to file periodic reports of financial and operating statistics with the U.S. Department of Transportation. These reports may be inspected at the DOT's Office of Airline Information, Bureau of Transportation Statistics, Department of Transportation, 1200 New Jersey Avenue, S.E., Washington, D.C 20590, and copies of the reports may be obtained from the DOT at prescribed rates.

Neither the Authority nor the Underwriters undertake any responsibility for and make no representations as to the accuracy or completeness of the content of any reports and statements filed with the SEC or DOT as described in this section, including, but not limited to updated information contained on the SEC's website as described in this section, and including, but not limited to updated information on the SEC website or links to other Internet sites accessed through the SEC's website. Any such information is not part of this Official Statement nor has such information been incorporated by reference herein, and such information should not be relied upon in deciding whether to invest in the Series 2019 Bonds.

LEGAL MATTERS

Certain legal matters relating to the authorization and validity of the Series 2019 Bonds will be subject to the approving opinion of Kaufman & Canoles, P.C., Richmond, Virginia, Bond Counsel, which will be furnished at the expense of the Authority upon delivery of the Series 2019 Bonds, in substantially the form set forth as APPENDIX E (the "Bond Opinion"). The Bond Opinion will be limited to matters relating to authorization and validity of the Series 2019 Bonds and to the tax-exempt status of interest thereon as described in the section "TAX MATTERS". Bond Counsel has not been engaged to investigate the financial resources of the Authority or its ability to provide for payment of the Series 2019 Bonds, and the Bond Opinion will make no statement as to such matters or as to the accuracy or completeness of this Official Statement or any other information that may have been relied on by anyone in making the decision to purchase Series 2019 Bonds.

Certain legal matters will be passed on for the Authority by Vandeventer Black LLP, Norfolk, Virginia, and for the Underwriters by their counsel, Butler Snow LLP, Richmond, Virginia.

TAX MATTERS

Opinion of Bond Counsel

In the opinion of Kaufman & Canoles, P.C., Richmond, Virginia, Bond Counsel, under existing law, interest on the Series 2019 Bonds (a) is not included in gross income for federal income tax purposes, and (b) is not an item of tax preference for purposes of the federal alternative minimum tax. Interest on the Series 2019 Bonds is exempt from income taxation by the Commonwealth. No other opinion will be expressed by Bond Counsel regarding the tax consequences of the ownership of, or the receipt or accrual of interest on, the Series 2019 Bonds.

Bond Counsel's opinion will be given in reliance upon certifications by representatives of the Authority as to certain facts relevant to both the opinion and requirements of the Internal Revenue Code of 1986, as amended (the "Tax Code"), and Bond Counsel's opinion is also subject to the condition that there is compliance subsequent to the issuance of the Series 2019 Bonds with all requirements of the Tax Code that must be satisfied in order for interest income to remain excludable from gross income for federal income tax purposes. The Authority has covenanted to comply with the provisions of the Tax Code regarding, among other matters, the use, expenditure, and investment of proceeds of the Series 2019 Bonds and the timely payment of any arbitrage rebate amounts in respect to the Series 2019 Bonds to the United States Treasury. Failure of the Authority to comply with such covenants could cause interest on the Series 2019 Bonds to be included in gross income for federal income tax purposes retroactively to their date of issue.

APPENDIX E to this Official Statement contains the proposed forms of the approving opinions of Bond Counsel. Prospective purchasers of the Series 2019 Bonds should review such forms to determine the assumptions relevant to such opinion and the relevant qualifications thereto. Bond Counsel's opinions represent its legal judgment based in part upon the representations and covenants referenced therein and its review of existing law, but is not a guarantee of result or binding on the Internal Revenue Service (the "Service") or the courts. Bond Counsel assumes no duty to update or supplement its opinions to reflect any facts or circumstances that may thereafter come to Bond Counsel's attention or to reflect any changes in law or the interpretation thereof that may thereafter occur or become effective.

In addition to the matters addressed above, prospective purchasers of the Series 2019 Bonds should be aware that the ownership of tax-exempt obligations may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, S corporations, foreign corporations subject to the branch profits tax, corporations subject to the environmental tax, recipients of Social Security or Railroad Retirement benefits and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry tax-exempt obligations. Prospective purchasers of the Series 2019 Bonds should consult their tax advisors as to the applicability and impact of such consequences. Bond Counsel will not render any opinion as to these collateral federal income tax matters.

Future legislative proposals, if enacted into law, clarification of the Tax Code or court decisions may cause interest on the Series 2019 Bonds to be subject, directly or indirectly, in whole or in part, to federal or state income taxation, or otherwise prevent owners of the Series 2019 Bonds from realizing the full current benefit of the tax status of such interest. The introduction or enactment of any such legislative proposals, clarification of the Tax Code or court decisions may also affect, perhaps significantly, the market price for, or marketability of, the Series 2019 Bonds. Additionally, investors in the Series 2019 Bonds should be aware that future legislative actions (including federal income tax reform) may retroactively change the treatment of all or a portion of the interest on the Series 2019 Bonds for federal income tax purposes for all or certain taxpayers. Prospective purchasers of the Series 2019 Bonds should consult their own tax advisors regarding the potential impact of any pending or proposed federal or state tax legislation, regulation or litigation as to which Bond Counsel expresses no opinion.

Many events could affect the value and liquidity or marketability of the Series 2019 Bonds after their issuance, including but not limited to public knowledge of an audit of the Series 2019 Bonds by the Service, a general change in interest rates for comparable securities, a change in Federal or state income tax rates, legislative or regulatory proposals as described above and changes in the judicial interpretation of existing law. In addition, certain tax considerations relevant to owners of Series 2019 Bonds who purchase Series 2019 Bonds after their issuance may be different from those relevant to purchase upon issuance. Neither the opinion of Bond Counsel nor this Official Statement addresses the likelihood or effect of any such potential events or such other tax considerations.

Further, the Service has a program to audit obligations to determine whether the interest thereon is includable in gross income for federal income tax purposes. If the Service does audit the Series 2019 Bonds, under current Service procedures, the Service would likely treat the Authority as the taxpayer and the owners of the Series 2019 Bonds would have limited rights, if any, to participate.

Original Issue Premium

The Series 2019 Bonds that have an original yield below their respective interest rates, as shown on the inside cover of this Official Statement (collectively, the “Premium Bonds”), are being sold at a premium. An amount equal to the excess of the issue price of a Premium Bond over its stated redemption price at maturity constitutes premium on such Premium Bond. A purchaser of a Premium Bond must amortize any premium over such Premium Bond’s term using constant yield principles, based on the purchaser’s yield to maturity (or, in the case of Premium Bonds callable prior to their maturity, generally by amortizing the premium to the call date, based on the purchaser’s yield to the call date and giving effect to any call premium). As premium is amortized, the amount of the amortization offsets a corresponding amount of interest for the period, and the purchaser’s basis in such Premium Bond is reduced by a corresponding amount resulting in an increase in the gain (or decrease in the loss) to be recognized for federal income tax purposes upon a sale or disposition of such Premium Bond prior to its maturity. Even though the purchaser’s basis may be reduced, no federal income tax deduction is allowed. Purchasers of the Premium Bonds should consult their tax advisors with respect to the determination and treatment of premium for federal income tax purposes and with respect to the state and local tax consequences of owning a Premium Bond.

Original Issue Discount

The Series 2019 Bonds that have an original yield above their respective interest rates, as shown on the inside cover of this Official Statement (collectively, the “OID Bonds”), are being sold at an original issue discount. The difference between the initial public offering prices of such OID Bonds and their stated amounts to be paid at maturity constitutes original issue discount treated in the same manner for federal income tax purposes as interest, as described above.

The amount of original issue discount that is treated as having accrued with respect to a OID Bond is added to the cost basis of the owner of the bond in determining, for federal income tax purposes, gain or loss upon disposition of such OID Bond (including its sale, redemption or payment at maturity). Amounts received on disposition of such OID Bond that are attributable to accrued original issue discount will be treated as tax-exempt interest, rather than as taxable gain, for federal income tax purposes.

Original issue discount is treated as compounding semiannually, at a rate determined by reference to the yield to maturity of each individual OID Bond, on days that are determined by reference to the maturity date of such OID Bond. The amount treated as original issue discount on such OID Bond for a particular semiannual accrual period is equal to (a) the product of (i) the yield to maturity for such OID Bond (determined by compounding at the close of each accrual period), and (ii) the amount that would have been the tax basis of such OID Bond at the beginning of the particular accrual period if held by the original purchaser, (b)less the amount of any interest payable for such OID Bond during the accrual period. The tax basis for purposes of the preceding sentence is determined by adding to the initial public offering price on such OID Bond the sum of the amounts that have been treated as original issue discount for such purposes during all prior periods. If such OID Bond is sold between semiannual compounding dates, original issue discount that would have been accrued for that semiannual compounding period for federal income tax purposes is to be apportioned in equal amounts among the days in such compounding period.

Owners of OID Bonds should consult their tax advisors with respect to the determination and treatment of original issue discount accrued as of any date and with respect to the state and local tax consequences of owning a OID Bond. Subsequent purchasers of OID Bonds that purchase such bonds for a price that is higher or lower than the "adjusted issue price" of the bonds at the time of purchase should consult their tax advisors as to the effect on the accrual of original issue discount.

Market Discount

A purchaser (other than a person who purchases a Series 2019 Bond upon issuance at the issue price) who buys a Series 2019 Bond at a discount from its principal amount will be subject to the market discount rules of the Tax Code. In general, the market discount rules of the Tax Code treat principal payments and gain on disposition of a debt instrument as ordinary income to the extent of accrued market discount. Each potential investor should consult his tax advisor concerning the application of the market discount rules to the Series 2019 Bonds.

Information Reporting and Backup Withholding

Interest paid on the Series 2019 Bonds is subject to information reporting in a manner similar to interest paid on taxable obligations. While this reporting requirement does not by itself affect the excludability of interest on the Series 2019 Bonds from gross income for federal income tax purposes, the reporting requirement causes the payment of interest on the Series 2019 Bonds to be subject to backup withholding if such interest is paid to beneficial owners who (i) are not "exempt recipients," and (ii) fail to provide certain identifying information (such as the beneficial owner's taxpayer identification number) in the required manner or have been identified by the Service as having failed to report all interest and dividends required to be shown on their income tax returns. Generally, individuals are not exempt recipients, whereas corporations and certain other entities generally are exempt recipients. Amounts withheld under the backup withholding rules from a payment to a beneficial owner would be allowed as a refund or a credit against such beneficial owner's federal income tax liability provided the required information is furnished to the Service.

Future Events and Legislative and Regulatory Actions

There are many events that could affect the value and liquidity or marketability of the Series 2019 Bonds after their issuance, including but not limited to public knowledge of an audit of the Series 2019 Bonds by the Service, a general change in interest rates for comparable securities, a change in federal or state income tax rates, legislative or regulatory proposals affecting state and local government securities and changes in judicial interpretation of existing law. Legislation affecting tax-exempt obligations is regularly considered by the U.S. Congress and various state legislatures. Such legislation may effect changes in federal or state income tax rates and the application of federal or state income tax laws (including the substitution of another type of tax), or may repeal or reduce the benefit of the excludability of interest on the tax-exempt obligations from gross income for federal or state income tax purposes. **For example, the tax reform act that was enacted by the U.S. Congress in December 2017, and signed into law by the President on December 22, 2017, and effective after December 31, 2017, changed both corporate and individual tax rates and eliminated advance refunding bonds**. The U.S. Treasury Department and the IRS are continuously drafting regulations to interpret and apply the provisions of the Tax Code and court proceedings may be filed the outcome of which could modify the federal or state tax treatment of tax-exempt obligations. There can be no assurance that legislation proposed or enacted after the date of issue of the Series 2019 Bonds, regulatory interpretation of the Tax Code or actions by a court involving either the Series 2019 Bonds or other tax-exempt obligations will not have an adverse effect on the Series 2019 Bonds' federal or state tax status, marketability or market price or on the economic value of the tax-exempt status of the interest on the Series 2019 Bonds. Neither the Bond Opinion nor this Official Statement purports to address the likelihood or effect of any such future events or legislative and regulatory actions, and purchasers of the Series 2019 Bonds should seek advice concerning such matters as they deem prudent in connection with their purchase of Series 2019 Bonds.

LITIGATION

The Authority is involved from time to time in various legal actions. In the opinion of Vandeventer Black LLP, General Counsel to the Authority, no legal proceedings of which the Authority has received written notice are pending or threatened that contest or affect the issuance, sale, execution or delivery of the Series 2019 Bonds, or in any way contest or affect the validity of the Series 2019 Bonds or the operation of the Airport, including the Authority's ability to collect and apply Revenues as set forth in the Indenture, or which affects or relates to any of the transactions described in or contemplated by this Official Statement.

RATINGS

Moody's Investor's Service ("Moody's") and S&P Global Ratings ("S&P") have assigned long-term ratings of "A3" and "A," respectively, to the Series 2019 Bonds.

The ratings express only the views of the rating agencies. The explanation of the significance of the ratings may be obtained from Moody's and S&P, respectively. There is no assurance that any rating will continue for any period of time or that it will not be revised or withdrawn. Any revision or withdrawal or ratings on the Bonds may have an effect on the market price thereof.

UNDERWRITING

The Series 2019 Bonds are being purchased by Raymond James & Associates, Inc. (“RJA”), Siebert Cisneros Shank & Co., L.L.C., and UBS Financial Services Inc. (“UBS Financial Services Inc.”) (collectively, the “Underwriters”). The Underwriters have agreed, subject to certain conditions, to purchase the Series 2019 Bonds from the Authority at a price of $66,691,881.59, which is net of an underwriting discount of $184,228.06 (0.338% of the principal amount of its Series 2019 Bonds). The Underwriters’ obligation is subject to certain conditions precedent to closing, and they will be obligated to purchase all of the Series 2019 Bonds if any Series 2019 Bonds are purchased. The Series 2019 Bonds may be offered and sold to certain dealers (including the Underwriters and other dealers depositing such Series 2019 Bonds into investment trusts) at prices lower than such public offering prices, and such public offering prices may be changed from time to time by the Underwriters.

In the ordinary course of its various business activities, RJA and its affiliates, officers, directors, and employees may purchase sell or hold a broad array of investments and may actively trade securities, derivatives, loans, commodities, currencies, credit default swaps, and other financial instruments for their own account and for the accounts of customers. Such investment and trading activities may involve or relate to assets, securities and/or instruments of the Authority (whether directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Authority. RJA and its affiliates also may communicate independent investment recommendations, market advice or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and at any time may hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

In the ordinary course of its business, RJA and its affiliates have engaged, and may in the future engage, in transactions with, and perform services for, the Authority and its affiliates for which they received or will receive customary fees and expenses.

In the ordinary course of its various business activities, UBS Financial Services Inc. and its affiliates, officers, directors, and employees may purchase, sell or hold a broad array of investments and may actively trade securities, derivatives, loans, commodities, currencies, credit default swaps, and other financial instruments for their own account and for the accounts of customers. Such investment and trading activities may involve or relate to assets, securities and/or instruments of the Authority (whether directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the Authority. UBS Financial Services Inc. and its affiliates also may communicate independent investment recommendations, market advice or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and at any time may hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

CONTINUING DISCLOSURE

The offering of the Series 2019 Bonds is subject to the continuing disclosure requirements of Rule 15c2-12 (the “Rule”) issued by the Securities and Exchange Commission. Pursuant to the Rule, the Authority has undertaken for the benefit of the owners to make public certain annual financial information and operating data and notice of certain events by furnishing such information to the Municipal Securities Rulemaking Board (the “MSRB”) in an electronic format as required by MSRB, for posting on its Electronic Municipal Marketplace Access (“EMMA”).

See APPENDIX F - “FORM OF CONTINUING DISCLOSURE CERTIFICATE” for a more detailed description of the Authority’s continuing disclosure undertakings.

Except as noted below, there have been no instances in the previous five years in which the Authority has failed to comply with its prior continuing disclosure undertakings. The Authority previously entered into its continuing disclosure undertakings for the benefit of the owners of the Authority’s Series 2011 Bonds. In making its annual financial and operating information filings required by such continuing disclosure undertakings prior to FY 2018, (i) the Authority included debt service requirements for each immediately preceding Fiscal Year, but omitted the required calculation of debt service coverage ratio for such Fiscal Year, and (ii) the Authority did not specifically identify revenues from concessions at the Airport for each such Fiscal Year. All such required information was included in the annual financial and operating information filing for FY 2018, and the Authority has taken steps to ensure that all required information will be included in future years’ filings.

A failure by the Authority to comply with its continuing disclosure undertaking will not constitute an Event of Default under the Indenture (although the owners will have any available remedy at law or in equity to enforce the undertaking). However, a failure must be reported in accordance with the Rule and must be considered by any broker, dealer or municipal securities dealer before recommending the purchase or sale of the Series 2019 Bonds in the secondary market. Consequently, such a failure may adversely affect the transferability and liquidity of the Series 2019 Bonds and their market price.

As noted herein in “AIRPORT OPERATIONS AND THE AIR TRADE AREA – Future Airline Traffic” certain Signatory Airlines (or their respective parent corporations) are subject to the information reporting requirements of the Exchange Act and, in accordance therewith, certain information, including financial information, concerning such domestic airlines or their parent corporations, is disclosed in certain reports and statements filed with the SEC and the United States Department of Transportation (the “DOT”). In providing or causing to be provided information to EMMA, the Authority shall state that information regarding Signatory Airlines is contained in reports filed with the SEC and the DOT. Furthermore, in the event that a Signatory Airline that is an Obligated Person (as defined below) is no longer required to file reports with the SEC or the DOT, the Authority agrees to use its best efforts to obtain from such Signatory Airlines an agreement to provide to the MSRB the same financial information as that currently contained in the filings with the SEC and DOT if, at any time during the continuation of the Continuing Disclosure Certificate, such filings are no longer being made. At this time, no Signatory Airline is an Obligated Person for such purposes.

For the purposes of the Continuing Disclosure Certificate, “Obligated Person” means the Authority and each airline or other entity using the Airport under a lease or use agreement extending for more than one year from the date in question and including bond debt service as part of the calculation of rates and charges, under which lease or use agreement (or both combined) such airline or other entity has paid amounts equal to 20% of the gross revenues of the Airport for the prior two Fiscal Years of the Authority. See APPENDIX F – “CONTINUING DISCLOSURE CERTIFICATE” for the detailed provisions of the Authority’s obligation to provide continuing disclosure.

FINANCIAL STATEMENTS AND INDEPENDENT ACCOUNTANTS

The financial statements as of June 30, 2017 and 2018, and for the years then ended, included in APPENDIX B to this Official Statement, have been audited by KPMG LLP, independent accountants, as stated in their report appearing herein. The auditors have not been requested to consent, nor have they rendered any consent, to the inclusion of the financial statements in this Official Statement, nor have the auditors been engaged to perform and have not performed any procedures relating to this Official Statement or the issuance of the Series 2019 Bonds.

FINANCIAL ADVISOR

The Authority has retained PFM Financial Advisors LLC ("PFM Financial Advisors"), as financial advisor in connection with the issuance and sale of the Series 2019 Bonds. Although PFM Financial Advisors assisted in the preparation of this Official Statement, PFM Financial Advisors is not obligated to undertake, and has not undertaken to make, an independent verification or to assume responsibility for the accuracy, completeness or fairness of the information contained in this Official Statement. PFM Financial Advisors is an independent advisory firm and is not engaged in the business of underwriting, trading or distributing municipal securities or other public securities.

RELATIONSHIPS OF PARTIES

Kaufman & Canoles, P.C., bond counsel, serves from time to time as counsel to the Trustee and various of the Underwriters in transactions unrelated to this financing. Butler Snow LLP, counsel to the Underwriters, serves from time to time as counsel to the Trustee in transactions unrelated to this financing. Haneberg Hurlbert PLC (Richmond, Virginia), counsel to the Trustee, serves from time to time as counsel to various of the Underwriters in transactions unrelated to this financing.

MISCELLANEOUS

This Official Statement and any advertisement of the Series 2019 Bonds are not to be construed as a contract with the purchasers of the Series 2019 Bonds. Any statement made in this Official Statement involving matters of opinion or of estimates, whether or not so expressly identified, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized.

Financial statements of the Authority are prepared annually and are available to interested persons on the Authority's website.

The Authority has furnished all information in this Official Statement relating to it and the Airport.

Any statements in this Official Statement involving matters of opinion, whether or not expressly so stated, are intended as such and not as representations of fact.

The Authority has authorized the distribution of this Official Statement. For purposes of compliance with Rule 15c2-12, this Official Statement constitutes an official statement of the Authority that has been deemed final by the Authority as of its date.

NORFOLK AIRPORT AUTHORITY

By: /s/ Robert S. Bowen
Executive Director

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APPENDIX A

REPORT OF THE AIRPORT CONSULTANT

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Appendix A
Report of the Airport Consultant

Norfolk Airport Authority
Airport Revenue Bonds
Series 2019 (Non-AMT)

May 24, 2019

Prepared by:

DKMG Consulting LLC

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DKMG Consulting LLC

May 24, 2019

Mr. Robert S. Bowen
Executive Director
Norfolk Airport Authority
Norfolk International Airport
2200 Norview Avenue
Norfolk, Virginia 23518

RE: Appendix A: Report of the Airport Consultant
Norfolk Airport Authority
Airport Revenue Bonds, Series 2019 (Non-AMT)

Dear Mr. Bowen:

DKMG Consulting LLC (DKMG) is pleased to submit this Report of the Airport Consultant in connection with the proposed issuance by the Norfolk Airport Authority (the Authority) of its Airport Revenue Bonds, Series 2019 (Non-AMT) (the Series 2019 Bonds). This report is intended for inclusion in the Official Statement for the Series 2019 Bonds as Appendix A: Report of the Airport Consultant (Report).

Norfolk Airport Authority

The Authority was established in 1948 as a political subdivision of the Commonwealth of Virginia. Its original name was Norfolk Port Authority, which was later changed to Norfolk Port and Industrial Authority and then to the current name of Norfolk Airport Authority. The Authority was originally responsible for the supervision of the operation and maintenance of what was then known as the Norfolk Municipal Airport. The Authority subsequently received ownership of Norfolk Municipal Airport, now known as Norfolk International Airport (ORF) and has the full responsibility for ORF's operation, maintenance, and development. The Authority is governed by a Board of Commissioners (the Board) of at least seven but not more than nine members appointed for four-year terms by the City Council of the City of Norfolk (the City). The Authority has a management staff headed by the Executive Director who is appointed by the Board.

Norfolk International Airport

ORF occupies approximately 1,088 acres and is located eight miles northeast of downtown Norfolk. Access to ORF is provided via Interstate 64 and Norview Avenue. ORF is classified by the Federal Aviation Administration (FAA) as a small hub airport with 1.7 million enplaned passengers in CY 2017.

The airfield facilities at ORF consist of two intersecting runways, identified as Runway 5/23 and Runway 14/32. Runway 5/23 is the primary runway and is 150 feet wide with a usable runway length of 8,001 feet. The terminal facility at ORF is separated into an Arrivals Terminal and Main Passenger Terminal. The Arrivals Terminal is a three-level facility consisting of 243,000 square feet and contains baggage claim services, as well as rental car and transportation network companies. The Main Passenger Terminal is a three-level facility consisting of over 485,000 square feet and serves as the primary terminal for passenger processing, passenger security screening, and passenger enplaning and deplaning.

ORF currently has three parking garages (Garage A, B, and C) adjacent to the Arrivals Terminal and six surface parking lots (two short term, two long term, employee, and permit). In total, ORF has 8,576 parking spaces, of which 7,252 are public parking spaces, 636 are dedicated to rental cars, 596 are for employee parking, and 92 are for permit parking.

Other major existing facilities at ORF include: a remote rental car facility , fueling facilities, two multipurpose air cargo buildings totaling 88,000 square feet, a fixed base operator (FBO), and various airport and aircraft support services.

Capital Improvement Program

In March 2019, the Authority submitted the 2020 through 2024 capital improvement program (CIP) to the FAA. While most projects are demand-based, others are dictated by design standards, safety, federal requirements, or rehabilitation needs. There is a higher level of uncertainty as to the estimated cost and schedule of projects in the later years of the CIP, as compared to those scheduled to be undertaken within the next few years. The Authority is in the process of updating its Master Plan pursuant to which a new planning forecast will be developed to determine future needs beyond the next five years and the options to accommodate the projected long-term growth. ORF's CIP for FY 2020 through FY 2025 is estimated to be approximately $238.7 million, of which $69.7 million is for the 2019 Parking Project.

Currently, ORF has limited land available for future airport development. As a result, the Authority re-evaluated its parking facilities, which resulted in the 2019 Parking Project. The 2019 Parking Project will be located adjacent to the Arrivals Terminal and will consist of a 3,208 space parking garage totaling approximately 1,048,325 square feet, including one double threaded helix vehicular access ramp for parking on levels one through eight. Traffic circulation throughout the garage is two-way, with parking stalls perpendicular to the drive aisles (i.e. 90-degree). The stair and elevator tower for the 2019 Parking Project was completed in July 2002 and the site work was completed in April 2011. The majority of the construction of the 2019

Parking Project is estimated to be complete by summer 2021, which is FY 2022. The anticipated plan of finance for the 2019 Parking Project consists of approximately $11.2 million in pay go Authority funds and $58.6 million from the Series 2019 Bonds for project costs. This analysis assumes no Additional Bonds are required to fund the remaining portions of the CIP.

The Series 2019 Bonds

On May 23, 2019, the Authority authorized the issuance of the Series 2019 Bonds in a par amount not to exceed $80,000,000. For this analysis, the Series 2019 Bonds are estimated to be issued in a par amount of $62.3 million. The proceeds of the Series 2019 Bonds will be used to net fund approximately $58.6 million in project costs and contingencies for the 2019 Parking Project, as well as capitalized interest, the deposit to the Debt Service Reserve Account, and costs of issuance. The debt service on the Series 2019 Bonds is expected to be paid with Net Revenues, as defined in the Indenture as defined below.

Indenture

The Series 2019 Bonds are being issued pursuant to the Constitution and laws of the Commonwealth of Virginia, including the Authority's Charter, Chapter 463 of the 1948 Acts of the General Assembly and an Indenture of Trust dated as of April 1, 2001 (Master Indenture) by and between the Authority and U.S. Bank National Association as Trustee, as supplemented by First Supplemental Indenture dated as of April 1, 2001, Second Supplemental Indenture dated as of May 1, 2011, the Third Supplemental Indenture dated as of October 1, 2011, and the Fourth Supplemental Indenture dated as of June 1, 2019. (The Master Indenture and all Supplemental Indentures are collectively referred to as the Indenture.)

The Series 2019 Bonds are payable from and are secured solely by a pledge of, and lien upon, the General Revenues of the Authority. General Revenues are defined in the Indenture to include all revenues, income, receipts and money derived from the ownership and operation of ORF, including without limitation all rentals, charges, landing fees, use charges, and concession revenues received by or on behalf of the Authority, investment earnings and all other income earned and accreted from, and deferred gain from, securities and other investments, and amounts earned on amounts deposited in funds and accounts under the Indenture or otherwise maintained with respect to ORF, computed in accordance with generally accepted accounting principles, and all gifts, grants, reimbursements, or payments received from governmental units or public agencies for the benefit of ORF.

The Series 2011B Bonds were issued under the Second Supplemental Indenture dated as of May 1, 2011. The Series 2011B Bonds were secured by a pledge of General Revenues and PFC Revenues; however, debt service on the Series 2011B Bonds is to be paid out of PFC Revenues to the extent legally available. Unless specifically designated, PFC Revenues are not included in the definition of General Revenues under the Indenture and are not pledged to secure Bonds.

The term Bonds is used in this Report to mean all Outstanding Bonds, the Series 2019 Bonds, and any Additional Bonds hereafter issued under the Indenture.

Under Section 601 of the Master Indenture, Rate Covenant, the Authority shall continuously own, control, operate, and maintain ORF in an efficient and economical manner and on a revenue producing basis and shall at all times prescribe, fix, maintain, and collect rates, fees, and other charges for the services and facilities furnished by ORF fully sufficient at all times:

- For 100% of the Operating Expenses and for the accumulation in the Revenue Fund of a reasonable reserve therefor; and

- Such Net Revenues for General Revenues in each Fiscal Year:

  - Will equal at least 125% of the Debt Service Requirement on all Revenue Obligations secured by General Revenues then Outstanding;

  - Will enable the Authority to make all required payments, if any, into the Debt Service Reserve Account and the Rebate Fund and on any Contract or Other Airport Obligation;

  - Will enable the Authority to accumulate an amount to be held in the Renewal and Extension Fund, which in the judgment of the Authority is adequate to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to ORF, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the ORF; and

  - Will remedy all deficiencies in required payments into any of the funds and accounts mentioned in the Indenture from prior Fiscal Years.

Summary of Report Findings

On the basis of the assumptions and analyses described in this Report, DKMG is of the opinion that estimated annual Revenues of the Authority during the forecast period (defined as fiscal year ending June 30 (Fiscal Year or FY) 2019 through FY 2028) comply with the requirements set forth in the Indenture. Additional findings of these analyses include the following:

Economic Base

- The economic base of ORF's Air Trade Area (as defined in Chapter 1) has the propensity to generate continued growth in the demand for air transportation services.

- The population of the Air Trade Area is expected to grow at a compound annual growth rate (CAGR) of 0.8% while Virginia and the U.S. are projected to grow at 1.1% and 0.9%, respectively, through 2028.

- The Air Trade Area's per capita personal income (PCPI) is projected to increase at a CAGR of 1.3% through 2028, which is slightly greater than that of Virginia and the U.S. at 1.2% for the same period.

- In 2028, 27.6% of the households located in the Air Trade Area are projected to have an income of $100,000 or more, compared to 34.5% of the households in Virginia and 25.3% of the households in the U.S.

- The Air Trade Area's Gross Regional Product (GRP) is projected to grow at a 1.6% CAGR through 2028, while Virginia is projected to grow at 2.4%, and the U.S. Gross Domestic Product (GDP) is projected to grow at 1.9% during the same period.

- According to Virginia's 2018-2020 Biennium Economic Forecast, unemployment for Virginia is forecast to fall slightly in 2018 where it will remain through 2020.

- The Air Trade Area's concentration of employment among industries varies from that of the U.S., with a higher concentration of employment in government and military and a lower concentration in the business and financial services industry than experienced throughout the U.S. In order to protect the local economy from periodic economic downturns, governments and other organizations in the Air Trade Area are making efforts to diversify the local economy.

Air Traffic

- Origin and destination (O&D) passenger traffic represented approximately 97% of the traffic at ORF in FY 2018. The O&D nature of ORF indicates that its traffic is generally influenced more by local characteristics of the area served than by individual airline network decisions in support of connecting activity.

- As of March 2019, ORF was served by six U.S. commercial passenger carriers and two all-cargo carriers.

- A global economic recession, record-high fuel costs that prompted airlines to moderate service across their respective routes, decreased Department of Defense spending in the Air Trade Area, followed by sequestration led to declines in ORF's enplaned passengers in FY 2010 through FY 2015 with the exception of a slight increase in FY 2013. However, ORF's enplaned passengers have grown in each of the last three fiscal years with higher load factors than those experienced historically and increases in enplaned passengers on each of the carriers serving ORF.

- American Airlines (American), in combination with its code-sharing partners, is the largest passenger carrier at ORF with an enplaned passenger market share of 33.3% in FY 2018. Delta Air Lines (Delta), Southwest Airlines (Southwest), and United Airlines (United) accounted for a combined share of 65.0% in FY 2018 when combined with their code-sharing partners.

- As of March 2019, ORF offered nonstop scheduled service to 25 airports, which includes 19 airports with daily service and six airports with less than daily service. ORF averaged 74 daily flights in March 2019. Markets with a significant number of daily nonstop flights included New York with 18 daily flights, Atlanta and Charlotte with nine daily flights each, Washington, D.C. with seven daily flights, and Chicago and Philadelphia with six daily flights each.

- Total landed weight increased at a CAGR of 1.9% from FY 2014 to FY 2018, driven by growth in passenger landed weight, which accounted for an average of 90.1% of the total landed weight during the last five years.

- Annual enplaned passengers are forecast to increase from approximately 1.7 million to 2.2 million from FY 2018 to FY 2028, a CAGR of 2.1%. Total airline landed weight is forecast to increase at a CAGR of 2.0% from FY 2018 to FY 2028.

Financial Analyses

- The Airline Use and Lease Agreements between the Authority and the Signatory Airlines became effective July 1, 2013 and expired on June 30, 2018, and were amended on July 1, 2018, extending the term through June 30, 2021 (the Airline Agreements). The Airline Agreements shall be automatically renewed for two additional terms of one year each unless either party gives notice of its intent to terminate 90 days prior to the end of the then current term. The airlines that are signatory to the Airline Agreements (Signatory Airlines) include American, Delta, Southwest, and United. Federal Express Corporation (FedEx) and UPS Airlines (UPS) are not signatory to the Airline Agreement but pay signatory landing fees since they meet the minimum number of flights required to pay the signatory rates. Allegiant Airlines (Allegiant) and Frontier Airlines (Frontier) are the only Non-Signatory Airlines operating at ORF. Article 7 of the Airline Agreements describes the method for the calculation of the rents, fees and charges of the Signatory Airlines for the use of facilities, rights, licenses, and privileges to operate at ORF, which is a compensatory rate-setting methodology with a revenue-sharing mechanism. The Airline Agreements do not require the Authority to seek majority-in-interest approval for proposed capital improvements from the Signatory Airlines. The Airline Agreement also permits the Authority to increase the Terminal Rental Rate, Landing Fee Rate, and Apron Rental Rate to meet the requirements of the Rate Covenant. Although the Airline Agreements will expire during the forecast period, the rate-setting methodologies outlined in the current Airline Agreements are assumed to be extended throughout the forecast period.

- The Signatory Airline cost per enplaned passenger (CPE) is forecast as follows:

FY	CPE
Preliminary Budget	
2020	$6.16
Forecast	
2021	$6.08
2022	$6.17
2023	$6.24
2024	$6.31
2025	$6.32
2026	$6.32
2027	$6.39
2028	$6.47

See Table 4-9.

- The following table presents the Rate Covenant on the Debt Service Requirement for the forecast period. As shown in the table, the Net Revenues are forecast to exceed 125% of the Debt Service Requirement in each year of the forecast period.

Fiscal Year	Net Revenues (in 000s)	Debt Service Requirement (a) (in 000s)	Debt Service Coverage
2020	$14,193	$4,224	336.0%
2021	$13,963	$4,216	331.2%
2022	$17,635	$5,780	305.1%
2023	$17,630	$8,923	197.6%
2024	$17,613	$9,089	193.8%
2025	$17,392	$9,075	191.7%
2026	$16,980	$8,805	192.8%
2027	$16,867	$8,189	206.0%
2028	$16,731	$8,199	204.1%

(a) Net of capitalized interest.

See Table 4-10.

The forecasts are based on information and assumptions reflecting expected conditions and the course of action that management expects to take during the forecast period. DKMG has relied upon the Authority and other Authority consultants for representations about its plans and expectations, and for disclosure of significant information that might affect the realization of projected results. Representatives of the Authority have reviewed the forecasts and assumptions and concur that they provide a reasonable and appropriate basis for the projections.

The assumptions and estimates underlying the forecasts are inherently subject to change and, though considered reasonable when taken as a whole as of the date of this Report, are subject to a wide variety of business, economic, and competitive risks and uncertainties that could cause actual results to vary materially from projected results. Accordingly, there can be no assurance that assumptions will be realized, that unanticipated events and circumstances will not occur, and that actual results will not be materially higher or lower than projected results.

DKMG is not registered with the U.S. Securities & Exchange Commission as a municipal advisor, is not acting as a municipal advisor, and does not assume any fiduciary duties or provide advisory services as described in Section 15B of the Securities Exchange Act of 1934 or otherwise. DKMG does not make recommendations or advice regarding any action to be taken by our clients with respect to any prospective, new, or existing municipal financial products or issuance of municipal securities including with respect to the structure, timing, terms or other similar matters concerning municipal financial products or the issuance of municipal securities.

The Report of the Airport Consultant should be read in its entirety for an understanding of the assumptions, limiting conditions, and rationale underlying the financial projections. DKMG has no responsibility to update this Report for events and circumstances occurring after the date of the Report.

Sincerely,

DKMG Consulting, LLC

DKMG Consulting LLC

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1. Economic Base for Air Transportation

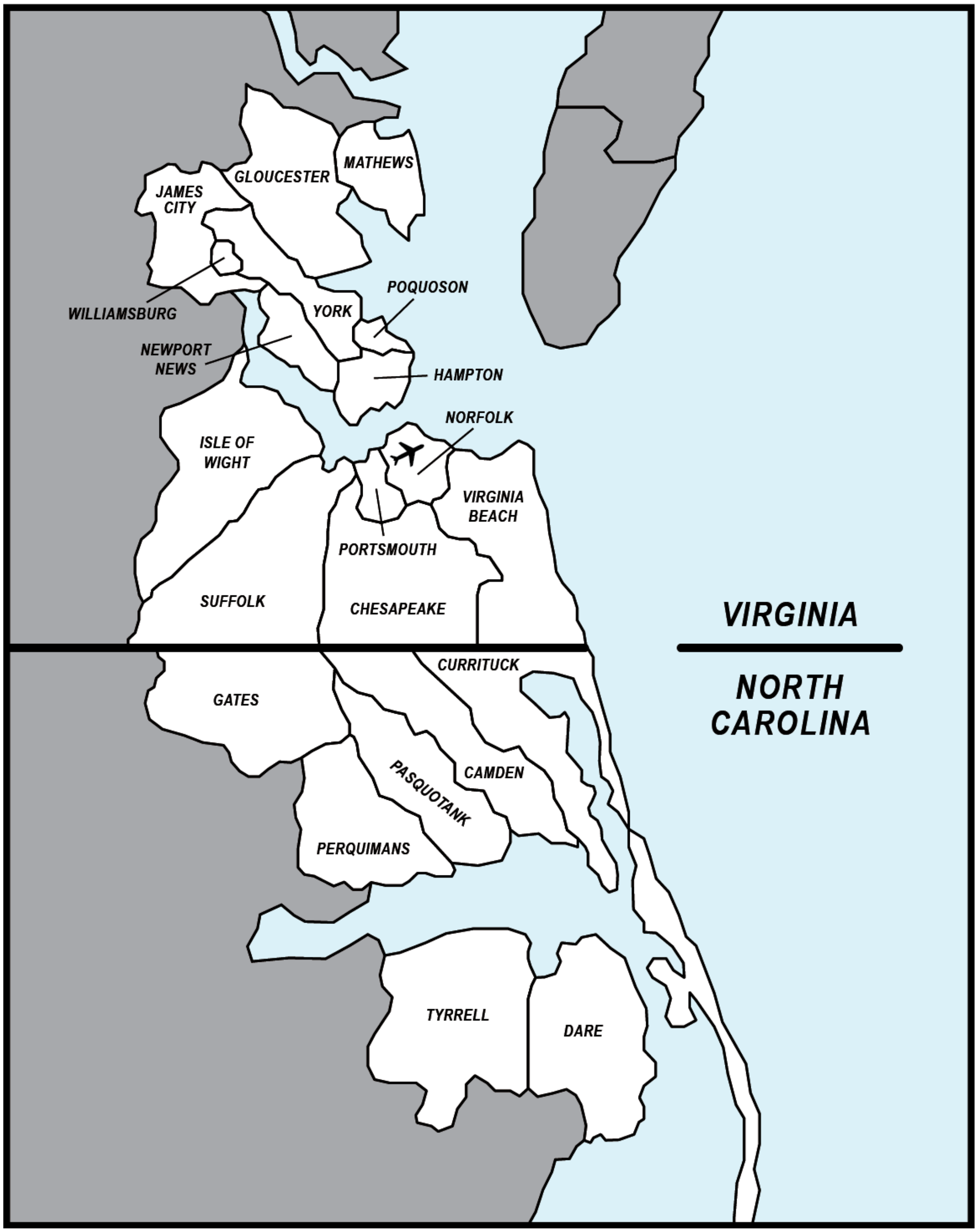
The demand for air transportation is, to a large degree, dependent upon the demographic and economic characteristics of the geographical area served by an airport (i.e., the airport's air trade area). This relationship is particularly true for the O&D portion of an airport's passenger traffic, which represented 97% of the passenger traffic at ORF in FY 2018. This high O&D percentage indicates that the demand for air travel at ORF is influenced more by local characteristics of the area served than by individual airline network decisions in support of connecting activity. This chapter presents a discussion of key economic and demographic elements, which demonstrates that ORF's air trade area is capable of generating growth in the demand for air transportation at ORF.

1.1 Air Trade Area

The borders of an air trade area are determined by the relative location of other metropolitan areas and their associated commercial airport facilities, which are discussed in greater detail in Chapter 2 of this Report. For purposes of these analyses, ORF's primary air trade area (Air Trade Area) is defined as the Virginia Beach-Norfolk, VA-NC Combined Statistical Area, which includes Gloucester, Isle of Wight, James City, Mathews, and York counties in Virginia; Camden, Currituck, Dare, Gates, Pasquotank, Perquimans, and Tyrrell counties in northeastern North Carolina; and the independent Virginia cities of Chesapeake, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg. The Air Trade Area encompasses approximately 7,000 square-miles. The population and economic strength of the Air Trade Area provides the primary base for supporting air transportation demand at ORF. Socioeconomic data for the Air Trade Area was analyzed in conjunction with data for Virginia[1] and the United States. **Figure 1-1** graphically presents the Air Trade Area.

[1] Since the Air Trade Area jurisdictions located in Virginia represented approximately 92.2% of the Air Trade Area's population in 2017, only data for Virginia was examined in this analysis.

Figure 1-1 – Air Trade Area



Source: Kyle Frank Designs

1.2 Demographic Analysis

This section presents an analysis of demographic data for the Air Trade Area and compares it to Virginia and the United States, including items such as population, per capita personal income, and household income distribution.

1.2.1 Population

The historical population of the Air Trade Area, Virginia, and the United States is presented in **Table 1-1**. As shown, population in the Air Trade Area increased at a CAGR of approximately 0.5% from 1995 to 2017, which was less than the 1.1% and 0.9% CAGRs experienced in Virginia and the U.S., respectively, during this same period. As also shown in the table, the population of the Air Trade Area is projected[2] to increase at a faster rate than experienced historically; however, the CAGR for the Air Trade Area continues to be lower than the CAGR for Virginia and the U.S.

Table 1-1 – Historical and Projected Population (in 000s)

	Historical							Projected	CAGR	
	1995	2000	2005	2010	2015	2016	2017	2028	1995-2017	2017-2028
Virginia										
Virginia Beach City	422	427	436	438	451	451	450	493	0.30%	0.82%
Norfolk City	245	235	240	243	246	246	245	241	0.00%	-0.15%
Chesapeake City	184	200	215	222	235	238	240	279	1.22%	1.37%
Newport News City	179	180	184	181	181	180	179	185	0.00%	0.28%
Hampton City	143	146	141	137	136	135	135	139	-0.29%	0.31%
Portsmouth City	103	100	98	96	96	95	95	93	-0.39%	-0.19%
James City County and Williamsburg City	53	61	71	81	88	89	91	105	2.44%	1.32%
Suffolk City	55	64	78	85	88	89	90	103	2.25%	1.19%
York County and Poquoson City	64	69	75	78	80	80	80	97	1.01%	1.76%
Isle of Wight County	28	30	33	35	36	36	37	42	1.28%	1.21%
Gloucester County	33	35	36	37	37	37	37	42	0.60%	1.11%
Mathews County	9	9	9	9	9	9	9	9	-0.01%	0.43%
North Carolina										
Pasquotank County	33	35	38	41	39	40	40	42	0.81%	0.56%
Dare County	26	30	33	34	35	36	36	41	1.52%	1.17%
Currituck County	16	18	22	24	25	26	26	33	2.28%	2.02%
Perquimans County	11	11	12	13	13	13	13	15	1.07%	1.04%
Gates County	10	11	11	12	12	12	12	12	0.67%	0.47%
Camden County	6	7	9	10	10	10	11	12	2.34%	0.99%
Tyrrell County	4	4	4	4	4	4	4	4	0.23%	0.45%
Air Trade Area	**1,624**	**1,672**	**1,745**	**1,779**	**1,823**	**1,826**	**1,829**	**1,986**	**0.54%**	**0.75%**
Virginia	**6,671**	**7,106**	**7,577**	**8,001**	**8,367**	**8,414**	**8,470**	**9,591**	**1.09%**	**1.14%**
United States	**266,278**	**282,162**	**295,517**	**309,338**	**321,040**	**323,406**	**325,719**	**360,689**	**0.92%**	**0.93%**

Sources:
U.S. Department of Commerce, Bureau of the Census (historical)
Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source* (projected)

Columns may not add to totals shown due to rounding.

Virginia Beach City, which is located southeast of ORF, is the most populous city in Virginia based on 2017 population estimates, followed by Norfolk City, the city in which ORF is located. The Air Trade Area is the second most populous area in Virginia; only the Washington-Arlington-Alexandria metropolitan area is more populous. In addition, the combined jurisdictions of James City County and Williamsburg City, which are located northwest of ORF,

[2] These and other projections presented in this chapter are provided by Woods & Poole Economics, Inc. and consider specific local as well as national conditions based on historical data from 1969 to 2016.

were the fastest growing areas in the Air Trade Area during the historical period shown and are projected to grow at a CAGR of 1.3% through 2028. Currituck County, which is located south of ORF, is projected to grow at a 2.0% CAGR through 2028, the highest projected growth in the Air Trade Area through 2028. This indicates an increasing population base surrounding ORF, which will support growth in aviation activity and air service. In addition, the Air Trade Area is home to the Hampton Roads region, which includes each of the Air Trade Area jurisdictions located in Virginia and Currituck and Gates counties in North Carolina. Many organizations, some of which are discussed in subsequent sections, have formed in order to research and champion the economic development of the Hampton Roads region.

1.2.2 Per Capita Personal Income

The demand for air travel tends to increase as income increases since consumers with higher income levels tend to travel by air more frequently. The level of income in a particular area indicates the relative affluence of local residents, and changes in the level of income over time indicate changes in economic well-being and reflect local economic and employment trends. As a result, PCPI was analyzed and is presented in **Table 1-2**. As shown, PCPI for the Air Trade Area and Virginia increased at a CAGR of 1.9% from 1995 through 2017, while the PCPI for the U.S. increased at a CAGR of 1.8%. Decreases experienced in 2009 are attributed to a global recession, which is discussed in greater detail in a subsequent section. Decreases in 2013 are the result of a decrease in earnings from dividends, interest, and rental income and an increase in contributions for government social insurance. A slight decrease in 2016 in the Air Trade Area is attributed to a decrease in supplements to wages and salaries, which consists of employer payments to employee retirement plans, health insurance plans, workers' compensation plans, and unemployment benefit plans. Table 1-2 also presents projections of PCPI for 2028. PCPI, in 2009 dollars[3], in the Air Trade Area is projected to increase from $43,330 in 2017 to $50,204 in 2028, representing a CAGR of 1.3%, which is slightly above the 1.2% CAGRs projected for Virginia and the U.S.

[3] In 2009, the Bureau of Economic Analysis revised the personal consumption expenditure index; therefore, data is presented in 2009 dollars where noted.

Table 1-2 – Per Capita Personal Income (in 2009 dollars)

Calendar Year	Air Trade Area	% Change	Virginia	% Change	United States	% Change
Historical						
1995	$28,792	--	$32,779	--	$30,867	--
2000	$33,418	--	$39,352	--	$36,812	--
2005	$38,365	--	$43,702	--	$38,916	--
2006	$39,507	3.0%	$45,028	3.0%	$40,266	3.5%
2007	$40,253	1.9%	$45,883	1.9%	$41,010	1.8%
2008	$40,281	0.1%	$45,677	-0.4%	$41,055	0.1%
2009	$39,609	-1.7%	$44,232	-3.2%	$39,376	-4.1%
2010	$39,646	0.1%	$44,603	0.8%	$39,622	0.6%
2011	$40,216	1.4%	$45,654	2.4%	$40,769	2.9%
2012	$40,693	1.2%	$46,458	1.8%	$41,728	2.4%
2013	$39,970	-1.8%	$45,094	-2.9%	$41,377	-0.8%
2014	$40,599	1.6%	$45,949	1.9%	$42,594	2.9%
2015	$42,192	3.9%	$47,665	3.7%	$44,255	3.9%
2016	$42,146	-0.1%	$47,800	0.3%	$44,450	0.4%
2017	$43,330	2.8%	$49,084	2.7%	$45,335	2.0%
Projected						
2028	$50,204	--	$56,215	--	$51,873	--
CAGR						
1995 - 2017	1.9%		1.9%		1.8%	
2017 - 2028	1.3%		1.2%		1.2%	

Source: Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source*

1.2.3 Household Income Distribution

An additional indicator of a market's potential for air transportation demand is the percentage of households in the higher income categories. An examination of this indicator is important since as personal income increases, the cost of air transportation becomes more affordable and, therefore, air travel is used more frequently. According to *Who's Buying for Travel, 11th Edition*[4], the most recent edition available, households with annual incomes of $100,000 or more (approximately $92,000 in 2009 dollars) were responsible for 54.4% of airfare expenditures in 2013.

[4] *Who's Buying for Travel* analyzes spending data from the Bureau of Labor Statistics' Consumer Expenditure Survey.

Table 1-3 presents the distribution of households by income category for the Air Trade Area, Virginia, and the U.S. for 1995, 2017, and 2028. As shown, the distribution of households shifted from the lower income categories to the higher income categories from 1995 to 2017 in each of the areas examined. As also shown, this trend is expected to continue through the projection period, indicating a greater propensity to travel. In 2028, 27.6% of the households located in the Air Trade Area are projected to have an income of $100,000 or more, compared to 34.5% of the households in Virginia and 25.3% of the households in the U.S.

Table 1-3 – Distribution of Households by Income Category (in 2009 dollars)

	Air Trade Area			Virginia			United States		
Income Category	1995	2017	2028	1995	2017	2028	1995	2017	2028
Less than $20,000	17.8%	14.7%	11.9%	16.9%	14.3%	11.4%	20.0%	18.5%	15.0%
$20,000 - $44,999	30.7%	23.1%	18.9%	26.5%	21.2%	17.4%	27.9%	24.9%	20.7%
$45,000 - $74,999	26.6%	25.0%	23.8%	24.6%	22.1%	21.7%	23.9%	23.0%	23.9%
$75,000 - $99,999	12.0%	14.7%	17.8%	12.9%	13.5%	15.0%	11.8%	12.6%	15.1%
$100,000 - $199,999	11.3%	19.1%	23.4%	16.5%	21.8%	25.9%	13.9%	16.7%	20.2%
$200,000 or More	1.6%	3.4%	4.2%	2.6%	7.1%	8.6%	2.5%	4.3%	5.1%
Total	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Source: Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source*

Columns may not add to totals shown due to rounding.

1.3 Economic Analysis

This section presents an analysis of economic data for the Air Trade Area, Virginia, and the United States; including items such as GRP, GDP, and employment data. The top employers in the Air Trade Area are also discussed in this section as well as business expansions and tourism in the Air Trade Area.

1.3.1 State of the Economy

The GDP is a broad indicator of economic output, which measures the market value of all final goods and services produced in the United States in a given time period. GRP serves as a counterpart to GDP in smaller jurisdictions such as states or counties. **Table 1-4** presents a comparison of the Air Trade Area's GRP, Virginia's GRP, and the U.S. GDP, in 2009 dollars, for 2005 through 2017. From 2005 to 2017, the GRP in the Air Trade Area increased at a 0.8% CAGR, while Virginia's GRP and the U.S. GDP grew at 0.9% and 1.5%, respectively.

Table 1-4 – Historical and Projected GRP and GDP (in millions of 2009 dollars)

	GRP		GRP		GDP	
Calendar Year (a)	Air Trade Area	% Change	Virginia	% Change	United States	% Change
Historical						
2005	$80,958	--	$396,319	--	$14,234,200	--
2006	$85,716	5.9%	$405,682	2.4%	$14,613,800	2.7%
2007	$87,128	1.6%	$408,148	0.6%	$14,873,700	1.8%
2008	$84,424	-3.1%	$407,227	-0.2%	$14,830,400	-0.3%
2009	$85,665	1.5%	$407,302	0.0%	$14,418,700	-2.8%
2010	$84,073	-1.9%	$416,903	2.4%	$14,783,800	2.5%
2011	$83,334	-0.9%	$419,725	0.7%	$15,020,600	1.6%
2012	$82,793	-0.6%	$422,269	0.6%	$15,354,600	2.2%
2013	$82,954	0.2%	$422,275	0.0%	$15,612,200	1.7%
2014	$83,469	0.6%	$422,957	0.2%	$16,013,300	2.6%
2015	$87,333	4.6%	$430,768	1.8%	$16,471,500	2.9%
2016	$87,148	-0.2%	$432,862	0.5%	$16,716,200	1.5%
2017	$89,383	2.6%	$441,494	2.0%	$17,096,200	2.3%
Projected						
2028	$106,891	--	$571,584	--	$21,023,958	--
CAGR						
2005 - 2017	**0.8%**		**0.9%**		**1.5%**	
2017 - 2028	**1.6%**		**2.4%**		**1.9%**	

(a) The Bureau of Economic Analysis performed a comprehensive revision of regional level GRP, which includes new and revised source data and revised classifications and statistical methods to more accurately portray regional economies. This data is not available at the state and regional levels prior to 2001; therefore, 1995 and 2000 are not presented.

Sources:
U.S. Department of Commerce, Bureau of Economic Analysis (Virginia and United States historical)
Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source* (Air Trade Area historical and projected for all areas)

Beginning in December 2007 and increasing through 2008, a global recession led to increased unemployment, volatility in financial markets, and decreased air travel demand. The length and depth of this recession made it the most severe economic crisis since the Great Depression, which lasted from 1929 through 1939. While other metropolitan areas were dramatically impacted by the economic recession, the Air Trade Area was somewhat buffered by Department of Defense spending as evidenced by growth in GRP in 2009; however, this reliance led to several years of declining GRP in the years following the recession when Department of Defense expenditures decreased due to fewer military personnel, which are discussed in greater detail in the Military subsection, located in the Air Trade Area and a decrease in the value of government contracts for local businesses. In March 2013, the spending reduction provisions of the Budget Control Act of 2011, commonly known as "sequestration", were implemented and required a 10% cut in spending from 2012 through 2020 with approximately 40% to 50% of the annual cuts occurring in military spending. According to the Congressional Budget Office and the Federal Open Market Committee, sequestration slowed economic growth and recovery in the jobs market in the years following the recession. In 2018, the U.S. Congress repealed sequestration of the military budget for FY 2019 and FY 2020. As shown in Table 1-4, the Air Trade Area's GRP is projected to grow at a 1.6% CAGR through 2028, while Virginia's GRP is projected to grow at 2.4%, and the U.S. GDP is projected to grow at 1.9%.

1.3.2 Civilian Labor Force and Unemployment Rates

Table 1-5 presents recent employment trends for the Air Trade Area, Virginia, and the U.S. As shown in the table, the Air Trade Area's civilian labor force increased by more than 130,000 people from 1995 to 2018. This increase represents a CAGR of 0.7% in the Air Trade Area's labor force during this period, compared to 1.0% for Virginia and 0.9% for the U.S.

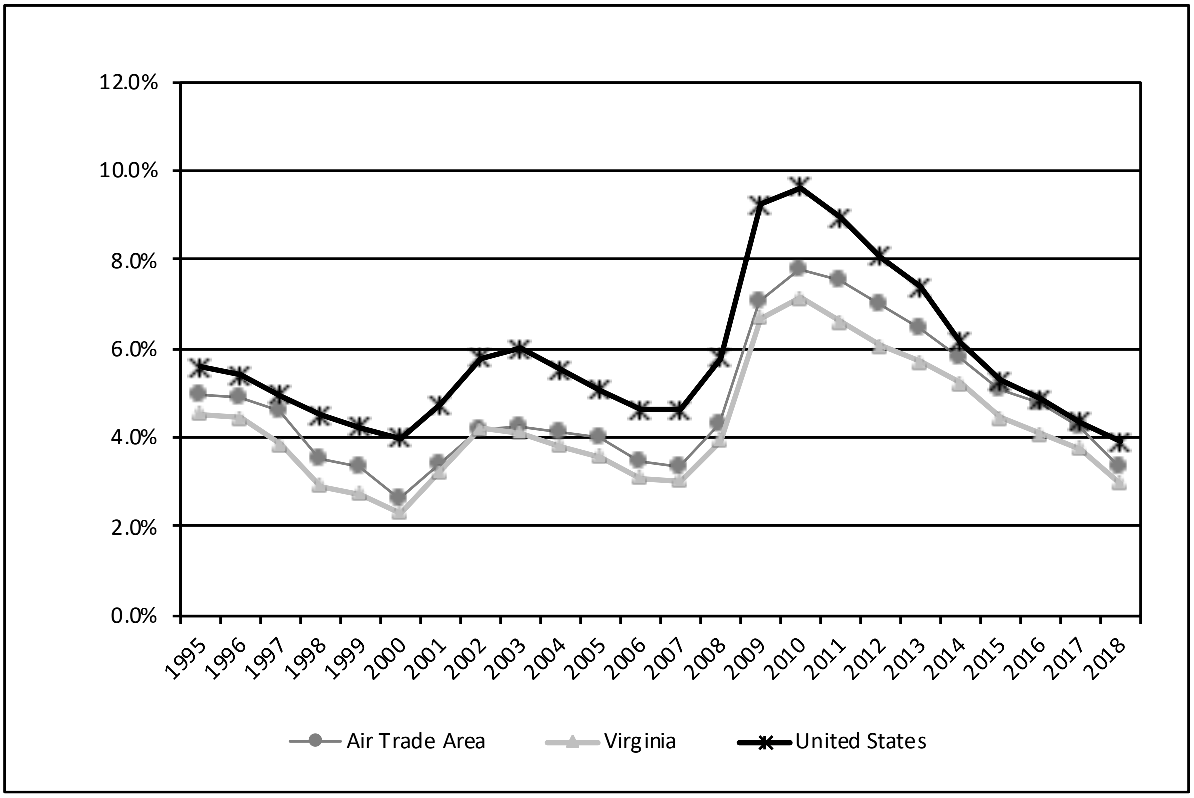
Table 1-5 – Historical Civilian Labor Force (in 000s)

Calendar Year	Air Trade Area	% Change	Virginia	% Change	United States	% Change
1995	767	--	3,451	--	132,304	--
2000	772	--	3,606	--	142,583	--
2001	790		3,670		143,734	
2002	808		3,726		144,863	
2003	817		3,754		146,510	
2004	827		3,795		147,401	
2005	844	--	3,897	--	149,320	--
2006	855	1.4%	3,979	2.1%	151,428	1.4%
2007	867	1.4%	4,037	1.5%	153,124	1.1%
2008	879	1.3%	4,133	2.4%	154,287	0.8%
2009	868	-1.2%	4,118	-0.4%	154,142	-0.1%
2010	884	1.8%	4,158	1.0%	153,889	-0.2%
2011	890	0.7%	4,212	1.3%	153,617	-0.2%
2012	889	-0.1%	4,224	0.3%	154,975	0.9%
2013	892	0.4%	4,237	0.3%	155,389	0.3%
2014	893	0.1%	4,244	0.2%	155,922	0.3%
2015	883	-1.1%	4,217	-0.6%	157,130	0.8%
2016	885	0.2%	4,243	0.6%	159,187	1.3%
2017	898	1.4%	4,308	1.5%	160,320	0.7%
2018	897	-0.1%	4,331	0.5%	162,075	1.1%
CAGR 1995 - 2018	**0.7%**		**1.0%**		**0.9%**	

Source: U.S. Department of Labor, Bureau of Labor Statistics

Figure 1-2 depicts the unemployment rates experienced in the Air Trade Area, Virginia, and the U.S. from 1995 through 2017. As shown, unemployment rates in the Air Trade Area and Virginia, while lower, follow the same trends as the U.S. In 2008, unemployment rates increased considerably as a result of the economic recession. Since reaching a peak in 2010, unemployment rates have fallen in each of the areas examined. In 2018, the annual average unemployment rate for the Air Trade Area was 3.4%, compared to 3.0% for Virginia and 3.9% for the U.S.

Figure 1-2 – Annual Average Unemployment Rates



Source: U.S. Department of Labor, Bureau of Labor Statistics

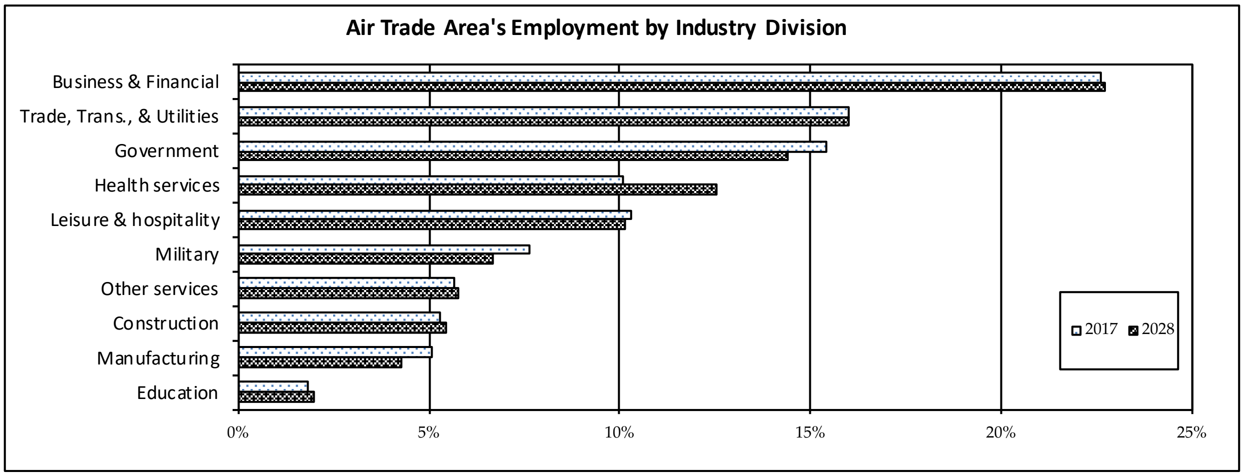
In March 2019, the unemployment rate in the Air Trade Area decreased to 3.5% from 3.6% in March 2018, while Virginia's unemployment rate fell to 3.0% from 3.2% during the same time. According to Virginia's 2018-2020 Biennium Economic Forecast, unemployment for Virginia is forecast to fall slightly in 2018 where it will remain through 2020.

1.3.3 Employment by Industry

Table 1-6 presents nonagricultural employment trends by industry for the Air Trade Area, Virginia, and the U.S. As shown, nonagricultural employment in the Air Trade Area is projected to increase by approximately 170,000 employees from 2017 to 2028, representing a 1.3% CAGR, which is lower than the growth projected for Virginia and the U.S. The highest percentage increase in employment during this period is projected to occur in the health services industry, with a CAGR of 3.3% for the Air Trade Area and Virginia, compared to 2.8% for the U.S. Employment presented in Table 1-6 is based on the employer's primary North American Industry Classification System (NAICS) code; therefore, a discussion of businesses in these sectors is also organized according to the employer's primary NAICS code in the following subsections.

Table 1-6 – Nonagricultural Employment Trends by Industry (in 000s)

Industry (a)	Air Trade Area CY 2017	Air Trade Area CY 2028	Air Trade Area CAGR	Virginia CY 2017	Virginia CY 2028	Virginia CAGR	United States CY 2017	United States CY 2028	United States CAGR
Business and financial services (b)	253	293	1.4%	1,491	1,791	1.7%	51,648	60,883	1.5%
Trade, transportation, and utilities	179	206	1.3%	844	972	1.3%	35,110	40,080	1.2%
Government (c)	173	186	0.6%	745	842	1.1%	22,608	25,113	1.0%
Health services	113	162	3.3%	510	728	3.3%	22,540	30,480	2.8%
Leisure and hospitality	115	131	1.2%	493	577	1.5%	19,485	22,452	1.3%
Military	85	86	0.1%	138	139	0.1%	1,928	1,943	0.1%
Other services	63	74	1.5%	319	386	1.8%	11,589	13,802	1.6%
Construction (d)	59	71	1.6%	316	373	1.5%	12,988	15,106	1.4%
Manufacturing	57	55	-0.3%	255	252	-0.1%	13,593	13,512	-0.1%
Education (e)	21	26	2.0%	111	140	2.1%	4,814	5,903	1.9%
Total	**1,119**	**1,289**	**1.3%**	**5,223**	**6,201**	**1.6%**	**196,305**	**229,274**	**1.4%**



(a) Employment is classified by industry depending on the primary NAICS code of the establishment.
(b) Includes information and administrative, waste, professional, technical, and financial services employment.
(c) Includes employment at public schools, including colleges and universities.
(d) Includes mining employment in cases where data is not confidential.
(e) Excludes employment at public schools, including colleges and universities.

Source: Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source*

Columns may not add to totals shown due to rounding.

The Air Trade Area's concentration of employment among industries varies from that of the U.S., with a higher concentration of employment in government and military and a lower concentration in the business and financial services industry than experienced throughout the U.S. In order to protect the local economy from periodic economic downturns, governments and other organizations in the Air Trade Area are making efforts to diversify the local economy, including offering incentives to new or expanding businesses, investing in infrastructure improvements, and maintaining low corporate tax rates, while continuing to support existing businesses that rely on Department of Defense spending. For example, GO Virginia, a statewide economic development initiative which operates in the Air Trade Area as Reinvent Hampton Roads, and GENEDGE, Inc. partnered to focus on certain industry clusters such as cybersecurity, unmanned vehicles, and advanced manufacturing in an attempt to assist small and mid-size companies in these clusters innovate and accelerate growth.

Fortune 500 companies headquartered in the Air Trade Area include Dollar Tree, Inc., Huntington Ingalls Industries, Inc., and Norfolk Southern Corporation.[5] **Table 1-7** illustrates the diversity of the local economy by listing the top 30 employers located in the Air Trade Area. As shown, the largest public employer is the U.S. Government with approximately 85,000 military and 59,000 civilian employees located at facilities throughout the Air Trade Area, many of which are discussed in greater detail in the Government and Military subsections. The largest private employers are Huntington Ingalls Industries, Inc. and Sentara Healthcare, Inc., each with more than 20,000 employees.

[5] In December 2018, Norfolk Southern announced that it plans to relocate its headquarters to Atlanta by 2021.

Table 1-7 – Top 30 Employers in the Air Trade Area

Employer	Approximate Employment (a)	Industry Sector
U.S. Government - Military	85,000	Military
U.S. Government - Civilian	59,000	Government
Huntington Ingalls Industries, Inc.	20,000	Manufacturing
Sentara Healthcare, Inc.	20,000	Health services
Virginia Beach City Public Schools	12,000	Government (b)
Riverside Health System	8,000	Health services
Virginia Beach City	7,000	Government
Chesapeake City Public Schools	7,000	Government (b)
Norfolk City Public Schools	7,000	Government (b)
Norfolk City	6,000	Government
Chesapeake City	6,000	Government
Cox Communications, Inc.	5,100	Business and financial services
Newport News City Public Schools	5,000	Government (b)
Newport News City	4,000	Government
Hampton City	4,000	Government
Hampton City Public Schools	3,000	Government (b)
Old Dominion University	3,000	Government (b)
PRA Group, Inc.	3,000	Business and financial services
Children's Hospital of the King's Daughters	2,500	Health services
GEICO Corporation	2,500	Business and financial services
Tidewater Community College	2,500	Government (b)
Portsmouth City Public Schools	2,000	Government (b)
Chesapeake Regional Medical Center	2,000	Health services
Portsmouth City	2,000	Government
Smithfield Fresh Meats Corporation	2,000	Manufacturing
Suffolk City Public Schools	2,000	Government (b)
Suffolk City	2,000	Government
STIHL, Inc.	1,800	Manufacturing
Ferguson Enterprises, Inc.	1,600	Trade, transportation, and utilities
LTD Management Company, LLC	1,500	Leisure and hospitality

(a) With the exception of U.S. Government employment, figures presented represent the minimum estimate of employees during the first quarter of 2018.

(b) The primary activity of the establishment is education; however, employment is classified in the government sector on Table 1-6.

Sources:

Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source* (U.S. Government)

Hampton Roads Economic Development Alliance

1.3.3.1 Business and Financial Services

As shown on Table 1-6, the Air Trade Area's largest industry is business and financial services, which is projected to grow at a CAGR of 1.4% through 2028. Major employers in the business and financial services industry include Cox Communications, Inc., PRA Group, Inc., and GEICO Corporation.

PRA Group, Inc. is a global leader in acquiring and collecting nonperforming loans. In October 2018, PRA Group, Inc. announced it would increase its North American revolving credit facility to $1.12 billion, which will provide significant additional capacity for investment in the U.S.

Dollar Tree, Inc., which operates more than 15,000 discount variety stores throughout the U.S. and Canada, acquired its competitor, Family Dollar Stores, Inc., in 2015. Dollar Tree, Inc. plans to consolidate support centers currently located in North Carolina and Virginia to its recently completed headquarters building, which is discussed in greater detail in the Construction subsection, in Chesapeake by the end of 2019. As part of this relocation, Dollar Tree, Inc. offered approximately 700 employees the opportunity to move to the new Chesapeake location.

Geico Corporation, a wholly owned subsidiary of Berkshire Hathaway, is the second largest auto insurer in the U.S. and also offers homeowner's, renter's, life, flood, and business insurance. In early 2018, Geico Corporation added approximately 500 jobs at its Virginia Beach regional office. The Virginia Beach regional office handles all sales, service, and claims for North Carolina, Virginia, and Tennessee. This expansion follows a December 2016 expansion, which added approximately 525 jobs at the Virginia Beach regional office.

ADP, LLC is a Fortune 500 company that provides payroll services, human resources management, and tax compliance services to other businesses. In December 2016, ADP, LLC opened a regional office in downtown Norfolk as part of a strategic realignment that included consolidating smaller offices nationwide into larger regional offices. The Norfolk regional office is expected to have approximately 1,800 employees upon completion of the strategic realignment.

The following companies, which are included in the business and financial services industry, are among those located in the Air Trade Area that directly benefit from increased spending by the Department of Defense as evidenced by recent contract awards:

- In September 2018, L-3 Unidyne, Inc. was awarded a $44.0 million contract from the Department of Defense for technical and engineering services related to electrical power and generation systems installed on surface ships, submarines, and assault craft.

- In September 2018, Q.E.D. Systems, Inc. and Oceaneering International, Inc. were among four companies awarded a Department of Defense contract with a combined value of $167.0 million for non-nuclear work on submarines. Work on this contract is expected to be completed by October 2019 unless options are exercised extending the completion date to October 2023.

- In September 2018, Oceaneering International, Inc. was awarded a $68.8 million Department of Defense contract for maintenance, design, and improvements to the Dry Deck Shelter Program. A dry deck shelter is a module that attaches to a submarine and allows divers to enter or exit the boat while it is submerged.

1.3.3.2 Trade, Transportation, and Utilities

As shown on Table 1-6, the Air Trade Area's trade, transportation, and utilities industry is projected to grow at a CAGR of 1.3% through 2028. One indicator of growth in this industry is retail sales, defined as all net sales (gross sales minus refunds and allowances for returns) for establishments engaged primarily in retail trade. **Table 1-8** presents historical per capita retail sales for the Air Trade Area, Virginia, and the U.S. In 2008 and 2009, decreases in per capita retail sales are attributed to the recession which began in December 2007. From 1995 through 2017, the Air Trade Area retail sales grew at a CAGR of 1.2%, which is slightly above the 1.1% CAGR experienced in Virginia and the U.S. The table also presents projections for 2028, with projected growth for the Air Trade Area and Virginia of 0.4% compared to 0.3% for the U.S.

Table 1-8 – Per Capita Retail Sales

Calendar Year	Air Trade Area	% Change	Virginia	% Change	United States	% Change
Historical						
1995	$11,224	--	$12,129	--	$11,989	--
2000	$13,031	--	$14,190	--	$13,832	--
2005	$14,329	--	$15,279	--	$14,666	--
2006	$14,665	2.3%	$15,535	1.7%	$14,876	1.4%
2007	$14,804	0.9%	$15,570	0.2%	$14,875	0.0%
2008	$13,962	-5.7%	$14,687	-5.7%	$14,151	-4.9%
2009	$12,685	-9.1%	$13,346	-9.1%	$12,989	-8.2%
2010	$12,933	2.0%	$13,597	1.9%	$13,352	2.8%
2011	$13,339	3.1%	$14,015	3.1%	$13,878	3.9%
2012	$13,545	1.5%	$14,221	1.5%	$14,202	2.3%
2013	$13,749	1.5%	$14,439	1.5%	$14,421	1.5%
2014	$14,013	1.9%	$14,718	1.9%	$14,700	1.9%
2015	$14,218	1.5%	$14,934	1.5%	$14,917	1.5%
2016	$14,399	1.3%	$15,118	1.2%	$15,103	1.2%
2017	$14,627	1.6%	$15,357	1.6%	$15,342	1.6%
Projected						
2028	$15,313	--	$16,064	--	$15,860	--
CAGR						
1995 - 2017	**1.2%**		**1.1%**		**1.1%**	
2017 - 2028	**0.4%**		**0.4%**		**0.3%**	

Source: Woods & Poole Economics, Inc., *The 2018 Complete Economic and Demographic Data Source*

The Air Trade Area is home to the Port of Virginia (Port), offers its users direct service to more than 45 countries with connections to more than 200 countries. Class I and short line rail partners allow the Port's users to reach customers in the Ohio valley and the upper Midwest with scheduled daily service. The Port is also home to a Foreign Trade Zone, which receives over $2.8 billion in merchandise annually. Top exports from the Port include mineral fuel and oil; miscellaneous grain, seed, and fruit; and wood, while top imports include nuclear reactors, boilers, and machinery; salt, sulfur, earth, and stone; and furniture and bedding. According to an economic impact study conducted by the Mason School of Business at the College of William & Mary, approximately 343,000 Virginia jobs are linked to Port activity, which generate $13.5 billion in annual compensation and $1.2 billion in state and local taxes. In July 2018, the Port received approval from the Army Corps of Engineers to dredge and widen the existing channel into Norfolk Harbor, which will allow larger ships with a greater volume of cargo to pass. The $350 million project is expected to increase capacity by 40% and be complete in 2024. The Port consists of six terminals, of which the following four are located in the Air Trade Area:

- Newport News Marine Terminal is located on the north bank of the James River in Newport News and is a U.S. Customs-designated port of entry. This terminal contains Class I rail provided by CSX Corporation.

- Norfolk International Terminal is located along the Elizabeth River and Lafayette River in Norfolk and is the Virginia Port Authority's largest terminal. The terminal has the capacity to process 820,000 containers annually and has direct access to Norfolk Southern's Heartland Corridor, which allows for second-day double-stack service to Midwest markets. The Norfolk International Terminal is undergoing a $375 million expansion project, which includes 60 new cranes and 30 new container stacks. The expansion project is expected to be complete in 2020.

- Portsmouth Marine Terminal is located on the west bank of the Elizabeth River in Portsmouth. This terminal is served directly by CSX Corporation and by Norfolk Southern Corporation via the Norfolk Portsmouth Beltline Railway and has the capacity to process 250,000 containers annually.

- Virginia International Gateway is also located along the Elizabeth River in Portsmouth. This terminal is one of the only functional automated container terminals in the Western Hemisphere with the capacity to process 650,000 containers annually. This terminal is also a U.S. Customs designated port of entry. The Virginia International Gateway is undergoing a $320 million expansion project, which includes 26 new cranes, construction of a new rail yard, additional berth space, and 16 additional shuttle trucks for container operations. The expansion project is expected to be complete in 2019.

Due to the proximity to the Port, many major shipping companies have a permanent presence in the Air Trade Area, including Maersk Line Limited, CMA CGM, and Zim Integrated Shipping Services each of which maintains their North American headquarters in Norfolk. Many distribution centers and warehousing companies also take advantage of the benefits of the Port and are located in the Air Trade Area including: Cost Plus, Inc.; DAMCO Distribution Services, Inc.; Dollar Tree, Inc.; Interstate Warehousing; QVC, Inc., SYSCO Corporation; Target Corporation; and Walmart, Inc.

1.3.3.3 Government

In addition to the private employers discussed in other subsections, a number of government organizations are among the top employers in the Air Trade Area, including local governments and public school systems. Old Dominion University and Tidewater Community College, both of which are listed among the top employers in the Air Trade Area, are the largest public universities in the Air Trade Area in terms of student enrollment.

However, the Air Trade Area's largest employer is the U.S. Government. Numerous military installations, which are discussed in greater detail in a separate subsection, employ many civilians in critical support roles. The majority of the U.S. Government's executive agencies maintain a presence in the Air Trade Area, including departments of the Interior, Agriculture, Commerce, Defense, Energy, Homeland Security, Justice, Labor, and Veterans Affairs. Independent agencies and commissions, including the General Services Administration, Maritime Administration, and National Aeronautics and Space Administration, are also located in the Air Trade Area.

1.3.3.4 Health Services

As shown on Table 1-6, the fastest growing industry in the Air Trade Area is projected to be health services, with a 3.3% CAGR projected through 2028. According to the Hampton Roads Economic Development Alliance, the healthcare industry contributes approximately $7.4 billion in economic activity to Virginia. There are more than 50 medical corporations in the Air Trade Area working with healthcare facilities including Chesapeake Regional Medical Center, Children's Hospital of The King's Daughters, Riverside Health System, and Sentara Healthcare, Inc., each of which are listed among the top employers in the Air Trade Area. Several of these healthcare facilities are undergoing or recently completed expansions including:

- In August 2018, Riverside Regional Medical Center, which is operated by Riverside Health System, opened its $75 million expanded facility in Newport News. The expansion added two floors and 150,000 square feet of space.

- In July 2018, Sentara Norfolk General Hospital completed a $199 million expansion, which added three floors to two existing wings, expanded the emergency department, consolidated the Intensive Care Unit on two floors, and added a new rooftop helipad. Further improvements at this location, which are expected to be complete in 2020, will include expansion and modernization of operating rooms and women's health space.

- In July 2018, Children's Hospital of The King's Daughters received approval to build a new pediatric mental health facility in Norfolk. The new facility will include 48 inpatient mental health beds, day treatment programs, and other services. The facility is expected to open in 2022 and will employ approximately 250 workers.

- In February 2017, Sentara Virginia Beach General Hospital began a $49 million modernization of its facilities that includes consolidation of three intensive care units, addition of a new surgery wing, and renovation of four operating rooms. This project is expected to be complete in the fall of 2019.

Many corporations involved in the health services industry are located in the Air Trade Area, including LifeNet Health, which is a leader in the field of tissue and organ research, Operation Smile, which is headquartered in the Air Trade Area and performs free medical procedures for children, and the Hampton University Proton Therapy Institute, which offers cancer treatment through the use of proton-based technology.

1.3.3.5 Leisure and Hospitality

Tourism plays an important role in the Air Trade Area's leisure and hospitality industry, which is projected to increase 1.2% from 2017 through 2028. According to the U.S. Travel Association, tourism contributed approximately $24.6 billion in spending and $3.4 billion in tax receipts, and created nearly 235,000 jobs in Virginia in 2017. The Air Trade Area offers a wide variety of attractions, which not only provides a catalyst for employment but also provides a revenue stream derived from non-residents. Norfolk was voted "America's Favorite City" in 2017 by Travel + Leisure! magazine by scoring high in areas such as sites to see, cleanliness of the city, and friendliness of the residents. Tourist attractions located in the Air Trade Area include:

- Numerous historic sites and neighborhoods such as Admirals' Row, Fort Norfolk, Freemason District, Ghent, Hampton, Isle of Wight, Jamestown Settlement, Newport News, Norfolk, Poplar Hall, Old Towne Portsmouth, Colonial Williamsburg, Yorktown, and various historic homes and churches.

- Museums including the American Revolution Museum, Casemate Museum, Children's Museum, Chrysler Museum of Art, Hampton Roads Naval Museum, Hermitage Museum & Gardens, Mariners' Museum and Park, Military Aviation Museum, Nauticus, Peninsula Fine Arts Center, Tug Boat Museum, Virginia Air & Space Center, and Virginia War Museum.

- Cultural attractions including the Virginia Opera, the Virginia Ballet Theatre, and the Virginia Symphony Orchestra.

- The Battleship *Wisconsin,* which is one of the largest and last battleships built by the U.S. Navy.

- Theatres including Attucks Theatre, Children's Theatre of Hampton Roads, Harrison Opera House, Little Theatre of Norfolk, NorVa, TCC Roper Performing Arts Center, and Virginia Stage Company at Wells Theatre.

- Numerous beaches, which include the Outer Banks, Virginia Beach, Ocean View Beach, and Sandbridge Beach, as well as rivers that provide opportunities to participate in recreation activities such as sailing, fishing, and other water sports.

- Other outdoor sites include Busch Gardens, Norfolk Botanical Garden, Virginia Living Museum, Virginia Zoo, over 70 public art projects in downtown and surrounding neighborhoods, the 10.5 mile biking and walking Elizabeth River Trail, the three mile biking and walking Nike Park Trail, and numerous golf courses.

- Waterside District, which is located in Norfolk's downtown and offers dining, weekly live music, festivals, and several hotels including Hilton, Marriott, and Sheraton.

- The NEON (New Energy of Norfolk) District, which is also located within downtown Norfolk and offers street art murals and numerous art galleries, restaurants, and a comedy club.

- The Great Dismal Swamp National Wildlife Refuge, which is bordered by the cities of Chesapeake and Suffolk and offers biking and hiking trails, fishing, boating, and bird watching.

- Professional sports teams include the Norfolk Tides baseball team, which is the Baltimore Orioles Triple-A affiliate, and the Norfolk Admirals Ice Hockey, which is affiliated with the National Hockey League's Arizona Coyotes.

The cruise industry is also an important driver of revenue in the leisure and hospitality industry. Carnival Corporation, the only cruise line that homeports in Norfolk, did not offer any voyages from Norfolk in 2018 but has requested berthing dates in 2019. In the absence of Carnival Corporation's cruises in 2018, the focus was on port-of-call activity, which refers to an intermediate stop for a ship on its scheduled journey. Eight cruise lines, which ranged from coastal to international cruise lines, used Norfolk as a port-of-call in 2018. According to an economic impact study prepared for Cruise Lines International Association, approximately 2,800 Virginia jobs were linked to cruise activity, which generated $170.4 million in annual compensation and $153.4 million in direct spending in 2016.

1.3.3.6 Military

The Air Trade Area is home to a large concentration of military employment, with 7.6% of the Air Trade Area's nonagricultural employees working in the industry compared to 2.6% for Virginia and 1.0% for the U.S. While all branches of the military are represented in the Air Trade Area, the greatest concentration of employment is in the U.S. Navy.

The Air Trade Area is home to Naval Station Norfolk, the world's largest naval base in terms of population. Naval Station Norfolk is the current headquarters of the U.S. Fleet Forces Command as well as being home port for the U.S. Second Fleet, strike groups and their assigned ships, destroyer squadrons, aircraft carriers, cruisers, amphibious assault ships, guided missile destroyers and submarines. The base is also home to the Allied Command Transformation headquarters, which is the only permanent North Atlantic Treaty Organization (NATO) headquarters outside of Europe and the sole NATO headquarters in North America. The Military Sealift Command (MSC) is also headquartered at Naval Station Norfolk. The MSC operates non-combatant, civilian-crewed ships that replenish U.S. Navy ships and other defense missions around the world. Over the past few years, MSC operations have been consolidated at Naval Station Norfolk resulting in the relocation of over 500 civilian and active-duty personnel from Washington, D.C..

Other military installations located in the Air Trade Area include Naval Air Station Oceana, Norfolk Naval Shipyard, Langley Air Force Base, and Joint Expeditionary Base – Little Creek. These military installations along with defense contractors, which are discussed in more detail in other subsections, are important contributors to the economy of the Air Trade Area and Virginia. According to the Department of Defense's spending by state report, Virginia ranked second in the nation in defense spending with $46.2 billion in the federal fiscal year ended September 30, 2017, making defense spending the largest contributor to Virginia's GRP. Specifically, the Air Trade Area was estimated to receive $20 billion in direct Department of Defense spending in 2017.

1.3.3.7 Other Services

Employment in the Air Trade Area's other services industry is projected to increase at a 1.5% CAGR from 2017 to 2028. The other services industry includes churches and establishments engaged in promoting or administering religious activities, grant-making, advocacy, personal care services, death care services, pet care services, photofinishing services, laundry services, temporary parking services, and dating services. Private households that engage in employing workers on or about the premises in activities primarily concerned with the operation of the household are also included in this industry.

1.3.3.8 Construction

Employment in the Air Trade Area's construction industry is projected to increase at a 1.6% CAGR from 2017 to 2028, compared to an increase of 1.5% projected for Virginia and 1.4% projected for the U.S. during this same period. Recent and future construction projects in the Air Trade Area include:

- A $3.3 billion expansion of the Hampton Roads Bridge-Tunnel, which is located between Norfolk and Hampton, is expected to begin in 2019 with completion in 2024.

- Dollar Tree, Inc. recently completed construction on its new 510,000 square-foot headquarters building. A second phase of construction, which includes over 100 living units with ground floor retail, as well as a six-story, 150,000 square foot office building with restaurant and retail spaces. This project began in February 2019 with completion scheduled for early 2020..

- In August 2018, construction began on the third and final phase of a six-year project to widen and repair Interstate 64 in York County. This phase of the project is anticipated to be complete in the fall of 2021 at a cost of $178.3 million. The first two phases of this project are also located in the Air Trade Area in Newport News and York and James City counties. The first phase was completed in December 2017 at a cost of $122.0 million, and the second phase is estimated to be complete in the spring of 2019 at a cost of approximately $176.0 million.

- In July 2018, Liebherr USA, Co. began construction on its new headquarters facility in Newport News with completion expected in 2020. Liebherr USA, Co. manufactures construction machinery and earthmoving equipment.

- In June 2018, Ferguson Enterprises, Inc. began construction of its $82.8 million headquarters in Newport News. The expansion is expected to retain 891 positions and create 434 additional jobs by 2021.

- In March 2018, the Virginia Beach Cavalier Hotel, a Marriott Autograph Collection Hotel, reopened after completion of a four-year $85 million renovation. The hotel's reopening created more than 200 jobs and is expected to generate $41 to $52 million in additional tax revenue in the next 20 years.

- In February 2018, construction began on the new $125 million Marriott Oceanfront Hotel in Virginia Beach. The hotel will include a beach bar, a sushi bar, and a rooftop restaurant and is expected to be complete in 2020.

- In January 2018, Fairlead Integrated, LLC began construction on a 40,000 square-foot facility in Virginia Beach, which will allow it additional capacity to meet projected demand. Fairlead Integrated manufactures control systems, variable speed drives, and communication and network products.

- In December 2017, STIHL, Inc. announced plans to expand its Virginia Beach facility with a $25 million investment in a new administration building and other campus improvements that will allow the company to continue its anticipated growth. The expansion is expected to be complete in late 2019. STIHL, Inc. manufactures handheld outdoor power equipment.

- In November 2017, Ikea began construction on its Norfolk store, which is its second Virginia location and 50th store nationwide. The Norfolk store is expected to generate 250 full and part-time jobs upon completion in the spring of 2019.

- In October 2017, construction began on a new $756 million two-lane tunnel under Thimble Shoal Channel to expand the existing Chesapeake Bay Bridge Tunnel facility. Once complete in 2022, southbound traffic will use the new tunnel, and northbound traffic will use the existing tunnel.

- In March 2017, construction of a luxury hotel and convention center were completed in downtown Norfolk. The Main, a 21-story project with a 300-room Hilton hotel, was a $150 million dollar project that is expected to draw more convention business to Norfolk.

- In June 2015, Newport News Shipbuilding, a division of Huntington Ingalls Industries, began construction of a new $600 million Joint Manufacturing Assembly Facility in Newport News. The new facility allows more efficiency and speed in the construction of aircraft carriers and submarines, and the initial phases were complete in 2017. Subsequent phases are in process, and the final completion is expected in 2022.

1.3.3.9 Manufacturing

Manufacturing employment in the Air Trade Area is projected to decrease at a 0.3% compound annual rate from 2017 to 2028. As shown on Table 1-6, this decrease is not unique to the Air Trade Area, as manufacturing employment in Virginia and the U.S. is projected to decrease at a 0.1% compound annual rate. Despite this projected decrease, the manufacturing sector remains an important part of the Air Trade Area's economy, especially considering the robust shipbuilding and repair industry present in the Air Trade Area. With more than 20,000 employees, the largest private employer in the Air Trade Area is Huntington Ingalls Industries, which builds nuclear aircraft carriers, submarines, and amphibious assault ships. The following manufacturing companies are among those located in the Air Trade Area that directly benefit from increased spending by the Department of Defense as evidenced by recent contract awards:

- Newport News Shipbuilding, a division of Huntington Ingalls Industries, is hiring approximately 400 people per month to meet increasing demands brought about by a larger Department of Defense budget. Newport News Shipbuilding is the sole manufacturer of nuclear-powered aircraft carriers and one of only two shipyards in the U.S. that builds nuclear-powered submarines. In September 2018, Newport News Shipbuilding was awarded contracts for two aircraft carriers, maintenance of a retired aircraft carrier, and continued maintenance, repair, and upgrades to a submarine.

- In September 2018, Tecnico Corp. was awarded a $25.5 million Department of Defense contract to extend the service life of Landing Craft Air Cushion vehicles from 20 to 30 years. This contract includes options and orders which, if exercised and issued, would increase the value of this contract to $48.0 million. Work on this contract is expected to be completed by February 2021.

- In September 2018, Lockheed Martin Corp. was awarded a $13.0 million Department of Defense contract for Aegis design agent field engineering services. This contract includes options which, if exercised, would increase the value of this contract to $64.0 million. Approximately 34% of the work on this contract is expected to be performed in Norfolk, and this contract is anticipated to be completed by September 2019.

- Nav Systems, Inc., which is headquartered in Chesapeake, is one of several companies that received a Department of Defense contract with a total value of $12.8 million for a broad range of systems and service support on Military Sealift Command vessels. Work on this contract is expected to be completed by September 2021.

- In November 2017, BAE Systems Norfolk Ship Repair was awarded a $139.8 million Department of Defense contract to modernize the USS Tortuga. In September 2018, an additional $24.7 million was awarded for further improvements to the USS Tortuga. Work on this contract is expected to be completed in May 2019.

The Air Trade Area is also home to manufacturing firms that are not related to Department of Defense activities including Smithfield Fresh Meats Corporation, which processes and packs meat; STIHL, Inc, which manufactures handheld outdoor power equipment; and Canon Virginia, Inc., which manufactures photocopiers and laser jet printers.

1.3.3.10 Education

The availability and quality of educational institutions are important in stimulating economic growth and development. As shown on Table 1-6, the Air Trade Area's education employment (not including public colleges and universities) is projected to grow at a CAGR of 2.0% from 2017 to 2028.

Private educational institutions located in the Air Trade Area include Bryant & Stratton College, East Coast Polytechnic University, Hampton University, Regent University, and Virginia Wesleyan University. Satellite campuses for Embry-Riddle Aeronautical, George Washington, Saint Leo, and Troy universities are also located in the Air Trade Area.

The Air Trade Area also has several public colleges and universities (included in government employment on Table 1-6), including Christopher Newport University, College of William & Mary, Eastern Virginia Medical School, Norfolk State University, Old Dominion University, Thomas Nelson Community College, and Tidewater Community College. In addition, the University of Virginia and Virginia Tech have satellite locations in the Air Trade Area.

2. Air Traffic

As discussed in Chapter 1 of this Report, the economic base of ORF's Air Trade Area has the propensity to generate continued growth in the demand for air transportation services. This chapter presents a review of the state of the airline industry and its potential impact on future activity at ORF, historical trends in activity at ORF and factors affecting those trends, and the forecast of aviation activity at ORF through FY 2028.

2.1 State of the Airline Industry

The state of the airline industry has the potential to affect the projections of aviation demand at ORF. As seen in the aftermath of the terrorist attacks on September 11, 2001, and the subsequent economic downturn, the U.S. airline industry experienced a material adverse shift in demand for airline travel. The result was five years of reported industry operating losses, each year between CY 2001 and CY 2005, totaling nearly $46 billion during these five years.

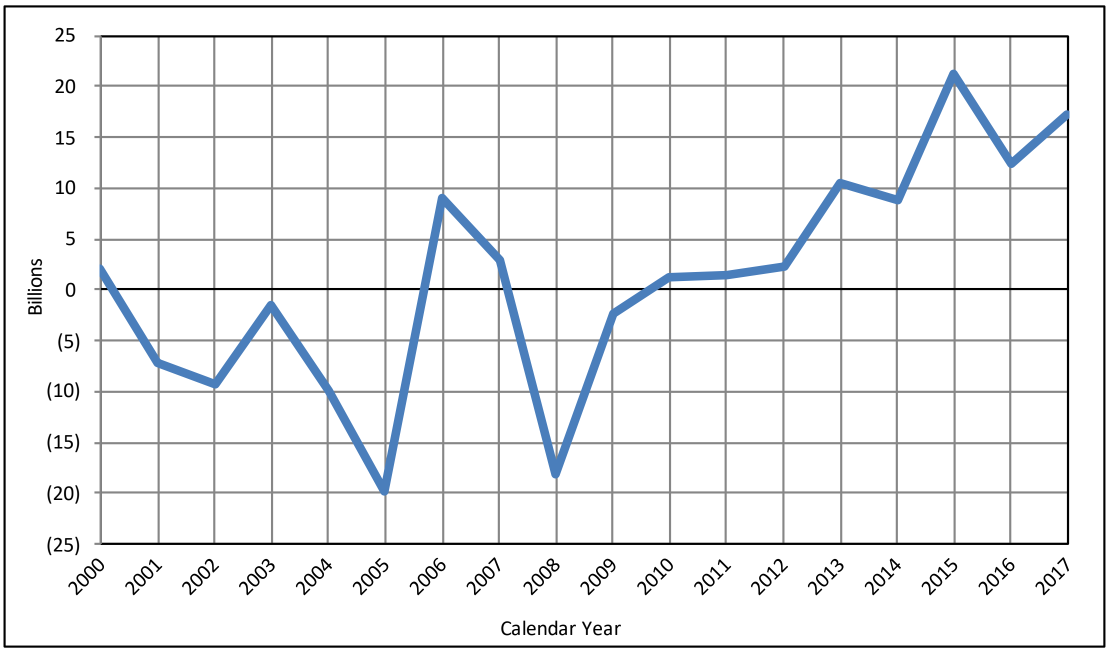
In response to these significant losses, the legacy airlines in the U.S. engaged in cost-cutting measures to reduce their cost structures in order to return to profitability. These cost-cutting measures included (1) simplifying fleets by retiring older, less-efficient aircraft, (2) improving labor productivity and lowering compensation levels, (3) rationalizing route networks by allocating smaller or regional aircraft where demand was insufficient to support larger aircraft, and eliminating underperforming hubs, (4) focusing efforts on attracting higher yield passengers, and (5) allocating more capacity to international routes, while curtailing domestic capacity growth plans. As a result of these cost-cutting measures and the imposition of baggage fees and other ancillary charges, the U.S. airline industry posted net profits in CY 2006 ($9.0 billion) and CY 2007 ($3.0 billion) for the first time since CY 2000. However, upward pressure on costs, especially fuel costs, and downward pressure on ticket prices, continued to dampen a full recovery during this period.

In CY 2008, airlines took further steps to rationalize domestic capacity and safeguard the financial recovery of the industry. However, oil prices spiked to approximately $150 per barrel, the "housing bubble" burst, a credit crisis ensued, and the U.S. and world economies fell into recession. In response, the airlines engaged in another round of capacity reductions resulting in increases in airfares in the second half of CY 2009. Between CY 2007 and CY 2009, the U.S. passenger airlines collectively reduced domestic capacity (as measured by available seat miles) by approximately 10%.

Between CY 2010 and CY 2013, the U.S. passenger airline industry recorded net income of over $15 billion, despite high fuel prices, by controlling capacity and nonfuel expenses, increasing air fares, recording high load factors, and increasing ancillary revenues. In CY 2014, the U.S. passenger airlines reported net income of nearly $9 billion, assisted by reduced fuel prices. In CY 2015, the airline industry achieved record net income of $21 billion as fuel prices decreased further, demand remained strong, and capacity control allowed average fares to remain high. CY 2016 net income was approximately $12 billion, a decrease from CY 2015 due to the loss of certain tax benefits recognized in CY 2015 and higher labor costs in CY 2016. CY 2017 marked the eighth consecutive year of profitability with a net income of approximately $17.2 billion, an increase from CY 2016 due to strong passenger and cargo demand. Through the third quarter of CY 2018, net income is approximately 8.0% lower than the same period in CY 2017 due to increasing fuel costs.

Figure 2-1 graphically depicts net income for U.S. airlines from CY 2000 through CY 2017.

Figure 2-1 – Historical Net Income (Loss) for U.S. Airlines



Source: U.S. DOT, Bureau of Transportation Statistics, Form 41 Schedule P1.2 Data via PlaneStats.com

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

2.1.1 Airline Mergers and Acquisitions

In addition to the steps discussed above, airlines have merged or acquired competitors in an attempt to increase operational synergies and become more competitive and cost efficient. Airline mergers and acquisitions in the last 10 years include:

- In CY 2009, Delta completed its merger with Northwest Airlines (Northwest), and Republic Airways Holdings acquired Frontier and Midwest Airlines.

- In CY 2010, United and Continental Airlines (Continental) merged, creating at the time the world's largest airline in terms of operating revenue and revenue passenger miles.

- In CY 2011, Southwest acquired AirTran Holdings, Inc. (AirTran).

- In CY 2013, American and US Airways merged and surpassed United as the world's largest airline, and Republic Airways Holdings sold Frontier to Indigo Partners LLC, a private equity firm.

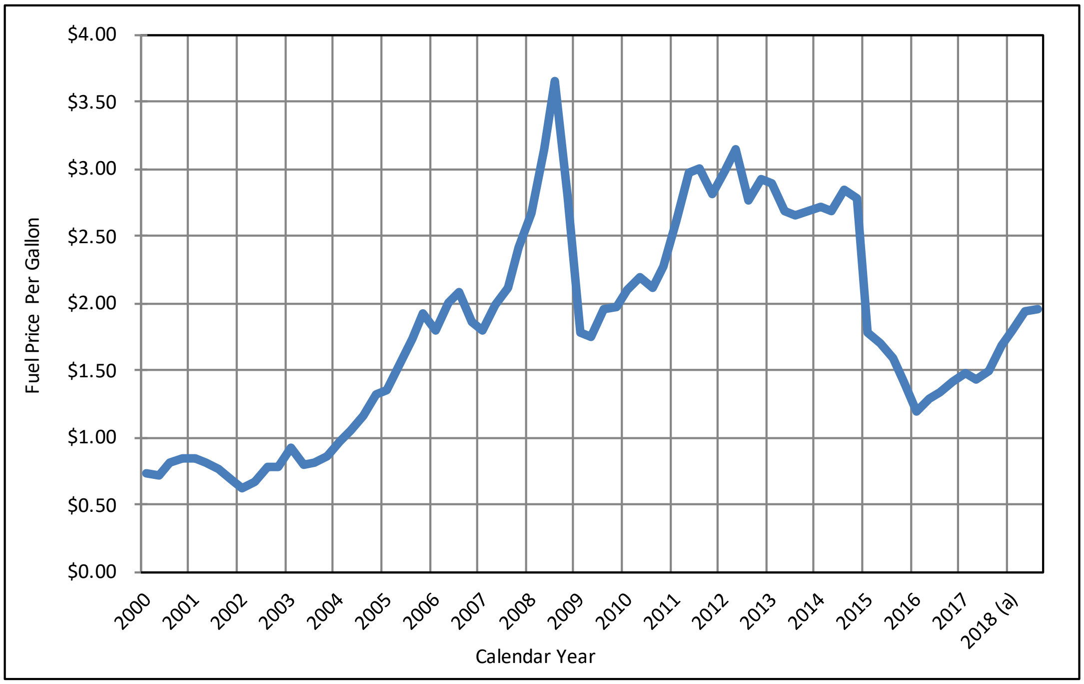
- In CY 2016, Alaska Airlines acquired Virgin America and became the fifth largest U.S. airline.

Additional consolidation in the U.S. airline industry could affect the capacity offered to passengers and alter the competitive environment further.

2.1.2 Cost of Aviation Fuel

The price of fuel is one of the most significant and unpredictable expenses for airlines. Beginning in CY 2003, aviation fuel prices increased as a result of, among other things, the invasion and occupation of Iraq, political unrest in other oil-producing countries, and growing demand for oil in China and India. By mid-CY 2008, average fuel prices were three times higher than they were in mid-CY 2004 and represented the largest airline operating expense. Fuel prices stabilized in CY 2011 through mid-CY 2014 but were still high compared to CY 2003. Beginning in mid-CY 2014, an imbalance in worldwide supply and demand resulted in a decrease in the price of oil and aviation fuel. As shown in **Figure 2-2**, the average price of aviation fuel at the end of CY 2015 was approximately 50% of the price at mid-CY 2014 and further dropped in the first quarter of 2016 to its lowest levels since CY 2004 before rising in the second quarter of 2016 and continuing to increase through the third quarter of CY 2018, with the exception of a 2.7% decrease in the second quarter of CY 2017.

Figure 2-2 – Historical Aviation Fuel Prices



(a) 2018 data is presented through the third quarter.
Source: U.S. DOT, Bureau of Transportation Statistics, Form 41 Schedule P1.2 Data via PlaneStats.com

Fluctuating fuel costs will continue to impact airline profitability and could lead to changes in air service as airlines restructure capacity to address increases or decreases in the cost of fuel.

2.1.3 Threat of Terrorism and Geopolitical Issues

Since September 11, 2001, the recurrence of terrorism incidents against either domestic or world aviation remains a risk. Tighter security measures have restored the public's confidence in the integrity of the U.S. and world aviation security systems, but have imposed inconveniences on passengers; the more intensive screening of passengers and baggage has caused the traveling public to rethink flying when a destination is within driving distance. Any terrorist incident aimed at aviation could have an immediate and significant impact on the demand for air travel worldwide.

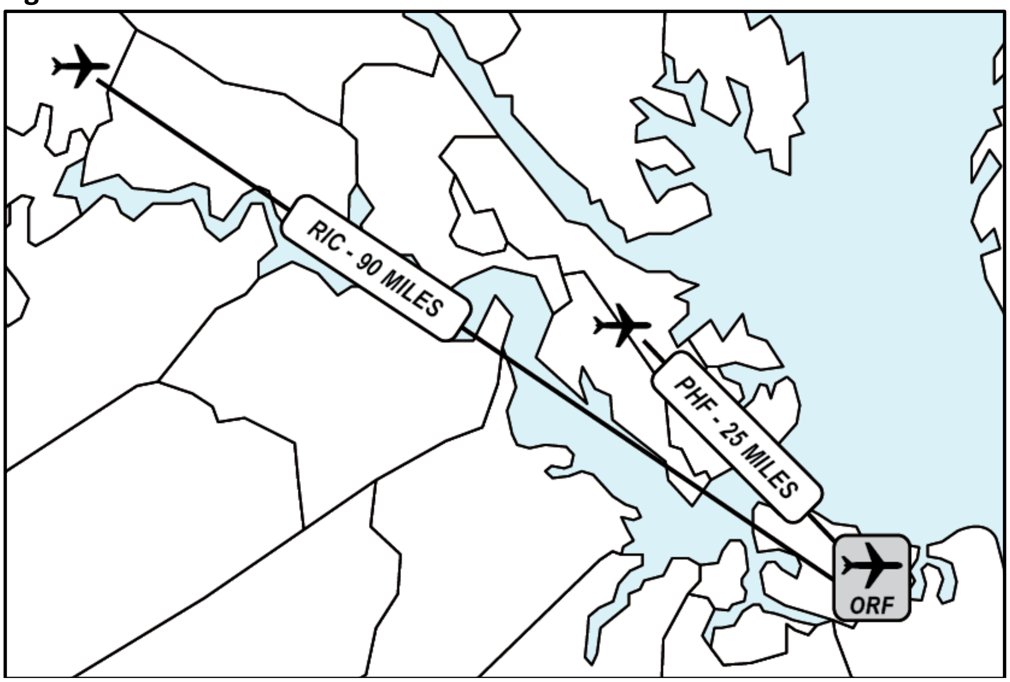
2.2 Proximity of Alternative Facilities

ORF is classified by the FAA as a small hub airport with 1.7 million enplaned passengers in CY 2017. As of March 2019, ORF offered nonstop scheduled service to 25 airports, which includes 19 airports with daily service and six airports with less than daily service. ORF averaged 74 daily flights in March 2019. In addition to service offered by American, Delta, and United, ORF was served by the low-cost carrier (LCC) Southwest and ultra-low-cost carriers (ULCC) Allegiant and Frontier in March 2019. According to the FAA's 2017 Air Carrier Activity Information System

(ACAIS) data, ORF ranked as the 72nd busiest airport nationwide based on total enplaned passengers.

Portions of the Air Trade Area are also served by the Newport News/Williamsburg International Airport (PHF), which is located approximately 25 miles northwest of ORF, and Richmond International Airport (RIC), which is located approximately 90 miles northwest of ORF. These commercial service airports, which are within a two hour drive of ORF, are graphically presented in **Figure 2-3**.

Figure 2-3 – Alternative Facilities



Source: Kyle Frank Designs

A brief discussion of these commercial service airports is presented below (listed according to hub size[1]).

- **Richmond International Airport:** RIC, a small hub airport, had approximately 1.8 million enplaned passengers in CY 2017. In March 2019, RIC offered scheduled service to 20 airports, which includes 17 airports with daily service and three airports with less than daily service. RIC averaged 83 daily flights in March 2019. In addition to service offered by American, Delta, and United, RIC was served by LCCs JetBlue Airways and Southwest and

[1] As defined by the FAA, a large hub primary airport enplanes more than 1% of nationwide enplaned passengers during the latest calendar year. A medium hub primary airport enplanes at least 0.25% but less than 1% of nationwide enplaned passengers during the latest calendar year. A small hub primary airport enplanes at least 0.05% but less than 0.25% of enplaned passengers nationwide during the latest calendar year. A non-hub primary airport enplanes at least 10,000 passengers but less than 0.05% of enplaned passengers nationwide.

ULCCs Allegiant and Spirit Airlines in March 2019. According to the FAA's 2017 ACAIS data, RIC ranked as the 68th busiest airport nationwide based on total enplaned passengers.

- **Newport News/Williamsburg International Airport:** PHF, a non-hub airport, had approximately 200,000 enplaned passengers in CY 2017. PHF offered scheduled daily service to three airports with an average of ten daily flights in March 2019. PHF was served by American and Delta and did not have LCC or ULCC service in March 2019. According to the FAA's 2017 ACAIS data, PHF ranked as the 183rd busiest airport nationwide based on total enplaned passengers.

As shown in **Table 2-1**, average one-way fares at RIC, ORF, and PHF ranged from $213 to $238 in FY 2018. Each airports' average one-way fare increased during the last five years, with PHF experiencing the greatest increase and the highest average one-way fare in each of the years presented.

Table 2-1 – Average Domestic One-Way Fares at Alternative Facilities

Airport (a)	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	CAGR
RIC	$212	$216	$213	$216	$213	0.1%
ORF	***$212***	***$236***	***$227***	***$230***	***$221***	***1.0%***
PHF	$215	$240	$240	$241	$238	2.6%

(a) Data is presented for ORF's Fiscal Year.

Source: U.S. DOT Origin and Destination Survey via PlaneStats.com

Non-hub commercial service airports within a three hour drive from ORF include Charlottesville Albemarle, Coastal Carolina Regional, Pitt-Greenville, and Salisbury Regional. Each of these facilities enplanes fewer than 350,000 passengers annually and offers fewer flight options than ORF. Baltimore/Washington International, Washington Dulles International, and Ronald Reagan Washington National are large hub airports located within an approximate four hour drive from ORF; however, nonstop service from ORF is provided to each of these airports.

The frequency and availability of air service, air fares, and time and expense involved in traveling to an airport impact travelers' decisions on which airport to choose. The closest alternative airport is PHF at approximately 25 miles from ORF; however, ORF offers more daily flights to more airports with lower average domestic fares than PHF. While RIC's average domestic fares were 3.7% lower than ORF in FY 2018, fewer destinations are served from RIC than ORF.

2.3 Historical Activity at ORF

The following sections present information related to the airlines currently serving ORF, including historical activity trends in enplaned passengers, operations (take-offs and landings), and aircraft landed weight at ORF, as well as the major factors influencing these trends.

2.3.1 Air Service

As of March 2019, ORF had service provided by six U.S. passenger carriers and two all-cargo carriers. **Table 2-2** lists the airlines serving ORF as of March 2019.

Table 2-2 – Airlines Serving ORF

Passenger		All-Cargo Carriers
Allegiant	Frontier	FedEx (d)
American (a)	Southwest	UPS
Delta (b)	United (c)	

(a) As of March 2019, code-sharing service was provided by Envoy, Piedmont, PSA, Republic, and SkyWest.
(b) As of March 2019, code-sharing service was provided by Endeavor, GoJet, and SkyWest.
(c) As of March 2019, code-sharing service was provided by Air Wisconsin, CommutAir, ExpressJet, Mesa, and Republic.
(d) As of March 2019, code-sharing service was provided by Mountain Air Cargo.

Sources:
Authority records
Official Airline Guide via PlaneStats.com

The distribution of O&D markets is a function of air travel demand and available services and facilities. This is particularly true for ORF, as O&D passenger traffic constituted approximately 97% of ORF's passengers in FY 2018. **Table 2-3** presents historical data on ORF's primary domestic O&D markets for FY 2014 and FY 2018. ORF's top 20 domestic O&D markets accounted for approximately 56% of total domestic O&D passengers in FY 2018. As shown, ORF's top 20 O&D markets were primarily medium-haul markets in the periods depicted. Of ORF's top 20 O&D markets in FY 2014, 18 remained in the top 20 in FY 2018; however, the ranking of the markets, in terms of number of passengers, has shifted as carriers added new markets and changed frequency to existing markets. In FY 2018, nonstop service from ORF was provided to 13 of its top 20 O&D markets. According to published schedules for FY 2019, nonstop service from ORF is provided to 17 of its top 20 O&D markets in FY 2019.

Table 2-3 – Primary Domestic O&D Markets

FY 2014						FY 2018					
Rank	Market	Trip Length (a)	Total O&D Passengers	Average One-Way Fare	Yield Per Passenger Mile	Rank	Market	Trip Length (a)	Total O&D Passengers	Average One-Way Fare	Yield Per Passenger Mile
1	Atlanta	SH	193,780	$136	$0.247	1	Chicago (b)	MH	185,516	$155	$0.194
2	Orlando	MH	141,710	$133	$0.168	2	New York (c)	SH	178,245	$180	$0.543
3	Chicago (b)	MH	126,269	$204	$0.241	3	Orlando (i)	MH	154,859	$139	$0.173
4	New York (c)	SH	118,567	$209	$0.567	4	Atlanta	SH	142,263	$198	$0.346
5	Los Angeles (d)	LH	101,470	$276	$0.102	5	Los Angeles (d),(j)	LH	125,271	$274	$0.103
6	San Diego	LH	88,100	$261	$0.101	6	San Diego (j)	LH	115,539	$276	$0.107
7	Dallas (e)	MH	83,410	$249	$0.180	7	Dallas (e)	MH	107,850	$242	$0.175
8	San Francisco (f)	LH	69,210	$253	$0.087	8	Boston	SH	77,460	$152	$0.279
9	Las Vegas	LH	67,630	$233	$0.095	9	Las Vegas (j)	LH	73,271	$242	$0.099
10	Jacksonville	MH	67,084	$154	$0.220	10	Denver	MH	72,500	$246	$0.131
11	Tampa	MH	60,950	$168	$0.178	11	San Francisco (f),(j)	LH	66,820	$290	$0.099
12	Boston	SH	60,412	$178	$0.317	12	Seattle (j)	LH	66,260	$275	$0.100
13	Miami	MH	56,004	$166	$0.171	13	Fort Lauderdale	MH	66,106	$139	$0.134
14	Houston (g)	MH	55,110	$247	$0.172	14	Houston (g)	MH	63,419	$254	$0.175
15	Nashville	MH	54,200	$144	$0.197	15	Jacksonville	MH	55,530	$197	$0.256
16	Seattle	LH	51,970	$278	$0.100	16	Detroit	MH	53,732	$217	$0.346
17	Detroit	MH	51,517	$199	$0.299	17	Tampa (j)	MH	53,410	$187	$0.188
18	Denver	MH	50,810	$224	$0.119	18	Miami	MH	52,874	$205	$0.218
19	Phoenix	LH	45,040	$229	$0.097	19	Phoenix (j)	LH	49,100	$264	$0.110
20	Charlotte	SH	44,775	$183	$0.551	20	Washington, D.C. (k)	SH	44,009	$144	$0.896
	Other O&D Markets		1,215,314				Other O&D Markets		1,397,813		
	Total O&D Passengers		2,803,332				Total O&D Passengers		3,201,847		
Average											
ORF (h)		**1,181**		**$212**	**$0.167**			**1,201**		**$221**	**$0.170**
U.S.		**897**		**$201**	**$0.155**			**924 (l)**		**$181**	**$0.140**

(a) Short Haul (SH) = 0 to 600 miles
Medium Haul (MH) = 601 to 1,800 miles
Long Haul (LH) = over 1,800 miles
(b) Includes Midway and O'Hare airports.
(c) Includes Newark, Kennedy, and LaGuardia airports.
(d) Includes Los Angeles, Ontario, John Wayne, Bob Hope, and Long Beach airports.
(e) Includes Dallas/Fort Worth and Dallas Love airports.
(f) Includes Oakland, San Francisco, and San Jose airports.
(g) Includes Hobby and Intercontinental airports.
(h) Average calculated for all of ORF's O&D markets.
(i) Includes Orlando and Sanford airports.
(j) No nonstop service from ORF in FY 2018.
(k) Includes National and Dulles airports.
(l) U.S. trip length for FY 2018 is forecast by the FAA.

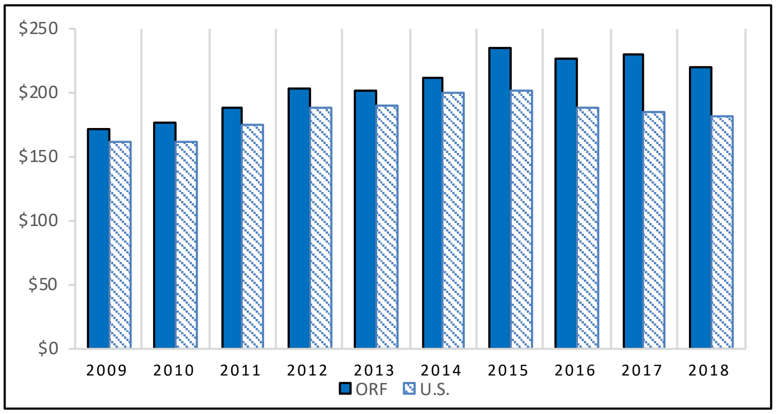
Sources:
U.S. DOT Origin and Destination Survey via PlaneStats.com
FAA Aerospace Forecasts (U.S. trip length)

Columns may not add to totals shown due to rounding.

The table also presents a comparison of the yield per passenger mile on ORF's O&D markets for FY 2014 and FY 2018 as well as the yield earned throughout the U.S. During this period, the yield per passenger mile, a measure of average earnings made by an airline transporting one passenger one mile, at ORF increased at a 0.5% CAGR compared to a 2.5% compound annual decrease throughout the U.S. In FY 2018, the yield earned at ORF was 21.5% greater than the average earned throughout the U.S.

Figure 2-4 presents average domestic one-way fares for ORF and the U.S. for FY 2009 through FY 2018. These fares reflect the average base fare paid by domestic revenue passengers and do not include ancillary fees such as bag check fees, inflight food and beverage purchases, and priority boarding fees, which have become increasingly prevalent since mid-CY 2008. As shown, ORF's average domestic one-way fare ranged from a low of $171 in FY 2009 to a high of $236 in FY 2015, while average domestic one-way fares throughout the U.S. ranged from a low of $161 in FY 2010 to a high of $201 in FY 2015.

Figure 2-4 – Average Domestic One-Way Fares



Source: U.S. DOT Origin and Destination Survey via PlaneStats.com

ORF's average one-way fare decreased 6.3% from its height of $236 in FY 2015 to $221 in FY 2018. While fares have declined throughout the U.S. during this period, an additional reason for this decrease at ORF is the recent presence of ULCCs at ORF. These airlines generally offer lower fares by taking advantage of lower operating costs than other carriers. As mentioned previously, the fares shown in Figure 2-4 do not include ancillary fees, which are common on ULCCs. ULCCs may charge fees for items such as printing a boarding pass, placing baggage in the overhead bin, and drinks and snacks. Allegiant, a ULCC, began serving ORF in October 2017 (FY 2018), and Frontier began serving in August 2018 (FY 2019).

Specific airline changes in service that impacted capacity at ORF since FY 2014 include:

- In FY 2014, Delta decreased its frequency to New York (LaGuardia) (September 2013) and Boston (December 2013) and increased its frequency to Atlanta (June 2014). Southwest decreased its frequency to Orlando and Baltimore (October 2014) and discontinued its service to Jacksonville (February 2014), Nashville (February 2014), and Atlanta (May 2014). Southwest also replaced its daily service to Tampa with weekly seasonal service (March 2014). American reinstated its New York (LaGuardia) service in April 2014. The greatest decreases in enplaned passengers from FY 2013 occurred on the Baltimore, Jacksonville, and Tampa routes.

- In FY 2015, Delta replaced its daily service to Minneapolis with seasonal service (November 2014). Delta also discontinued its New York (JFK) service (February 2015), followed by an increase in its frequency to New York (LaGuardia) (April 2015). Delta increased its frequency to Atlanta in March 2015, and Southwest increased its frequency to Baltimore in

June 2015. The greatest decreases in enplaned passengers from FY 2014 occurred on the Atlanta, Charlotte, Jacksonville, and Nashville routes.

- In FY 2016, American initiated service to Chicago (O'Hare) (April 2016), and Delta reinstated its New York (JFK) service (April 2016). Southwest increased its frequency to Baltimore in April 2016 and initiated weekly seasonal service to Denver in June 2016. The greatest increases in enplaned passengers from FY 2015 occurred on the Atlanta, Baltimore, and New York (LaGuardia) routes.

- In FY 2017, Southwest discontinued its seasonal Tampa service (July 2016). United gradually decreased its frequency to New York (Newark) throughout the year. The greatest increases in enplaned passengers from FY 2016 occurred on the Baltimore, Chicago (O'Hare), New York (JFK), and Washington, D.C. (Dulles) routes.

- In FY 2018, Allegiant began serving ORF (October 2017) with two weekly flights to St. Pete-Clearwater and has since added two weekly flights each to Fort Lauderdale, Jacksonville, and Orlando (Sanford). American increased it Charlotte (September 2017 and December 2017), New York (JFK and LaGuardia) (April 2018), and Miami (June 2018) service. In June 2018, Delta increased its Atlanta and New York (JFK) frequencies and converted seasonal service to Minneapolis to year round, and United began offering one daily flight to Denver. The greatest increases in enplaned passengers from FY 2017 occurred on the Atlanta and Charlotte routes.

- In FY 2019, Frontier began serving ORF (August 2018) and currently offers two weekly flights to Denver, Las Vegas, Phoenix, and Tampa and four weekly flights to Orlando (International). In June 2019, Southwest will begin new nonstop service to Nashville and in August 2019 to San Diego. In January 2019, Allegiant announced new nonstop service to Cincinnati and Cleveland beginning in June 2019.

Figure 2-5 presents ORF's scheduled nonstop destinations as of March 2019. As shown, scheduled nonstop service was provided to 25 airports, which includes 19 airports with daily service and six airports with less than daily service. Markets with a significant number of daily nonstop flights included New York with 18 daily flights, Atlanta and Charlotte with nine daily flights each, Washington, D.C. with seven daily flights, and Chicago and Philadelphia with six daily flights each. In addition to daily nonstop flights, Allegiant and Frontier provided less than daily service to a total of six additional airports.

Figure 2-5 – ORF's Scheduled Nonstop Destinations as of March 2019

Source: Kyle Frank Designs (based on information obtained from the Official Airline Guide via PlaneStats.com)

2.3.2 Historical Enplaned Passengers

Based on the FAA's ACAIS data, ORF ranked 72nd nationwide with 1.7 million enplaned passengers in CY 2017. **Table 2-4** presents passenger activity for ORF and the U.S. for FY 2009 through FY 2018.

Table 2-4 – Historical Enplaned Passengers

	ORF			U.S. Domestic (a)			ORF Share
FY	Enplaned Passengers	% Change	Load Factors	Enplaned Passengers	% Change	Load Factors	of U.S. Traffic
2009	1,728,361	--	73.5%	630,800,000	--	81.4%	0.274%
2010	1,652,353	-4.4%	74.9%	634,800,000	0.6%	82.7%	0.260%
2011	1,638,947	-0.8%	72.2%	650,100,000	2.4%	83.6%	0.252%
2012	1,603,060	-2.2%	72.4%	653,800,000	0.6%	84.1%	0.245%
2013	1,606,669	0.2%	72.6%	654,400,000	0.1%	84.2%	0.246%
2014	1,537,557	-4.3%	76.2%	669,000,000	2.2%	85.0%	0.230%
2015	1,450,388	-5.7%	83.3%	696,300,000	4.1%	85.1%	0.208%
2016	1,553,605	7.1%	81.0%	726,200,000	4.3%	85.3%	0.214%
2017	1,628,353	4.8%	79.5%	743,500,000	2.4%	85.2%	0.219%
2018	1,741,125	6.9%	79.5%	778,000,000	4.6%	85.5%	0.224%
FY YTD (b)							
2018	1,260,976						
2019	1,397,180	10.8%					
CAGR							
2009 - 2018	**0.1%**		**0.9%**	**2.4%**		**0.5%**	
2014 - 2018	**3.2%**		**1.1%**	**3.8%**		**0.1%**	

(a) U.S. data is presented on a federal fiscal year (October through September) basis. U.S. data for FY 2017 is estimated, and FY 2018 is forecast by the FAA.

(b) Represents enplaned passenger from July through March.

Sources:
Authority records
U.S. DOT, Schedule T100
FAA Aerospace Forecasts (U.S.)

A global economic recession, record-high fuel costs that prompted airlines to moderate service across their respective routes, decreased Department of Defense spending in the Air Trade Area, followed by federal budget sequestration (discussed in Chapter 1) led to declines in ORF's enplaned passengers in FY 2010 through FY 2015 with the exception of a slight increase in FY 2013. However, ORF's enplaned passengers have grown in each of the last three fiscal years with increases in enplaned passengers on each of the carriers serving ORF. After passenger load factors reached a peak of 83.3% in FY 2015, airlines began adding service. As mentioned previously, American, Delta, and Southwest added service in FY 2016, and American, Delta, and United added service in FY 2018. In FY 2018, Allegiant initiated service at ORF, and Frontier initiated service at ORF in FY 2019. For the nine months ended March 2019, enplaned passengers increased 10.8% compared to the same period in FY 2018.

Table 2-5 presents the historical share of enplaned passengers by airline at ORF for FY 2014 through FY 2018. As shown, enplaned passengers are distributed across a number of carriers; however, American, in combination with its code-sharing partners, accounted for the greatest enplaned passenger market share in each of the last five years and accounted for 33.3% of total enplaned passengers in FY 2018. When combined with their code-sharing partners, Delta, Southwest, and United accounted for a combined share of 65.0% in FY 2018. Total enplaned passengers increased at a 3.2% CAGR from FY 2014 through FY 2018, and each of the airlines serving ORF experienced growth during the last three fiscal years.

Table 2-5 – Historical Enplaned Passengers by Airline

											July through March			
	FY 2014		FY 2015		FY 2016		FY 2017		FY 2018		2018		2019	
Airline	Enplaned Passengers	Share	Enplaned Passengers	Share	Enplaned Passengers	Share	Enplaned Passengers	Share	Enplaned Passengers	Share	Enplaned Passengers	Share	Enplaned Passengers	Share
American (a)	484,138	31.5%	488,945	33.7%	503,843	32.4%	532,112	32.7%	580,461	33.3%	430,623	34.1%	444,527	31.8%
Delta (b)	446,013	29.0%	472,613	32.6%	495,500	31.9%	504,382	31.0%	513,143	29.5%	370,040	29.3%	407,119	29.1%
Southwest (c)	389,021	25.3%	265,038	18.3%	312,139	20.1%	331,289	20.3%	339,297	19.5%	243,587	19.3%	227,963	16.3%
United (d)	218,385	14.2%	223,792	15.4%	242,123	15.6%	260,570	16.0%	278,868	16.0%	199,351	15.8%	239,934	17.2%
Allegiant	0	0.0%	0	0.0%	0	0.0%	0	0.0%	29,356	1.7%	17,375	1.4%	33,598	2.4%
Frontier	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	43,297	3.1%
Other (e)	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	742	0.1%
Total	**1,537,557**	**100.0%**	**1,450,388**	**100.0%**	**1,553,605**	**100.0%**	**1,628,353**	**100.0%**	**1,741,125**	**100.0%**	**1,260,976**	**100.0%**	**1,397,180**	**100.0%**
Percent change				**-5.7%**		**7.1%**		**4.8%**		**6.9%**				**10.8%**
CAGR (2014-2018)										**3.2%**				

(a) Includes enplaned passengers on the following code-sharing partners: Air Wisconsin, Envoy, Mesa, Piedmont, PSA, Republic, SkyWest, and Trans States. Also includes enplaned passengers on US Airways and its code-sharing partners.
(b) Includes enplaned passengers on the following code-sharing partners: Chautauqua, Compass, Endeavor, ExpressJet, GoJet, Republic, Shuttle America, and SkyWest.
(c) Includes enplaned passengers on AirTran.
(d) Includes enplaned passengers on the following code-sharing partners: Air Wisconsin, CommutAir, ExpressJet, GoJet, Mesa, Republic, Shuttle America, SkyWest, and Trans States.
(e) Includes enplaned passengers on charter airlines.

Source: Authority records

Columns may not add to totals shown due to rounding.

2.3.3 Historical Aircraft Operations

Table 2-6 presents ORF’s historical aircraft operations for passenger airline, all-cargo, general aviation, and military for FY 2009 through FY 2018.

Table 2-6 – Historical Operations

FY	Passenger Airline	% Change	All-Cargo Airline	% Change	General Aviation	% Change	Military	% Change	Total Operations	% Change
2009	64,992	--	2,440	--	21,027	--	902	--	89,361	--
2010	61,337	-5.6%	2,614	7.1%	20,772	-1.2%	480	-46.8%	85,203	-4.7%
2011	63,492	3.5%	2,620	0.2%	20,867	0.5%	619	29.0%	87,598	2.8%
2012	61,399	-3.3%	2,482	-5.3%	20,460	-2.0%	1,308	111.3%	85,649	-2.2%
2013	58,121	-5.3%	2,458	-1.0%	17,557	-14.2%	958	-26.8%	79,094	-7.7%
2014	53,738	-7.5%	2,410	-2.0%	18,363	4.6%	1,046	9.2%	75,557	-4.5%
2015	47,436	-11.7%	2,384	-1.1%	17,524	-4.6%	702	-32.9%	68,046	-9.9%
2016	50,622	6.7%	2,396	0.5%	17,827	1.7%	583	-17.0%	71,428	5.0%
2017	51,615	2.0%	2,226	-7.1%	17,739	-0.5%	534	-8.4%	72,114	1.0%
2018	52,209	1.2%	2,150	-3.4%	16,267	-8.3%	573	7.3%	71,199	-1.3%
CAGR 2009 - 2018	**-2.4%**		**-1.4%**		**-2.8%**		**-4.9%**		**-2.5%**	

Sources:
Authority records
FAA Air Traffic Activity System

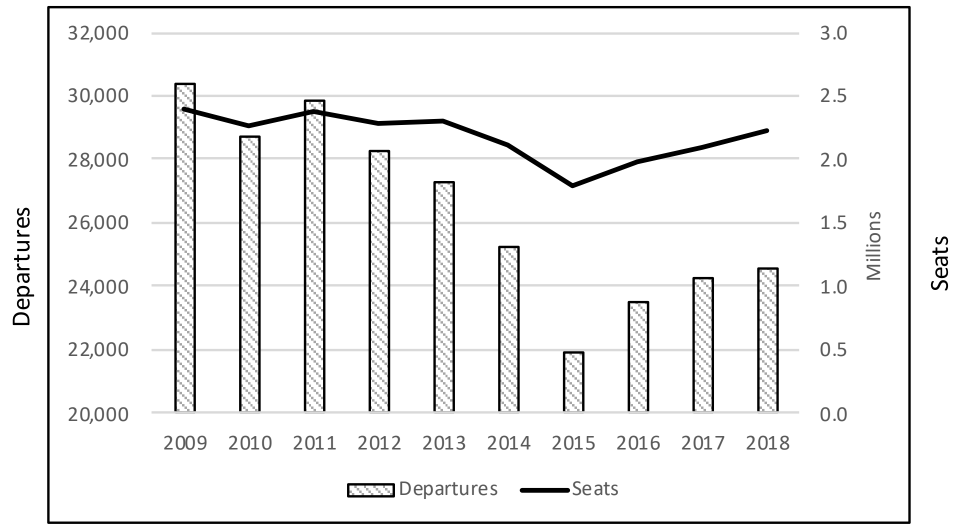
Columns may not add to totals shown due to rounding.

Passenger airline operations at ORF decreased at a compound annual rate of 2.4% between FY 2009 and FY 2018. As discussed previously, the U.S. entered an economic recession in December 2007, which led to airlines reducing capacity and right-sizing aircraft used on routes. In addition, the decrease in Department of Defense spending and sequestration negatively impacted the Air Trade Area in the years following the recession. Recently, airlines have begun adding service at ORF as evidenced by the increased frequency to existing markets, addition of new markets, and introduction of service by Allegiant and Frontier in Fiscal Years 2018 and 2019.

As also shown in Table 2-6, all-cargo operations decreased at a 1.4% compound annual rate from FY 2009 though FY 2018. The cargo industry is especially sensitive to economic downturns as evidenced by annual decreases following the economic recession, Department of Defense spending cuts in the Air Trade Area, and sequestration. General aviation operations decreased at a 2.8% compound annual rate from FY 2009 through FY 2018, and military operations decreased at a 4.9% compound annual rate during the same period.

Figure 2-6 graphically presents ORF's total scheduled seats and departures from FY 2009 through FY 2018. As discussed previously, the decreases experienced through FY 2015 are attributable to the impacts of the worldwide economic recession, rising fuel costs, decreased Department of Defense spending in the Air Trade Area, and sequestration. The total number of scheduled seats decreased at a 0.8% compound annual rate from FY 2009 through FY 2018. In FY 2015, the number of scheduled departing seats reached a low point of approximately 1.8 million but has increased in each fiscal year since that time to 2.2 million in FY 2018. The weighted average seat per aircraft at ORF increased at a CAGR of 3.4% from FY 2015 through FY 2018, indicating the airlines confidence that ORF can support an aircraft with more available seats. In recent years, airlines have begun upgauging aircraft, either by utilizing larger aircraft or putting additional seats into existing aircraft, rather than adding flights when demand in a market warrants additional capacity. In FY 2018, scheduled departures increased 1.5% while scheduled seats increased 5.5% from the prior year.

Figure 2-6 – ORF's Scheduled Departures and Seats



Source: Official Airline Guide via PlaneStats.com

2.3.4 Historical Landed Weight

Table 2-7 presents the shares of landed weight by passenger and all-cargo carriers at ORF from FY 2014 through FY 2018. As shown, total landed weight increased at a CAGR of 1.9% from FY 2014 to FY 2018. Passenger airlines' landed weight increased at a 1.8% CAGR and all-cargo increased at a 2.8% CAGR from FY 2014 through FY 2018. Similar to enplaned passenger market share, ORF's largest passenger carrier in terms of landed weight is American (in combination with its code-sharing partners) at 30.9%, with the next three airlines (when combined with their code-sharing partners) accounting for 56.8% of total landed weight in FY 2018. For the nine months ended March 2019, total landed weight increased 13.4% compared to the same period in FY 2018.

Table 2-7 – Historical Landed Weight by Airline (in 000s of pounds)

	FY 2014		FY 2015		FY 2016		FY 2017		FY 2018		July through March 2018		July through March 2019	
	Landed Weight	Share	Landed Weight	Share	Landed Weight	Share	Landed Weight	Share	Landed Weight	Share	Landed Weight	Share	Landed Weight	Share
Passenger airlines														
American (a)	625,769	29.3%	591,528	31.2%	671,980	32.3%	691,551	31.0%	713,076	30.9%	534,247	31.4%	419,070	21.7%
Delta (b)	581,805	27.2%	555,251	29.3%	579,319	27.8%	587,033	26.3%	605,856	26.2%	440,965	25.9%	521,403	27.0%
Southwest (c)	465,618	21.8%	277,948	14.7%	335,544	16.1%	372,580	16.7%	368,668	16.0%	266,884	15.7%	249,863	12.9%
United (d)	259,240	12.1%	254,680	13.4%	282,219	13.6%	307,262	13.8%	337,480	14.6%	245,379	14.4%	299,367	15.5%
Allegiant	0	0.0%	0	0.0%	0	0.0%	0	0.0%	29,307	1.3%	17,620	1.0%	208,743	10.8%
Frontier	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	43,055	2.2%
Other (e)	4,721	0.2%	20,016	1.1%	11,626	0.6%	39,547	1.8%	29,637	1.3%	24,678	1.4%	24,465	1.3%
	1,937,154	90.6%	1,699,422	89.7%	1,880,688	90.4%	1,997,974	89.5%	2,084,024	90.3%	1,529,772	89.9%	1,765,966	91.5%
All-cargo airlines	201,582	9.4%	195,791	10.3%	200,586	9.6%	233,880	10.5%	224,774	9.7%	172,396	10.1%	164,174	8.5%
Total	**2,138,735**	**100.0%**	**1,895,213**	**100.0%**	**2,081,274**	**100.0%**	**2,231,853**	**100.0%**	**2,308,798**	**100.0%**	**1,702,168**	**100.0%**	**1,930,141**	**100.0%**
Percent change				**-11.4%**		**9.8%**		**7.2%**		**3.4%**				**13.4%**
CAGR (2014-2018)														
Passenger airlines										**1.8%**				
All-cargo airlines										**2.8%**				
Total										**1.9%**				

(a) Includes landed weight on the following code-sharing partners: Air Wisconsin, Envoy, Mesa, Piedmont, PSA, Republic, SkyWest, and Trans States. Also includes landed weight on US Airways and its code-sharing partners.
(b) Includes landed weight on the following code-sharing partners: Chautauqua, Compass, Endeavor, ExpressJet, GoJet, Republic, Shuttle America, and SkyWest.
(c) Includes landed weight on AirTran.
(d) Includes landed weight on the following code-sharing partners: Air Wisconsin, CommutAir, ExpressJet, GoJet, Mesa, Republic, Shuttle America, SkyWest, and Trans States.
(e) Includes landed weight on charter airlines and general aviation.

Source: Authority records

Columns may not add to totals shown due to rounding.

2.4 Forecasts of Aviation Activity

Forecasts of air traffic activity were developed based on an analysis of the underlying economic conditions of the Air Trade Area and trends in historical airline traffic at ORF and throughout the U.S. In general, it was assumed that growth in O&D passenger traffic at ORF will occur as a function of the growth in the population and economy of the Air Trade Area, with growth in income being the primary factor. In addition, certain underlying assumptions are incorporated into the forecast including:

- Future growth in the U.S. and local economy will support underlying demand for air travel to and from ORF.
- Low-fare service will be an important component of air service at ORF, fostering continued competition in air service to ORF's major O&D markets.
- There will be no aviation-related terrorist incidents during the forecast period.
- Economic disturbances may occur during the forecast period causing traffic variations; however, a long-term increase in traffic is expected to occur.

2.4.1 Enplaned Passenger Forecast

Published schedules for FY 2019 reflecting fleet mix and seat capacity as well as year-to-date enplaned passenger data and trends in load factors were analyzed to forecast enplaned passengers for FY 2019. Published schedules for ORF reflect an increase of 6.8% in scheduled seat capacity in FY 2019 compared to FY 2018. Enplaned passengers through March 2019 are 10.8% higher than enplaned passengers through the same period in FY 2018. Based on this data and an analysis of monthly trends in load factors, enplaned passengers are forecast to increase 7.0% in FY 2019 to 1,863,000. The passenger forecast beyond FY 2019 was determined using socioeconomic regression analysis of several independent variables including population, employment, per capita personal income, and GRP.

While FY 2018 enplaned passengers increased 6.9% from FY 2017, it is not forecast that an annual increase this high will continue throughout the forecast period. As shown on **Table 2-8**, enplaned passengers are forecast to increase from approximately 1.7 million in FY 2018 to 2.2 million in FY 2028, a CAGR of 2.1%. This is lower than the 2.4% CAGR for enplaned passengers included in the 2019 Terminal Area Forecast (TAF) prepared by the FAA for ORF. The FAA forecasts U.S. domestic passenger growth at a 1.6% CAGR during this same period, indicating the FAA's projection that ORF's share of U.S. domestic traffic will increase through the forecast period.

Table 2-8 – Aviation Activity Forecast

FY	Enplaned Passengers	% Change	Operations: Passenger	Operations: All-Cargo	Operations: Other (a)	Operations: Total	Operations: % Change	Landed Weight (in 000s of pounds): Passenger	Landed Weight: All-Cargo	Landed Weight: Total	Landed Weight: % Change
Historical											
2014	1,537,557	--	53,738	2,410	19,409	75,557	--	1,937,154	201,582	2,138,735	--
2015	1,450,388	-5.7%	47,436	2,384	18,226	68,046	-9.9%	1,699,422	195,791	1,895,213	-11.4%
2016	1,553,605	7.1%	50,622	2,396	18,410	71,428	5.0%	1,880,688	200,586	2,081,274	9.8%
2017	1,628,353	4.8%	51,615	2,226	18,273	72,114	1.0%	1,997,974	233,880	2,231,853	7.2%
2018	1,741,125	6.9%	52,209	2,150	16,840	71,199	-1.3%	2,084,024	224,774	2,308,798	3.4%
Forecast											
2019	1,863,000	7.0%	54,980	2,150	16,880	74,010	3.9%	2,231,619	225,401	2,457,020	6.4%
2020	1,899,400	2.0%	55,180	2,150	16,930	74,260	0.3%	2,276,857	226,028	2,502,885	1.9%
2021	1,930,900	1.7%	55,240	2,150	16,980	74,370	0.1%	2,316,493	226,655	2,543,147	1.6%
2022	1,962,400	1.6%	55,280	2,150	17,020	74,450	0.1%	2,355,357	227,282	2,582,639	1.6%
2023	1,994,400	1.6%	55,340	2,150	17,070	74,560	0.1%	2,395,141	227,909	2,623,050	1.6%
2024	2,025,200	1.5%	55,360	2,150	17,120	74,630	0.1%	2,433,248	228,535	2,661,783	1.5%
2025	2,055,600	1.5%	55,360	2,160	17,170	74,690	0.1%	2,470,489	230,228	2,700,717	1.5%
2026	2,087,000	1.5%	55,380	2,170	17,210	74,760	0.1%	2,508,636	231,927	2,740,562	1.5%
2027	2,118,500	1.5%	55,400	2,180	17,260	74,840	0.1%	2,546,809	233,631	2,780,441	1.5%
2028	2,150,000	1.5%	55,420	2,180	17,310	74,910	0.1%	2,585,010	234,267	2,819,277	1.4%
CAGR											
2014 - 2018	**3.2%**		**-0.7%**	**-2.8%**	**-3.5%**	**-1.5%**		**1.8%**	**2.8%**	**1.9%**	
2018 - 2028	**2.1%**		**0.6%**	**0.1%**	**0.3%**	**0.5%**		**2.2%**	**0.4%**	**2.0%**	
2019 - 2028	**1.6%**		**0.1%**	**0.2%**	**0.3%**	**0.1%**		**1.6%**	**0.4%**	**1.5%**	
TAF CAGR											
2018 - 2028	**2.4%**					**1.3%**					

(a) Includes general aviation and military operations.

Sources:
FAA, Terminal Area Forecast, February 2019
Authority records (historical)
DKMG Consulting LLC (FY 2019 - FY 2028)

Columns may not add to totals shown due to rounding.

2.4.2 Operations Forecast

Table 2-8 also presents ORF's operations forecast. Forecasts of passenger airline operations were developed based on the historical relationships between enplaned passengers, load factors, and average seating capacities of aircraft utilized at ORF, as well as an analysis of published fleet plans and year-to-date operations data. Specifically, average seats are forecast to increase at a 0.5% CAGR, while load factors are forecast to increase at a 0.1% CAGR. Passenger airline operations at ORF are forecast to increase from 52,209 in FY 2018 to 55,420 in FY 2028, a CAGR of 0.6%.

All-cargo operations are forecast to increase slightly from 2,150 in FY 2018 to 2,180 in FY 2028, a CAGR of 0.1%. General aviation and military operations are forecast to increase from a total of 16,840 to 17,310 in FY 2028, a 0.3% CAGR.

As shown, total aircraft operations at ORF are forecast to increase from 71,199 operations in FY 2018 to 74,910 in FY 2028, a CAGR of 0.5%, which is predominantly attributable to the forecast growth in passenger airline operations.

2.4.3 Landed Weight Forecast

Table 2-8 also presents forecast passenger airline and all-cargo carrier landed weight at ORF. From FY 2018 to FY 2028, passenger airline landed weight is forecast to increase at a 2.2% CAGR, reflecting the projected increase in passenger airline operations along with estimates of future fleet mix and the continued upgauging of aircraft. As also shown, all-cargo carrier landed weight is forecast to increase at a CAGR of 0.4%. Total landed weight is forecast to increase at a 2.0% CAGR, which is driven by the forecast growth in passenger airline landed weight.

3. Airport Facilities

This chapter contains a review of existing ORF facilities, a summary of ORF's CIP, of which the 2019 Parking Project is a subset, and describes the funding sources for the 2019 Parking Project.

3.1 Existing Airport Facilities

ORF occupies approximately 1,088 acres and is located eight miles northeast of downtown Norfolk. Access to ORF is provided via Interstate 64 and Norview Avenue. The existing ORF facilities are described as follows:

- **Airfield** – ORF has two intersecting runways, identified as Runway 5/23 and Runway 14/32. Runway 5/23 is the primary runway and is 150 feet wide with a usable runway length of 8,001 feet, accompanied by a 1,000 foot long displaced threshold, for a total pavement length of 9,001 feet. Runway 5/23 is equipped with an Instrument Landing System. Runway 14/32 is ORF's crosswind runway. The runway is 150 feet wide and has a usable runway length of 4,300 feet, with a 575-foot displace threshold, for a total pavement length of 4,875 feet.

  Other airfield facilities include airport equipment storage and maintenance, air traffic control tower, and aircraft rescue and firefighting (ARFF).

- **Terminal** – The terminal facility at ORF is separated into an Arrivals Terminal and Main Passenger Terminal. The Arrivals Terminal is primarily utilized by passengers concluding their flight at ORF and contains baggage claim services, as well as rental car and transportation network companies. The Main Passenger Terminal serves as the primary terminal for passenger processing, passenger security screening, and passenger enplaning and deplaning.

  The Arrivals Terminal is a three-level facility consisting of 243,000 square feet. The first level is a basement and the second level contains the airline baggage claims and ground transportation center. The third level has administrative offices and the military welcome center. The Arrivals Terminal is connected to the Main Terminal Building by a 362-foot bridge.

  The Main Terminal Building is a three-level facility consisting of over 485,000 square feet. The lower level is primarily used for storage and Authority operations. The first level contains the airline ticketing functions, outbound baggage make-up and airline operations space on Concourses A and B. The second level is comprised of the two TSA screening checkpoints, 23 air carrier gates on Concourses A and B, a Federal Inspection Services (FIS) facility, airport administration offices, and concession space.

- **Parking Facilities** ORF currently has three parking garages (Garage A, B, and C) adjacent to the Arrivals Terminal and six surface parking lots (two short term, two long term, employee, and permit). In total, ORF has 8,576 parking spaces, of which 7,252 are public parking spaces, 636 are dedicated to rental cars, 596 are for employee parking, and 92 are for permit parking.

- **Rental Car Facilities** – As included above, 636 parking spaces in Garage A are used for rental car ready and return spaces. A separate exit lane from the rental car level of the garage allows rental car customers to avoid the garage exit plaza. The rental car companies also operate a remote rental car facility.

- **Fueling Facility** – Signature Flight Support operates the fuel farm facilities for commercial, general aviation, and cargo aircraft. The fuel farm includes four above-ground fuel tanks where fuel is transported to a dispensing facility and trucks then transport the fuel to aircraft. The general aviation fuel farm includes three underground storage tanks.

- **Air Cargo Facilities** – ORF leases property to Aeroterm for air cargo in a dedicated area that is shared by FedEx, Mountain Air Cargo (MAC) and UPS. The cargo facility consists of two multipurpose buildings totaling 88,000 square feet. FedEx and MAC, a FedEx contract carrier, operate from one building and FedEx and UPS operate from the second. Adjacent to the cargo facilities is a 265,000 square foot aircraft ramp.

- **General Aviation** – Signature Flight Support (Signature) is ORF's sole FBO providing fueling and deicing services to tenants at ORF. The FBO operates a 29.5 acre site which includes six bulk-storage hangars, three sections of T-hangars, a 54,000 square foot terminal building, and apron space. Signature leases property to PSA Airlines for a maintenance, repair, and overhaul dedicated facility located in the general aviation area.

3.2 Capital Improvement Program

In March 2019, the Authority submitted the 2020 through 2024 CIP to the FAA. While most projects are demand-based, others are dictated by design standards, safety, federal requirements, or rehabilitation needs. There is a higher level of uncertainty as to the estimated cost and schedule of projects in the later years of the CIP, as compared to those scheduled to be undertaken within the next few years. The Authority is in the process of updating its Master Plan pursuant to which a new planning forecast will be developed to determine future needs beyond the next five years and the options to accommodate the projected long-term growth.

Table 3-1 presents the estimated cost of ORF's five-year CIP, of which the 2019 Parking Project is a component. As shown in the table, ORF's CIP for FY 2020 through FY 2025 is estimated to be approximately $238.7 million, of which $69.7 million is for the 2019 Parking Project.

Table 3-1 – Capital Improvement Program (in 000s)

			Funding Sources							
					Local Funds					
					PFCs Pay Go		Series 2019 Bonds		Pay Go	
Project	Fiscal Year	Project Costs	AIP Grants	State	PFC #6	Future	CFC Eligible	General Revenues	General Reserve Fund	Total
2019 Projects										
Runway 5/23 lighting - construction	2019	$8,001	$0	$0	$8,001	$0	$0	$0	$0	$8,001
Runway 5/23 pavement - construction	2019	5,399	0	0	5,399	0	0	0	0	5,399
Alpha concourse extension - construction	2019	2,251	2,026	0	225	0	0	0	0	2,251
Airfield signage replacement	2019	2,500	2,250	250	0	0	0	0	0	2,500
Departures main lobby elevators construction - AIP	2019	2,230	2,007	0	223	0	0	0	0	2,230
Customs general aviation facility construction - AIP	2019	2,157	1,941	0	216	0	0	0	0	2,157
Taxiway 'C' South reconstruction (design)	2019	1,500	1,350	150	0	0	0	0	0	1,500
Customs general aviation facility construction - non-AIP	2019	1,213	0	0	0	0	0	0	1,213	1,213
Runway 5/23 standardization project	2019	1,000	900	100	0	0	0	0	0	1,000
Property purchase - Gurley Street (3 parcels)	2019	825	743	83	0	0	0	0	0	825
Property purchase - Barrs Road	2019	750	675	75	0	0	0	0	0	750
Runway 14/32 pavement - construction	2019	528	0	0	528	0	0	0	0	528
Departures main lobby elevators construction - non-AIP	2019	579	0	0	0	0	0	0	579	579
Property purchase - Burton Station Road	2019	225	203	23	0	0	0	0	0	225
Pavement management plan update	2019	250	225	25	0	0	0	0	0	250
Continuous friction measuring equipment (purchase)	2019	70	63	7	0	0	0	0	0	70
Subtotal		$29,478	$12,382	$712	$14,592	$0	$0	$0	$1,792	$29,478
2020 Projects										
Fuel farm expansion	2020	$750	$0	$0	$0	$0	$0	$0	$750	$750
Concourse stairwell refurbishment	2020	600	0	0	0	0	0	0	600	600
Intersection improvements (design)	2020	500	0	400	0	0	0	0	100	500
Long term east repairs	2020	500	0	0	0	0	0	0	500	500
Arrivals terminal and fire station fire alarm upgrade	2020	400	0	0	0	0	0	0	400	400
Garage B and C repairs	2020	300	0	0	0	0	0	0	300	300
Runway outer pavement mill & overlay (design)	2020	250	0	200	0	0	0	0	50	250
Fire protection for transformer vault room (design)	2020	250	0	200	0	0	0	0	50	250
Water main into departures terminal replacement	2020	250	0	200	0	0	0	0	50	250
Field maintenance high bay heating replacement	2020	150	0	120	0	0	0	0	30	150
Departures main lobby doors painting	2020	150	0	0	0	0	0	0	150	150
Work station and server upgrades/replacement	2020	150	0	0	0	0	0	0	150	150
Concourse digital message signs	2020	120	0	0	0	0	0	0	120	120
Departures terminal ticket lobby seating replacement	2020	100	0	80	0	0	0	0	20	100
Small capital equipment	2020	395	0	56	0	0	0	0	339	395
Subtotal		$4,865	$0	$1,256	$0	$0	$0	$0	$3,609	$4,865
2021-2024 Projects										
Taxiway C south reconstruction	2021	$16,000	$8,000	$1,600	$0	$6,400	$0	$0	$0	$16,000
Runway 5/23 standardization - design	2021	2,000	1,800	200	0	0	0	0	0	2,000
Environmental study	2021	1,000	900	100	0	0	0	0	0	1,000
Intersection improvements (construction)	2021	6,000	0	4,800	0	1,200	0	0	0	6,000
Runway outer pavement mill and overlay	2021	9,000	0	7,200	0	1,800	0	0	0	9,000
Fire protection for transformer vault room (construction)	2021	600	0	480	0	0	0	0	120	600
Runway 5/23 standardization - Ph 1 of 3	2022	30,000	15,000	7,000	0	8,000	0	0	0	30,000
Runway 5/23 standardization - Ph 2 of 3	2023	40,000	15,000	7,000	0	18,000	0	0	0	40,000
Runway 5/23 standardization - Ph 3 of 3	2024	30,000	15,000	7,000	0	8,000	0	0	0	30,000
Subtotal		$134,600	$55,700	$35,380	$0	$43,400	$0	$0	$120	$134,600
2019 Parking Project (a)	2022	$69,712	$0	$0	$0	$0	$7,746	$50,816	$11,151	$69,712
Total		**$238,655**	**$68,082**	**$37,348**	**$14,592**	**$43,400**	**$7,746**	**$50,816**	**$16,672**	**$238,655**
					$57,992		**$58,561**			

(a) See Table 3-3.

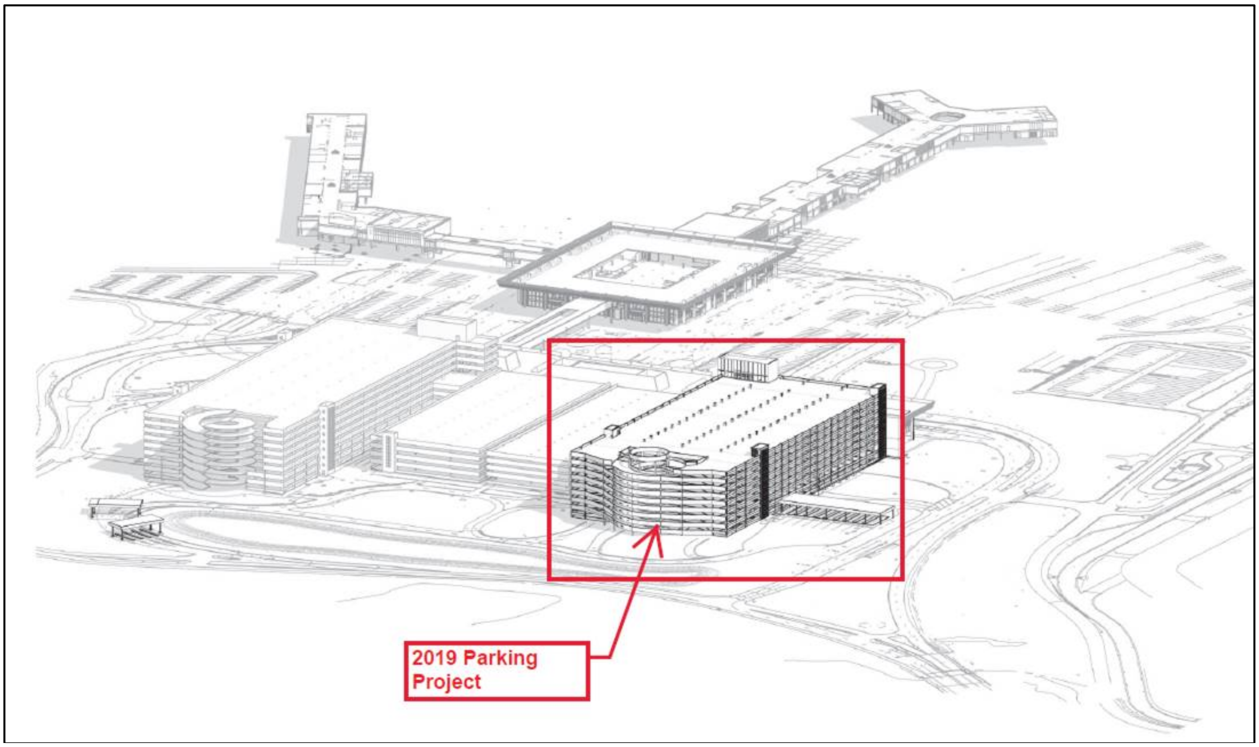
Source: Authority records

Columns may not add to totals shown due to rounding.

3.3 The 2019 Parking Project

Currently, ORF has limited land available for future airport development. As a result, the Authority re-evaluated its parking facilities, which resulted in the 2019 Parking Project. The 2019 Parking Project is graphically depicted in **Figure 3-1**.

Figure 3-1 – The 2019 Parking Project



The 2019 Parking Project will be located adjacent to the Arrivals Terminal and will consist of a 3,208 space parking garage totaling approximately 1,048,325 square feet, including one double threaded helix vehicular access ramp for parking on levels one through eight. Traffic circulation throughout the garage is two-way, with parking stalls perpendicular to the drive aisles (i.e. 90-degree). The stair and elevator tower for the 2019 Parking Project was completed in July 2002 and the site work was completed in April 2011. The construction bids were received on April 30, 2019, and the majority of the construction of the 2019 Parking Project is estimated to be complete by summer 2021, which is FY 2022. **Table 3-2** presents existing parking spaces at ORF and the parking spaces upon completion of the 2019 Parking Project.

Table 3-2 – Existing and Planned Parking Spaces

Project	Type	Existing	FY 2022	Variance
Garage A				
Long	Public	2,290	2,290	0
Short	Public	282	282	0
Rental car ready		313	313	0
Rental car return		323	323	0
Subtotal		3,208	3,208	0
Garage B	Public	1,113	1,113	0
Garage C	Public	1,110	1,110	0
Garage D				
Public	Public	0	2,612	2,612
Employee		0	596	596
Subtotal		0	3,208	3,208
Surface lots				
Public	Public	2,134	0	(2,134)
Employee lot		596	0	(596)
Permit lot		92	92	0
Subtotal		2,822	92	(2,730)
Total		**8,253**	**8,731**	**478**
Public parking spaces		**6,929**	**7,407**	**478**
Less: rental car return				**(323)**
Net gain in parking				**155**
Relocated spaces				
Surface lots		**2,134**		
Employee lot		**596**		
Rental car return		**323**		
Net gain in parking		**3,053**	**3,208**	**155**

Source: Authority

Columns may not add to totals shown due to rounding.

As shown in the table, the 2019 Parking Project consists of the construction of Garage D to provide 3,208 long-term parking spaces allowing for:

- The relocation of 2,134 various surface lot public parking spaces, allowing approximately 725,000 square feet of land to become available for aircraft parking and future airport development.

- The relocation of 596 employee parking lot spaces, allowing approximately 210,000 square feet of land to become available for future non-aeronautical use.

- The recapture of 323 spaces that were eliminated as a result of converting the second floor of Garage A from public parking to rental car return.

Between the three relocated parking areas, approximately 3,053 spaces will be relocated to Garage D, representing a 155 net gain in public parking spaces.

The land that will become available for aircraft parking, future non-aeronautical use, and other future airport development is graphically depicted in **Figure 3-2**.

Figure 3-2 – Future Airport Development

3.4 Plan of Finance

Table 3-3 presents the anticipated plan of finance for the approximatley $69.7 million 2019 Parking Project, which consists of approximately $11.2 million in pay go Authority funds and $58.6 million from the Series 2019 Bonds for project costs.

Table 3-3 – The 2019 Parking Project Plan of Finance (in 000s)

Description	Amount
Uses	
Construction	$59,895
Design and administration fees	4,747
Contingency	5,070
Total Uses	**$69,712**
Sources	
Series 2019 Bonds	
General Revenue-supported	$50,816
CFC-supported	7,746
Subtotal	$58,561
General Revenues - pay go	11,151
Total Sources	**$69,712**

Sources:
Connico Incorporated (project costs)
Authority (funding sources)

Columns may not add to totals shown due to rounding.

The debt service on the Series 2019 Bonds is expected to be paid with CFCs and Authority funds, which are described in greater detail as follows:

3.4.1 Customer Facility Charges

In September 1999, the Authority approved a CFC to be charged by the rental car companies to their customers. This CFC is collected by the rental car companies in lieu of a fixed rent payment to cover the costs of on-airport rental car facilities, including all costs associated with ready/return facilities, parking facilities, and a shuttle bus service (1999 Resolution). According to the 1999 Resolution, the CFC is calculated annually based on the estimated cost of operating the rental car facilities and is collected from rental car customers using the airport facilities and remitted 100% to the Authority by the rental car operators. The initial CFC was estimated to be between $0.70 and $1.00 per transaction/rental, increasing to $1.03 in FY 2018. In May 2018, the Board approved a resolution, which authorized the Authority's staff to set a CFC rate to fund future capital projects. As a result, the CFC was increased to $2.00 per transaction day effective July 29, 2018. The rental car companies are obligated to collect the CFC through July 31, 2023, which can be extended by mutual agreement of the Authority and the rental car companies.

Table 3-4 presents the CFC revenue calculation for ORF based on the enplaned passenger forecast presented in Chapter 2 of this Report. As shown in the table, the Authority is estimated to collect on average approximately $3.1 million annually in CFC revenues, which will fund capital expenditures and operating expenses related to the rental car facilities and annual CFC-eligible debt service associated with approximately $7.7 million of the 2019 Parking Project costs through the issuance of the Series 2019 Bonds.

Table 3-4 – Calculation of CFC Revenues (in 000s)

	Forecast								
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Enplanements (a)	1,899	1,931	1,962	1,994	2,025	2,056	2,087	2,119	2,150
% O&D of enplanements (b)	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%	97.0%
Total O&D enplanements	1,842	1,873	1,904	1,935	1,964	1,994	2,024	2,055	2,086
% visiting passengers (c)	37.0%	37.0%	37.0%	37.0%	37.0%	37.0%	37.0%	37.0%	37.0%
Total visiting passengers	682	693	704	716	727	738	749	760	772
Total transactions	348	354	359	365	371	377	382	388	394
% of visiting passengers renting cars (d)	51.0%	51.0%	51.0%	51.0%	51.0%	51.0%	51.0%	51.0%	51.0%
Average days per rental	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11	4.11
Transaction days (e)	1,430	1,454	1,477	1,501	1,525	1,547	1,571	1,595	1,619
CFC per transaction day	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00	$2.00
CFC revenue	$2,860	$2,907	$2,955	$3,003	$3,049	$3,095	$3,142	$3,190	$3,237
Balance in CFC Account as of 6/30/18	$383	$1,059	$1,746	$2,238	$2,325	$2,420	$2,321	$2,227	$2,141
Plus: CFC revenue	$2,860	$2,907	$2,955	$3,003	$3,049	$3,095	$3,142	$3,190	$3,237
Less: CFC eligible debt service (f)	$0	$0	($206)	($621)	($621)	($620)	($620)	($619)	($619)
Less: future capital (g)	($1,000)	($1,000)	($1,000)	($1,000)	($1,000)	($1,200)	($1,200)	($1,200)	($1,200)
Less: rental car operating expenses	($1,185)	($1,220)	($1,256)	($1,295)	($1,334)	($1,374)	($1,415)	($1,457)	($1,500)
Ending balance	$1,059	$1,746	$2,238	$2,325	$2,420	$2,321	$2,227	$2,141	$2,059

(a) See Table 2-8.
(b) Per Chapter 1.
(c) Per Table 3 of *Characteristics of Passengers Using Norfolk International Airport 2017* , prepared by Bonney & Company.
(d) Based on the average of FY 2016 through FY 2018.
(e) FY 2018 transaction days are forecasted with enplanement growth.
(f) A portion of the Series 2019 Bond debt service is assumed to be CFC-eligible. See Table 4-2.
(g) Historically, the Authority has used a portion of the CFC to fund certain rental car-related capital expenditures, therefore, between $1.0 to $1.2 million is assumed annually for future expenditures.

Columns may not add to totals shown due to rounding.

3.4.2 Authority Funds

The Authority plans on using amounts in the General Reserve Fund to fund approximately $11.2 million of the 2019 Parking Project costs on a pay go basis and to pay annual debt service associated with approximately $50.8 million of the 2019 Parking Project costs through the issuance of the Series 2019 Bonds. The debt service associated with the Series 2019 Bonds is discussed in greater detail in the next chapter.

3.5 Summary

Upon completion of the 2019 Parking Project, ORF will have its parking consolidated in one location freeing up land for aircraft parking and future airport development, which will provide the Authority opportunities to generate additional revenues in those locations.

4. Financial Analysis

This chapter examines the financial structure of the Authority, as well as the forecast of debt service, Operating Expenses, and General Revenues. The reasonableness of the user fees, including Signatory Airline CPE, and estimates of Net Revenues, including compliance with the Rate Covenant requirement established by the Indenture, are also discussed.

The FY 2016 through FY 2018 amounts included in this chapter are as presented in the Authority's Basic Financial Statements for the corresponding years. The FY 2019 amounts were projected by the Authority using 12 months of calendar year actual data as well as certain other factors known as the date of this report. The FY 2020 amounts are as presented in the FY 2020 annual budget for the Authority anticipated to be approved by the Board in May 2019 (FY 2020 Budget). The forecast period for this analysis consists of FY 2020 through FY 2028. All financial tables are included at the end of this chapter.

4.1 The Authority

The Authority was established in 1948 as a political subdivision of the Commonwealth of Virginia and has the full responsibility for ORF's operation, maintenance, and development. The Authority is governed by a Board of Commissioners (the Board) of at least seven but not more than nine members appointed for four-year terms by the City Council. The Authority has a management staff headed by the Executive Director who is appointed by the Board.

4.2 Indenture

The Series 2019 Bonds are being issued pursuant to the Constitution and laws of the Commonwealth of Virginia, including the Authority's Charter, Chapter 463 of the 1948 Acts of the General Assembly and the Indenture. The Series 2019 Bonds are payable from and are secured solely by a pledge of, and lien upon, the General Revenues of the Authority. General Revenues are defined in the Indenture to include all revenues, income, receipts and money derived from the ownership and operation of ORF, including without limitation all rentals, charges, landing fees, use charges, and concession revenues received by or on behalf of the Authority, investment earnings and all other income earned and accreted from, and deferred gain from, securities and other investments, and amounts earned on amounts deposited in funds and accounts under the Indenture or otherwise maintained with respect to ORF, computed in accordance with generally accepted accounting principles, and all gifts, grants, reimbursements, or payments received from governmental units or public agencies for the benefit of ORF.

The Series 2011B Bonds were issued under the Second Supplemental Indenture dated as of May 1, 2011. The Series 2011B Bonds were secured by a pledge of General Revenues and PFC Revenues; however, debt service on the Series 2011B Bonds is to be paid out of PFC Revenues to the extent legally available. Unless specifically designated, PFC revenues are not included in the definition of General Revenues under the Indenture and are not pledged to secure Bonds. The term Bonds is used in this Report to mean all Outstanding Bonds, the Series 2019 Bonds, and any Additional Bonds hereafter issued under the Indenture.

4.2.1 Flow of Funds

Pursuant to the Indenture, all Revenues are deposited into the Revenue Fund when received and moneys in the Revenue Fund are applied by the Authority from time to time to the following purposes and in the order of priority determined by the Authority in its sole discretion: (a) to pay Operating Expenses; (b) to deposit into the Sinking Fund; (c) to deposit into the Debt Service Reserve Account; (d) to deposit into the Rebate Fund; (e) to pay any party to a Contract the amounts due thereon; (f) to pay any amounts required to be paid with respect to any Other Airport Obligations; (g) for transfer to the Renewal and Extension Fund; (h) for transfer to the General Reserve Fund; and (i) for any other lawful purpose.

4.2.2 Rate Covenant

Under Section 601 of the Master Indenture, Rate Covenant, the Authority shall continuously own, control, operate, and maintain ORF in an efficient and economical manner and on a revenue producing basis and shall at all times prescribe, fix, maintain, and collect rates, fees, and other charges for the services and facilities furnished by ORF fully sufficient at all times:

- For 100% of the Operating Expenses and for the accumulation in the Revenue Fund of a reasonable reserve therefor; and
- Such Net Revenues for General Revenues in each Fiscal Year:
  - Will equal at least 125% of the Debt Service Requirement on all Revenue Obligations secured by General Revenues then Outstanding;
  - Will enable the Authority to make all required payments, if any, into the Debt Service Reserve Account and the Rebate Fund and on any Contract or Other Airport Obligation;
  - Will enable the Authority to accumulate an amount to be held in the Renewal and Extension Fund[1], which in the judgment of the Authority is adequate to meet the costs

[1] As of April 2019, the Renewal and Extension Fund has a balance of approximately $11.4 million.

of major renewals, replacements, repairs, additions, betterments, and improvements to ORF, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the ORF; and

– Will remedy all deficiencies in required payments into any of the funds and accounts mentioned in the Indenture from prior Fiscal Years.

4.3 Airline Agreement

The Airline Agreements extend through June 30, 2021 and shall be automatically renewed for two additional terms of one year each unless either party gives notice of its intent to terminate 90 days prior to the end of the then current term. The Signatory Airlines include American, Delta, Southwest, and United. FedEx and UPS are not signatory to the Airline Agreement but pay signatory landing fees since they meet the minimum number of flights required to pay the signatory rates. Allegiant and Frontier are the only Non-Signatory Airlines operating at ORF. Article 7 of the Airline Agreements describes the method for the calculation of the rents, fees and charges of the Signatory Airlines for the use of facilities, rights, licenses, and privileges to operate at ORF, which is a compensatory rate-setting methodology with a revenue-sharing mechanism. Non-signatory airlines pay a fee that is 1.25 times higher than the rates paid by the Signatory Airlines. The Airline Agreement also permits the Authority to increase the Terminal Rental Rate, Landing Fee Rate, and Apron Rental Rate to meet the requirements of the Rate Covenant. Although the Airline Agreements will expire during the forecast period, the rate-setting methodologies outlined in the current Airline Agreements are assumed to be extended throughout the forecast period.

The Airline Agreements provide for the rental of space and the use of certain facilities by the Signatory Airlines, the establishment of cost accounting centers and the periodic adjustment of the rentals, charges and fees to be paid by the Signatory Airlines as determined by the costs and expenses associated with the Direct Cost Centers (including airfield, terminal, passenger loading bridges, ground transportation, and other) and Indirect Cost Centers (administrative, maintenance, janitorial, police, and fire). Further, the Airline Agreements establish the calculation of Parking Incremental Revenue to be used by the Authority to pay costs associated with the future construction of parking facilities. The Parking Incremental Revenue is defined as any incremental parking revenues generated from an increase in parking rates from the rates established on February 1, 2014. The Airline Agreements set forth a formula for the calculation of the Parking Incremental Revenues as 20% of long-term parking revenue less 20% of total parking revenue credit card fees. Upon the commencement of any debt service payments for parking-related improvements, the Parking Incremental Revenue will be reduced by such debt service amounts but not below zero. The Parking Incremental Revenue is deducted prior to the calculation of the airlines' share of surplus revenues. **Table 4-1** presents the calculation of the Parking Incremental Revenue.

While the landing fee and terminal rental rates are calculated based on a compensatory rate-setting methodology, the Airline Agreements also allow for the sharing of surplus revenue with the Signatory Airlines at year end. Surplus revenue is defined as any revenue remaining after Operating Expenses, loan payments, Debt Service Requirements, reserve fund deposits, amortization requirements, Capital Reserve Fund deposits, and the Parking Incremental Revenue are funded (Surplus Revenues). As a result of the Parking Incremental Revenue, the Surplus Revenue available to be shared with the airlines is assumed to be zero throughout the forecast period.

The Airline Agreements permit the Authority to undertake capital expenditures to preserve, protect, enhance, expand or otherwise improve ORF, or any part thereof, and include such costs in the airlines' rates, fees, and charges without Signatory Airline approval.

4.4 Debt Service Requirement

On May 23, 2019, the Board authorized the issuance of the Series 2019 Bonds in a par amount not to exceed $80,000,000. For this analysis, the Series 2019 Bonds are estimated to be issued in a par amount of $62.3 million. The proceeds of the Series 2019 Bonds will be used to net fund approximately $58.6 million in project costs and contingencies for the 2019 Parking Project, as well as capitalized interest, the deposit to the Debt Service Reserve Account, and costs of issuance. The sources and uses of funds used to determine the Debt Service Requirement associated with the issuance of the Series 2019 Bonds is presented in the following table.

Sources of funds (in 000s)	
Par amount of Bonds	$62,310
Original issue premium (discount)	7,395
Total sources	$69,705
Uses of funds (in 000s)	
Project Fund (a)	$58,561
Interest on Project Fund (a)	(893)
Capitalized Interest	6,208
Debt Service Reserve Account	4,736
Costs of issuance	1,093
Total uses	$69,705

(a) See Table 3-3. Project costs are net funded at an investment rate of 1.5%.

Source: PFM Financial Advisors LLC, May 3, 2019

Table 4-2 presents historical and forecast annual Debt Service Requirements. As of March 31, 2019, the Authority had $38,775,000 in Outstanding Bonds. Forecast amounts for the Series 2019 Bonds were estimated by the Authority's financial advisor, PFM Financial Advisors LLC, at an all-in true interest cost of 4.08% for a 25-year amortization period. This analysis assumes no Additional Bonds are required to fund the remaining portions of the CIP.

As shown in the table, the Series 2019 Bond Debt Service Requirement (net of capitalized interest) is estimated to be $1.6 million in FY 2022, increasing to $4.7 million by FY 2028. The total net Debt Service Requirement is estimated to be $4.3 million in FY 2019, increasing to $9.2 million in 2023, and declining to $8.3 million by 2028.

4.5 Operating Expenses

The Authority's financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Operating Expenses include salaries and fringe benefit costs, maintenance and repairs, security, utilities, professional services, administrative, payments to the City, and other operating expenses. Interest expense and financing costs are reported as non-operating expenses.

Table 4-3 presents historical and projected Operating Expenses. As shown in the table, historical Operating Expenses increased from $30.9 million in FY 2016 to $33.4 million in FY 2018. The table also presents projected FY 2019, budgeted FY 2020, and forecast FY 2021 through FY 2028 Operating Expenses. As shown, FY 2020 Operating Expenses are budgeted to increase approximately 6.1% over FY 2019 amounts to $36.3 million primarily as a result of the following:

- The FY 2020 amounts assume 100% of the employee positions are filled; however, in actual years, all positions are not filled.

- FY 2020 professional services, administrative, advertising, insurance, sanitation, etc. are budgeted to increase approximately 22.6% over projected FY 2019 Operating Expenses primarily as a result of an increase in insurance and marketing promotions.

Operating Expenses are forecast to be approximately $44.9 million in FY 2028, reflecting a 2.7% CAGR from FY 2020 to FY 2028 based on the following assumptions:

- A review of historical trends, staffing requirements, projected increases in aviation activity, and the anticipated effects of inflation, assumed at 3% annually.

- A reduction of $600,000 in 2022 to reflect the decommissioning of the employee parking lot shuttle buses since the employees will be parking in the garages upon Garage D's completion.

- Increases in the City Payment of $150,000 every five years based on the Authority's agreement with the City. This agreement expires in 2024; however, this analysis assumes that the City Payments will continue and increase per the existing agreement

Table 4-4 presents the allocation of Operating Expenses from the Indirect Cost Centers to the Direct Cost Centers for airline rate setting purposes.

Table 4-5 presents the amortization of capital expenditures at ORF. According to the Airline Agreements, amortization is defined as the recovery or repayment of capital costs, excluding any amounts funded with PFCs or federal, state, or local grants, in substantially equal annual installments for a capital expenditure which is not debt financed. In no event shall the total amortization for a Fiscal Year for the Airfield and Terminal exceed $2,000,000, net of direct rental reimbursements for amortization of new facilities. The FY 2020 Authority-funded capital expenditure items are listed on Table 3-1 in the General Revenue column. FY 2020 amortization is budgeted to be approximately $1.4 million and is forecast to be approximately $1.3 million by FY 2028.

4.6 Operating Revenues

ORF operating revenues primarily consist of passenger terminal, landing fees and field operations, and parking revenue. Transactions related to financing and investing activities are reported as non-operating revenues. As shown in the following table, non-airline revenues represented approximately 70.5% of ORF's revenues in FY 2018 with airline revenues accounting for approximately 29.5%:

Revenue Type	Actual FY 2018 (in 000s)	% to Total Line Item	% to Total Financial Statement	% to Non-airline Line Item	% to Non-airline Financial Statement
Parking	$15,466	37.8%	37.8%	53.7%	53.7%
Landing fees (a)	7,700	18.8%	18.8%		
Rent			17.2%		9.3%
Airline space rent (a)	4,329	10.6%			
Building rent	1,094	2.7%		3.8%	
Fuel farm rent	254	0.6%		0.9%	
Air cargo terminal	221	0.5%		0.8%	
Passenger loading bridge loan	148	0.4%		0.5%	
Other	965	2.4%		3.4%	
Rental car	6,792	16.6%	16.6%	23.6%	23.6%
Concessions			8.0%		11.3%
Food services	1,638	4.0%		5.7%	
Newsstand	918	2.2%		3.2%	
Fixed base operator	330	0.8%		1.1%	
Advertising	151	0.4%		0.5%	
Catering	155	0.4%		0.5%	
Other	58	0.1%		0.2%	
Other			1.6%		2.1%
Ground transportation revenues	571	1.4%		2.0%	
Reimbursements - telephones (a)	35	0.1%			
Other	41	0.1%		0.1%	
Total operating revenue	$40,865	100.0%	100.0%	100.0%	100.0%
Airline	$12,064	29.5%			
Non-airline	28,801	70.5%			
Total operating revenue	$40,865	100.0%			

(a) These revenue are counted in the summary of airline revenues.

Source Authority's Basic Financial Statements for FY ended June 30, 2018

Table 4-6 presents historical and forecast operating revenues for ORF. As shown in the table, total operating revenues were approximately $40.4 million in FY 2016 increasing to $40.9 million in FY 2018. FY 2019 projected operating revenues reflect an increase of 2.6% to approximately $41.9 million over FY 2018 actuals. FY 2020 budgeted operating revenues reflect an increase of 7.6% to approximately $45.1 million over FY 2019 projections. FY 2019 projections versus FY 2020 budgeted operating revenues are further discussed as follows:

- FY 2020 parking revenues are projected to increase approximately 13.1% primarily as a result of a $1.00 per day parking rate increase planned by the Authority in fall of 2019, which is FY 2020.

- FY 2020 landing fees are budgeted to increase 4.4% over FY 2019 projections primarily as a result of an increase in the landing fee rate from $3.01 per 1,000 pounds of landed weight in FY 2019 to $3.26 per 1,000 pounds of landed weight in FY 2020. This increase is primarily the result of an increase in FY 2020 budgeted airfield operating expenses.

- FY 2020 rent is budgeted to increase 8.3% over FY 2019 projections primarily as a result of an increase in the airline space rental rate from $36.25 per square foot in FY 2019 to $37.98 per square foot in FY 2020. This increase is primarily the result of an increase in FY 2020 budgeted capital expenditures.

- FY 2020 ground transportation revenues are budgeted to increase over FY 2018 actuals and FY 2019 projections primarily as a result of anticipated growth in transportation network company (TNC) revenues.

Operating revenues are forecast to increase to approximately $55.8 million in FY 2028, reflecting a CAGR of 2.7% from FY 2020 to FY 2028. Operating revenues were forecast as follows:

- Historical trends through FY 2018, including allowances for unit price inflation at 2.0% per year.

- The provisions of the Airline Agreements and other leases and agreements with tenants and users of ORF.

- Revenues from sources related to passengers, such as parking, rental car commissions, 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 activity forecasts shown in Table 2-8 of this Report.

- If a lease expires during the forecast period, similar lease terms are assumed to be in place throughout the forecast period.

A detailed discussion of operating revenues is presented in the following subsections and is organized according to the categories included in the financial statements and as presented in Table 4-6.

4.6.1 Parking

Parking revenues are the largest non-airline revenue source at ORF, representing 37.8% of total operating revenues and 53.7% of non-airline revenues in FY 2018. Parking revenues are derived from the public garages and surface lots, as well as the employee lot. As shown in the table, parking revenues were approximately $15.5 million in FY 2018, are budgeted to increase to approximately $18.2 million in FY 2020, and are forecast to increase to approximately $24.0 million by FY 2028. The Authority manages the parking operations at ORF.

ORF's last parking rate change occurred in February 1, 2014, increasing parking rates to $9.00 per day for long-term and the Authority plans on increasing parking rates by $1.00 per day in the fall of 2019, which is FY 2020. This analysis assumes another $1.00 rate increase in short and long term parking in 2022, which is the date the 2019 Parking Project is estimated to be complete. The Authority intends on reviewing its parking rate structure annually to determine if further increases are warranted. In addition to a parking rate increase, parking revenues are forecast to increase as a result of the following:

- The employee parking monthly fee is estimated to increase from $20 per month to $30 in FY 2022 since the employees will be parking in a garage instead of the surface lot.

- Once the 2019 Parking Project is complete, the Authority intends on instituting premium parking programs that could potentially increase parking revenues. Also, there will be a slight increase in available parking spaces that may increase revenues. After 2022, additional parking revenues are forecast to grow with enplanements.

Public parking revenues are the largest revenue source in parking and were approximately $15.2 million in FY 2018 and are budgeted to be approximately $18.0 million in FY 2020, or $9.45 per enplaned passenger. Public parking revenues are forecast to increase to approximately $20.3 million, maintaining the $10.97 per enplaned passenger level by FY 2028.

4.6.2 Landing Fees

Landing fee revenues represent 18.8% of total operating revenues in FY 2018. Landing fees are charged to the airlines for use of Airfield facilities at ORF. Total landing fee revenues were approximately $7.7 million in FY 2018, are budgeted to be approximately $8.0 million in FY 2020, and are forecast to increase to approximately $10.0 million by FY 2028. **Table 4-7** presents the landing fee calculation. As shown in the table, the landing fee rate is budgeted to be $3.26 per 1,000 pounds of landed weight in FY 2019, increasing to $3.42 per 1,000 pounds of landed weight in FY 2028.

4.6.3 Rent

Rent revenues represent 17.2% of total operating revenues and 9.3% of non-airline revenues in FY 2018. Rent revenues consist of rental revenues received from the passenger airlines, all-cargo airlines, and the FBO. As shown in the table, total rent revenues were approximately $7.0 million in FY 2018, are budgeted to be approximately $7.5 million in FY 2020, and are forecast to increase to approximately $8.6 million by FY 2028.

The terms of the agreements that generate the majority of the rent revenues at ORF are discussed in greater detail as follows:

- Terminal rental revenues represent 10.6% of total operating revenues in FY 2018. Terminal rentals are charged to the airlines for use of Terminal facilities at ORF. Under the compensatory rate-setting formula, the sum of the Authority's Terminal Operating Expenses, Debt Service Requirement, and amortization are divided by total useable terminal space to determine the terminal rental rate. **Table 4-8** presents the terminal rental rate calculation. As shown in the table, the terminal rental rate is budgeted to be $37.98 per square foot in FY 2020, increasing to $44.70 per square foot in FY 2028.

- Building rent is the next largest revenue source in this category, representing 2.7% of total revenue and 3.8% of non-airline revenue in FY 2018. In June 2009, the Authority entered into a concession agreement with Landmark Aviation, which was later bought by Signature Flight Support (Signature), to conduct the FBO at ORF. Signature's lease expires on June 30, 2024 and has one option year. This revenue category includes the rent Signature pays the Authority based on a fixed schedule detailed in the lease. Signature also pays a fuel flowage fee and a gross receipts fee based on services and sales. The revenue related to those fees is included in concession revenue category discussed later in this chapter.

4.6.4 Rental Car

Rental car commission revenues represent 16.6% of total operating revenues and 23.6% of non-airline revenues in FY 2018. Rental car revenues were approximately $6.8 million in FY 2018 and are budgeted to increase to approximately $7.5 million in FY 2020, or $3.69 per enplaned passenger. Rental car revenue is forecast to increase to approximately $8.2 million, or $3.82 per enplaned passenger by FY 2028.

The Authority has entered into concession agreements for rental car services (RAC Agreements) with Alamo, Avis, Budget, Dollar, Enterprise, Hertz, National, and Thrifty. The initial term of the RAC Agreements expires on July 31, 2023 but can be extended for up to five years. Pursuant to the RAC Agreements, each company pays rent, a CFC, and a concession fee equal to 10% of gross revenues.

4.6.5 Concessions

Terminal concession revenues represent 8.0% of total operating revenues and 11.3% of non-airline revenues in FY 2018. As shown in the table, concession revenues were approximately $3.3 million in FY 2018, are budgeted to be approximately $3.5 million in FY 2020, and are forecast to increase to approximately $4.0 million by FY 2028.

The terms of the agreements that generate the majority of the concession revenues at ORF are discussed in greater detail as follows:

- Food services revenues represent 4.0% of total operating revenues and 5.7% of non-airline revenue in FY 2018. Food service concession revenues were approximately $1.6 million in FY 2018 and are budgeted to be approximately $1.8 million in FY 2019, or $0.95 per enplaned passenger. Food service concession revenues are forecast to increase to approximately $2.0 million, or $0.95 per enplaned passenger, by FY 2028.

  In March 1999, the Authority entered into a concession agreement with Anton Airfood of VA, Inc., which was later assigned to HMS Host. This agreement had an initial term of 10 years, which was extended through June 30, 2026. Pursuant to the agreement, Host pays the Authority rent plus the greater of the minimum annual guarantee or percentage rent. Percentage rents vary between 10% to 14% of gross sales.

- Newsstand concession revenues represent 2.2% of total operating revenues and 3.2% of non-airline revenue in FY 2018. Newsstand concession revenues were approximately $918,000 in FY 2018 and are budgeted to be approximately $950,000 in FY 2020, or $0.50 per enplaned passenger. Newsstand concession revenues are forecast to increase to approximately $1.1 million, or $0.50 per enplaned passenger, by FY 2028.
  In March 1999, the Authority entered into a concession agreement for the newsstand concession with Hudson-NIA Norfolk (Hudson). This agreement had an initial term of 10 years, which was extended through June 30, 2026. Pursuant to this agreement, Hudson pays the Authority rent plus the greater of the minimum annual guarantee or the percentage rent. Percentage rents vary between 15% or 17% of gross sales.

- FBO concession revenues represent 0.8% of total operating revenues and 1.1% of non-airline revenue in FY 2018. FBO concession revenues were approximately $330,000 in FY 2018 and are forecast to increase to approximately $387,000] by FY 2028. As previously mentioned, in addition to rental revenue, Signature pays a fuel flowage fee and a gross receipts fee based on services and sales.

4.6.6 Other

Other revenues represent 1.6% of total operating revenues and 2.1% of non-airline revenues in FY 2018. Ground transportation revenues represent 88.2% of the other revenue at ORF and include revenues derived from taxis, limos, Uber Technologies, Inc. (Uber), and Lyft, Inc. (Lyft). As shown in the table, other revenues were approximately $647,000 in FY 2018, are budgeted to be approximately $939,000 in FY 2020, and are forecast to increase to approximately $1.1 million by FY 2028.

In late 2016, the Authority negotiated leases with Uber and Lyft, the TNCs. In August 2018 (FY 2019), the Authority approved a rate increase for the TNCs to $2.50 per trip through June 30, 2021. This rate increase was not reflected in the FY 2020 Budget amount, and as a result, TNC revenues are forecast to increase 25% in FY 2020. The Authority reserves the right to adjust the fee after June 30, 2021.

4.7 Airline Cost per Enplanement

Table 4-9 presents the detailed Signatory Airline CPE calculation for ORF. The following presents a summary of the historical and forecast Signatory Airline CPE:

FY	CPE	FY	CPE
Historical		Forecast	
2016	$8.39	2021	$6.08
2017	$8.65	2022	$6.17
2018	$6.45	2023	$6.24
Estimated		2024	$6.31
2019	$6.17	2025	$6.32
Preliminary		2026	$6.32
Budget		2027	$6.39
2020	$6.16	2028	$6.47

Sources:
Authority's Basic Financial Statements for FY ended June 30, 2016, 2017, and 2018
Table 4-9 (FY 2020 - FY 2028)

4.8 Debt Service Coverage

Table 4-10 presents the debt service coverage calculation as defined in Section 5.2 of the Indenture. Historically, the Authority has exceeded the requirement that Net revenues be equal to at least 125% of the Debt Service Requirement. As shown in the table, Net revenues are forecast to exceed 125% of the Debt Service Requirement. The following presents a summary of the historical and forecast debt service coverage:

	Net Revenues (in 000s)	Debt Service Requirement (a) (in 000s)	Debt Service Coverage
Historical			
2016	$13,141	$4,214	311.8%
2017	$10,622	$4,173	254.6%
2018	$12,013	$4,219	284.7%
Estimated			
2019 (b)	$12,407	$3,102	399.9%
Preliminary Budget			
2020	$14,193	$4,224	336.0%
Forecast			
2021	$13,963	$4,216	331.2%
2022	$17,635	$5,780	305.1%
2023	$17,630	$8,923	197.6%
2024	$17,613	$9,089	193.8%
2025	$17,392	$9,075	191.7%
2026	$16,980	$8,805	192.8%
2027	$16,867	$8,189	206.0%
2028	$16,731	$8,199	204.1%

(a) Net of capitalized interest.
(b) Debt service coverage increases in FY 2019 primarily as a result of the final contribution of PFC revenues for the eligible portion of the Series 2011B Bonds related to PFC Application #2.

Sources: Table 4-10

4.9 Required Fund Deposits

Table 4-11 presents the required fund deposits and the cash reserves of ORF. Amounts in the Sinking Fund are pledged to Bondholders and may only be used to pay debt service on Bonds.

4.10 Sensitivity Test

The assumptions and estimates underlying the forecasts are inherently subject to change and, though considered reasonable when taken as a whole as of this date, are subject to a wide variety of business, economic, and competitive risks and uncertainties that could cause actual results to vary materially from projected results. Accordingly, there can be no assurance that assumptions will be realized, that unanticipated events and circumstances will not occur, and that actual results will not be materially higher or lower than projected results. Therefore, a sensitivity test was prepared to determine the impacts of certain potential negative events, the results of which are presented in **Table 4-12**. The base case as well as the sensitivity tests are defined as follows:

- **Base Case** – The Base Case represents the results as determined in Table 4-1 through Table 4-11 of this Report.

- **Sensitivity Test: Decreased Enplanement Growth** – The forecast presented in the base case assumes ORF enplaned passengers will grow at a CAGR of 2.1% from FY 2018 through FY 2028. However, the timing of this growth is difficult to determine. As a result, a sensitivity test has been prepared reflecting a decrease in enplaned passengers by 6% in FY 2021, which is the largest decrease in enplaned passengers at ORF during the last 10 years. The decreased FY 2021 enplaned passengers are then increased with by 1.0% thereafter. This results in lower CFC revenues, as well as lower parking, rental car, and concession revenues. As shown in the table, the Signatory Airline CPE increases from the base case of $6.47 per enplanement in FY 2028 to $7.27 per enplanement and debt service coverage decreases from the base case of 204.1% in FY 2028 to 162.0%. Even with the decrease in enplaned passenger growth, it is forecast in the sensitivity test that the CFC revenues will be sufficient to fund the portion of the costs of the 2019 Parking Project assumed in the plan of finance.

Table 4-1 – Incremental Parking Revenue (in 000s)

	Location	Preliminary Budget 2020	Forecast 2021	2022	2023	2024	2025	2026	2027	2028
Parking revenue by lot										
Long term west	Garage A (2–8), B, & C & Lot D	$11,716	$11,911	$12,105	$12,302	$12,492	$12,680	$12,873	$13,068	$13,262
Short term west	Garage A level 1	752	764	777	790	802	814	826	839	851
Long term east	Surface lot adjacent to rental car return	4,055	4,122	4,190	4,258	4,324	4,389	4,456	4,523	4,590
Short term south	Surface lot on south side	960	976	992	1,008	1,024	1,039	1,055	1,071	1,087
Short term north	Surface lot on north side	466	474	482	490	497	505	513	520	528
Total parking revenues (a)		$17,950	$18,248	$18,546	$18,848	$19,139	$19,426	$19,723	$20,021	$20,319
Long term parking revenues										
Long term west		$11,716	$11,911	$12,105	$12,302	$12,492	$12,680	$12,873	$13,068	$13,262
Long term east		4,055	4,122	4,190	4,258	4,324	4,389	4,456	4,523	4,590
Additional parking revenues										
Due to enhanced parking amenities		0	0	233	237	241	245	249	253	257
Due to rate increase										
Long term west		0	0	1,257	1,278	1,298	1,317	1,337	1,357	1,378
Long term east		0	0	435	443	449	456	463	470	477
Total long term parking revenue		$15,771	$16,033	$18,220	$18,518	$18,804	$19,086	$19,378	$19,671	$19,965
Credit card fees		$357	$368	$379	$390	$402	$414	$426	$439	$452
Parking incremental revenue										
20% of long term revenue		$3,154	$3,207	$3,644	$3,704	$3,761	$3,817	$3,876	$3,934	$3,993
20% of parking credit card fees		($71)	($74)	($76)	($78)	($80)	($83)	($85)	($88)	($90)
Parking Incremental Revenue		**$3,083**	**$3,133**	**$3,568**	**$3,626**	**$3,680**	**$3,734**	**$3,790**	**$3,846**	**$3,903**

(a) See Table 4-6.

Columns may not add to totals shown due to rounding.

Table 4-2 – Annual Debt Service Requirement (in 000s)

	Fiscal Year												
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Outstanding Bond Debt Service													
Series 2011A	$2,113	$2,127	$2,128	$2,121	$2,128	$2,120	$2,118	$2,124	$0	$0	$0	$0	$0
Series 2011B (a)	3,630	881	887	893	891	892	899	900	877	871	605	0	0
Series 2011C	1,205	1,205	1,205	1,205	1,205	1,205	1,205	1,205	3,520	3,514	3,511	3,507	3,517
Total	$6,948	$4,213	$4,219	$4,219	$4,224	$4,216	$4,222	$4,228	$4,397	$4,385	$4,116	$3,507	$3,517
Proposed Series 2019 Bonds (b)	$0	$0	$0	$0	$0	$0	$1,558	$4,695	$4,692	$4,690	$4,688	$4,682	$4,682
Total Debt Service	**$6,948**	**$4,213**	**$4,219**	**$4,219**	**$4,224**	**$4,216**	**$5,780**	**$8,923**	**$9,089**	**$9,075**	**$8,805**	**$8,189**	**$8,199**

Summary by funding source													
Summary for debt service coverage (c)													
Authority funded	$4,214	$4,173	$4,219	$3,102	$4,224	$4,216	$5,574	$8,302	$8,468	$8,455	$8,185	$7,570	$7,579
CFC eligible	0	0	0	0	0	0	206	621	621	620	620	619	619
PFC eligible (d)	2,733	40	0	1,116	0	0	0	0	0	0	0	0	0
Total Debt Service	$6,948	$4,213	$4,219	$4,219	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
Summary for airline rates and charges (c)													
Authority funded													
Airfield	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Terminal	1,461	1,407	1,416	1,444	1,458	1,489	1,491	1,505	1,500	1,229	608	608	609
Ground transportation	2,130	2,822	2,857	1,713	2,821	2,799	7,329	7,085	7,082	7,083	7,079	7,084	7,088
CFC eligible	0	0	0	0	0	0	206	621	621	620	620	619	619
PFC eligible	670	40	0	1,116	0	0	0	0	0	0	0	0	0
Total Debt Service	$4,261	$4,270	$4,273	$4,274	$4,278	$4,288	$9,026	$9,210	$9,202	$8,933	$8,307	$8,312	$8,316

(a) A portion of the Series 2011B Bond debt service is PFC eligible and was approved in PFC Application #2.

(b) The proposed Series 2019 Bond Debt Service is shown net of capitalized interest.

(c) For the calculation of debt service coverage, the principal and interest payments are the sum of July of the prior calendar year and January of the current calendar year. For the calculation of airline rate and charges, the principal and interest payments are the sum of January and July of the current year.

(d) The maximum PFC eligibility for PFC Application #2 was reached for the Series 2011B Bonds through the PFC contribution made in FY 2019. Since no PFC contributions were made in FY 2018, the remaining PFC eligibility amount applied in FY 2019 to achieve full eligibility was greater than the Series 2011B Bond debt service payment for that year.

Sources:
Authority records, outstanding bond Debt Service
PFM Financial Advisors LLC, May 3, 2019, proposed Series 2019 Bond Debt Service Requirement

Columns may not add to totals shown due to rounding.

Table 4-3 – Historical and Forecast Operating Expenses (in 000s)

	Actual			Estimated	Preliminary Budget	Forecast							
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Summary by line item													
Salaries and fringe benefits	$14,974	$16,069	$16,120	$16,973	$17,792	$18,326	$18,875	$19,443	$20,025	$20,626	$21,244	$21,882	$22,538
Maintenance and repairs	3,459	3,505	3,663	3,685	3,706	3,818	3,932	4,050	4,172	4,296	4,424	4,556	4,693
Payment to City	2,500	2,500	2,500	2,500	2,500	2,650	2,650	2,650	2,650	2,650	2,800	2,800	2,800
Other expenses													
Security and other services	3,491	4,451	3,874	4,071	4,304	4,433	4,566	4,703	4,846	4,992	5,142	5,295	5,454
Utilities	2,468	2,502	2,735	2,734	2,791	2,875	2,960	3,047	3,137	3,230	3,327	3,428	3,531
Professional services, administrative, advertising, insurance, sanitation, etc.	4,040	5,613	4,488	4,226	5,180	5,338	5,499	5,664	5,834	6,008	6,189	6,375	6,565
Decommissioning of shuttle buses	0	0	0	0	0	0	(600)	(618)	(637)	(656)	(676)	(696)	(717)
Total direct	$9,999	$12,566	$11,097	$11,031	$12,275	$12,646	$12,425	$12,796	$13,180	$13,574	$13,982	$14,402	$14,833
Total Operating Expenses	**$30,932**	**$34,641**	**$33,380**	**$34,189**	**$36,273**	**$37,440**	**$37,882**	**$38,939**	**$40,027**	**$41,146**	**$42,450**	**$43,640**	**$44,864**
Summary by cost center													
Airfield	$2,566	$2,849	$3,071	$1,767	$2,085	$2,149	$2,213	$2,280	$2,348	$2,417	$2,490	$2,565	$2,644
Terminal	4,497	4,471	4,619	4,781	4,665	4,805	4,949	5,097	5,251	5,408	5,570	5,738	5,910
Ground Transportation	5,400	5,854	5,868	6,095	6,672	6,873	6,480	6,675	6,876	7,083	7,296	7,515	7,740
Other	0	0	0	0	173	178	183	189	195	201	207	213	219
Total direct	$12,463	$13,174	$13,559	$12,643	$13,594	$14,005	$13,825	$14,241	$14,670	$15,109	$15,563	$16,031	$16,513
Maintenance - Field	$1,460	$1,437	$1,571	$1,298	$1,341	$1,382	$1,423	$1,465	$1,508	$1,554	$1,601	$1,649	$1,699
Maintenance - Building	1,520	1,369	1,570	1,572	1,585	1,632	1,681	1,731	1,782	1,835	1,889	1,945	2,003
Janitorial	2,074	2,216	2,254	2,276	2,344	2,413	2,485	2,560	2,637	2,716	2,797	2,881	2,967
Police	4,888	4,994	5,187	5,361	5,562	5,730	5,902	6,079	6,262	6,451	6,644	6,843	7,048
Fire	2,766	2,861	2,937	2,969	3,054	3,146	3,239	3,336	3,435	3,537	3,643	3,753	3,865
Administrative	3,261	6,091	3,802	5,571	6,292	6,482	6,677	6,877	7,083	7,294	7,513	7,738	7,969
Payment to City	2,500	2,500	2,500	2,500	2,500	2,650	2,650	2,650	2,650	2,650	2,800	2,800	2,800
Total indirect	$18,469	$21,467	$19,821	$21,546	$22,678	$23,435	$24,057	$24,698	$25,357	$26,037	$26,887	$27,609	$28,351
Total Operating Expenses	**$30,932**	**$34,641**	**$33,380**	**$34,189**	**$36,273**	**$37,440**	**$37,882**	**$38,939**	**$40,027**	**$41,146**	**$42,450**	**$43,640**	**$44,864**
% Change		**12.0%**	**-3.6%**	**2.4%**	**6.1%**	**3.2%**	**1.2%**	**2.8%**	**2.8%**	**2.8%**	**3.2%**	**2.8%**	**2.8%**
CAGR (2020 - 2028)													**2.7%**

Sources:

Authority's Basic Financial Statements for FY ended June 30, 2016, 2017, and 2018

Authority financial records (FY 2019 and FY 2020)

DKMG Consulting LLC (FY 2021 - FY 2028)

Columns may not add to totals shown due to rounding.

Table 4-4 – Allocation of Operating Expenses for Airline Rates and Charges (in 000s) (Page 1 of 2)

	Preliminary Budget	Forecast							
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Maintenance - Field									
Airfield	$671	$691	$712	$733	$754	$777	$801	$825	$850
Terminal	201	207	213	220	226	233	240	247	255
Ground Transportation	402	415	427	440	452	466	480	495	510
Other	67	69	71	73	75	78	80	82	85
	$1,341	$1,382	$1,423	$1,465	$1,508	$1,554	$1,601	$1,649	$1,699
Maintenance - Building									
Airfield	$317	$326	$336	$346	$356	$367	$378	$389	$401
Terminal	1,109	1,142	1,177	1,212	1,247	1,285	1,322	1,362	1,402
Ground Transportation	158	163	168	173	178	184	189	195	200
Other	0	0	0	0	0	0	0	0	0
	$1,585	$1,632	$1,681	$1,731	$1,782	$1,835	$1,889	$1,945	$2,003
Janitorial									
Airfield	$0	$0	$0	$0	$0	$0	$0	$0	$0
Terminal	2,226	2,292	2,361	2,432	2,505	2,580	2,657	2,737	2,819
Ground Transportation	117	121	124	128	132	136	140	144	148
Other	0	0	0	0	0	0	0	0	0
	$2,344	$2,413	$2,485	$2,560	$2,637	$2,716	$2,797	$2,881	$2,967
Police									
Airfield	$556	$573	$590	$608	$626	$645	$664	$684	$705
Terminal	3,893	4,011	4,131	4,255	4,383	4,516	4,651	4,790	4,934
Ground Transportation	834	860	885	912	939	968	997	1,026	1,057
Other	278	287	295	304	313	323	332	342	352
	$5,562	$5,730	$5,902	$6,079	$6,262	$6,451	$6,644	$6,843	$7,048
Fire									
Airfield	$2,443	$2,517	$2,591	$2,669	$2,748	$2,830	$2,914	$3,002	$3,092
Terminal	611	629	648	667	687	707	729	751	773
Ground Transportation	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0
	$3,054	$3,146	$3,239	$3,336	$3,435	$3,537	$3,643	$3,753	$3,865

Table 4-4 – Allocation of Operating Expenses for Airline Rates and Charges (in 000s) (Page 2 of 2)

	Preliminary Budget 2020	Forecast 2021	2022	2023	2024	2025	2026	2027	2028
Administrative									
Airfield	$1,390	$1,433	$1,506	$1,551	$1,598	$1,645	$1,694	$1,745	$1,798
Terminal	2,909	2,997	3,152	3,246	3,343	3,443	3,546	3,652	3,761
Ground Transportation	1,874	1,931	1,890	1,947	2,006	2,066	2,128	2,191	2,257
Other	119	122	128	132	136	141	145	149	153
	$6,292	$6,482	$6,677	$6,877	$7,083	$7,294	$7,513	$7,738	$7,969
Payment to City									
Airfield	$378	$401	$401	$401	$401	$401	$424	$424	$424
Terminal	513	544	544	544	544	544	575	575	575
Ground Transportation	1,469	1,557	1,557	1,557	1,557	1,557	1,645	1,645	1,645
Other	140	148	148	148	148	148	156	156	156
	$2,500	$2,650	$2,650	$2,650	$2,650	$2,650	$2,800	$2,800	$2,800
Total indirect									
Airfield	$5,756	$5,941	$6,136	$6,308	$6,483	$6,664	$6,875	$7,069	$7,268
Terminal	11,464	11,823	12,226	12,576	12,937	13,308	13,720	14,114	14,518
Ground Transportation	4,855	5,046	5,052	5,157	5,264	5,376	5,579	5,696	5,818
Other	603	626	643	657	673	689	713	730	747
Total	**$22,678**	**$23,435**	**$24,057**	**$24,698**	**$25,357**	**$26,037**	**$26,887**	**$27,609**	**$28,351**

Columns may not add to totals shown due to rounding.

Table 4-5 – Amortization of Capital Expenditures (in 000s)

	Preliminary Budget	Forecast							
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Direct cost centers									
Airfield	$148	$113	$116	$103	$97	$73	$33	$32	$17
Terminal	849	824	836	773	766	676	676	676	676
Ground Transportation	326	312	277	277	277	272	272	272	272
Other	0	121	131	131	131	131	131	131	131
Total direct	$1,323	$1,370	$1,361	$1,285	$1,272	$1,153	$1,112	$1,111	$1,097
Indirect cost centers									
Janitorial	$9	$9	$9	$9	$9	$9	$9	$9	$9
Police	62	62	62	62	62	6	6	6	6
Fire	11	11	16	28	28	28	28	18	18
Administrative	14	8	13	113	116	119	115	118	121
Total indirect	$95	$89	$100	$212	$215	$162	$157	$151	$154
Total amortization	**$1,418**	**$1,459**	**$1,460**	**$1,497**	**$1,487**	**$1,314**	**$1,269**	**$1,262**	**$1,251**
% Change		**2.9%**	**0.1%**	**2.5%**	**-0.7%**	**-11.6%**	**-3.4%**	**-0.6%**	**-0.9%**
Allocation of indirect									
Airfield	$19	$17	$23	$66	$67	$62	$61	$54	$55
Terminal	59	57	60	95	96	58	57	56	57
Ground Transportation	14	12	14	47	48	41	40	41	42
Other	3	3	3	3	3	0	0	0	0
Total direct	$95	$89	$100	$212	$215	$162	$157	$151	$154

Source: Authority financial records (FY 2019 and FY 2020)

Columns may not add to totals shown due to rounding.

Table 4-6 – Historical and Forecast Operating Revenues (in 000s)

	Actual			Estimated	Preliminary Budget	Forecast							
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Parking													
Public parking	$14,366	$14,908	$15,238	$15,863	$17,950	$18,248	$18,546	$18,848	$19,139	$19,426	$19,723	$20,021	$20,319
Employee & limo parking (a)	245	228	228	221	235	239	366	373	380	388	396	404	412
Additional parking revenues													
Due to enhanced parking amenities (b)	0	0	0	0	0	0	233	237	241	245	249	253	257
Due to rate increase (c)	0	0	0	0	0	0	2,745	2,790	2,834	2,875	2,919	2,964	3,008
Subtotal	$14,611	$15,136	$15,466	$16,084	$18,185	$18,487	$21,890	$22,248	$22,594	$22,934	$23,287	$23,642	$23,996
% Change		3.6%	2.2%	4.0%	13.1%	1.7%	18.4%	1.6%	1.6%	1.5%	1.5%	1.5%	1.5%
Landing fees	$8,814	$8,992	$7,700	$7,669	$8,008	$8,219	$8,488	$8,757	$8,995	$9,217	$9,458	$9,720	$9,985
% Change		2.0%	-14.4%	-0.4%	4.4%	2.6%	3.3%	3.2%	2.7%	2.5%	2.6%	2.8%	2.7%
Rent													
Airline space rent	$5,231	$4,948	$4,329	$4,351	$4,764	$4,894	$5,040	$5,164	$5,294	$5,327	$5,315	$5,459	$5,608
Building rent	1,036	1,068	1,094	1,108	1,166	1,166	1,166	1,166	1,224	1,224	1,224	1,224	1,224
Fuel farm rent	286	351	254	274	300	306	312	318	325	331	338	345	352
Air cargo terminal	220	224	221	206	210	214	218	222	226	231	236	241	246
Passenger loading bridge loan	148	148	148	106	106	106	106	106	106	106	106	106	106
Common use gates	0	0	0	0	100	100	100	100	100	100	100	100	100
Other	774	842	965	873	844	860	877	894	911	928	945	964	984
Subtotal	$7,696	$7,581	$7,011	$6,919	$7,490	$7,646	$7,818	$7,970	$8,186	$8,248	$8,263	$8,439	$8,620
% Change		-1.5%	-7.5%	-1.3%	8.3%	2.1%	2.3%	1.9%	2.7%	0.8%	0.2%	2.1%	2.1%
Rental car	$6,269	$6,602	$6,792	$6,998	$7,000	$7,140	$7,283	$7,429	$7,578	$7,730	$7,885	$8,043	$8,204
% Change		5.3%	2.9%	3.0%	0.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Concessions													
Food services	$1,224	$1,284	$1,638	$1,769	$1,800	$1,830	$1,860	$1,890	$1,919	$1,948	$1,978	$2,008	$2,038
Newsstand	793	862	918	985	950	966	982	998	1,013	1,028	1,044	1,060	1,076
Fixed base operator	283	315	330	345	330	337	344	351	358	365	372	379	387
Advertising	302	260	151	137	250	254	258	262	266	270	274	278	282
Catering	115	138	155	126	115	117	119	121	123	125	127	129	131
Other	43	64	58	54	53	54	55	56	57	58	59	60	61
Subtotal	$2,759	$2,922	$3,250	$3,415	$3,498	$3,558	$3,618	$3,678	$3,736	$3,794	$3,854	$3,914	$3,975
% Change		5.9%	11.2%	5.1%	2.4%	1.7%	1.7%	1.7%	1.6%	1.6%	1.6%	1.6%	1.6%
Other													
Ground transportation revenues	$159	$353	$571	$717	$855	$869	$883	$897	$911	$925	$939	$953	$967
Reimbursements - telephones	37	34	35	38	40	41	42	43	44	45	46	47	48
Other	72	102	41	106	44	45	46	47	48	49	50	51	52
Subtotal	$268	$488	$647	$862	$939	$955	$971	$987	$1,003	$1,019	$1,035	$1,051	$1,067
% Change		81.9%	32.6%	33.2%	9.0%	1.7%	1.7%	1.6%	1.6%	1.6%	1.6%	1.5%	1.5%
Total operating revenue	**$40,417**	**$41,721**	**$40,865**	**$41,946**	**$45,119**	**$46,006**	**$50,069**	**$51,070**	**$52,092**	**$52,941**	**$53,783**	**$54,809**	**$55,847**
% Change		**3.2%**	**-2.1%**	**2.6%**	**7.6%**	**2.0%**	**8.8%**	**2.0%**	**2.0%**	**1.6%**	**1.6%**	**1.9%**	**1.9%**
CAGR (2020 - 2028)													**2.7%**
Per enplanement statistics													
Public parking including increases	$9.25	$9.15	$8.75	$8.51	$9.45	$9.45	$10.97	$10.97	$10.97	$10.97	$10.97	$10.97	$10.97
Rental car	$4.04	$4.05	$3.90	$3.76	$3.69	$3.70	$3.71	$3.72	$3.74	$3.76	$3.78	$3.80	$3.82
Food services	$0.79	$0.79	$0.94	$0.95	$0.95	$0.95	$0.95	$0.95	$0.95	$0.95	$0.95	$0.95	$0.95
Newsstand	$0.51	$0.53	$0.53	$0.53	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50	$0.50
Ground transportation revenues	$0.10	$0.22	$0.33	$0.38	$0.45	$0.45	$0.45	$0.45	$0.45	$0.45	$0.45	$0.45	$0.45

(a) The employee parking monthly fee is estimated to increase from $20 per month to $30 in FY 2022 since the employees will be parking in a garage instead of the surface lot.
(b) Once the 2019 Parking Project is complete, the Authority intends on instituting premium parking programs that could potentially increase parking revenues. Also, there will be a slight increase in available parking spaces that may increase revenues. After 2022, additional parking revenues are forecasted to grow with enplaned passengers.
(c) Assumes a $1.00 rate increase in short and long term parking in 2022.

Sources:
Authority's Basic Financial Statements for FY ended June 30, 2016, 2017, and 2018
Authority financial records (FY 2019 and FY 2020)
DKMG Consulting LLC (FY 2021 - FY 2028)

Columns may not add to totals shown due to rounding.

Table 4-7 – Landing Fee Rate (in 000s)

	Preliminary Budget 2020	Forecast 2021	2022	2023	2024	2025	2026	2027	2028
Operating Expenses									
Direct (a)	$2,085	$2,149	$2,213	$2,280	$2,348	$2,417	$2,490	$2,565	$2,644
Indirect (b)	5,756	5,941	6,136	6,308	6,483	6,664	6,875	7,069	7,268
Debt Service Requirement (c)	0	0	0	0	0	0	0	0	0
Amortization (d)									
Direct	148	113	116	103	97	73	33	32	17
Indirect	19	17	23	66	67	62	61	54	55
Total requirement	$8,008	$8,219	$8,488	$8,757	$8,995	$9,217	$9,458	$9,720	$9,985
Landed weight (e)	2,455	2,634	2,675	2,717	2,757	2,797	2,839	2,880	2,920
Signatory landing fee rate	**$3.26**	**$3.12**	**$3.17**	**$3.22**	**$3.26**	**$3.29**	**$3.33**	**$3.38**	**$3.42**
Non-signatory landing fee rate	**$4.08**	**$3.90**	**$3.97**	**$4.03**	**$4.08**	**$4.12**	**$4.17**	**$4.22**	**$4.27**
Landing fee revenue									
Signatory	$6,905	$6,800	$7,022	$7,244	$7,441	$7,625	$7,825	$8,041	$8,260
Non-signatory	1,103	1,420	1,466	1,513	1,554	1,592	1,634	1,679	1,725
Total landing fee revenue	$8,008	$8,219	$8,488	$8,757	$8,995	$9,217	$9,458	$9,720	$9,985

(a) See Table 4-3.
(b) See Table 4-4.
(c) See Table 4-2.
(d) See Table 4-5.
(e) The divisor equals total landed weight per Table 2-8 plus a non-signatory premium.

Columns may not add to totals shown due to rounding.

Table 4-8 – Terminal Rental Rate (in 000s)

	Preliminary Budget 2020	Forecast 2021	2022	2023	2024	2025	2026	2027	2028
Operating Expenses									
Direct (a)	$4,665	$4,805	$4,949	$5,097	$5,251	$5,408	$5,570	$5,738	$5,910
Indirect (b)	11,464	11,823	12,226	12,576	12,937	13,308	13,720	14,114	14,518
Debt Service Requirement (c)	1,458	1,489	1,491	1,505	1,500	1,229	608	608	609
Amortization (d)									
Direct	849	824	836	773	766	676	676	676	676
Indirect	59	57	60	95	96	58	57	56	57
Total requirement	$18,494	$18,998	$19,561	$20,046	$20,550	$20,679	$20,630	$21,192	$21,770
Less telephone reimbursements (e)	($40)	($41)	($42)	($43)	($44)	($45)	($46)	($47)	($48)
Net requirement	$18,454	$18,957	$19,519	$20,003	$20,506	$20,634	$20,584	$21,145	$21,722
Total useable terminal space	486	486	486	486	486	486	486	486	486
Terminal Rental Rate	**$37.98**	**$39.02**	**$40.17**	**$41.17**	**$42.20**	**$42.47**	**$42.36**	**$43.52**	**$44.70**
Airline leased space	125	125	125	125	125	125	125	125	125
Terminal rental revenue	$4,764	$4,894	$5,040	$5,164	$5,294	$5,327	$5,315	$5,459	$5,608

(a) See Table 4-3.
(b) See Table 4-4.
(c) See Table 4-2.
(d) See Table 4-5.
(e) See Table 4-6.

Columns may not add to totals shown due to rounding.

Table 4-9 – Signatory Airline Cost per Enplanement (in 000s)

	Preliminary Budget	Forecast							
	2020	2021	2022	2023	2024	2025	2026	2027	2028
Landing fee revenue (a)	$6,905	$6,800	$7,022	$7,244	$7,441	$7,625	$7,825	$8,041	$8,260
Terminal rental revenue (b)	4,764	4,894	5,040	5,164	5,294	5,327	5,315	5,459	5,608
Telephone reimbursement (c)	40	41	42	43	44	45	46	47	48
Total	$11,709	$11,735	$12,104	$12,452	$12,780	$12,997	$13,185	$13,547	$13,916
Enplaned passengers (d)	1,899	1,931	1,962	1,994	2,025	2,056	2,087	2,119	2,150
Airline cost per enplaned passengers	**$6.16**	**$6.08**	**$6.17**	**$6.24**	**$6.31**	**$6.32**	**$6.32**	**$6.39**	**$6.47**

(a) See Table 4-7.
(b) See Table 4-8.
(c) See Table 4-6.
(d) See Table 2-8.

Columns may not add to totals shown due to rounding.

Table 4-10 – Rate Covenant (in 000s)

	Actual			Estimated	Preliminary Budget	Forecast							
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Operating revenues (a)	$40,417	$41,721	$40,865	$41,946	$45,119	$46,006	$50,069	$51,070	$52,092	$52,941	$53,783	$54,809	$55,847
Non-operating revenues													
Customer facility charge	1,021	1,032	1,432	1,906	2,860	2,907	2,955	3,003	3,049	3,095	3,142	3,190	3,237
Unrestricted State grants	2,000	2,000	2,002	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Unrestricted federal grants - K9	152	152	152	152	152	155	158	161	164	167	170	173	176
Other income	202	159	338	557	300	300	300	300	300	300	300	300	300
Interest income on State grants	81	12	164	35	35	35	35	35	35	35	35	35	35
Investment income/(loss)	200	189	441	0	0	0	0	0	0	0	0	0	0
General Revenues	$44,073	$45,263	$45,393	$46,596	$50,466	$51,403	$55,517	$56,569	$57,640	$58,538	$59,430	$60,507	$61,595
Less: Operating Expenses (b)	($30,932)	($34,641)	($33,380)	($34,189)	($36,273)	($37,440)	($37,882)	($38,939)	($40,027)	($41,146)	($42,450)	($43,640)	($44,864)
Net Revenues	$13,141	$10,622	$12,013	$12,407	$14,193	$13,963	$17,635	$17,630	$17,613	$17,392	$16,980	$16,867	$16,731
Debt Service Requirement (c)													
Debt service	$6,948	$4,213	$4,219	$4,219	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
Less: PFC-eligible debt service	(2,733)	(40)	0	(1,116)	0	0	0	0	0	0	0	0	0
Total Debt Service Requirement	$4,214	$4,173	$4,219	$3,102	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
Debt service coverage ratio	**311.8%**	**254.6%**	**284.7%**	**399.9%**	**336.0%**	**331.2%**	**305.1%**	**197.6%**	**193.8%**	**191.7%**	**192.8%**	**206.0%**	**204.1%**

(a) See Table 4-6.
(b) See Table 4-3.
(c) See Table 4-2.

Columns may not add to totals shown due to rounding.

Table 4-11 – Required Fund Deposits (in 000s)

	Actual 2018	Estimated 2019	Preliminary Budget 2020	Forecast 2021	2022	2023	2024	2025	2026	2027	2028
General Revenues (a)	$45,393	$46,596	$50,466	$51,403	$55,517	$56,569	$57,640	$58,538	$59,430	$60,507	$61,595
Required deposits											
Operating Expenses (a)	($33,380)	($34,189)	($36,273)	($37,440)	($37,882)	($38,939)	($40,027)	($41,146)	($42,450)	($43,640)	($44,864)
Sinking Fund (a)											
Debt service	($4,219)	($4,219)	($4,224)	($4,216)	($5,780)	($8,923)	($9,089)	($9,075)	($8,805)	($8,189)	($8,199)
Plus: PFC-eligible debt service	$0	$1,116	$0	$0	$0	$0	$0	$0	$0	$0	$0
Debt Service Reserve Account	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Rebate Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Payments to any party to a Contract due thereon	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Other Airport Obligations											
Virginia Resources Authority Loan Payments (b)	($92)	($92)	($92)	($15)	$0	$0	$0	$0	$0	$0	$0
Transfer to the Renewal and Extension Fund	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Transfer to the General Reserve Fund	($7,702)	($9,212)	($9,877)	($9,732)	($11,855)	($8,706)	($8,524)	($8,317)	($8,175)	($8,677)	($8,532)
Total deposits	($45,393)	($46,596)	($50,466)	($51,403)	($55,517)	($56,569)	($57,640)	($58,538)	($59,430)	($60,507)	($61,595)
General Reserve Fund											
Beginning balance (balance as of 6/30/18)		$39,817	$44,613	$48,454	$56,066	$54,770	$61,476	$68,001	$74,318	$80,493	$87,170
Plus: Transfer from the Revenue Fund		$9,212	$9,877	$9,732	$11,855	$8,706	$8,524	$8,317	$8,175	$8,677	$8,532
Less: Authority funded CIP (c)	($16,672)	($1,792)	($3,609)	($120)	($11,151)	$0	$0	$0	$0	$0	$0
Less: transfer to State Grant fund											
Annual amount		($2,000)	($2,000)	($2,000)	($2,000)	($2,000)	($2,000)	($2,000)	($2,000)	($2,000)	($2,000)
Virginia State Block Grant (d)		($624)	($427)	$0	$0	$0	$0	$0	$0	$0	$0
Ending balance		$44,613	$48,454	$56,066	$54,770	$61,476	$68,001	$74,318	$80,493	$87,170	$93,702
Days cash on hand											
Current year unrestricted cash and equivalents		$39,817	$44,613	$48,454	$56,066	$54,770	$61,476	$68,001	$74,318	$80,493	$87,170
Total operating expenses		$34,189	$36,273	$37,440	$37,882	$38,939	$40,027	$41,146	$42,450	$43,640	$44,864
Ratio		1.16	1.23	1.29	1.48	1.41	1.54	1.65	1.75	1.84	1.94
Number of days		365	366	365	365	365	366	365	365	365	366
Days cash on hand		425	450	472	540	513	562	603	639	673	711

(a) See Table 4-10.
(b) The Virginia Resources Authority made a loan to the Authority in Feburary 2001 to fund the construction related to Hangar 4 and ground support equipment shop.
(c) See Table 3-1.
(d) The Commonwealth of Virginia made a loan to the Authority in 2009 to finance the site work project to accommodate the 2019 Parking Project.

Columns may not add to totals shown due to rounding.

Table 4-12 – Sensitivity Test Results (in 000s)

	Estimated 2019	Preliminary Budget 2020	Forecast 2021	2022	2023	2024	2025	2026	2027	2028
Base case										
Enplaned passengers per Table 2-8	1,863	1,899	1,931	1,962	1,994	2,025	2,056	2,087	2,119	2,150
CFC revenues	$0	$2,860	$2,907	$2,955	$3,003	$3,049	$3,095	$3,142	$3,190	$3,237
Debt service requirement	$3,102	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
O&M Expenses	$34,189	$36,273	$37,440	$37,882	$38,939	$40,027	$41,146	$42,450	$43,640	$44,864
Operating Revenues	$41,946	$45,119	$46,006	$50,069	$51,070	$52,092	$52,941	$53,783	$54,809	$55,847
Signatory Airline CPE	$0.00	$6.16	$6.08	$6.17	$6.24	$6.31	$6.32	$6.32	$6.39	$6.47
Debt service coverage ratio	399.9%	336.0%	331.2%	305.1%	197.6%	193.8%	191.7%	192.8%	206.0%	204.1%
Sensitivity test: decreased enplaned passengers										
Enplaned passengers	1,863	1,899	1,785	1,803	1,821	1,840	1,858	1,877	1,895	1,914
CFC revenues	$0	$2,860	$2,688	$2,715	$2,742	$2,770	$2,797	$2,825	$2,853	$2,882
Debt service requirement	$3,102	$4,224	$4,216	$5,780	$8,923	$9,089	$9,075	$8,805	$8,189	$8,199
O&M Expenses	$34,189	$36,273	$37,440	$37,882	$38,939	$40,027	$41,146	$42,450	$43,640	$44,864
Operating Revenues	$41,946	$45,119	$44,327	$47,990	$48,808	$49,665	$50,356	$51,030	$51,886	$52,756
Signatory Airline CPE	$0.00	$6.16	$6.57	$6.71	$6.84	$6.95	$7.00	$7.03	$7.15	$7.27
Debt service coverage ratio	399.9%	336.0%	286.2%	265.0%	169.3%	164.0%	159.9%	158.0%	166.2%	162.0%
Variance										
Enplaned passengers	0	0	(145)	(159)	(173)	(186)	(198)	(210)	(223)	(236)
CFC revenues	$0	$0	($219)	($240)	($261)	($279)	($298)	($317)	($337)	($355)
Debt service requirement	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
O&M Expenses	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Operating Revenues	$0	$0	($1,679)	($2,079)	($2,262)	($2,427)	($2,585)	($2,753)	($2,923)	($3,091)
Signatory Airline CPE	$0.00	$0.00	$0.50	$0.54	$0.59	$0.64	$0.67	$0.71	$0.75	$0.80
Debt service coverage ratio	0.0%	0.0%	-45.0%	-40.1%	-28.3%	-29.8%	-31.8%	-34.9%	-39.8%	-42.0%

APPENDIX B

AUDITED FINANCIAL STATEMENTS
OF THE NORFOLK AIRPORT AUTHORITY
AS OF AND FOR THE FISCAL YEARS ENDED
JUNE 30, 2017 AND 2018

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NORFOLK AIRPORT AUTHORITY

Basic Financial Statements,
Required Supplementary Information,
Supplemental Schedules and Audit of Federal Awards Performed
in Accordance with the Uniform Guidance

June 30, 2018 and 2017

(With Independent Auditors’ Report Thereon)

NORFOLK AIRPORT AUTHORITY

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Board of Commissioners and Administrative Officials

Board of Commissioners

Blythe Ann Scott, Chairman	Mekbib Gemeda
Malcolm P. Branch, Vice Chairman	William L. Nusbaum
Deborah H. Painter, Treasurer	Bruce B. Smith
Peter G. Decker, III	Chris G. Stephanitsis
Paul D. Fraim,	Harold J. Cobb (Emeritus Commissioner)

Administrative Officials

Robert S. Bowen	Executive Director
Steve C. Sterling	Deputy Executive Director Administration & Operations
Anthony E. Rondeau	Deputy Executive Director Engineering & Facilities
Jeffrey J. Bass	Director of Facilities
Jarred M. Roenker	Director of Finance
Sheila M. Balli	Director of Human Resources
Charles W. Braden	Director of Market Development
Shelia D. Ward	Director of Operations

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KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Auditors' Report

The Board of Commissioners
Norfolk Airport Authority:

Report on the Financial Statements

We have audited the accompanying financial statements of the Norfolk Airport Authority (the Authority) as of and for the years ended June 30, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements for the years then ended as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Norfolk Airport Authority as of June 30, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended, in accordance with U.S. generally accepted accounting principles.

Emphasis of Matter

As discussed in note 1(m)(ii) to the basic financial statements, in fiscal year 2018, the Authority adopted new accounting guidance described in Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

U.S. generally accepted accounting principles require that the Management's Discussion and Analysis on pages 4 – 10, and the Schedule of Changes in Net Pension Liability and Related Ratios on page 50, the Schedule of Pension Contributions on page 51, the Schedule of OPEB Contributions on page 52, the Schedule of Authority's Share of Net OPEB Liability on page 53, and the notes to Required Supplementary Information on page 54, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary and Other Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's basic financial statements. The Introductory Section, Schedule of Expenditures of Federal Awards, as required by Title 2 U.S. Code of Federal Regulations, Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards,* the notes to the Schedule of Expenditures of Federal Awards, and the Schedule of Passenger Facility Charge Revenues and Expenditures, as specified in the Passenger Facility Charge Audit Guide for Public Agencies, issued by the Federal Aviation Administration, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedule of Expenditures of Federal Awards and the Schedule of Passenger Facility Charge Revenues and Expenditures are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditures of Federal Awards and Schedule of Passenger Facility Charge Revenues and Expenditures are fairly stated in all material respects in relation to the basic financial statements as a whole.

The Introductory Section has not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 20, 2018, on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

KPMG LLP

Norfolk, Virginia
November 20, 2018

The management of the Norfolk Airport Authority (the Authority) offers readers of its basic financial statements the following narrative overview and analysis of financial activities as of and for the years ended June 30, 2018 and 2017. The following should be read in conjunction with the basic financial statements and notes thereto.

Basic Financial Statements

The Authority's financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. This is a similar basis of accounting as employed by most private-sector enterprises.

The following components are included in the Authority's financial statements:

The statements of net position present information on the assets, deferred outflows of resources, liabilities, and deferred inflows of resources of the Authority, with the resulting differences reported as net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The statements of revenues, expenses, and changes in net position report revenues and expenses, classified as operating and nonoperating, for the period. The resulting change in net position for the period is combined with the beginning of the year total net position balance in order to reconcile to the end of the year total net position.

The statements of cash flows report the cash flows experienced by the Authority from operating activities, capital and related financing activities, and investing activities. The net result of the cash provided by or used in these activities for the period, added to the beginning of the year cash balance, is reconciled to the cash balance presented on the statements of net position.

The notes to the basic financial statements explain and provide additional information on the data presented in the basic financial statements as of and for the years ended June 30, 2018 and 2017.

The Authority and Financial Highlights

The Norfolk Airport Authority (the Authority) was formed in 1988 to account for the operations of the Norfolk International Airport (the Airport). The Airport is the primary Origination and Destination (O&D) airport serving the Virginia Beach-Norfolk, VA-NC Combined Statistical Area (CSA). Revenues generated by Airport operations are used to meet all operating expenses and to provide for payment of all principal and interest on debt of the Authority. The Authority is authorized to finance projects by issuing bonds or obtaining loans in its own name.

The financial results in 2018 continue to demonstrate the success of the Authority's passenger growth strategy. The total number of passengers served by the Airport, at 3,483,846 for 2018, is an increase of 6.7% over the prior year. This year has continued the Authority's recent success, and represents an increase of 19.8% from 2015's total passenger count. The Authority's non-airline revenue has risen in 2018 and coupled with fiscal discipline over expenses has allowed the Authority to reduce revenues charged to the airlines. These reduced costs on the airlines position the Airport for continued airline route and destination growth.

Revenues

A summary of the major revenues for the years ended June 30, 2018, 2017 and 2016 are shown below:

		2018	2017	2016
Operating revenues:				
Parking	$	15,465,667	15,135,831	14,611,343
Landing fees		7,699,906	8,991,845	8,813,538
Rent		7,010,567	7,580,914	7,695,510
Rental cars		6,792,428	6,602,430	6,269,171
Concessions		3,249,504	2,922,036	2,759,475
Other		646,989	488,010	268,352
Total operating revenues		40,865,061	41,721,066	40,417,389
Nonoperating revenues, net:				
Federal and state grants and interest		11,465,136	3,385,362	7,518,845
Passenger facility charges and interest		7,280,020	6,558,879	6,401,423
Customer facility charges		1,432,100	1,031,792	1,021,106
Interest income		441,259	188,538	200,182
Other income		337,694	158,530	202,223
Total nonoperating revenues, net		20,956,209	11,323,101	15,343,779
Total revenues, net	$	61,821,270	53,044,167	55,761,168

2018 versus 2017 Financial Highlights

Operating revenues during fiscal year 2018 decreased by $856,005 compared to the previous year to $40,865,061, as the Authority was able to reduce the rates charged to the airlines for landing fees and rent. Parking revenue increased $329,836 to $15,465,667 due to higher passenger activity. Landing fees decreased by $1,291,939 to $7,699,906 and rent decreased by $570,347 to $7,010,567 as the result of lower fees charged to the airlines. Rental car revenue increased $189,998 to $6,792,428. Concessions revenue increased $327,468 to $3,249,504 due to higher passenger activity and other income increased $158,979 to $646,989 primarily due to increased fees collected from transportation network companies.

Nonoperating revenues during fiscal year 2018 increased by $9,633,108 compared to the previous year to $20,956,209, due to an increase in federal and state grants. Federal and state grants and interest increased by $8,079,774 as a result of an increase in grants reimbursing the Authority for capital projects. Passenger facility charges (PFCs) increased by $721,141 to $7,280,020 and Customer Facility Charges (CFCs) increased by $400,308 to $1,432,100. The increase in PFCs was due to higher passenger activity and the increase in CFCs was due to a CFC rate increase along with higher passenger activity. Interest income and other income increased by $252,721 and $179,164 to $441,259 and $337,694, respectively.

2017 versus 2016 Financial Highlights

Operating revenues during fiscal year 2017 increased by $1,303,677 compared to the previous year to $41,721,066. Parking revenue increased $524,488 to $15,135,831 due to higher passenger activity. Landing fees increased by $178,307 to $8,991,845 as a result of higher airline activity. Rent decreased by $114,596 to $7,580,914 as a result of lower rents charged to tenants. Rental car revenue increased $333,259 to $6,602,430 due to higher passenger activity. Concessions revenue increased $162,561 to $2,922,036 due to higher passenger activity and other income increased $219,658 to $488,010 primarily due to increased fees collected from transportation network companies.

Nonoperating revenues during fiscal year 2017 decreased by $4,020,678 compared to the previous year to $11,323,101, due to a decrease in federal and state grants. Federal and state grants and interest decreased by $4,133,483 as a result of a decrease in grants reimbursing the Authority for capital projects. PFCs increased by $157,456 to $6,558,879 and CFCs increased by $10,686 to $1,021,106. The increase in PFCs and CFCs was due to higher passenger activity.

Expenses

A summary of the major expenses for the years ended June 30, 2018, 2017 and 2016 are shown below:

		2018	2017	2016
Operating expenses:				
Salaries and fringe benefits	$	16,119,948	16,069,061	14,973,786
City tax assessment		2,500,000	2,500,000	2,500,000
Maintenance and repairs		3,662,659	3,505,388	3,458,833
Depreciation		10,951,169	10,029,660	10,355,409
Other expenses		11,097,024	12,566,263	9,999,125
Total operating expenses		44,330,800	44,670,372	41,287,153
Nonoperating expenses:				
Interest expense		1,746,874	764,513	1,298,383
Total expenses	$	46,077,674	45,434,885	42,585,536

2018 versus 2017 Financial Highlights

Operating expenses during fiscal year 2018 decreased by $339,572 compared to the previous year to $44,330,800. Salaries and fringe benefits increased by $50,887 due to normal pay rate increases. Maintenance and repairs increased by $157,271 to $3,662,659. Depreciation increased by $921,509 to $10,951,169 due to new capital asset acquisitions. Other expenses decreased by $1,469,239, primarily as a result of a one-time impairment charge to capitalized assets in 2017, in the amount of $1,424,535.

Nonoperating expenses during fiscal year 2018 increased by $982,361 compared to the previous year to $1,746,874, due to the adoption of Governmental Accounting Standards Board (GASB) Statement 89 - *Accounting for Interest Cost Incurred before the End of a Construction Period,* which resulted in the cessation of capitalizing interest into capital assets.

2017 versus 2016 Financial Highlights

Operating expenses during fiscal year 2017 increased by $339,572 compared to the previous year to $44,330,800. Salaries and fringe benefits increased by $50,887 due to increases in salaries, wages and state retirement benefits. Maintenance and repairs increased by $46,555 to $3,505,388. Depreciation decreased by $325,749 to $10,355,409. Other expenses increased by $2,567,138, primarily as a result of a one-time impairment charge to capitalized assets, in the amount of $1,424,535.

Nonoperating expenses during fiscal year 2017 decreased by $533,870 compared to the previous year to $764,513, due to the higher amount of interest capitalized into capital assets.

Net Position

A summary of the major components of the statements of net position as of June 30, 2018, 2017, and 2016 is as follows:

		2018	2017	2016
Current assets	$	45,482,174	42,528,042	40,970,738
Restricted assets		31,069,080	24,078,889	17,556,625
Capital assets, net		185,716,491	181,313,276	184,625,975
Other noncurrent assets		949,687	1,005,929	1,062,088
Total assets		263,217,432	248,926,136	244,215,426
Deferred outflows of resources		1,572,687	2,643,406	1,821,607
Current liabilities		7,290,216	5,525,054	6,292,238
Amounts payable from restricted assets		3,406,677	3,389,652	3,290,059
Long-term liabilities		45,658,185	49,387,121	49,836,161
Total liabilities		56,355,078	58,301,827	59,418,458
Deferred inflows of resources		1,266,730	—	960,142
Net investment in capital assets		142,841,719	136,918,892	137,851,515
Restricted net position		31,069,081	23,034,014	16,503,725
Unrestricted net position		33,257,511	33,314,809	31,303,193
Total net position	$	207,168,311	193,267,715	185,658,433

2018 Versus 2017 Results

Current assets as of June 30, 2018 were $45,482,174, an increase of $2,954,132, while restricted assets of $31,069,080 had increased by $6,990,191. These increases reflected an overall increase of cash and cash equivalents due to operations.

Deferred outflows of resources as of June 30, 2018 were $1,572,687, a decrease of $1,070,719. Deferred inflows of resources as of June 30, 2018 were $1,266,730, an increase of $1,266,730. The primary driver of these changes was the Authority's participation in VRS, and the resulting pension balances. Additionally, the Authority adopted GASB 75 during the year which lead to additional balances within deferred outflows and inflows of resources.

Current liabilities as of June 30, 2018 were $7,290,216, an increase of $1,765,162. This increase was primarily due to the increase in the surplus payable due back to the airlines. Long-term liabilities as of June 30, 2018 of $45,658,185 decreased by $3,728,936 as a result of the decrease in the actuarially determined net pension liability as well as continued debt service payments, partially offset by the addition of new OPEB liabilities resulting from the adoption of GASB 75.

Net position as of June 30, 2018 was $207,168,311, an increase of $13,900,596. This increase was primarily driven by the capital grants, PFCs and CFCs received by the Authority during the year, partially offset by the year's operating loss.

2017 Versus 2016 Results

Current assets as of June 30, 2017 were $42,528,042, an increase of $1,557,304, while restricted assets of $24,078,889 had increased by $6,522,264. These increases reflected an overall increase of cash and investments due to operations.

Deferred outflows of resources as of June 30, 2017 were $2,643,406, an increase of $1,206,719. Deferred inflows of resources as of June 30, 2017 were $0, a decrease of $821,799. The changes in these balances are primarily driven by actuarial adjustments to the Authority's VRS pension liabilities.

Current liabilities as of June 30, 2017 were $5,525,054, a decrease of $767,184. This decrease was primarily due to the timing of payables. Long-term liabilities as of June 30, 2017 of $49,387,121 decreased by $449,040 as a result of continued debt service payments.

Net position as of June 30, 2017 was $193,267,715, an increase of $7,609,282. This increase was primarily driven by the capital grants, PFCs and CFCs received by the Authority during the year, partially offset by the year's operating loss.

Capital Assets

Capital assets include land, construction in progress, buildings, structures, improvements, roads and runways, equipment, and capitalized interest during construction periods before adoption of GASB Statement 89. Capital assets are net of related accumulated depreciation. Significant capital asset additions in the current period included the renovations of the departures ticket lobby, completion of the main terminal's renovations, new snow removal equipment, and various road and runway projects. A summary of capital assets by category and the associated accumulated depreciation as of June 30, 2018, 2017, and 2016, as well as a schedule of additions and retirements for the years ended June 30, 2018, 2017, and 2016, are included as follows:

	June 30		
	2018	**2017**	**2016**
Summary of capital assets:			
Land	$ 14,722,494	14,722,494	14,722,494
Buildings, structures, and improvements	275,431,417	249,325,175	249,262,512
Roads and runways	67,095,173	64,256,390	61,399,095
Equipment	45,175,179	39,655,210	37,100,978
Construction in progress	10,030,730	29,182,628	28,127,753
	412,454,993	397,141,897	390,612,832
Accumulated depreciation	(226,738,502)	(215,828,621)	(205,986,857)
Total	$ 185,716,491	181,313,276	184,625,975

Schedule of additions and retirements:

	June 30		
	2018	**2017**	**2016**
Capital assets, beginning of year	$ 181,313,276	184,625,975	178,601,211
Additions	15,354,384	8,156,442	17,707,636
Retirements	—	(1,439,481)	(1,171,393)
Depreciation	(10,951,169)	(10,029,660)	(10,511,479)
Capital assets, end of year	$ 185,716,491	181,313,276	184,625,975

The Authority has begun a major rehabilitation effort on the primary runway, which is expected to last for several years and total approximately $90 million. The funding for this project is expected to come from various sources, including federal grants, state grants, PFCs and approximately $3 million in Authority funding. Additionally, during fiscal year 2019, approximately $11 million in various other projects are planned, which will be funded by similar sources.

(Continued)

Economic Factors

The Virginia Beach-Norfolk CSA contains a dynamic mix of economic activity. Included within its boundaries are the Port of Virginia, tourism destinations in Virginia Beach and the North Carolina Outer Banks, and a significant military presence anchored by Naval Station Norfolk – the largest naval base in the world. Additionally, the region is the headquarters for three Fortune 500 companies.

The region's growth appears to be positive. The Port of Virginia – already the third largest port on the United States east coast – is currently undergoing a $670 million expansion which will increase capacity approximately 60% by 2020. Additionally, the federal government's current budget contains increased defense spending over the prior few years which will have an outsized impact on the region.

Air travel is particularly sensitive to operating costs changes (especially fuel costs), which can cause significant fluctuations in passenger counts. Other economic risks to the Authority include federal government spending or tourism declines.

The outlook for fiscal year 2019 is positive. Passenger traffic for the first quarter has seen substantial growth, with total passengers increasing by 9.24% over the same period in fiscal year 2018. The Airport saw a new airline (Frontier) begin service in August 2018. Frontier has announced five routes, including three new destinations to Las Vegas, Tampa and Phoenix. Three of Frontier's routes have already begun, while Tampa and Phoenix will launch in November 2018. The addition of Frontier brings the number of passenger airlines serving the Airport up to six. The number of cargo airlines operating at the Airport has held steady from the prior year at three.

Contacting the Authority's Financial Management

This financial report is designed to provide interested parties with a general overview of the Authority finances. Should you have any questions about this report or need additional information, please contact the Norfolk Airport Authority, Attention: Jarred M. Roenker, Director of Finance, 2200 Norview Avenue, Norfolk, VA 23518-5807. Alternatively, information about the operation of the Authority can be obtained via the internet at www.norfolkairport.com.

NORFOLK AIRPORT AUTHORITY

Statements of Net Position

June 30, 2018 and 2017

Assets		**2018**	**2017**
Current assets:			
Cash and cash equivalents	$	27,634,941	699,282
Investments		12,182,244	35,755,016
Accounts receivable, net		3,021,106	3,312,355
Accrued interest receivable		23,334	96,348
Grants receivable		78,940	104,307
Prepaid expenses		2,541,609	2,560,734
Total current assets		45,482,174	42,528,042
Restricted assets:			
Cash and cash equivalents		25,376,674	267,153
Investments		4,465,000	22,726,227
Passenger facility charges receivable		1,227,406	1,085,509
Total restricted assets		31,069,080	24,078,889
Capital assets:			
Land		14,722,494	14,722,494
Buildings, structures, and improvements		275,431,417	249,325,175
Roads and runways		67,095,173	64,256,390
Equipment		45,175,179	39,655,210
Construction in progress, including capitalized interest		10,030,730	29,182,628
		412,454,993	397,141,897
Less accumulated depreciation		(226,738,502)	(215,828,621)
Total capital assets, net		185,716,491	181,313,276
Other assets		912,001	954,133
Bond insurance costs, net		37,686	51,796
Total assets	$	263,217,432	248,926,136
Deferred outflows of resources			
Deferred amount on refunding	$	106,563	138,336
Net difference between projected and actual earnings on pension plan investments		—	347,630
Differences between expected and actual pension experience		122,276	1,000,788
Deferred pension contributions		1,207,848	1,156,652
Deferred outflows related to OPEB plans		136,000	—
Total deferred outflows of resources	$	1,572,687	2,643,406

(Continued)

NORFOLK AIRPORT AUTHORITY

Statements of Net Position

June 30, 2018 and 2017

Liabilities		**2018**	**2017**
Current liabilities:			
Accounts payable	$	1,953,142	1,380,858
Accrued leave and wages		2,063,101	1,958,530
Other accrued expenses		116,134	305,648
Surplus payable to airlines		3,157,839	1,880,018
Total current liabilities		7,290,216	5,525,054
Amounts payable from restricted assets:			
Accrued interest		954,200	1,044,875
Current portion of bonds payable		2,452,477	2,344,777
Total amounts payable from restricted assets		3,406,677	3,389,652
Long-term liabilities:			
Bonds payable, less current portion		39,612,344	42,239,741
Net pension liability		3,587,497	6,209,120
Net OPEB liability		1,765,000	—
Other liabilities		693,344	938,260
Total long-term liabilities		45,658,185	49,387,121
Total liabilities	$	56,355,078	58,301,827
Deferred inflows of resources			
Net difference between projected and actual earnings on pension plan investments	$	627,877	—
Changes of pension plan assumptions		149,510	—
Differences between expected and actual pension experience		288,343	—
Deferred inflows related to OPEB plans		201,000	—
Total deferred inflows of resources		1,266,730	—
Net position			
Net investment in capital assets		142,841,719	136,918,892
Restricted for:			
Capital projects		26,441,792	12,002,139
Debt service		4,627,289	11,031,875
Unrestricted		33,257,511	33,314,809
Total net position	$	207,168,311	193,267,715

See accompanying notes to basic financial statements

NORFOLK AIRPORT AUTHORITY

Statements of Revenues, Expenses, and Changes in Net Position

Years ended June 30, 2018 and 2017

		2018	2017
Operating revenues:			
Parking	$	15,465,667	15,135,831
Landing fees		7,699,906	8,991,845
Rent		7,010,567	7,580,914
Rental cars		6,792,428	6,602,430
Concessions		3,249,504	2,922,036
Other		646,989	488,010
Total operating revenues		40,865,061	41,721,066
Operating expenses:			
Salaries and fringe benefits		16,119,948	16,069,061
Depreciation		10,951,169	10,029,660
Utilities		2,734,661	2,502,248
Maintenance and repairs		3,662,659	3,505,388
Administrative		810,716	847,556
Professional services		623,101	483,703
Advertising and promotion		987,631	895,189
Insurance		987,936	920,554
Security and other services		3,874,357	4,451,058
Sanitation		696,342	651,992
City tax assessment		2,500,000	2,500,000
Capital asset impairment		—	1,424,535
Other		382,280	389,428
Total operating expenses		44,330,800	44,670,372
Operating loss		(3,465,739)	(2,949,306)
Nonoperating revenues (expenses):			
Federal grant revenues		9,299,601	1,373,734
State grant revenues		2,001,500	2,000,000
Passenger facility charges		7,201,183	6,580,824
Customer facility charges		1,432,100	1,031,792
State grant interest income		164,035	11,628
Passenger facility charges interest income (expense)		78,837	(21,945)
Other income		337,694	158,530
Interest income		441,259	188,538
Interest expense		(1,746,874)	(764,513)
Net nonoperating revenues		19,209,335	10,558,588
Change in net position		15,743,596	7,609,282
Total net position, beginning of the year, as restated, see note 1(m)(ii)		191,424,715	185,658,433
Total net position, end of the year	$	207,168,311	193,267,715

See accompanying notes to basic financial statements.

NORFOLK AIRPORT AUTHORITY

Statements of Cash Flows

Years ended June 30, 2018 and 2017

	2018	2017
Cash flows from operating activities:		
Collections from customers	$ 41,156,310	41,476,662
Payments to employees for services	(16,598,838)	(15,677,804)
Payments for city tax assessment	(2,500,000)	(2,500,000)
Payments to suppliers	(13,094,477)	(15,510,780)
Net cash provided by operating activities	8,962,995	7,788,078
Cash flows from capital and related financing activities:		
Principal payments on bonds	(2,344,777)	(2,237,159)
Acquisition of capital assets	(15,374,394)	(6,900,012)
Proceeds from the sale of equipment	21,250	39,100
Interest paid on debt	(1,966,586)	(2,047,326)
Passenger facility charges	7,059,286	6,221,638
Customer facility charges	1,432,100	1,031,792
Federal and State grants received	11,326,468	3,365,655
Net cash provided by (used in) capital and related financing activities	153,347	(526,312)
Cash flows from investing activities:		
Investment income	1,094,839	270,825
Purchases of investments	(29,650,714)	(246,490,161)
Proceeds from maturities of investments	71,484,713	239,150,814
Net cash provided by (used in) investing activities	42,928,838	(7,068,522)
Net increase in cash and restricted cash	52,045,180	193,244
Cash and restricted cash, beginning of year	966,435	773,191
Cash and restricted cash, end of year	$ 53,011,615	966,435
Cash and restricted cash are presented in the accompanying statements of net position as follows:		
Cash	$ 27,634,941	699,282
Restricted cash	25,376,674	267,153
	$ 53,011,615	966,435
Reconciliation of operating loss to net cash provided by operating activities:		
Operating loss	$ (3,465,739)	(2,949,306)
Adjustments to reconcile operating loss to net cash provided by operating activities:		
Depreciation	10,951,169	10,029,660
Capital asset impairment	—	1,424,535
Gain on disposal of capital assets	(21,250)	(24,156)
Other	—	158,530
Decrease (increase) in operating assets:		
Accounts receivable	291,249	(244,404)
Prepaid expenses	19,125	(27,912)
Other assets	42,132	39,968
Increase (decrease) in operating liabilities:		
Accounts payable	592,294	(637,411)
Accrued leave and wages	104,571	54,663
Other accrued expenses	(189,514)	113,732
Surplus payable to airlines	1,277,821	(422,724)
Net pension liability	(380,947)	222,862
Net OPEB liability	(13,000)	—
Other liabilities	(244,916)	50,041
Net cash provided by operating activities	$ 8,962,995	7,788,078

Supplemental disclosure of noncash capital and related financing activities:

The Authority incurred noncash capital expenditures related to construction in progress in the amount of $1,000,054 and $1,020,064 that are included in accounts payable as of June 30, 2018 and 2017, respectively.

See accompanying notes to basic financial statements.

(1) Summary of Significant Accounting Policies

(a) Organization and Purpose

The Norfolk Airport Authority (the Authority) was formed on April 4, 1988 from the Norfolk Port and Industrial Authority to account for the operations of the Norfolk International Airport (the Airport). The Authority is an independent subdivision of the Commonwealth of Virginia. Revenues generated by Airport operations are used to meet all operating expenses and to provide for payment of all principal and interest on debt of the Authority. The Authority is authorized to finance projects by issuing bonds or obtaining loans in its own name.

(b) Basis of Accounting

The Authority prepares its financial statements in conformity with U.S. generally accepted accounting principles (GAAP) as applied to governmental entities. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Authority uses the economic resources measurement focus and the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred. Current assets include cash and amounts convertible to cash during the next normal operating cycle, or one year. Current liabilities include those obligations to be liquidated with current assets. The Authority generally uses restricted assets first for expenses incurred for which both restricted and unrestricted assets are available. The Authority may defer the use of restricted assets based on a review of the specific transaction.

(c) Revenue Recognition

Rentals and concession fees are generated from airlines, parking structures and lots, food service, rental cars, fixed-base operators, and other commercial operators and are included in the applicable operating revenue accounts. Leases are accounted for as operating leases and generally require rentals based on the volume of business, with specified minimum rentals. Rental revenue is recognized over the life of the respective leases, and concession revenue is recognized based on reported concessionaire revenue.

(d) Cash and Cash Equivalents

The Authority considers all highly liquid debt instruments purchased with original maturities of three months or less to be cash equivalents.

(e) Capital Assets

Capital assets with an initial individual cost of $10,000 or more are capitalized at cost. The Authority provides for depreciation of all capital assets by the straight-line method over estimated useful lives as follows:

Buildings and structures	20 to 50 years
Improvements	5 to 30 years
Roads and runways	10 to 40 years
Equipment	3 to 50 years

Major renewals and improvements that extend a capital asset's useful life are capitalized; maintenance and repairs are expensed when incurred.

When a capital asset is retired or otherwise disposed of, the related cost and accumulated depreciation are eliminated from the accounts and any resulting gain or loss is reflected in operating expenses.

(f) Bond Premiums, Discounts and Issuance Costs

Bond premiums and discounts incurred to issue debt are capitalized and amortized as interest expense over the related bond issue period using the effective interest method. With the exception of prepaid bond insurance costs discussed in item (g) below, bond issuance costs are expensed in the period incurred.

(g) Bond Insurance Costs

Bond insurance costs are amortized on the effective-interest method over the life of the debt to which it relates.

(h) Operating Revenues and Expenses

Operating revenues and expenses consist of all revenue and expenses not related to capital and related financing or investing transactions.

(i) Use of Estimates

The preparation of the financial statements requires management to make a number of estimates and assumptions related to reported amounts of assets, deferred outflows of resources, liabilities, and deferred inflows of resources, and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses and changes in net position during the reporting period. Significant items subject to such estimates include the valuation allowance for receivables; and assets and obligations related to employee benefits. Actual results could differ from those estimates.

(j) Pensions

The Authority contributes to the VRS, an agent multiple-employer public employee retirement system with separate agent multiple pools for each locality, which acts as a common investment and administrative agent for political subdivisions in the Commonwealth of Virginia. For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's Retirement Plan and the additions to/deductions from the Authority's Retirement Plan's fiduciary net position have been determined on the same basis as they were reported by the VRS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when paid in accordance with the benefit terms. Investments are reported at fair value.

(Continued)

(k) OPEB Plans

(i) Group Life Insurance

The VRS Group Life Insurance (GLI) Program is a multiple employer, cost-sharing plan. It provides coverage to state employees, teachers, and employees of participating political subdivisions. The GLI Program was established pursuant to §51.1-500 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. The GLI Program is a defined benefit plan that provides a basic group life insurance benefit for employees of participating employers.

(ii) Line of Duty Act Program

The VRS Line of Duty Act Program (LODA) is a multiple-employer, cost-sharing plan. The Line of Duty Act Program was established pursuant to §9.1-400 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. The LODA Program provides death and health insurance benefits to eligible state employees and local government employees, including volunteers, who die or become disabled as a result of the performance of their duties as a public safety officer. In addition, health insurance benefits are provided to eligible survivors and family members.

(iii) Political Subdivision Employee Virginia Local Disability Program

The VRS Political Subdivision Employee Virginia Local Disability Program (VLDP) is a multiple-employer, cost-sharing plan.

For purposes of measuring the net GLI, LODA and VLDP Programs' corresponding Other Post-Employment Benefit (OPEB) liability, each individual plan's deferred outflows of resources and deferred inflows of resources related to the OPEB, and OPEB expense, information about the fiduciary net position of the OPEB and the additions to/deductions from the OPEB's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

(l) Fair Value

The Authority utilizes valuation techniques that maximize the use of observable inputs and minimize the use of unobservable inputs to the extent possible. The Authority determines fair value based on assumptions that market participants would use in pricing an asset or liability in the principal or most advantageous market.

When considering market participant assumptions in fair value measurements, the following fair value hierarchy distinguishes between observable and unobservable inputs, which are categorized in one of the following levels:

- Level 1 Inputs: Unadjusted quoted prices in active markets for identical assets or liabilities accessible to the reporting entity at measurement date.
- Level 2 Inputs: Other than quoted prices included in Level 1 inputs that are observable for the asset or liability, either directly or indirectly, for substantively the full term of the asset or liability.

- Level 3 Inputs: Unobservable inputs for the asset or liability used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at measurement date.

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identified assets or liabilities (Level 1 measurements) and the lowest priority to measurements involving significant unobservable inputs (Level 3 measurements).

The level in the fair value hierarchy within which a fair value measurement, in its entirety falls in, is based on the lowest level input that is significant to the fair value measurement in its entirety.

Portfolio investments are assigned a level based upon the observability of the inputs which are significant to the overall valuation. The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities.

(m) New Accounting Pronouncements

(i) GASB Statement No. 89

The Authority adopted GASB Statement Number 89 – *Accounting for Interest Cost Incurred before the End of a Construction Period*, effective July 1, 2017. The objective of GASB Statement 89 is to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and to simplify accounting for certain interest costs. The Authority chose to early adopt the provisions of GASB Statement 89 and the results of this adoption were to cease the capitalization of interest into capital projects. The provisions of GASB Statement 89 have been applied prospectively.

(ii) GASB Statement No. 75

During the fiscal year ended June 30, 2018, the Authority adopted GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. The objective of GASB Statement No. 75 is to improve accounting and financial reporting for postemployment benefits other than pensions. As a result of the adoption of GASB Statement No. 75, the Authority has recognized a liability equal to the net OPEB liability and related OPEB expense and deferred outflows of resources and deferred inflows of resources.

Total net position as of July 1, 2017 was adjusted as follows:

Total net position, as previously reported	$	193,267,715
Adoption of GASB Statement No. 75		(1,843,000)
Total net position, as restated	$	191,424,715

(n) Reclassifications

Certain reclassifications of fiscal year 2017 amounts have been made to conform to the fiscal year 2018 presentation. These reclassifications resulted in a decrease of 2017 operating revenue of $1,432,100 and a corresponding increase in nonoperating revenue.

(2) Deposits and Investments

The Authority maintains several restricted cash and investment funds in addition to its operating funds. These funds are disclosed on the accompanying statements of net position as cash and cash equivalents and investments.

The Code of Virginia authorizes the Authority to invest in certificates of deposit with national banks located within the Commonwealth of Virginia, obligations of the United States or its agencies, obligations of the Commonwealth of Virginia or its political subdivisions, and certain other investments.

(a) Deposits

The carrying values of the Authority's deposits with banks were $53,011,615 and $966,435 and the bank balances were $55,866,282 and $886,564 at June 30, 2018 and 2017, respectively. The entire bank balance was covered by federal depository insurance or collateralized in accordance with the Virginia Security for Public Deposits Act (the Act). In accordance with the Act, the depository institution pledged collateral in the form of federal agency obligations with a market value equal to 110% of the Authority's deposits with a third-party trustee in the name of the Treasurer of the Commonwealth of Virginia. In the event that the banking institution fails, the Treasurer will take possession of the collateral, liquidate it and reimburse the Authority up to the value of its deposits. The State Treasury Board is responsible for monitoring compliance with the collateralization and reporting requirements of the Act and for notifying local governments of compliance by banks.

(b) Investments

The Authority's investment policy (the Policy) permits investments and investment practices that meet or exceed all statutes governing the investment of public funds in Virginia and any investment restrictions imposed by bond covenants. The Policy establishes limitations on the investment options to include U.S. government obligations, Commonwealth of Virginia Local Government Investment Pool (LGIP), prime quality commercial paper, and certain corporate notes, bankers, acceptances, repurchase agreements, negotiable certificates of deposit, bank deposit notes, and mutual funds that invest exclusively in securities specifically permitted by the Code of Virginia.

(c) Credit Risk

Credit risk is defined as the risk that an issuer or other counterparty to an investment will not fulfill its obligations. As required by state statute, the Policy requires that commercial paper have a short-term debt rating of no less than "A-1" (or its equivalent) from at least two of the following: Moody's Investors Service, Standard & Poor's, Fitch Ratings, and Duff & Phelps. Corporate notes, negotiable certificates of deposit, and bank deposit notes maturing in less than one year must have a short-term debt rating of at least "A-1" by Standard & Poor's and "P-l" by Moody's Investors Service. Notes having a maturity of greater than one year must be rated "AA" by Standard & Poor's and "Aa" by Moody's Investors Service.

As of June 30, 2018, the Standard & Poor's ratings on the Authority's investments included 69.8% of "AAAm", 0.2% of "AAA", 18.9% of "AA+", 0.1% of "AA", 1.5% of "AA-", 6.8% of "A-1+", and 2.7% of "A-1".

(d) Concentration of Credit Risk

The Policy establishes limitations on portfolio composition by issuer in order to control concentration of credit risk. No more than 5% of the Authority's portfolio will be invested in the securities of any single issuer with the following exceptions:

U.S. Treasury	100% maximum
Each federal agency	35% maximum
Each repurchase agreement counterparty	25% maximum
Commonwealth of Virginia Local Government Investment Pool	75% maximum
Registered investments (mutual funds)	75% maximum

As of June 30, 2018, the Authority's portfolio was invested as follows:

Issuer	Percentage of portfolio
U.S. Treasury	79.4 %
Commercial paper	9.0
Corporate notes	8.5
Federal Home Loan Mortgage Corporation (Freddie Mac)	1.5
Federal National Mortgage Agency (Fannie Mae)	1.6
	100.0 %

(e) Interest Rate Risk

Interest rate risk is defined as the risk that changes in interest rates will adversely affect the fair value of an investment. The Authority's policy limits the investment of funds as a means of limiting exposure to fair value losses arising from permitted investments with a stated maturity of no more than five years from the date of purchase. To control the volatility of investments, a duration target not to exceed three years is determined for the core portfolio.

Proceeds from the sale of bonds issued by the Authority shall be invested in compliance with the specific requirements of the bond covenants without further restriction as to the maximum term of securities purchased.

As of June 30, 2018, the carrying values and weighted average maturity of the Authority's investments were as follows:

Investment type		Fair value	Weighted average maturity in years
U.S. Treasury securities	$	13,232,302	0.30
Commercial paper		1,494,638	0.17
Corporate notes		1,408,766	0.88
Freddie Mac		249,684	0.08
Fannie Mae		261,854	1.00
Total investments	$	16,647,244	

(f) Custodial Credit Risk

Custodial credit risk for deposits is defined as the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of the outside party. The custodial credit risk for investments is defined as the risk that, in the event of failure of the counterparty to a transaction, a government will not be able to recover the value of the investment or collateral securities that are in the possession of an outside party. The Policy requires that all investment securities purchased by the Authority or held as collateral on deposits or investments shall be held in third-party safekeeping at a qualified public depository that may not otherwise be a counterparty to the investment transaction.

As of June 30, 2018, all of the Authority's investments were held in a bank's trust department in the Authority's name.

(g) Summary of Deposits and Investments

A reconciliation of the carrying value of deposits and investments reported above to amounts reported in the statements of net position at June 30, 2018 and 2017 is as follows:

		2018	2017
Deposits	$	53,011,615	966,435
Investments		16,647,244	58,481,243
	$	69,658,859	59,447,678
Current assets:			
Cash and cash equivalents	$	27,634,941	699,282
Investments		12,182,244	35,755,016
Restricted assets:			
Cash and cash equivalents		25,376,674	267,153
Investments		4,465,000	22,726,227
	$	69,658,859	59,447,678

(h) Fair Value Measurements

The Authority has the following recurring fair value measurements as of June 30, 2018:

U.S. Treasury securities, federal agency notes, commercial paper, corporate notes and municipal bonds of $16,647,244 are valued using a matrix pricing model (Level 2 inputs).

(3) Restricted Assets

The Authority received $2,000,000 during both fiscal years 2018 and 2017 from the Commonwealth Airport Fund (State block grant) for the Authority’s use in financing capital asset additions. These funds are provided in advance of actual expenditure or specific project approval based on the relative size of each of the Commonwealth’s air carrier airports and are restricted for expenditures on qualifying projects.

(Continued)

The trust indenture securing the Series 2012 Bonds Payable, issued in the aggregate principal amount of $69,285,000, requires segregation of certain assets into restricted accounts. The construction account includes funds available for the design and construction of capital improvements for the Airport and for the repayment of debt. The passenger facility charge cash and receivable accounts are also restricted assets. All cash and investments are held by the following financial institutions: US Bank, SunTrust Bank, SunTrust Financial Corporation, Branch Banking and Trust Company, and the Local Government Investment Pool of Virginia Department of the Treasury. Restricted assets consist of the following at June 30, 2018 and 2017:

		2018	2017
State block grant account	$	16,231,662	12,002,139
Debt service reserve accounts		4,627,289	4,662,320
Passenger facility charges account		8,966,616	6,061,768
Passenger facility charges receivable, including interest		1,227,406	1,085,509
Other restricted assets		16,107	267,153
Restricted assets	$	31,069,080	24,078,889

The current authorization from the Federal Aviation Administration (FAA) permits the Authority to collect Passenger Facility Charges (PFC) of $4.50 per eligible enplaned passenger up to an aggregate amount of $134,247,810 and expires on January 1, 2022. The net receipts from PFC are accounted for on the accrual basis of accounting and are restricted to use on FAA-approved projects. Unexpended PFC and related interest are included as restricted net position for projects that are approved by the FAA.

(4) Capital Assets

The following is a summary of the changes in capital assets for the years ended June 30, 2018 and 2017:

		Balances, June 30, 2017	Increases	Decreases	Balances, June 30, 2018
Capital assets not being depreciated:					
Land	$	14,722,494	—	—	14,722,494
Construction in progress		29,182,628	15,552,834	(34,704,732)	10,030,730
		43,905,122	15,552,834	(34,704,732)	24,753,224
Other capital assets:					
Building, structures, and improvements		249,325,175	26,106,242	—	275,431,417
Roads and runways		64,256,390	2,838,783	—	67,095,173
Equipment		39,655,210	5,561,257	(41,288)	45,175,179
Less accumulated depreciation for:					
Building, structures, and improvements		(130,033,736)	(7,694,299)	—	(137,728,035)
Roads and runways		(56,264,822)	(1,455,819)	—	(57,720,641)
Equipment		(29,530,063)	(1,801,051)	41,288	(31,289,826)
		137,408,154	23,555,113	—	160,963,267
Capital assets, net	$	181,313,276	39,107,947	(34,704,732)	185,716,491

		Balances, June 30, 2016	Increases	Decreases	Balances, June 30, 2017
Capital assets not being depreciated:					
Land	$	14,722,494	—	—	14,722,494
Construction in progress		28,127,753	7,671,509	(6,616,634)	29,182,628
		42,850,247	7,671,509	(6,616,634)	43,905,122
Other capital assets:					
Building, structures, and improvements		249,262,512	87,213	(24,550)	249,325,175
Roads and runways		61,399,095	2,857,295	—	64,256,390
Equipment		37,100,978	2,732,523	(178,291)	39,655,210
Less accumulated depreciation for:					
Building, structures, and improvements		(123,173,672)	(6,884,614)	24,550	(130,033,736)
Roads and runways		(54,804,004)	(1,460,818)	—	(56,264,822)
Equipment		(28,009,181)	(1,684,228)	163,346	(29,530,063)
		141,775,728	(4,352,629)	(14,945)	137,408,154
Capital assets, net	$	184,625,975	3,318,880	(6,631,579)	181,313,276

(Continued)

Depreciation expense for the years ended June 30, 2018 and 2017 was $10,951,169 and $10,029,660, respectively.

(5) Bond Insurance Costs

At June 30, 2018, the gross carrying amount and accumulated amortization of bond insurance costs was $678,110 and $640,424, respectively. At June 30, 2017, the gross carrying amount and accumulated amortization of bond insurance costs was $678,110 and $626,314, respectively. Amortization expense for the years ended June 30, 2018 and 2017 was $14,110 and $16,191, respectively.

(6) Bonds Payable

Bonds payable comprise the following at June 30, 2018 and 2017:

		2018	2017
Series 2011 Bonds payable	$	41,140,000	43,400,000
VRA Bonds payable		193,063	277,840
		41,333,063	43,677,840
Unamortized premium		731,758	906,678
	$	42,064,821	44,584,518

In June 2011, the Authority completed the sale of $18,300,000 Airport Revenue Bonds Series 2011A (Non-AMT) and $25,025,000 Airport Revenue Bonds Series 2011B (AMT). In October 2011, the Authority completed the sale of $25,960,000 Airport Revenue Bonds Series 2011C (Non-AMT). Proceeds of the Series 2011 Bonds were used to defease and refund its previously outstanding Series 2001 Bonds. The Series 2011 Bonds are payable from general revenues and PFC revenues of the Authority and certain funds and accounts established under the indenture. Principal payments on the Series 2011 Bonds are due on July 1 of each year through July 1, 2031. Interest is payable on the bonds on January 1 and July 1 of each year, with interest rates ranging from 3.00% to 5.25% during the term of the bonds. The bond resolutions include reserve requirements, including the requirement that total revenues provide for 100% of operating expenses and net revenues provide at least 125% of the debt service requirement for the following year.

In January 2001, the Authority entered into a financing agreement with Virginia Resources Authority (VRA) in which VRA agreed to use a portion of the proceeds from the issuance of its Airport Revolving Fund Revenue Bonds, Series 2001B to acquire from the Authority the Airport Fixed-Base Operations Revenue Bond, Series 2001 (VRA Bonds) in the principal amount of $1,273,267. The VRA Bonds are payable from construction fund reserves established under the agreement. Principal payments plus interest at 3.14% are due monthly through 2021.

Maturities of bond principal and interest to be provided for all bonds outstanding at June 30, 2018 were as follows:

		Principal	Interest
Year(s) ending June 30:			
2019	$	2,452,477	1,858,535
2020		2,565,264	1,750,742
2021		2,595,322	1,635,685
2022		2,715,000	1,506,825
2023		2,850,000	1,378,300
2024–2028		15,305,000	4,617,319
2029–2033		12,850,000	1,184,013
	$	41,333,063	13,931,419

Revenue bond activity for the years ended June 30, 2018 and 2017 is as follows:

		Balance, June 30, 2017	Amortization of premium	Bond payments	Balance, June 30, 2018
Series 2011 Bonds payable	$	44,306,675	(174,920)	(2,260,000)	41,871,755
VRA Bonds payable		277,843	—	(84,777)	193,066
	$	44,584,518	(174,920)	(2,344,777)	42,064,821

		Balance, June 30, 2016	Amortization of premium	Bond payments	Balance, June 30, 2017
Series 2011 Bonds payable	$	46,656,706	(195,031)	(2,155,000)	44,306,675
VRA Bonds payable		360,002	—	(82,159)	277,843
	$	47,016,708	(195,031)	(2,237,159)	44,584,518

Bond Covenant

The bond indenture states that the Authority will provide general revenues at least 125% of the debt service requirement on all related bonds secured by general revenues then outstanding for the sinking fund year ending on the next June 30. At June 30, 2018, the rate covenant was met. The indenture further provides that the Authority (in the event that the coverage is not met for a single year) hire a consultant to study revenues, expenses, and debt coverage for the following year and to provide guidance on rates and charges and meeting the rate coverage calculation. A noncompliance with the covenant is not a default until it is not met for two consecutive years.

(7) Airport Use Agreement

Effective July 1, 2008, the Authority entered into an Airline Use and Lease Agreement (the Agreement) with the commercial airlines operating scheduled passenger service at the Airport, which was renewed effective July 1, 2013 and again on August 28, 2018. The current term of the Agreement for all signatory carriers is through June 30, 2021. The Agreement provides for airlines to pay rates and charges calculated based on established cost centers. The Agreement provides for the Authority to share surplus revenues with the signatory airlines (the Airlines) after all operating and maintenance expenses, debt service (including coverage), and required deposits to various reserve funds have been made. Surplus revenues are accrued at the end of the year and refunded to the Airlines and a deficit in revenues may be billed to the Airlines. At June 30, 2018 and 2017, there was a surplus of $3,157,839 and $1,880,018, respectively, payable to the Airlines, which is reflected as a reduction of operating revenues in the accompanying statements of revenues, expenses, and changes in net position for the years ended June 30, 2018 and 2017.

(8) Defined Benefit Pension Plan

(a) Plan Description

The Authority contributes to the VRS, an agent and multiple-employer public employee retirement system, which acts as a common investment and administrative agent for political subdivisions in the Commonwealth of Virginia. All full-time, salaried permanent (professional) employees of the Authority are automatically covered by the VRS Retirement Plan upon employment. This plan is administered by the Virginia Retirement System (the System or VRS) along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior public service, based on specific criteria as defined in the *Code of Virginia,* as amended. Eligible prior service that may be purchased includes prior public services, active military service, certain periods of leave, and previously refunded service.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and Hybrid. Each plan has a different eligibility and benefit structure as set forth below:

VRS Plan 1 is a defined benefit plan. Members hired before July 1, 2010 and who were vested as of January 1, 2013 and they have not taken a refund, are eligible for Plan 1. The retirement benefit is based on a member’s age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for an unreduced retirement benefit at age 65 with five years of service and at age 50 with 30 years of service for participating employers. An optional reduced retirement benefit is available to members of VRS as early as age 50 with at least 10 years of service credit or age 55 with at least five years of service credit. Active members may purchase previous service as creditable service to their plan and, if eligible, may purchase periods of leave without pay.

VRS Plan 2 is a defined benefit plan. Members hired or rehired on or after July 1, 2010 and who have no service credits before July 1, 2010 and are not vested as of January 1, 2013 are covered under Plan 2. The retirement benefit is based on a member's age, creditable service, and average final compensation at retirement using a formula. Employees are eligible for an unreduced benefit beginning at their normal Social Security retirement age with at least five years of service credit or when the sum of their age and service equals 90. An optional reduced retirement benefit is available to Plan 2 members as early as age 60 with at least five years of service credit. Active members may purchase previous service as creditable service to their plan and, if eligible, may purchase periods of leave without pay.

The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Members hired on or after January 1, 2014 are eligible for the Hybrid Plan. The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. The benefit payment payable from the defined contribution plan depends on the member and employer contributions made to the plan and the investment performance of those contributions. Employees are eligible for an unreduced benefit beginning at their normal Social Security retirement age with at least five years of service credit or when the sum of their age and service equals 90. An optional reduced retirement benefit is available as early as age 60 with at least five years of service credit. Under the defined benefit plan, active members may purchase previous service as creditable service to their plan and, if eligible, may purchase periods of leave without pay.

The VRS Basic Benefit is a lifetime monthly benefit based on a retirement multiplier as a percentage of the member's average final compensation multiplied by the member's total service credit. The retirement multiplier for Authority's employees is 1.7% for Plan 1 members, 1.65% for Plan 2 members, and 1.0% for Hybrid Plan members. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans. Under Plan 1, average final compensation is the average of the member's 36 consecutive months of highest compensation. Under Plan 2 and the Hybrid Plan, average final compensation is the average of the member's 60 consecutive months of highest compensation. At retirement, members can elect the Basic Benefit, the Survivor Option, a Partial Lump-Sum Option Payment (PLOP), or the Advance Pension Option. A retirement reduction factor is applied to the Basic Benefit amount for members electing the Survivor Option, PLOP or Advance Pension Option, or those retiring with a reduced benefit.

Retirees are eligible for an annual cost-of-living adjustment (COLA) effective July 1 of the second calendar year of retirement. Under Plan 1, the COLA cannot exceed 5.00%; under Plan 2 and the Hybrid Plan, the COLA cannot exceed 3.00%. During years of no inflation or deflation, the COLA is 0.00%. The VRS also provides death and disability benefits. Title 51.1 of the Code of Virginia (1950), as amended, assigns the authority to establish and amend benefit provisions to the General Assembly of Virginia.

The System issues a publicly available comprehensive annual financial report that includes financial statements and required supplementary information for the plans administered by VRS. A copy of the most recent report may be obtained from the VRS website at http://www.varetire.org/pdf/publications/2017-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

(b) Employees Covered by Benefit Terms

As of the June 30, 2016 and 2015 actuarial valuations, the following employees were covered by the benefit terms of the pension plan:

		Number	
		2016	**2015**
Inactive members or their beneficiaries currently receiving benefits	$	130	125
Inactive members:			
Vested inactive members		25	25
Nonvested inactive members		58	58
Inactive members active elsewhere in VRS		38	39
Total inactive members		121	122
Active members		199	195
Total covered employees	$	450	442

(c) Contributions

The contribution requirement for active employees is governed by §51.1-145 of the *Code of Virginia*, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement.

The Authority's actuarially required contribution rate for the years ended June 30, 2018 and 2017 was 10.43% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were $1,207,848 and $1,156,652 for the years ended June 30, 2018 and 2017, respectively.

(d) Net Pension Liability

The Authority's net pension liability as of June 30, 2018 and 2017 was measured as of June 30, 2017 and 2016, respectively. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2016 and 2015, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement dates of June 30, 2017 and 2016.

(Continued)

(e) Actuarial Assumptions

The total pension liability for general employees and public safety employees in the Authority's Retirement Plan was based on an actuarial valuations as of June 30, 2016 and 2015, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement dates of June 30, 2017 and 2016.

	General employees	Public safety employees
Inflation	2.50 %	2.50 %
Salary increases, including inflation	3.50%-5.35%	3.50%-4.75%
Investment rate of return, net of pension plan investment expense, including inflation*	7.00 %	7.00 %
Cost-of-living adjustment	2.25%-2.50%	2.25%-2.50%

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

	Mortality assumptions	
	General employees	**Public safety employees**
Deaths assumed to be service related:	15.0 %	45.0 %
Pre-retirement:	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of Rates; females 105% of rates	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 90% of Rates; females set forward 1 year
Post-retirement:	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1% increase compounded from ages 70 to 90	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year, 1% increase compounded from ages 70 to 90; females set forward 3 years

	Mortality assumptions	
	General employees	**Public safety employees**
Post-disablement:	RP-2014 Disabled Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates	RP-2014 Disabled Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 – Non Hazardous Duty:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 20%

All Others (Non 10 Largest) – Non LEOS:

Mortality Rates (Pre-retirement, post-retirement healthy, and disabled	Update to a more current mortality table – RP-2014 projected to 2020
Retirement Rates	Lowered rates at older ages and changed final retirement from 70 to 75
Withdrawal Rates	Adjusted rates to better fit experience at each year age and service through 9 years of service
Disability Rates	Lowered rates
Salary Scale	No change
Line of Duty Disability	Increase rate from 14% to 15%

(f) Long-Term Expected Rate of Return

The long-term expected rate of return on pension system investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension system investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighing the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summaries in the following table:

Asset class (strategy)	Target allocation	Arithmetic long-term expected rate of return	Weighted average long-term expected rate of return
Public equity	40.00%	4.54%	1.82%
Fixed income	15.00	0.69	0.10
Credit strategies	15.00	3.96	0.59
Real assets	15.00	5.76	0.86
Private equity	15.00	9.53	1.43
Total	100.00%		4.80
		Inflation	2.50
	*Expected arithmetic nominal return		7.30%

* The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

(g) Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2019, the rate contributed by the employer for the Authority Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

(h) Changes in Net Pension Liability

		Total pension liability (a)	Plan fiduciary net position (b)	Net pension liability (a) – (b)
Balances at June 30, 2016	$	44,750,762	38,541,642	6,209,120
Changes for the year:				
Service cost		1,373,319	—	1,373,319
Interest		3,053,266	—	3,053,266
Differences between expected and actual experience		(429,688)	—	(429,688)
Changes of assumptions		(222,799)	—	(222,799)
Contributions – employer		—	1,170,578	(1,170,578)
Contributions – employee		—	564,624	(564,624)
Net investment income		—	4,691,484	(4,691,484)
Benefit payments, including refunds of employee contributions		(2,264,730)	(2,264,730)	—
Administrative expenses		—	(27,108)	27,108
Other changes		—	(3,857)	3,857
Net changes		1,509,368	4,130,991	(2,621,623)
Balances at June 30, 2017	$	46,260,130	42,672,633	3,587,497

		Total pension liability (a)	Plan fiduciary net position (b)	Net pension liability (a) – (b)
Balances at June 30, 2015	$	42,013,309	37,844,916	4,168,393
Changes for the year:				
Service cost		1,346,523	—	1,346,523
Interest		2,880,450	—	2,880,450
Differences between expected and actual experience		237,910	—	237,910
Contributions – employer		—	1,223,465	(1,223,465)
Contributions – employee		—	553,205	(553,205)
Net investment income		—	671,007	(671,007)
Benefit payments, including refunds of employee contributions		(1,727,430)	(1,727,430)	—
Administrative expenses		—	(23,348)	23,348
Other changes		—	(173)	173
Net changes		2,737,453	696,726	2,040,727
Balances at June 30, 2016	$	44,750,762	38,541,642	6,209,120

(i) *Sensitivity of the Net Pension Liability to Changes in the Discount Rate*

The following presents the net pension liability of the Authority using the discount rate of 7.00%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

		1% Decrease (6.00%)	Current discount rate (7.00%)	1% Increase (8.00%)
The Authority's Net Pension Liability:				
As of June 30, 2018	$	9,147,901	3,587,497	(1,092,512)
As of June 30, 2017	$	11,579,801	6,209,120	1,685,373

(j) Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the years ended June 30, 2018 and 2017, the Authority recognized pension expense of $841,140 and $1,290,815. At June 30, 2018 and 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

		Deferred outflows of resources	Deferred inflows of resources
Net difference between projected and actual earnings on pension plan investments	$	—	627,877
Change of assumptions		—	149,510
Differences between expected and actual experience		122,276	288,343
Employer contributions subsequent to the measurement date		1,207,848	—
Total as of June 30, 2018	$	1,330,124	1,065,730

		Deferred outflows of resources	Deferred inflows of resources
Net difference between projected and actual earnings on pension plan investments	$	347,630	—
Differences between expected and actual experience		1,000,788	—
Employer contributions subsequent to the measurement date		1,156,652	—
Total as of June 30, 2017	$	2,505,070	—

Deferred outflows of resources related to pensions totaling $1,207,848 resulting from the Authority's contributions subsequent to the measurement date of June 30, 2017 will be recognized as a reduction of the Net Pension Liability in the fiscal year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred (inflows) of resources related to pensions will be recognized as decreases to pension expense as follows:

Years ending June 30:		
2019	$	(487,495)
2020		(37,903)
2021		(15,415)
2022		(402,641)
2023		—
Thereafter		—
	$	(943,454)

(9) OPEB Plans

(a) Plan descriptions

(i) GLI plan

All full-time, salaried permanent employees of the state agencies, teachers and employees of participating political subdivisions are automatically covered by the VRS GLI Program upon employment. This plan is administered by the VRS, along with pensions and other OBEB plans, for public employer groups in the Commonwealth of Virginia.

In addition to the Basic Group Life Insurance benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional Group Life Insurance Program. For members who elect the optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured program, it is not included as part of the GLI Program OPEB.

The GLI Program was established July 1, 1960, for state employees, teachers and employees of political subdivisions that elect the program. Basic group life insurance coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their member contributions and accrued interest.

The benefits payable under the GLI Program have several components. The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. The accidental death benefit is double the natural death benefit. In addition to the basic natural and accidental death benefits, the program provides additional benefits provided under specific circumstances. These include accidental dismemberment benefits, safety belt benefits, repatriation benefits, felonious assault benefits and accelerated death benefit options. The benefit amounts provided to members covered under the GLI Program are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value. For covered members with at least 30 years of creditable service, there is a minimum benefit payable under the GLI Program. The minimum benefit was set at $8,000 by statute. This amount is increased annually based on the VRS Plan 2 cost-of-living adjustment and is currently $8,111.

(ii) LODA plan

All paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the VRS, the State Police Officers' Retirement System (SPORS), or the Virginia Law Officers' Retirement System (VaLORS) are automatically covered by the LODA Program. As required by statute, the VRS is responsible for managing the assets of the program. Participating employers made contributions to the program beginning in FY 2012. The employer contributions are determined by the VRS's actuary using anticipated program costs and the number of covered individuals associated with all participating employers.

The eligible employees of the LODA are paid employees and volunteers in hazardous duty positions in Virginia localities and hazardous duty employees who are covered under the VRS, the SPORS, or the VaLORS.

The LODA provides death and health insurance benefits for eligible individuals. The LODA program death benefit is a one-time payment made to the beneficiary or beneficiaries of a covered individual. Amounts vary as follows. $100,000 when a death occurs as the direct or proximate result of performing duty as of January 1, 2006, or after. $25,000 when the cause of death is attributed to one of the applicable presumptions and occurred earlier than five years after the retirement date. An additional $20,000 benefit is payable when certain members of the National Guard and U.S. military reserves are killed in action in any armed conflict on or after October 7, 2001.

The LODA program also provides health insurance benefits. Prior to July 1, 2017, these benefits were managed through the various employer plans and maintained the benefits that existed prior to the employee’s death or disability. These premiums were reimbursed to the employer by the LODA program. Beginning July 1, 2017, the health insurance benefits are managed through the Virginia Department of Human Resource Management (DHRM). The health benefits are modeled after the State Employee Health benefits Program plans and provide consistent, premium-free continued health plan coverage for LODA-eligible disabled individuals, survivors and family members. Individuals receiving the health insurance benefits must continue to meet eligibility requirements as defined by the Line of Duty Act.

(iii) VLDP plan

All full-time, salaried general employees; including local law enforcement officers, firefighters, or emergency medical technicians of political subdivisions who do not provide enhanced hazardous duty benefits; who are in the VRS Hybrid Retirement Plan benefit structure and whose employer has not elected to opt out of the VRS-sponsored program are automatically covered by the VLDP. This plan is administered by the VRS, along with pension and other OPEB plans, for eligible public employer groups in the Commonwealth of Virginia. Political subdivisions are required by Title 51.1 of the Code of Virginia, as amended to provide short-term and long-term disability benefits for their Hybrid employees either through a local plan or through the VLDP.

The VLDP was implemented January 1, 2014 to provide short-term and long-term disability benefits for non-work-related and work-related disabilities for employees with Hybrid retirement benefits.

Eligible employees are enrolled automatically upon employment, unless their employer has elected to provide comparable coverage. Eligibility includes full-time general employees; including local law enforcement officers, firefighters, or emergency medical technicians who do not have enhanced hazardous duty benefits; of public political subdivisions covered under VRS.

The VLDP provides a short-term disability benefit beginning after a seven-calendar-day waiting period from the first day of disability. Employees become eligible for non-work-related short-term disability coverage after one year of continuous participation in VLDP with their current employer. During the first five years of continuous participation in VLDP with their current employer, employees are eligible for 60% of their pre-disability income if they go out on non-work-related of work-related disability. Once the eligibility period is satisfied, employees are eligible for higher income replacement levels.

The VLDP program provides a long-term disability benefit beginning after 125 workdays of short-term disability. Members are eligible if they are unable to work at all or are working fewer than 20 hours per week. Members approved for long-term disability will receive 60% of their pre-disability income. If approved for work-related long-term disability, the VLDP benefit will be offset by the workers' compensation benefit. Members will not receive a VLDP benefit if their workers' compensation benefit is greater than the VLDP benefit.

Members approved for short-term or long-term disability at age 60 or older will be eligible for a benefit, provided they remain medically eligible. The VLDP Long-Term Care Plan is a self-funded program that assists with the cost of covered long-term care services.

(b) Contributions

The contribution requirements for the GLI Program are governed by §51.1-506 and §51.1-508 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI Program was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% X 60%) and the employer component was 0.52% (1.31% X 40%). Employers may elect to pay all or part of the employee contribution, however the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2018 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contribution to the GLI Program from the Authority were $62,000 and $58,000 for the years ended June 30, 2018 and June 30, 2017, respectively.

The contribution requirements for the LODA Program are governed by §9.1-400.1 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies by the Virginia General Assembly. Each employer's contractually required employer contribution rate for the LODA Program for the year ended June 30, 2018 was $567.37 per covered full-time-equivalent employee. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015 and represents the pay-as-you-go funding rate and not the full actuarial cost of the benefits under the program. The actuarially determined pay-as-you-go rate was expected to finance the costs and related expenses of benefits payable during the year. Contributions to the LODA Program from the Authority were $35,000 for the years ended June 30, 2018 and 2017.

The contribution requirement for active Hybrid employees is governed by §51.1-1178(C) of the Code of Virginia, as amended, but may be impacted as a result of funding provided to political subdivisions by the Virginia General Assembly. Each political subdivision's contractually required employer contribution rate for the year ended June 30, 2018 was 0.60% of covered employee compensation for employees in the VLDP. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015. The actuarially determined rate was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability.

Contributions from the Authority to the VLDP were $9,000 and $3,000 for the years ended June 30, 2018 and June 30, 2017, respectively.

(c) OPEB Liabilities, OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the OPEB

At June 30, 2018, the Authority reported a liability of $933,000 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2017 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation as of that date. The Authority's proportion of the Net GLI OPEB Liability was based on the Authority's actuarially determined employer contributions to the GLI Program for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the Authority's proportion was 0.06204% as compared to 0.05997% at June 30, 2016.

For the year ended June 30, 2018, the Authority recognized GLI OPEB expense of $16,000. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Authority reported a liability of $829,000 for its proportionate share of the Net LODA OPEB Liability. The Net LODA OPEB Liability was measured as of June 30, 2017 and the total LODA OPEB liability used to calculate the Net LODA OPEB Liability was determined by an actuarial valuation as of that date. The Authority's proportion of the Net LODA OPEB Liability was based on the Authority's actuarially determined pay-as-you-go employer contributions to the LODA OPEB plan for the year ended June 30, 2017 relative to the total of the actuarially determined pay-as-you-go employer contributions for all participating employers. At June 30, 2017, the Authority's proportion was 0.31564% as compared to 0.31907% at June 30, 2016.

For the year ended June 30, 2018, the Authority recognized LODA OPEB expense of $72,000. Since there was a change in proportionate share between measurement dates, a portion of the LODA OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Authority reported a liability of $3,000 for its proportionate share of the VLDP Net OPEB Liability. The Net VLDP OPEB Liability was measured as of June 30, 2017 and the total VLDP OPEB liability used to calculate the Net VLDP OPEB Liability was determined by an actuarial valuation as of that date. The Authority's proportion of the Net VLDP OPEB Liability was based on the Authority's actuarially determined employer contributions to the VLDP OPEB plan for the year ended June 30, 2017 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2017, the Authority's proportion of the VLDP was 0.53211% as compared to 0.45126% at June 30, 2016.

For the year ended June 30, 2018, the Authority recognized VLDP OPEB expense of $5,000. Since there was a change in proportionate share between June 30, 2016 and June 30, 2017 a portion of the VLDP Net OPEB expense was related to deferred amounts from changes in proportion.

At June 30, 2018, the Authority reported deferred outflows of resources and deferred inflows of resources related to the GLI, LODA and VLDP OPEB plans from the following sources:

	Deferred outflows of resources	Deferred inflows of resources
Net difference between projected and actual earnings on OPEB plan investments	$ —	36,000
Change of assumptions	—	135,000
Differences between expected and actual experience	—	21,000
Changes in proportionate share	30,000	9,000
Employer contributions subsequent to the measurement date	106,000	—
Total as of June 30, 2018	$ 136,000	201,000

Deferred outflows of resources related to OPEB plans totaling $106,000 resulting from the Authority's contributions subsequent to the measurement date of June 30, 2017 will be recognized as a reduction of the net OPEB liability in the fiscal year ended June 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the OPEB plans will be recognized in the Authority's OPEB expense in future reporting periods as follows:

Year ending June 30:	
2019	$ (28,000)
2020	(27,000)
2021	(27,000)
2022	(27,000)
2023	(19,000)
Thereafter	(43,000)
	$ (171,000)

The total GLI, LODA and VLDP OPEB liabilities were based on actuarial valuations as of June 30, 2016, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2017.

(d) Actuarial assumptions

Inflation	2.5 percent
Salary increases, including inflation:	
General employees (GLI & VDLP)	3.5–5.35 percent
Hazardous duty employees (GLI & LODA)	3.5–4.75 percent
Medical cost trend rates assumption (LODA):	
Under age 65	7.75 percent decreasing to 5.00%
Ages 65 and older	5.75 percent decreasing to 5.00%
Investment rate of return (GLI & VLDP)	7.0 percent, net of investment expenses, including inflation*
Investment rate of return (LODA)	3.56 percent, net of investment expenses, including inflation**

* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed rate. However, since the difference was minimal, and a more conservative investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% (GLI & VLDP) to simplify preparation of the OPEB liabilities.

** Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 3.56%. However, since the difference was minimal, a more conservative 3.56% investment return assumption has been used. Since LODA is funded on a current disbursement basis, the assumed annual rate of return of 3.56% was used since it approximates the risk-free rate of return.

	Mortality assumptions	
	General employees	Hazardous duty employees
Pre-retirement:	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of Rates; females 105% of rates	RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 90% of Rates; females set forward 1 year
Post-retirement:	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1% increase compounded from ages 70 to 90	RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 1 year, 1% increase compounded from ages 70 to 90; females set forward 3 years
Post-disablement:	RP-2014 Disabled Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates	RP-2014 Disabled Mortality Rates projected with scale BB to 2020; males set forward 2 years; unisex using 100% male

The actuarial assumptions used in the June 30, 2016 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016. Changes to the actuarial assumptions as a result of the experience study for general employees include updating to a more current mortality table, lowering retirement rates at older ages and extending final retirement ages, adjusting termination rates, lowering disability rates, and increasing line of duty disability. Changes to the actuarial assumptions as a result of the experience study for hazardous duty employees include updating to a more current mortality table, increasing age 50 retirement rates at older ages, adjusting termination rates, adjusting disability rates, and decreasing line of duty disability rates.

(e) Changes to the LODA Program Associated with HB 1345 (2016) and HB 2243 (2017)

The following changes were made to the LODA Program as a result of legislation in 2016 and 2017, but were specifically not considered in the June 30, 2016 actuarial valuation results which were rolled forward to the measurement date of June 30, 2017. There was no current actuarial experience on which to base the adjustments and the combined impact of the changes was not considered to be material to the final results. These changes will be factored into future actuarial valuations for the LODA Program.

- The discontinuance of spouse health care coverage, if a covered spouse divorces a disabled employee or a covered surviving spouse remarries.
- The potential for VRS's periodic review of the disability status of a disabled employee.

- For those beneficiaries who become eligible for health care benefits as the result of a disability occurring after June 30, 2017, the suspension of health care benefits in years when VRS certifies current income exceeds salary at the time of the disability, indexed for inflation.
- The extension of health care benefits for dependent children to age 26.
- The expansion of the definition of presumption of death or disability to include infectious diseases.

(f) Net OPEB Liability

The net OPEB liability represents the program's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of June 30, 2017, net OPEB liability amounts are as follows (dollar amounts in thousands):

		GLI	LODA	VLDP
Total OPEB liability	$	2,942,426	266,252	914
Plan fiduciary net position		1,437,586	3,461	351
Employers' net OPEB liability	$	1,504,840	262,791	563
Plan fiduciary net position as a percentage of the total OPEB liability		48.86 %	1.30 %	38.40 %

The total OPEB liability is calculated by VRS' actuary, and each plan's fiduciary net position is reported in the VRS' financial statements. The net OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the VRS' notes to the financial statements and required supplementary information.

(g) Long-Term Expected Rate of Return

The long-term expected rate of return on VRS' investments for the GLI and VLDP plans was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of VRS' investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset class (strategy)	Target allocation	Arithmetic long-term expected rate of return	Weighted average long-term expected rate of return
Public equity	40.00%	4.54%	1.82%
Fixed income	15.00	0.69	0.10
Credit strategies	15.00	3.96	0.59
Real assets	15.00	5.76	0.86
Private equity	15.00	9.53	1.43
Total	100.00%		4.80
Inflation			2.50
* Expected arithmetic nominal return			7.30%

* The above allocation provides a one-year return of 7.30%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 6.83%, including expected inflation of 2.50%.

The long-term expected rate of return on LODA OPEB Program's investments was set at 3.56% for this valuation. Since LODA is funded on a current-disbursement basis, it is not able to use the VRS Pooled Investments 7.00% assumption. Instead, the assumed annual rate of return of 3.56% was used since it approximates the risk-free rate of return. This single equivalent interest rate is the applicable municipal bond index rate based on the Bond Buyer General Obligation 20-year Municipal Bond Index published monthly by the Board of Governors of the Federal Reserve System as of the measurement date of June 30, 2017.

(h) Discount rate

The discount rate used to measure the total GLI and VLDP OPEB liabilities was 7.00%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the

VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2019, the rate contributed by the Authority for the GLI and VLDP OPEBs will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2019 on, employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI and VLDP OPEBs' fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI and VLDP OPEB liabilities.

The discount rate used to measure the total LODA OPEB liability was 3.56%. The projection of cash flows used to determine the discount rate assumed that employer contributions will be made per the VRS Statutes and that they will be made in accordance with the VRS funding policy and at rates equal to the actuarially determined contribution rates adopted by the VRS Board of Trustees. Through the fiscal year ending June 30, 2019, the rate contributed by participating employers to the LODA OPEB Program will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly.

(i) Sensitivity of the Authority's Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate

The following presents the Authority's proportionate share of the net OPEB liability using the current discount rates, as well as what the Authority's proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

		1% Decrease (6.00%)	Current discount rate (7.00%)	1% Increase (8.00%)
The Authority's proportionate share of the GLI Net OPEB Liability	$	1,207,000	933,000	711,000
The Authority's proportionate share of the VLDP Net OPEB Liability	$	3,000	3,000	2,000

		1% Decrease (2.56%)	Current discount rate (3.56%)	1% Increase (4.56%)
The Authority's proportionate share of the LODA Net OPEB Liability	$	940,000	829,000	736,000

(j) Sensitivity of the Authority's Proportionate Share of the Net LODA OPEB Liability to Changes in the Health Care Trend Rate

Because the LODA plan contains provisions for the payment of health insurance premiums, the liabilities are also impacted by the health care trend rates. The following presents the Authority's proportionate share of the net LODA OPEB liability using health care trend rate of 7.75% decreasing to 5.00%, as well as what the Authority's proportionate share of the net LODA OPEB liability would be if it were calculated using a health care trend rate that is one percentage point lower (6.75% decreasing to 4.00%) or one percentage point higher (8.75% decreasing to 6.00%) than the current rate:

		1.00% Decrease (6.75% decreasing to 4.00%)	Health Care Trend Rates (7.75% decreasing to 5.00%)	1.00% Increase (8.75% decreasing to 6.00%)
The Authority's proportionate share of the LODA Net OPEB Liability	$	704,000	829,000	985,000

(k) Group Life Insurance Program Fiduciary Net Position

Detailed information about the GLI, LODA, and VLDP Fiduciary Net Position is available in the separately issued VRS 2017 Comprehensive Annual Financial Report (CAFR). A copy of the 2017 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2017-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

(10) Executive Supplemental Retirement Plan

The Authority has an Executive Supplemental Retirement Plan (the ESRP), which was approved and established by the Board of Commissioners for two former employees. Under the terms of the ESRP, the participants are receiving annual payments equal to 75% of their final salary less any benefits received under the VRS. During the year ended June 30, 2018, the plan benefit expenses was $171,086, which is net of payments of $73,829. During the year ended June 30, 2017, the plan benefit expenses was $33,165, which is net of payments of $86,382. Whole life insurance policies have been purchased to assist in funding this liability. The Authority is owner and beneficiary of each of these policies. The cash surrender value of these policies was $912,001 and $954,133 at June 30, 2018 and 2017, respectively, and is included as other noncurrent assets in the accompanying statements of net position. The ESRP accrued expense totaling $420,815 and $665,730 as of June 30, 2018 and 2017, respectively, is included in other long term liabilities in the accompanying statements of net position.

(11) Employee Contribution Plan

The Authority maintains a deferred compensation plan through ICMA Retirement Corporation (ICMA). The plan was established under the guidelines of Section 457 of the Internal Revenue Code (IRC). The plan is a voluntary employee contribution plan in which employees elect a dollar amount to be withheld each pay period. Assets and liabilities related to this plan are not included in the accompanying statements of net position.

All regular full-time employees of the Authority are eligible to participate with a minimum contribution of $10 per pay period. Maximum contributions made by an employee are subject to IRC limitations.

The plan is entirely funded by the Authority's employees. ICMA charges fees to employees if they are enrolled in a managed account. ICMA also has the authority to annually deduct a certain percentage of the daily average net asset balance to cover administrative and other various costs.

(12) Rental Income from Operating Leases

The Authority has entered into various operating leases with tenants for the use of space at Authority facilities. The lease terms include a minimum fixed fee, as well as contingent fees, based on the tenant's volume of business. Substantially all the leases provide for a periodic review and redetermination of the rental amounts.

Minimum future rentals and concessions expected to be received on operating leases for each of the succeeding five years approximate:

Year ending June 30:	
2019	$ 14,601,000
2020	14,311,000
2021	14,352,000
2022	8,825,000
2023	8,832,000

The above amounts do not include contingent rentals and fees in excess of minimums, which amounted to $2,312,780 and $1,988,260 in fiscal years 2018 and 2017, respectively.

(13) Concentration of Credit Risk

Financial instruments that potentially subject the Authority to concentration of credit risk consist of investments and accounts receivable. The Authority's investments are described in note 2. A substantial portion of the Authority's accounts receivable is from U.S. commercial airlines that could be similarly affected by industry economic conditions. Historically, the Authority's uncollectible accounts receivable have been minimal, and the Authority does not require collateral for its receivables.

(14) Risk Management

The Authority is exposed to a variety of risks or losses related to torts (i.e., injuries to employees, damage to property, destruction or theft of assets, cyber-attacks and natural disasters). The Authority purchases insurance through the Commonwealth of Virginia and commercial insurance carriers for specific types of coverage.

The Authority participates in a risk management self-insurance plan through the Commonwealth of Virginia administered by the Division of Risk Management. Through this plan, the Authority obtains public officers' liability coverage of $1,000,000 per occurrence. The Comprehensive Annual Financial Report of the Commonwealth of Virginia contains disclosure of the Commonwealth's estimated claims payable and estimated losses for self-insurance plans at June 30, 2018 and 2017.

Through commercial insurance carriers, the Authority has property insurance coverage of $300,000,000 annually, general liability coverage of $50,000,000 per occurrence, airport liability coverage of $300,000,000 annually, business auto coverage of $1,000,000 per occurrence, disability coverage of $78,000 annually, cyber attach coverage of $1,000,000, crime insurance coverage of $1,000,000 per occurrence, and workers' compensation coverage for bodily injury of $1,000,000 per occurrence.

There were no reductions to insurance coverage from the prior year. Claim settlements and judgments not covered by insurance coverage are covered by operating resources. The amount of settlements did not exceed insurance coverage for any of the past three years. Claim expenditures and liabilities are reported when it is probable that a loss occurred and the amount of loss can be reasonably estimated.

(15) Government Grants in Aid of Construction

The Authority receives, on a reimbursement basis, grants from the Commonwealth of Virginia and the federal government for certain capital construction projects through the Airport Improvement Program. As a recipient of state and federal financial assistance, the Authority is responsible for maintaining an internal control structure that ensures compliance with all laws and regulations related to this program. All grants are subject to financial and compliance audits by the grantors. In the opinion of management, audit adjustments, if any, would not have a significant impact on the financial position of the Authority.

(16) Commitments and Contingencies

Prior to July 1, 1998, the Authority had an agreement with the City of Norfolk (the City) whereby the Authority had use of the Airport property free of charge. As of July 1, 1998, the City reacquired title to all property. On January 18, 2000, the City executed a deed conveying title to the Authority, reserving a right of reversion if the Airport property is no longer used as an airport. In consideration of the conveyance of the property, the Authority agreed to compensate the City for the loss of tax revenue on the Airport property. Beginning in fiscal year 2016, the adjusted annual payment was set by the City's tax assessor; in no event shall the payment exceed stated tax rates on the fair value of the Airport property. Advance payments are due annually on July 1. Payment in the amount of $2,500,000 was required for both fiscal years 2018 and 2017. The Authority's fiscal year 2019 annual payment of $2,500,000 was made in June 2018 and is reflected as a prepaid expense as of June 30, 2018. Beginning with the July 1, 2020 payment, the amount will increase to $2,650,000 per year. This amount will be due each year thereafter through the July 1, 2024 payment.

From time to time, the Authority is a defendant in certain lawsuits which are incidental to its operations. Management is of the opinion that the accompanying financial statements will not be materially affected by the ultimate resolution of litigation pending or threatened as of June 30, 2018.

(17) Conduit Debt

From time to time, the Authority has issued revenue bonds to provide financial assistance to private-sector entities for the acquisition and construction of industrial and commercial facilities deemed to be in the public interest. The bonds are secured by the property financed and are payable solely from payments received on the underlying promissory notes. Upon repayment of the bonds, ownership of the acquired facilities transfers to the private-sector entity served by the bond issuance. Neither the Commonwealth of Virginia nor any political subdivision thereof, including the Authority, is obligated in any manner for repayment of the bonds. Accordingly, the bonds are not reported as liabilities in the accompanying statements of net position. As of June 30, 2018, there were nine series of revenue bonds outstanding with an aggregate principal amount of approximately $29,800,000. As of June 30, 2017, there were ten series of revenue bonds outstanding with an aggregate principal amount of approximately $39,971,000.

(18) Capitalized Interest

Before adoption of GASB 89, the Authority capitalized interest cost that related to the construction of Airport projects. Interest costs of projects acquired with tax exempt borrowings were reduced by interest earned on invested debt proceeds over the same construction period. Interest costs on Authority funded projects were calculated using the average interest rate on all borrowings over the same construction period. The capitalized interest cost was $1,131,873 for fiscal year 2017.

REQUIRED SUPPLEMENTARY INFORMATION

NORFOLK AIRPORT AUTHORITY

Schedule of Changes in Net Pension Liability and Related Ratios (unaudited)

June 30, 2018

	2017	2016	2015	2014
Schedule of Changes in the Authority's Net Pension Liability and Related Ratios:				
Total pension liability:				
Service cost	$ 1,373,319	1,346,523	1,300,433	1,278,926
Interest	3,053,266	2,880,450	2,688,486	2,530,135
Differences between expected and actual experience	(429,688)	237,910	484,660	—
Changes of assumptions	(222,799)	—	—	—
Benefit payments, including refunds of employee contributions	(2,264,730)	(1,727,430)	(1,735,055)	(1,358,746)
Net change in total pension liability	1,509,368	2,737,453	2,738,524	2,450,315
Total pension liability – beginning	44,750,762	42,013,309	39,274,785	36,824,470
Total pension liability – ending (a)	46,260,130	44,750,762	42,013,309	39,274,785
Plan fiduciary net position:				
Contributions – employer	1,170,578	1,223,465	1,179,412	1,260,523
Contributions – employee	564,624	553,205	522,626	512,028
Net investment income	4,691,484	671,007	1,669,448	4,930,757
Benefit payments, including refunds of employee contributions	(2,264,730)	(1,727,430)	(1,735,055)	(1,358,746)
Administrative expense	(27,108)	(23,348)	(22,585)	(25,970)
Other	(3,857)	(173)	(663)	260
Net change in plan fiduciary net position	4,130,991	696,726	1,613,183	5,318,852
Plan fiduciary net position – beginning	38,541,642	37,844,916	36,231,733	30,912,881
Plan fiduciary net position – ending (b)	42,672,633	38,541,642	37,844,916	36,231,733
Authority's net pension liability – ending (a)-(b)	$ 3,587,497	6,209,120	4,168,393	3,043,052
Plan fiduciary net position as a percentage of the total pension liability (b) / (a)	92.24 %	86.13 %	90.08 %	92.25 %
Covered-employee payroll (c)	$ 11,725,164	10,903,311	10,406,965	10,245,675
Authority's net pension liability as a percentage of covered-employee payroll [(a)-(b)] / (c)	30.60 %	56.95 %	40.05 %	29.70 %

Unaudited - See accompanying independent auditors' report and notes to required supplementary information.

NORFOLK AIRPORT AUTHORITY

Required Supplementary Information (Unaudited)

Schedule of Pension Contributions

June 30, 2018

For the year ended June 30	Actuarially determined contribution	Contributions in relation to actuarially determined contribution	Contribution deficiency (excess)	Employer's covered employee payroll	Contributions as a% of covered employee payroll
2018	$ 1,207,848	1,207,848	—	11,882,270	10.17 %
2017	1,156,652	1,156,652	—	11,725,164	9.86
2016	1,223,500	1,223,465	35	10,903,311	11.22
2015	1,180,959	1,179,412	1,547	10,406,956	11.33

Unaudited – See accompanying independent auditors' report and notes to required supplementary information.

NORFOLK AIRPORT AUTHORITY

Schedule of OPEB Contributions (Unaudited)

For the Year ended June 30, 2018

Year		Contractually required contribution	Contributions in relation to contractually required contribution	Contribution deficiency (excess)	Employer's covered payroll	Contributions as a % of covered payroll
GLI Plan:						
2018	$	62,000	62,000	—	11,445,288	0.54%
LODA Plan:						
2018		35,000	35,000	—	11,445,288	0.31%
VLDP Plan:						
2018		9,000	9,000	—	977,098	0.92%
GLI Plan:						
2017		58,000	58,000	—	11,841,567	0.49%
LODA Plan:						
2017		35,000	35,000	—	11,841,567	0.30%
VLDP Plan:						
2017		3,000	3,000	—	1,430,793	0.21%

Unaudited – See accompanying independent auditors' report and notes to required supplementary information.

NORFOLK AIRPORT AUTHORITY

Schedule of Authority's Share of Net OPEB Liability (Unaudited)

For the Year ended June 30, 2018

		2018
GLI Plan:		
Authority's Proportion of the Net GLI OPEB Liability		0.06204%
Authority's Proportionate Share of Net GLI OPEB Liability	$	933,000
Employer's Covered Payroll		11,445,288
Employer's Proportionate Share of the Net GLI OPEB Liability as a Percentage of its Covered Payroll		8.15%
Plan Fiduciary Net Position as a Percentage of the Total GLI OPEB Liability		48.86%
LODA Plan:		
Authority's Proportion of the Net LODA OPEB Liability		0.31564%
Authority's Proportionate Share of Net LODA OPEB Liability	$	829,000
Employer's Covered Payroll		11,445,288
Employer's Proportionate Share of the Net LODA OPEB Liability as a Percentage of its Covered Payroll		7.24%
Plan Fiduciary Net Position as a Percentage of the Total LODA OPEB Liability		1.30%
VLDP Plan:		
Authority's Proportion of the Net VLDP OPEB Liability		0.53211%
Authority's Proportionate Share of Net VLDP OPEB Liability	$	3,000
Employer's Covered Payroll		977,098
Employer's Proportionate Share of the Net VLDP OPEB Liability as a Percentage of its Covered Payroll		0.31%
Plan Fiduciary Net Position as a Percentage of the Total VLDP OPEB Liability		38.40%

Unaudited – See accompanying independent auditors' report and notes to required supplementary information.

(1) Changes of Benefit Terms

There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

(2) Changes of Assumptions

The following changes in pension and OPEB actuarial assumptions were made effective June 30, 2016 based on the most recent experience study of the System for the four-year period ending June 30, 2016:

- Updated to a more current mortality table – RP-2014
- Lowered retirement rates at older ages and changed final retirement from 70 to 75
- Adjusted withdrawal rates to better fit experience at each year age and service through 9 years of service
- Lowered disability rates for pension and OPEB general employees. Adjusted disability rates for OPEB hazardous duty employees to better match experience.
- Increased line of duty disability from 14% to 15% for pension and OPEB general employees. Decreased line of duty disability from 60% to 45% for OPEB hazardous duty employees.

(3) Years Presented in Schedules

The Schedule of Changes in the Authority's Net Pension Liability and Related Ratios and the Schedule of Pension Contributions are required to be presented for the last ten fiscal years. However, the Authority has only presented the required supplementary information for the last four years as fiscal year 2015 was the first year of implementation of the requirement to provide such required supplementary information and such information is not available for the prior years.

The schedule of Authority's Share of Net OPEB liability and the Schedule of OPEB Contributions are required to be presented for the last ten fiscal years. However, the Authority has only presented the required supplementary information for the last year as fiscal year 2018 was the first year of implementation of the requirement to provide such required supplementary information and such information is not available for the prior years.

Unaudited – See accompanying independent auditors' report.

SUPPLEMENTARY INFORMATION

NORFOLK AIRPORT AUTHORITY

Schedule of Expenditures of Federal Awards

Year ended June 30, 2018

Federal grantor/program title	CFDA number	Project number	Expenditures
Department of Transportation:			
Federal Aviation Administration:			
Airport Improvement Program	20.106	3-51-0036-63	$ 806,873
Airport Improvement Program	20.106	3-51-0036-64	4,357,191
Airport Improvement Program	20.106	3-51-0036-65	1,102,270
Airport Improvement Program	20.106	3-51-0036-66	1,510,306
Airport Improvement Program	20.106	3-51-0036-67	410,849
Airport Improvement Program	20.106	3-51-0036-68	938,067
Total Airport Improvement Program			9,125,556
Department of Homeland Security:			
Transportation Security Administration:			
Explosive Detection Canine Team Program	97.072		151,500
Department of the Treasury:			
Equitable Sharing Program	21.016		10,955
			$ 9,288,011

See accompanying notes to schedule of expenditures of federal awards.

See accompanying independent auditors’ report.

(1) General

The accompanying schedule of expenditures of federal awards (the Schedule) presents the activities of the federal financial assistance programs of the Norfolk Airport Authority.

(2) Basis of Accounting

The accompanying Schedule is presented using the accrual basis of accounting.

(3) De Minimus Cost Rate

The auditee has not elected to use the 10% de minimus indirect cost rate as discussed in Uniform Guidance Section 200.414

KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

The Board of Commissioners
Norfolk Airport Authority:

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Norfolk Airport Authority (the Authority), which comprise the statement of net position as of June 30, 2018, and the related statements of revenues, expenses, and changes in net position and cash flows for the year then ended, and the related notes to the financial statements, and have issued our report thereon dated November 20, 2018 which included a paragraph emphasizing that in fiscal year 2018, the Authority adopted new accounting guidance described in Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

KPMG

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Authority's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

KPMG LLP

Norfolk, Virginia
November 20, 2018

KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Auditors' Report on Compliance for the Major Federal Program and Report on Internal Control Over Compliance Required by the Uniform Guidance

The Board of Commissioners
Norfolk Airport Authority:

Report on Compliance for Each Major Federal Program

We have audited the Norfolk Airport Authority's (the Authority) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on the Authority's major federal program for the year ended June 30, 2018. The Authority's major federal program is identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal statutes, regulations, and the terms and conditions of its federal awards applicable to its federal programs.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for the Authority's major federal program based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the major federal program. However, our audit does not provide a legal determination of the Authority's compliance.

Opinion on the Major Federal Program

In our opinion, the Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on its major federal program for the year ended June 30, 2018.

KPMG

Report on Internal Control Over Compliance

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on the major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance the major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A material weakness in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

KPMG LLP

Norfolk, Virginia
November 20, 2018

NORFOLK AIRPORT AUTHORITY

Schedule of Passenger Facility Charge Revenues and Expenditures

Year ended June 30, 2018 and
each quarter during the year ended June 30, 2018

	Cumulative total – June 1998 to June 30, 2017	Quarter ended September 30, 2017	Quarter ended December 31, 2017	Quarter ended March 31, 2018	Quarter ended June 30, 2018	Year ended June 30, 2018	Cumulative total – June 1998 to June 30, 2018
Revenues:							
Passenger facility charge revenues received[1]	$ 100,651,548	1,772,677	1,754,969	1,557,485	1,974,155	7,059,286	107,710,834
Interest earned[2]	7,328,947	33,321	19,240	22,428	37,913	112,902	7,441,849
Total revenues	107,980,495	1,805,998	1,774,209	1,579,913	2,012,068	7,172,188	115,152,683
Expenditures:							
Bond financing and interest costs and capital expenditures	101,904,840	2,189,672	2,044,011	—	—	4,233,683	106,138,523
Collected and unexpended PFCs	$ 6,075,655						9,014,160

Revenues received and expenditures spent on approved projects in the schedule above agree to the Passenger Facility Charge Quarterly Status Reports (PFC Reports) submitted by the Norfolk Airport Authority to the Federal Aviation Administration (FAA).

1 PFC revenues are reported when the cash is received.

2 The FAA requires that the PFC revenue does not include net quarterly interest losses. As such, only the net quarterly gains are reflected above as interest earned

See accompanying independent auditors' report.

NORFOLK AIRPORT AUTHORITY

Schedule of Findings and Questioned Costs

Year ended June 30, 2018

(1) Summary of Auditor's Results

(a) Type of report issued on whether the financial statements were prepared in accordance with generally accepted accounting principles: **Unmodified**

(b) Internal control deficiencies over financial reporting disclosed by the audit of the financial statements:

- Material weaknesses: **No**
- Significant deficiencies: **None Reported**

(c) Noncompliance material to the financial statements: **No**

(d) Internal control deficiencies over major programs disclosed by the audit:

- Material weaknesses: **No**
- Significant deficiencies: **None reported**

(e) Type of report issued on compliance for major programs: **Unmodified**

(f) Audit findings that are required to be reported in accordance with 2 CFR 200.516(a): **No**

(g) Major programs:

- Airport Improvement Program – CFDA 20.106

(h) Dollar threshold used to distinguish between Type A and Type B programs: **$750,000**

(i) Auditee qualified as a low-risk auditee: **Yes**

(2) Findings Relating to the Financial Statements Reported in Accordance with *Government Auditing Standards*:

None Reported

(3) Findings and Questioned Costs Relating to Federal Awards:

None Reported

KPMG LLP
Suite 1900
440 Monticello Avenue
Norfolk, VA 23510

Independent Auditors' Report on Compliance with Requirements Applicable for the Passenger Facility Charge Program and on Internal Control over Compliance

The Board of Commissioners
Norfolk Airport Authority:

Report on Compliance for the Passenger Facility Charge Program

We have audited the Norfolk Airport Authority's (the Authority) compliance with the compliance requirements described in the *Passenger Facility Charge Audit Guide for Public Agencies* (the Audit Guide), issued by the Federal Aviation Administration, applicable to the Authority's Passenger Facility Charge Program for the year ended June 30, 2018.

Management's Responsibility

Management of the Authority is responsible for compliance with requirements of laws, and regulations, applicable to the Passenger Facility Charge Program.

Auditors' Responsibility

Our responsibility is to express an opinion on compliance for the Authority's Passenger Facility Charge Program based on our audit of the compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements in the Audit Guide. Those standards and the Audit Guide require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the compliance requirements referred to above that could have a material effect on the Passenger Facility Charge Program occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for the Authority's Passenger Facility Charge Program. However, our audit does not provide a legal determination of the Authority's compliance.

Opinion

In our opinion, the Norfolk Airport Authority complied, in all material respects, with the types of compliance requirements referred to above that are applicable to its Passenger Facility Charge Program for the year ended June 30, 2018.

Report on Internal Control Over Compliance

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance and to test and report on internal control over compliance in accordance with the Guide, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance on a timely basis. A material weakness in internal control over compliance is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a compliance requirement will not be prevented, or detected and corrected, on a timely basis. A significant deficiency in internal control over compliance is a deficiency, or a combination of deficiencies, in internal control over compliance with a compliance requirement that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Audit Guide. Accordingly, this report is not suitable for any other purpose.

KPMG LLP

Norfolk, Virginia
November 20, 2018

APPENDIX C

DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

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DEFINITIONS AND SUMMARY OF CERTAIN PROVISIONS OF THE INDENTURE

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Set forth herein are definitions and summaries of certain sections of the Master Indenture of Trust. These summaries do not purport to be complete, and reference is made to the Master Indenture of Trust, a copy of which can be obtained from the Authority, for a complete statement of the rights, duties and obligations of the parties thereto. The headings herein are not part of the Indenture but have been added for ease of reference only. Purchasers of the Bonds should review this paragraph of the final Official Statement for any material changes in the summaries contained herein.

DEFINITIONS OF CERTAIN TERMS

The following are definitions of certain of the terms used in this Official Statement (certain other terms are defined elsewhere in the text of the Official Statement).

"Accreted Value" means, with respect to each Compound Interest Bond, the principal amount of such Compound Interest Bond, plus, on the date of calculation, the interest accrued thereon to such date compounded at the interest rate thereof on each compounding date contained in such Compound Interest Bond, and, with respect to any calculation on a date other than a compounding date, the Accreted Value means the Accreted Value as of the preceding compounding date plus interest on such amount from such compounding date to the date of calculation at a rate equal to the interest rate on such Compound Interest Bond.

"Act" means Chapter 463, Virginia Acts of Assembly of 1948, as amended.

"Additional Interest" means, for any period during which any Pledged Bonds are owned by a Credit Issuer pursuant to a Credit Facility or Credit Facility Agreement, the amount of interest accrued on such Pledged Bonds at the Pledged Bond Rate less the amount of interest which would have accrued during such period on an equal principal amount of Bonds at the Bond Rate.

"Additional Obligations" means Revenue Obligations issued pursuant to provisions of the Master Indenture relating to Additional Senior Lien Revenue Obligations, Additional Subordinate Lien Revenue Obligations, Additional Identified Revenue Obligations, Additional Special Purpose Revenue Obligations, Hybrid Obligations, and Other Airport Obligations.

"Airport" means the Norfolk International Airport and any other airport facilities that the Authority designates in writing as part of the Airport under the Master Indenture, less any portion thereof sold or otherwise disposed of pursuant thereto.

"Airport Consultant" means a firm of consultants experienced in the planning or assessment of financial feasibility of airports or airport-related projects and having a nationally recognized reputation for such work, which has been retained by the Authority or whose selection has been approved by the Authority.

"Annual Budget" means the annual budget of the Authority relating to the Airport (which will specify all costs, obligations, and expenses properly allocable to the Airport), as amended or supplemented in accordance with established procedures of the Authority, adopted or in effect for a particular Fiscal Year.

"Balloon Date" means any Principal Maturity Date or Put Date for Balloon Obligations in a Balloon Year.

"Balloon Obligations" means any Revenue Obligations 25% or more of the original principal amount of which (i) is due in any 12-month period or (ii) is required to be redeemed by the Authority, or otherwise paid in any 12-month period; provided that, in calculating the principal amount of such Revenue Obligations due or required to be redeemed in any 12-month period, such principal amount will be reduced to the extent that all or any portion of such amount is required to be redeemed or amortized prior to such 12-month period.

"Balloon Year" means any 12-month period in which more than 25% of the original principal amount of related Balloon Obligations mature or are subject to mandatory redemption by the Authority.

"Beneficial Owner" means the actual purchasers of the Bonds.

"Beneficiaries" means the holders of any Revenue Obligations and the parties to Contracts.

"Bond Counsel" means any firm of nationally recognized bond counsel experienced in matters relating to tax-exempt financing retained by the Authority.

"Bondholder" or "**holder**" means the registered owner or the holder of one or more Revenue Obligations.

"Bond Insurer" means Financial Guaranty Insurance Company, a New York stock insurance company, or any successor thereto.

"Bond Rate" means the rate of interest per annum payable on specified Revenue Obligations other than Pledged Bonds.

"Bond Register" means the registration books maintained and to be maintained by the Bond Registrar.

"Bond Registrar" means any bank or trust company designated as such by the Authority in the Indenture with respect to any of the Bonds, either by certificate of the Executive Director or by Supplemental Indenture. Such Bond Registrar will perform the duties required of the Bond Registrar in the Indenture.

"Bonds" means any revenue bonds authorized by and authenticated and delivered pursuant to the Indenture.

The term **"category"** or **"category of Revenues"** means an objectively definable portion of Revenues related to a particular type of service, activity or facility, including the categories of General Revenues, PFC Revenues, Released Revenues and Special Purpose Revenues and subcategories within such categories. A **"category of Revenues,"** unless otherwise determined by the Authority, includes Investment Earnings or other moneys in funds or amounts derived from such portion of Revenues.

"City" means the City of Norfolk, Virginia, a political subdivision existing under the laws of the State.

"Code" means the Internal Revenue Code of 1986, as amended, and any applicable regulations thereunder.

"Commitment" when used with respect to Balloon Obligations, means a binding written commitment from a financial institution, surety, or insurance company to refinance such Balloon Obligations on or prior to any Balloon Date thereof, including without limitation any Credit Facility for such Balloon Obligations.

"Compound Interest Bonds" means Bonds that bear interest which is calculated based on periodic compounding, payable only at maturity or earlier redemption.

"Conditional Redemption" means an optional redemption described in the Master Indenture.

"Conduit Bonds" means bonds, notes or other obligations issued by a Conduit Issuer to provide proceeds to be loaned by the Conduit Issuer to the Authority pursuant to a Loan Agreement.

"Conduit Issuer" means a third-party issuer of Conduit Bonds.

"Contracts" means all Credit Facility Agreements, including any related Reimbursement Obligations, all agreements with respect to Reserve Account Credit Facilities, including any related Reimbursement Obligations, all Qualified Hedge Agreements, and any agreement made pursuant to the Master Indenture.

"Contract Payments Subaccount" means the Contract Payments Subaccount within the Payments Account established in the Master Indenture.

"Costs," with respect to any Project, means the total cost, paid or incurred, to study, plan, design, finance, acquire, construct, reconstruct, install or otherwise implement the Project, including improvements to another Project, and will include, but will not be limited to, the following costs and expenses relating to such Project and the reimbursement to the Authority for any such items previously paid by the Authority:

(i) the cost of all lands, real or personal properties, rights, easements and franchises acquired;

(ii) the cost of the acquisition, construction, reconstruction, implementation or installation of any Project;

(iii) the cost of engineering, architectural, planning, development, and supervisory services, fiscal agents' and legal expenses, plans and specifications, and other expenses necessary or incident to determining the feasibility or practicability of any Project, administrative expenses, and such other expenses as may be necessary or incident to any financing with proceeds of Revenue Obligations;

(iv) the cost of placing any Project in operation;

(v) the cost of condemnation of property necessary for construction implementation and operation;

(vi) the costs of issuing any Revenue Obligations to finance or to refinance any Project;

(vii) any other costs which may be incident to any Project prior to completion and implementation;

(viii) interest on the Revenue Obligations during the construction and installation of any Project and for up to twelve (12) months thereafter; and

(ix) any costs permitted by the Act.

"Credit Facility" means any letter of credit, insurance policy, guaranty, surety bond, standby bond purchase agreement, line of credit, revolving credit agreement, or similar obligation, arrangement, or instrument issued by a bank, insurance company, or other financial institution that is used by the Authority to perform one or more of the following tasks: (i) enhancing the Authority's credit by assuring owners of any of the Revenue Obligations that principal of and interest on such Revenue Obligations will be paid promptly when due; (ii) providing liquidity for the owners of Revenue Obligations through undertaking to cause Revenue Obligations to be bought from the owners thereof when submitted pursuant to an arrangement prescribed by a Supplemental Indenture; or (iii) remarketing any Revenue Obligations so submitted to the Credit Issuer (whether or not the same Credit Issuer is remarketing the Revenue Obligations). The term "Credit Facility" does not include a Reserve Account Credit Facility.

"Credit Facility Agreement" means an agreement between the Authority and a Credit Issuer pursuant to which the Credit Issuer issues a Credit Facility and may include a related Reimbursement Obligation. The term "Credit Facility Agreement" does not include an agreement with respect to a Reserve Account Credit Facility.

“Credit Issuer” means any issuer of a Credit Facility then in effect for all or part of the Revenue Obligations. The term “Credit Issuer” does not include any Reserve Account Credit Facility Provider. Whenever in the Indenture the consent of the Credit Issuer is required, such consent will only be required from the Credit Issuer whose Credit Facility is issued with respect to the Revenue Obligations for which the consent is required.

“Debt Service Requirement” means the total principal and interest coming due, whether at maturity or upon mandatory redemption, in any specified period, provided:

(i) If any Revenue Obligations Outstanding or proposed to be issued shall bear interest at a Variable Rate (including Hedged Obligations if the interest thereon calculated as set forth below is expected to vary and Revenue Obligations secured by a Credit Facility if the interest thereon calculated as set forth below is expected to vary), the interest coming due in any specified future period shall be determined as if the Variable Rate in effect at all times during such future period was, at the option of the Authority, either (1) the average of the actual Variable Rates which were in effect (weighted according to the length of the period during which each such Variable Rate was in effect) for the most recent 12-month period immediately preceding the date of calculation for which such information is available (or shorter period if such information is not available for a 12-month period), or (2) the current average annual fixed rate of interest on securities of similar quality having a similar maturity date as certified by a Financial Advisor.

(ii) If any Compound Interest Bonds are Outstanding or proposed to be issued, the total principal and interest coming due in any specified period shall be determined in accordance with the Supplemental Indenture of the Authority authorizing such Compound Interest Bonds.

(iii) With respect to any Revenue Obligations secured by a Credit Facility, the Debt Service Requirement therefor shall include (1) any commission or commitment fee obligations with respect to such Credit Facility, (2) the outstanding amount of any Reimbursement Obligation and interest thereon, (3) any Additional Interest owed on Pledged Bonds, and (4) any remarketing agent fees; provided if (a) the Credit Facility requires the Credit Issuer to make all interest payments on the Revenue Obligations, (b) the Reimbursement Obligation provides for payments by the Authority or the Credit Issuer based on levels of, or changes or differences in, interest rates, currency exchange rates, or stock or other indices, and (c) the Credit Issuer would qualify as a Qualified Hedge Provider if the Credit Facility Agreement were to be construed as a Hedge Agreement and the related Revenue Obligations as Hedged Obligations, then interest on such Revenue Obligations shall be calculated by adding (x) the amount of interest payable on such Revenue Obligations pursuant to their terms and (y) the amount of payments for interest to be made by the Authority under the Credit Facility Agreement, and subtracting (z) the amounts payable by the Credit Issuer to the Authority or as interest on such Revenue Obligations as specified in the Credit Facility Agreement; but only to the extent the Credit Issuer is not in default under the Credit Facility and if such default has occurred and is continuing, interest on such Revenue Obligations shall be calculated as if there were no Credit Facility.

(iv) With respect to any Hedged Obligations, the interest on such Hedged Obligations during any Hedge Period and for so long as the provider of the related Hedge Agreement has not defaulted on its payment obligations thereunder shall be calculated by adding (x) the amount of interest payable by the Authority on such Hedged Obligations pursuant to their terms and (y) the amount of Hedge Payments payable by the Authority under the related Hedge Agreement and subtracting (z) the amount of Hedge Receipts payable by the provider of the related Hedge Agreement at the rate specified in the related Hedge Agreement; provided, however, that to the extent that the provider of any Hedge Agreement is in default thereunder, the amount of interest payable by the Authority on the related Hedged Obligations shall be the interest calculated as if such Hedge Agreement had not been executed. In determining the amount of Hedge Payments or Hedge Receipts that are not fixed throughout the Hedge Period (*i.e.*, which are variable), payable or receivable for any future period, such Hedge Payments or Hedge Receipts for any period of calculation (the “Determination Period”) shall be computed by assuming that the variables comprising the calculation (*e.g.*, indices) applicable to the Determination Period are equal to the average of the actual variables which were in effect (weighted according to the length of the period during which each such variable was in effect) for the most recent 12-month period immediately preceding the date of calculation for which such information is available (or shorter period if such information is not available for a 12-month period).

(v) For the purpose of calculating the Debt Service Requirement on Balloon Obligations (1) which are subject to a Commitment or (2) which do not have a Balloon Year commencing within 12 months from the date of calculation, such Balloon Obligations shall be assumed to be amortized in substantially equal annual amounts to be paid for principal and interest over an assumed amortization period of 20 years at an assumed interest rate (which shall be the interest rate certified by a Financial Advisor to be the interest rate at which the Authority could reasonably expect to borrow the same amount by issuing Bonds with the same priority of lien as such Balloon Obligations and with a 20-year term); provided, however, that if the maturity of such Balloon Obligations (taking into account the term of any Commitment) is in excess of 20 years from the date of issuance, then such Balloon Obligations shall be assumed to be amortized in substantially equal annual amounts to be paid for principal and interest over an assumed amortization period of years equal to the number of years from the date of issuance of such Balloon Obligations to maturity (including the Commitment) and at the interest rate applicable to such Balloon Obligations. For the purpose of calculating the Debt Service Requirement on Balloon Obligations (a) which are not subject to a Commitment and (b) which have a Balloon Year commencing within 12 months from the date of calculation, the principal payable on such Balloon Obligations during the Balloon Year shall be calculated as if paid on the Balloon Date.

(vi) The principal of and interest on Revenue Obligations, amounts for interest under a Credit Facility and Hedge Payments shall be excluded from the determination of Debt Service Requirement to the extent that the same were or are expected to be paid with amounts on deposit on the date of calculation (or proceeds of Revenue Obligations to be deposited on the date of issuance of proposed Revenue Obligations) in a fund under the Indenture (including any PFC Revenues on deposit in the PFC Revenue Account in the Revenue Fund).

"Debt Service Reserve Account" means the Debt Service Reserve Account within the Sinking Fund established in the Master Indenture.

"Debt Service Reserve Requirement" means an amount determined from time to time by the Authority as a reasonable reserve for the payment of principal of and interest on Revenue Obligations for which a subaccount in the Debt Service Reserve Account is created or added to pursuant to a Supplemental Indenture.

"Depository" means the depository of each fund established under the Indenture, and any successor depository of such fund hereafter designated by the Authority from time to time by Supplemental Indenture.

"DTC" means The Depository Trust Company, New York, New York, or its nominee, or its successors and assigns, or any other depository performing similar functions under the Indenture.

"Event of Default" means any of the events defined as such in the Master Indenture.

"Executive Director" means the individual appointed by the Governing Body as the executive director of the Authority.

"Financial Advisor" means an investment banking or financial advisory firm, commercial bank, or any other Person who or which is retained by the Authority for the purpose of passing on questions relating to the availability and terms of specified types of Revenue Obligations and is actively engaged in and, in the good faith opinion of the Authority, has a favorable reputation for skill and experience in underwriting or providing financial advisory services in respect of similar types of securities.

"Finance Officer" means the official of the Authority who serves as the chief financial officer of the Authority.

"First Supplemental Indenture" means the Supplemental Indenture with respect to the Series 2001 Bonds, dated as of April 1, 2001, as amended.

"Fiscal Year" means the 12-month period used by the Authority for its general accounting purposes, as it may be changed from time to time.

"Fitch" means Fitch Investors Service, L.P., or, if such limited partnership is dissolved or liquidated or otherwise ceases to perform securities rating services, such other nationally recognized securities rating agency as may be designated in writing by the Authority. The notice address of Fitch is One State Street Plaza, New York, New York 10004.

"Forecast Period" means a period including each consecutive Fiscal Year through, and ending with, the first Fiscal Year beginning after the later of (i) the Fiscal Year in which any proposed Additional Obligations are to be issued or (ii) the Fiscal Year in which any Project to be financed with the proceeds of any proposed Additional Obligations is, in the judgment of the Authority, expected to be completed.

"Fourth Supplemental Indenture" means the Supplemental Indenture with respect to the Series 2019 Bonds, dated as of June 1, 2019.

"General Reserve Fund" means the Authority's General Reserve Fund established in the Master Indenture.

"General Revenue Account" means the General Revenue Account within the Revenue Fund established in the Master Indenture.

"General Revenue Obligations" means Revenue Obligations secured by a Senior Lien on General Revenues.

"**General Revenue Facilities"** means the Airport, including PFC Facilities, but not including all Special Purpose Facilities and Released Revenue Facilities.

"General Revenues" means all Revenues other than PFC Revenues, Special Purpose Revenues and Released Revenues.

"Governing Body" means the Board of Commissioners of the Authority and any predecessor or successor in office to such present body.

"Government Loans" means loans to the Authority by the government of the United States or the State, or by any department, authority, or agency of either, for the purpose of acquiring, constructing, reconstructing, improving, bettering, or extending any part of the Airport.

"Government Obligations" means (i) direct obligations of the United States of America for the full and timely payment of which the full faith and credit of the United States of America is pledged or (ii) obligations issued by a person controlled or supervised by and acting as an instrumentality of the United States of America, the full and timely payment of the principal of and the interest on which is fully and unconditionally guaranteed as a full faith and credit obligation of the United States of America (including any securities described in (i) or (ii) issued or held in book-entry form on the books of the Department of the Treasury of the United States of America), which obligations, in either case, (y) are not subject to redemption or prepayment prior to maturity except at the option of the holder of such obligations and (z) may include U.S. Treasury Trust Receipts.

"Hedge Agreement" means, without limitation, (i) any contract known as or referred to or which performs the function of an interest rate swap agreement, currency swap agreement, forward payment conversion agreement, or futures contract; (ii) any contract providing for payments based on levels of, or changes or differences in, interest rates, currency exchange rates, or stock or other indices; (iii) any contract to exchange cash flows or payments or series of payments; (iv) any type of contract called, or designed to perform the function of, interest rate floors, collars, or caps, options, puts, or calls, to hedge or minimize any type of financial risk, including, without limitation, payment, currency, rate, or other financial risk; and (v) any other type of contract or arrangement that the Authority determines is to be used, or is intended to be used, to manage or reduce the cost of any Revenue Obligations, to convert any element of any Revenue Obligations from one form to another, to maximize or increase investment return, to minimize investment return risk, or to protect against any type of financial risk or uncertainty.

"Hedged Obligations" means any Revenue Obligations for which the Authority will have entered into a Qualified Hedge Agreement.

"Hedge Payments" means amounts payable by the Authority pursuant to any Hedge Agreement, other than termination payments, fees, expenses, and indemnity payments.

"Hedge Payments Subaccount" means the Hedge Payments Subaccount within the Payments Account established in the Master Indenture.

"Hedge Period" means the period during which a Hedge Agreement is in effect.

"Hedge Receipts" means amounts payable by any provider of a Hedge Agreement pursuant to such Hedge Agreement, other than termination payments, fees, expenses, and indemnity payments.

"Hybrid Obligations" means Revenue Obligations which are not Subordinate Lien Obligations and either (i) have no Senior Lien on any Revenues, (ii) have no lien on any Revenues, or (iii) have a Senior Lien on some Revenues in addition to a Subordinate Lien on some Revenues.

"Identified Revenue Account" means the Identified Revenue Account within the Revenue Fund established in the Master Indenture.

"Identified Revenue Facilities" means the portion of the Airport with respect to which Identified Revenues arise or from which they are generated.

"Identified Revenue Obligations" means Revenue Obligations secured by a lien on one or more categories of Identified Revenues.

"Identified Revenues" means particular categories of General Revenues which have been identified in accordance with the Master Indenture.

"Indenture" means the Master Indenture of Trust as it may from time to time be modified, supplemented, or amended by Supplemental Indentures.

"Independent Certified Public Accountant" means a certified public accountant, or a firm of certified public accountants, who or which are "independent" as that term is defined in Rule 101 and related interpretations of the Code of Professional Ethics of the American Institute of Certified Public Accountants, of recognized standing, who or which does not devote their full time to the Authority (but who or which may be regularly retained by the Authority).

"Interest Payment Date" means each date on which interest is to become due on any Revenue Obligations, as established in the Supplemental Indenture for such Revenue Obligations.

"Interest Subaccount" means the Interest Subaccount within the Payments Account established in the Master Indenture.

"Investment Earnings" means all interest received on and profits derived from investments made with Revenues or any other moneys in the funds and accounts established under the Master Indenture.

"Letter of Representations" means the Blanket Issuer Letter of Representations between the Authority and DTC.

"Loan Agreement" means any agreement or contract entered into by the Authority whereby a third-party agrees to advance funds to the Authority and the Authority agrees to repay those funds with interest and all costs associated with the Loan Agreement and any bonds, notes or other obligations issued to fund the Loan Agreement.

"Master Indenture" means the Master Indenture of Trust dated as of April 1, 2001, between the Authority and the Trustee.

"Maximum Annual Debt Service Requirement" for a series of Bonds means the largest Debt Service Requirement for such series during any Sinking Fund Year after the date of calculation.

"Moody's" means Moody's Investors Service, Inc. or, if such corporation is dissolved or liquidated or otherwise ceases to perform securities rating services, such other nationally recognized securities rating agency as may be designated in writing by the Authority. The notice address of Moody's is 99 Church Street, New York, New York 10007.

"Net Revenues" means, for each category of Revenues, Revenues net of related Operating Expenses.

"Operating Expenses" means all expenses reasonably incurred in connection with the operation, maintenance, repair, ordinary replacement and ordinary reconstruction of the Airport, including without limitation salaries, wages, the cost of materials, services and supplies, rentals of leased property, if any, management fees, utility costs, the cost of audits, Paying Agent's and Bond Registrar's fees, operating and maintenance reserves, payments to the City, payment of premiums for insurance required by the Indenture and other insurance which the Authority deems prudent to carry on the Airport and its operations and personnel, and, generally, all expenses, exclusive of depreciation or amortization, which under generally accepted accounting principles are properly allocable to operation and maintenance; however, only such expenses as are reasonably and properly necessary or desirable for the proper operation and maintenance of the Airport will be included. "Operating Expenses" does not include any payments on Revenue Obligations, Contracts (including continuing commissions or commitment fees, remarketing agent fees, Additional Interest or amounts equivalent to principal on related Revenue Obligations) or Other Airport Obligations. To the extent Operating Expenses are allocable to particular related facilities, a lien on the portion of Revenues related thereto will not provide a claim on such Revenues ahead of the use thereof for payment of such allocable Operating Expenses.

"Other Airport Obligations" means obligations of any kind, including but not limited to, Government Loans, revenue bonds, capital leases, Hedge Agreements which are not Qualified Hedge Agreements, installment purchase agreements, loan agreements, or notes (but excluding Revenue Obligations and Contracts), incurred or issued by the Authority to finance or refinance the cost of acquiring, constructing, reconstructing, improving, bettering, or extending any part of the Airport or any other cost relating to the Airport, which do not have a lien on any category of Revenues, except pursuant to the Master Indenture.

"Outstanding" means, when used in reference to the Revenue Obligations, all Revenue Obligations that have been duly authenticated and/or delivered under the Indenture, with the exception of (a) Revenue Obligations in lieu of which other Revenue Obligations have been issued under agreement to replace lost, mutilated, stolen, or destroyed obligations, (b) Bonds surrendered by the owners in exchange for other Bonds under the Master Indenture, and (c) Revenue Obligations for the payment of which provision has been made in accordance with the Master Indenture. In determining the amount of Compound Interest Bonds Outstanding under the Indenture, the Accreted Value of such Compound Interest Bonds at the time of determination will be used.

The term **"parity"** or **"parity secured"** when applied to two or more series of Revenue Obligations means each such Revenue Obligation has a lien of equal rank on the same category of Revenues; provided the existence of an additional lien on a different category of Revenues securing one or more series of such Revenue Obligations does not prevent such one or more series of Revenue Obligations from being "parity secured" with the other Revenue Obligations with respect to the category of Revenues on which they have liens of equal rank.

"Paying Agent" means any bank or trust company authorized by the Authority to pay the principal of, premium, if any, or interest on any Bonds on behalf of the Authority either by certificate of the Executive Director or by Supplemental Indenture. Such Paying Agent will perform the duties required of the Paying Agent in the Indenture.

"Payments Account" means the Payments Account within the Sinking Fund established in the Master Indenture.

"Permitted Investments" means obligations permitted as investments with respect to Revenue Obligations in the Supplemental Indenture pursuant to which such Revenue Obligations are issued.

"Person" or **"person"** means any individual, corporation, partnership, limited liability company, joint venture, association, joint stock company, trust, unincorporated organization, body, authority, government, or agency or political subdivision thereof.

"PFC Act" means the Aviation Safety and Capacity Expansion Act of 1990, Pub. L. 101-508, Title IX, Subtitle B, §§ 9110 and 9111, as amended from time to time.

"PFC Facilities" means facilities for which the Airport has used funds under the PFC Act.

"PFC Regulations" means Part 158 of the Federal Aviation Regulations (14 CFR Part 158), as amended from time to time, and any other regulation issued with respect to the PFC Act.

"PFC Revenue Account" means the PFC Revenue Account within the Revenue Fund established in the Master Indenture.

"PFC Revenue Obligations" means Revenue Obligations secured by a Senior Lien on PFC Revenues.

"PFC Revenues" means all income and revenue received by or required to be remitted to the Authority from the passenger facility charges imposed by the Authority pursuant to the PFC Act and the PFC Regulations, including any interest earned after such charges have been remitted to the Authority as provided in the PFC Regulations, all of which may be pledged pursuant to the PFC Act and PFC Regulations § 158.13; provided, the term "PFC Revenues" also includes any interest or other gain in any of the accounts or subaccounts created in the Master Indenture or in any Supplemental Indenture resulting from any investments and reinvestments of PFC Revenues.

"Pledged Bond" means any Revenue Obligation purchased and held by a Credit Issuer pursuant to a Credit Facility Agreement. A Revenue Obligation will be deemed a Pledged Bond only for the actual period during which such Revenue Obligation is owned by a Credit Issuer pursuant to a Credit Facility Agreement.

"Pledged Bond Rate" means the rate of interest payable on Pledged Bonds, as may be provided in a Credit Facility or Credit Facility Agreement.

"Pledged Revenues" means all Revenues and all moneys paid or required to be paid into, and all moneys and securities on deposit from time to time in, the funds and accounts specified in the Master Indenture, but excluding (i) amounts in the Revenue Fund required to be used to pay Operating Expenses and (ii) any amounts required in the Indenture to be set aside pending, or used for, rebate to the United States government pursuant to Section 148(f) of the Code, including, but not limited to, amounts in the Rebate Fund.

The term **"principal"** means the principal amount of any Revenue Obligation and includes the Accreted Value of any Compound Interest Bonds. All references to principal will be construed as if they were also references to Accreted Value with respect to Compound Interest Bonds.

"Principal Maturity Date" means each date on which principal is to become due on any Revenue Obligations, by maturity or mandatory sinking fund redemption, as established in the Supplemental Indenture for such Revenue Obligations.

"Principal Subaccount" means the Principal Subaccount within the Payments Account established in the Master Indenture.

"Project" means the acquisition, construction and equipping of improvements at the Airport, in whole or in part, and the acquisition of all property, real and personal, related thereto, with the proceeds of any Revenue Obligations.

"Project Fund" means the Authority's Airport Project Fund established in the Master Indenture.

"Put Date" means any date on which a holder may elect to have Balloon Obligations redeemed, prepaid, purchased directly or indirectly by the Authority, or otherwise paid.

"Qualified Hedge Agreement" means any Hedge Agreement with a Qualified Hedge Provider.

"Qualified Hedge Provider" means an entity whose senior unsecured long term obligations, financial program rating, counterparty rating, or claims paying ability, or whose payment obligations under the related Hedge Agreement are absolutely and unconditionally guaranteed or insured or collateralized by an entity whose senior unsecured long term obligations, financial program rating, counterparty rating, or claims paying ability, are rated either (i) at least as high as the third highest Rating category of each Rating Agency, but, if there is no Credit Facility with respect to the related Hedged Obligations, in no event lower than any Rating on the related Hedged Obligations at the time of execution of the Hedge Agreement, or (ii) in any such lower Rating categories which each Rating Agency indicates in writing to the Authority will not, by itself, result in a reduction or withdrawal of its Rating on the related Hedged Obligations that is in effect prior to entering into the Hedge Agreement. An entity's status as a "Qualified Hedge Provider" is determined only at the time the Authority enters into a Hedge Agreement with such entity and cannot be redetermined with respect to that Hedge Agreement.

"Rating" means a rating in one of the categories by a Rating Agency, disregarding pluses, minuses, and numerical gradations.

"Rating Agencies" or **"Rating Agency"** means Fitch, Moody's, and Standard & Poor's or any successors thereto and any other nationally recognized credit rating agency then maintaining a rating on any Revenue Obligations at the request of the Authority. If at any time a particular Rating Agency does not have a rating outstanding with respect to the relevant Revenue Obligations, then a reference to Rating Agency or Rating Agencies will not include such Rating Agency.

"Rebate Fund" means the Authority's Airport Rebate Fund, established in the Master Indenture.

“Record Date” means, with respect to any semiannual Interest Payment Date, the 15th day of the calendar month immediately preceding such Interest Payment Date, and, for any Revenue Obligations paying interest other than semiannually, any record dates designated by the Authority in a Supplemental Indenture.

“Reimbursement Obligation” means the obligation of the Authority to directly reimburse any Credit Issuer for amounts paid by such Credit Issuer under a Credit Facility, whether or not such obligation to so reimburse is evidenced by a promissory note or other similar instrument. The term “Reimbursement Obligation” includes obligations pursuant to a Credit Facility Agreement either to make payments for interest based on levels of, or changes or differences in, interest rates, currency exchange rates, or stock or other indices, in return for the Credit Issuer’s fixed obligations under the Credit Facility or to make fixed payments for interest in return for the Credit Issuer’s payments based on such variables.

The term **“related”** means, when used to refer to Revenue Obligations, subaccounts, category of Revenues or liens, the item modified by such term has a definite relationship to the subject as described in the Indenture. The term “related” means, when used to refer to Operating Expenses, (i) for Special Purpose Revenue Obligations or Special Purpose Revenues, Operating Expenses with respect to Special Purpose Facilities, (ii) for Released Revenue Obligations or Released Revenues, other than Released PFC Revenues, Operating Expenses with respect to Released Revenue Facilities, (iii) for Identified Revenue Obligations or Identified Revenues, Operating Expenses with respect to Identified Revenue Facilities, and (iv) for General Revenue Obligations or General Revenues, all Operating Expenses of the Airport less Operating Expenses with respect to Special Purpose Facilities and Released Revenue Facilities. There are no Operating Expenses related to PFC Revenues or PFC Obligations.

“Released PFC Revenue Obligations” means Revenue Obligations secured by a Senior Lien on amounts released from PFC Revenues pursuant to the Master Indenture.

“Released PFC Revenues” means Released Revenues which would be PFC Revenues but for action taken under the Master Indenture.

“Released Revenue Account” means the Released Revenue Account within the Revenue Fund established in the Master Indenture.

“Released Revenue Facilities” means the portion of the Airport with respect to which Released Revenues arise or from which they are generated, other than PFC Facilities.

“Released Revenue Obligations” means Revenue Obligations secured by a Senior Lien on one or more categories of Released Revenues.

“Released Revenues” means particular categories of Revenues which would otherwise be General Revenues or PFC Revenues but have been identified in accordance with the Master Indenture and therefore do not constitute a part of General Revenues or PFC Revenues, until the Authority has acted to include such categories of Revenues within General Revenues or PFC Revenues again.

“Renewal and Extension Fund” means the Authority’s Airport Renewal and Extension Fund established in the Master Indenture.

“Reserve Account Credit Facility” means any letter of credit, insurance policy, line of credit, surety bond, or similar obligation, arrangement or instrument issued by a bank, insurance company, or other financial institution, together with any substitute or replacement therefor, if any, and related Reimbursement Obligations, if any, complying with the provisions of the Indenture, thereby fulfilling all or a portion of a Debt Service Reserve Requirement.

"Reserve Account Credit Facility Provider" means any provider of a Reserve Account Credit Facility.

"Revenue Fund" means the Authority's Airport Revenue Fund established in the Master Indenture.

"Revenue Obligations" means any revenue bonds, notes or other obligations authorized by and authenticated and delivered or any loan agreement executed and delivered pursuant to the Indenture, including any Additional Obligations.

"Revenues" means (i) all revenues, income, receipts, accounts receivable and money derived from the ownership and operation of the Airport, including without limitation all rentals, charges, landing fees, use charges and concession revenue received by or on behalf of the Authority, Investment Earnings (other than Investment Earnings on the Project Fund) and all other income earned and accreted from, and deferred gain from, securities and other investments and amounts earned on amounts deposited in funds and accounts under the Indenture or otherwise maintained with respect to the Airport, computed in accordance with generally accepted accounting principles, and (ii) all gifts, grants, reimbursements or payments received from governmental units or public agencies for the benefit of the Airport which are (y) not restricted by law or the payor to application for a particular purpose and (z) otherwise lawfully available for payment of Revenue Obligations or Contracts. The term "Revenues" does not include proceeds of insurance so long as such proceeds are to be paid to a party separate from the Authority in respect of a liability or are to be used to repair or replace portions of the Airport.

"Senior Lien" means a lien on one or more categories of Revenues that entitles the Beneficiaries of such lien to have a claim on such Revenues prior to any other Person and ahead of the use of such Revenues for any purpose other than payment of Operating Expenses; provided one or more series of Revenue Obligations, Contracts and related Beneficiaries may have parity Senior Liens on the same categories of Revenues pursuant to the terms of the Indenture.

"Senior Lien Revenue Obligations" means General Revenue Obligations, PFC Revenue Obligations and Released Revenue Obligations but not Identified Revenue Obligations, Subordinate Lien Obligations or Hybrid Obligations, provided "Senior Lien Obligations" also includes Additional Senior Lien Obligations issued in compliance with the Master Indenture and obligations secured by a Senior Lien pursuant thereto. A Hybrid Obligation may be a Senior Lien Revenue Obligation, if it has a Senior Lien on a category of Revenue but then will only be a Senior Lien Revenue Obligation as to such category.

"Series 2019 Bonds" means the Revenue Obligations issued under the Fourth Supplemental Indenture.

"Sinking Fund" means the Authority's Airport Sinking Fund established in the Master Indenture.

"Sinking Fund Year" means the twelve-month period ending on June 30 of each year.

"Special Purpose Facilities" means facilities which (i) will not result, upon completion, in a material reduction in Net General Revenues, (ii) will not be of such a type or design that the subsequent closing thereof will materially impair the general operations of the Airport, and (iii) the Authority has designated in a Supplemental Indenture, as "Special Purpose Facilities;" provided such facilities, if owned or operated by the Authority, cease to be Special Purpose Facilities (and become General Revenue Facilities) when there are no longer any Outstanding Special Purpose Revenue Obligations related thereto. As set forth in the section *"Existing Indebtedness"* in the front part of this Official Statement, the Authority incurred certain indebtedness secured by revenues from the Airport's fixed base operations to construct an aircraft storage hanger and a ground service equipment maintenance facility.

"Special Purpose Revenue Account" means the Special Purpose Revenue Account within the Revenue Fund established in the Master Indenture.

"Special Purpose Revenue Obligations" means obligations secured by a Senior Lien on Special Purpose Revenues.

"Special Purpose Revenues" means Revenues arising from or generated by one or more Special Purpose Facilities.

"Standard and Poor's" means Standard & Poor's Ratings Services, a division of The McGraw-Hill Companies, Inc., or, if such corporation is dissolved or liquidated or otherwise ceases to perform securities rating services, such other nationally recognized securities rating agency as may be designated in writing by the Authority. The notice address of Standard & Poor's is 55 Water Street, New York, New York 10041.

"State" means the Commonwealth of Virginia.

"Subordinate Lien" means a lien on one or more categories of Revenues which is not a Senior Lien.

"Subordinate Lien Obligations" means Revenue Obligations which only have a Subordinate Lien and obligations secured by a Subordinate Lien pursuant to the Master Indenture.

"Supplemental Indenture" means an Indenture of Trust of the Authority supplemental to the Master Indenture (which itself may be supplemented by one or more Indentures of Trust) to be adopted prior to and authorizing the issuance and delivery of any series of Revenue Obligations, including the Fourth Supplemental Indenture. Such an Indenture of Trust, as supplemented, will establish the date or dates of the pertinent series of Revenue Obligations, the schedule of maturities of such Revenue Obligations, whether any such Revenue Obligations will be Compound Interest Revenue Obligations, the name of the purchaser(s) of such series of Revenue Obligations, the purchase price thereof, the rate or rates of interest to be borne thereby, whether fixed or variable, the interest payment dates for such Revenue Obligations, the terms and conditions, if any, under which such Revenue Obligations may be made subject to redemption (mandatory or optional) prior to maturity, the form of such Revenue Obligations, the liens relating to such Revenue Obligations, the Contracts, if any, relating to such Revenue Obligations, and such other details as the Authority may determine. "Supplemental Indenture" means (i) any Supplemental Indenture of Trust and (ii) any modification, amendment, or supplement to the Master Indenture other than a Supplemental Indenture of Trust.

"Tax-Exempt Bonds" means any Revenue Obligations the interest on which has been determined, in an unqualified opinion of Bond Counsel, to be excludable from the gross income of the owners thereof for federal income tax purposes.

"Trustee" means U.S. Bank National Association, or its successor and assigns serving as trustee under the Indenture.

"U.S. Treasury Trust Receipts" means receipts or certificates which evidence an undivided ownership interest in the right to the payment of portions of the principal of or interest on obligations described in clauses (i) or (ii) of the term Government Obligations, provided that such obligations are held by a bank or trust company organized under the laws of the United States acting as custodian of such obligations, in a special account separate from the general assets of such custodian.

"Variable Rate" means a rate of interest applicable to the Revenue Obligations, other than a fixed rate of interest which applies to a particular maturity of Revenue Obligations so long as that maturity of Revenue Obligations remains Outstanding.

"Virginia Code" means the Code of Virginia of 1950, as amended.

THE MASTER INDENTURE

Pledge of Revenues; Limited Obligations; Contract Liens. (a) All Pledged Revenues will be pledged to the prompt payment of the principal of, premium, if any, and interest on the Revenue Obligations, obligations treated as Senior Lien Revenue Obligations or Subordinate Lien Revenue Obligations pursuant to the Master Indenture, and the Authority's obligations under the Contracts; provided:

(1) General Revenues will secure only (A) General Revenue Obligations, (B) Subordinate Lien Obligations which have a lien on General Revenues, (C) Hybrid Obligations which have a lien on General Revenues, and (D) any Contracts with respect to such Revenue Obligations;

(2) PFC Revenues will secure only (A) PFC Revenue Obligations, (B) Subordinate Lien Obligations which have a lien on PFC Revenues, (C) Hybrid Obligations which have a lien on PFC Revenues, and (D) any Contracts with respect to such Revenue Obligations;

(3) Special Purpose Revenues will secure only (A) the related Special Purpose Revenue Obligations, (B) Subordinate Lien Obligations which have a lien on any Special Purpose Revenues, (C) Hybrid Obligations which have a lien on any Special Purpose Revenues, and (D) any Contracts with respect to such Revenue Obligations;

(4) Released Revenues will secure only (A) the related Released Revenue Obligations, (B) Subordinate Lien Obligations which have a lien on any Released Revenues, (C) Hybrid Obligations which have a lien on any Released Revenues, (D) any Contracts with respect to such Revenue Obligations and (E) separate agreements pursuant to the Master Indenture;

(5) Identified Revenues, subject to use with other General Revenues under (1), will secure only (A) the related Identified Revenue Obligations, (B) Hybrid Obligations which have a lien on any Identified Revenues, and (C) any Contracts with respect to such Revenue Obligations; and

(6) A Contract may have a Senior Lien or a Subordinate Lien on a related category of Revenues, or no lien at all on Revenues, but no Contract will have a lien on Revenues that is senior to the lien on the category of Revenues securing the Revenue Obligations related to the Contract.

Pledged Revenues will immediately be subject to the lien of this pledge for the benefit of the Beneficiaries without any physical delivery thereof or further act, and the lien of this pledge will be valid and binding against the Authority and against all other persons having claims against the Authority, whether such claims will have arisen in tort, contract, or otherwise, and regardless of whether such persons have notice of the lien of this pledge. This pledge will rank superior to all other pledges which may hereafter be made of any Pledged Revenues. The lien of this pledge does not secure any obligation of the Authority other than the Revenue Obligations, obligations treated as Senior Lien Obligations or Subordinate Lien Obligations pursuant to the Master Indenture and the Contracts.

(b) The Revenue Obligations and related Contracts will be limited obligations of the Authority as provided therein payable solely from the particular Revenues pledged thereto. The Revenue Obligations and the interest thereon and related Contracts will not constitute a debt of any municipality, the State, or any political subdivision thereof other than the Authority and will not constitute an indebtedness within the meaning of any constitutional or statutory provision whatsoever. The Authority has no authority to levy any taxes to pay the Revenue Obligations or the Contracts. Neither the members of the Governing Body nor any person executing the Revenue Obligations will be liable personally on the Revenue Obligations by reason of the issuance thereof or on the Contracts by reason of the execution thereof.

(c) Other Airport Obligations (other than obligations treated as Senior Lien Revenue Obligations or Subordinate Lien Obligations pursuant to the Master Indenture) are not secured by a lien on any category of

Revenues and Hybrid Obligations described in clause (ii) of the definition thereof will not have a lien on any category of Revenues, but such obligations, prior to an Event of Default, may be paid from Revenues as described in the Master Indenture.

Funds, Accounts, and Subaccounts. The Authority hereby establishes the following funds, accounts, and subaccounts, and the moneys deposited in such funds, accounts, and subaccounts will be held in trust for the purposes set forth in the Indenture:

(a) Norfolk Airport Authority Airport Revenue Fund, to be held by the Authority, and within the Revenue Fund:

(1) General Revenue Account.

(2) PFC Revenue Account.

(3) Special Purpose Revenue Account.

(4) Released Revenue Account.

(5) Identified Revenue Account.

(b) Norfolk Airport Authority Airport Sinking Fund, to be held by the Trustee, and within the Sinking Fund:

(1) Payments Account, and within the Payments Account:

(A) Interest Subaccount, with further subaccounts therein for each series of Revenue Obligations; provided a subaccount therein may be utilized for more than one series of Revenue Obligations if all such series of Revenue Obligations share exactly the same lien status on the same categories of Revenues.

(B) Hedge Payments Subaccount, with further subaccounts therein for each series of Revenue Obligations; provided a subaccount therein may be utilized for more than one series of Revenue Obligations if all such series share exactly the same lien status on the same categories of Revenues and are secured in parity by the same or identical Qualified Hedge Agreements with the same provider.

(C) Contract Payments Subaccount, with further subaccounts therein for each series of Revenue Obligations; provided a subaccount therein may be utilized for more than one series of Revenue Obligations if all such series of Revenue Obligations share exactly the same lien status on the same categories of Revenues and are secured in parity by the same or identical Contracts with the same provider.

(D) Principal Subaccount, with further subaccounts therein for each series of Revenue Obligations; provided a subaccount therein may be utilized for more than one series of Revenue Obligations if all such series of Revenue Obligations share exactly the same lien status on the same categories of Revenues.

(2) Debt Service Reserve Account, with a subaccount for each series of Revenue Obligations which has a Debt Service Reserve Requirement; provided a subaccount therein may be utilized for more than one series of Revenue Obligations if all such series of Revenue Obligations are specified in the related Supplemental Indentures to share a pledge of such account and have a combined Debt Service Reserve Requirement.

(c) Norfolk Airport Authority Airport Renewal and Extension Fund, to be held by the Authority.

(d) Norfolk Airport Authority Airport Rebate Fund, to be held by the Trustee.

(e) Norfolk Airport Authority Airport Project Fund, to be held by the Trustee.

(f) Norfolk Airport Authority General Reserve Fund, to be held by the Authority.

Each account listed above will be held within the fund under which it is created. Each subaccount listed above will be held within the account under which it is created. All funds, accounts, and subaccounts listed above are further described in the Master Indenture. The Authority reserves the right, in its sole discretion, to create additional subaccounts or to abolish any subaccounts within any account from time to time.

Revenue Fund. The Authority will deposit and continue to deposit all Revenues in the Revenue Fund from time to time as and when received. The amounts deposited will be immediately allocated to the account within the Revenue Fund designated therefor: General Revenues other than Identified Revenues to the General Revenue Account; PFC Revenues to the PFC Revenue Account; Special Purpose Revenues to the Special Purpose Revenue Account; Released Revenues to the Released Revenue Account; and Identified Revenues to the Identified Revenue Account. Moneys in the Revenue Fund will be applied by the Authority from time to time to the following purposes and, prior to the occurrence and continuation of an Event of Default, in the order of priority determined by the Authority in its sole discretion: (a) to pay Operating Expenses; (b) to deposit into the Sinking Fund the amounts required by the Master Indenture; (c) to deposit into the Debt Service Reserve Account the amounts required thereby; (d) to deposit into the Rebate Fund the amounts required thereby; (e) to pay to any party to a Contract the amounts due thereon, including Additional Interest, continuing commission or commitment fees, remarketing agent fees and repayment of amounts equivalent to principal on related Bonds; (f) to pay any amounts required to be paid with respect to any Other Airport Obligations; (g) for transfer to the Renewal and Extension Fund; (h) for transfer to the General Reserve Fund; and (i) for any other lawful purpose; provided the following strictures will be applicable for purposes of such use of funds:

(1) For Operating Expenses, (A) amounts in the Special Purpose Revenue Account will be used only for Operating Expenses of Special Purpose Facilities, (B) amounts in the Released Revenue Account other than Released PFC Revenues will be used only for Operating Expenses of Released Revenue Facilities, (C) subject to (D) hereafter, amounts in the Identified Revenue Account will be used for Operating Expenses of Identified Revenue Facilities, and (D) Operating Expenses related to General Revenues will be paid first from amounts in the General Revenue Account and second from amounts in the Identified Revenue Account;

(2) For deposits to the Sinking Fund, the Debt Service Reserve Account or the Rebate Fund, (A) amounts in the Special Purpose Reserve Account will be used only for deposits to subaccounts relating to Revenue Obligations which have a lien on any Special Purpose Revenues, (B) amounts in the Released Revenue Account will be used only for deposits to subaccounts relating to Revenue Obligations which have a lien on any Released Revenues or for other purposes pursuant to the Master Indenture, (C) amounts in the PFC Revenue Account will be used only for deposits to subaccounts relating to Revenue Obligations which have a lien on PFC Revenues, (D) subject to (E) hereafter, amounts in the Identified Revenue Account will be for deposits to subaccounts relating to Revenue Obligations having a lien on Identified Revenues, (E) deposits to subaccounts relating to Revenue Obligations which have a lien on General Revenues will be made first from amounts in the General Revenue Account and second from amounts in the Identified Revenue Account, and (F) deposits to subaccounts relating to Revenue Obligations which have a lien on General Revenues and on PFC Revenues will be made first from PFC Revenues;

(3) For any payments on a Contract, amounts may be drawn only from the account or accounts relating to the revenues securing the Revenue Obligations related to such Contract, only in accordance with the strictures of (2);

(4) For any payments with respect to any Other Airport Obligations, (A) if such Other Airport Obligations relate to Special Purpose Facilities, from the Special Purpose Revenue Account; (B) if such Other Airport Obligations relate to Released Revenue Facilities, then from the Released Revenue Account; (C) subject to (D) hereafter, if such Other Airport Obligations relate to Identified Revenue Facilities, from the Identified Revenue Account, and (D) otherwise, first from the General Revenue Account and second from the Identified Revenue Account;

(5) No payments may be made to a subaccount of the Sinking Fund related to Subordinate Lien Obligations or Hybrid Obligations unless all required payments have been made to other subaccounts with respect to Revenue Obligations, or Contracts related to Revenue Obligations, which have a lien on a category of Revenues ahead of the lien of such Subordinate Lien Obligations or Hybrid Obligations, and no payments may be made with respect to any Other Airport Obligations unless all required payments have been made to each subaccount with respect to Revenue Obligations and on all Contracts; provided if required by the terms thereof, obligations treated as Senior Lien Revenue Obligations or Subordinate Lien Obligations pursuant to the Master Indenture will be paid with the other Senior Lien Revenue Obligations or Subordinate Lien Obligations;

(6) The Authority may from time to time deposit into the General Reserve Fund any moneys and securities held in the Revenue Fund (other than in the PFC Revenue Account or Released PFC Revenues in the Released Revenue Account); provided that the Sinking Fund contains sufficient money to make the next payment of principal and interest on all Revenue Obligations and Contracts and that each Debt Service Reserve Subaccount contains the applicable Debt Service Reserve Requirement.

(7) If at any time the amounts in any subaccount of the Sinking Fund are less than the amounts required by the Indenture, and there are not on deposit in the Renewal and Extension Fund available moneys sufficient to cure any such deficiency, then the Trustee will withdraw from subaccounts related to Subordinate Lien Obligations and Hybrid Obligations (taking such amounts first from subaccounts related to Subordinate Lien Obligations, pro rata, and second from Hybrid Obligations, pro rata) and deposit in such subaccount of the Sinking Fund, as the case may be, the amount necessary (or all the moneys in such funds and accounts, if less than the amount required) to make up such deficiency; provided no such amounts will be withdrawn from or payable to subaccounts related to Special Purpose Revenue Obligations; and

(8) Amounts in the PFC Revenue Account and Released PFC Revenues in the Released Revenue Account may be used to pay Costs of PFC Facilities; provided no such use will be made unless the amounts remaining are sufficient, with amounts in the related accounts of the Sinking Fund, for all payments to be made with respect to any related Revenue Obligations and Contracts during the succeeding 12 months.

Sinking Fund. (a) Payments Account. Sufficient moneys will be paid in periodic installments from the Revenue Fund into subaccounts in the Payments Account for the purpose of paying the Revenue Obligations as they become due and payable and for the purpose of making payments under Contracts. Amounts held in the Interest Subaccount will not be used to pay Additional Interest.

(b) Interest Subaccount. Unless otherwise provided in a Supplemental Indenture, on or before the 30th day preceding each Interest Payment Date for a series of Revenue Obligations, the Authority will deposit in the related subaccount of the Interest Subaccount an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than the interest (excluding Additional Interest) coming due on such Revenue Obligations on such Interest Payment Date. Moneys in the related subaccount of the Interest Subaccount will be used solely to pay interest (excluding Additional Interest) on the Revenue Obligations when due or to pay the interest portion of Reimbursement Obligations for Credit Facilities under which the Credit Issuer makes all interest payments on the Revenue Obligations. The Authority will also deposit and continue to deposit all Hedge Receipts under related Qualified Hedge Agreements and any payments from a Credit Issuer under a Credit Facility Agreement in the related subaccount of the Interest Subaccount from time to time as and when received.

(c) Hedge Payments Subaccount and Contract Payments Subaccount. Unless otherwise provided in a Supplemental Indenture or a Hedge Agreement, on or before the 30th day preceding each payment date for Hedge Payments under Qualified Hedge Agreements, the Authority will deposit in the related subaccount of the Hedge Payments Subaccount an amount which, together with any Hedge Receipts to be deposited in the Interest Subaccount by such payment date and other moneys already on deposit therein and available to make such payment, is not less than such Hedge Payments coming due on such payment date. Moneys in the related subaccount of the Hedge Payments Subaccount will be used solely to pay Hedge Payments under Qualified Hedge Agreements when due. Unless otherwise provided in a Supplemental Indenture or a Contract, on or before the 30th day preceding each payment date for amounts, other than for Reimbursement Obligations, due on Contracts other than Qualified Hedge Agreements, including Additional Interest, continuing commission or commitment fees and remarketing fees, the Authority will deposit in the related subaccount of the Contract Payments Subaccount an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than the amount coming due on such payment date. Moneys in the related subaccount of the Contract Payments Subaccount will be used solely for such payments when due.

(d) Principal Subaccount. Unless otherwise provided in a Supplemental Indenture, on or before the 30th day preceding each Principal Maturity Date for a series of Revenue Obligations, the Authority will deposit in the related subaccount of the Principal Subaccount an amount which, together with any other moneys already on deposit therein and available to make such payment, is not less than the principal coming due on such Revenue Obligations on such Principal Maturity Date. Moneys in the related subaccount of the Principal Subaccount will be used solely for the payment of principal of the Revenue Obligations as the same will become due and payable at maturity or upon redemption or to pay the principal portion of Reimbursement Obligations for Credit Facilities under which the Credit Issuer makes all principal payments on the Revenue Obligations.

(e) No further payments need be made into a subaccount of the Interest Subaccount or the Principal Subaccount whenever the amount available in such subaccount of the Interest Subaccount and the related subaccount of the Principal Subaccount, if added to the amount then in the related subaccount of the Debt Service Reserve Account, if any (without taking into account any amount available to be drawn on any applicable Reserve Account Credit Facility), is sufficient to retire all the Revenue Obligations then Outstanding and Contracts to which such subaccounts relate and to pay all unpaid interest accrued and to accrue prior to such retirement. No moneys in any subaccount of the Interest Subaccount or the Principal Subaccount will be used or applied to the optional purchase or redemption of or repayment of Revenue Obligations prior to maturity unless: (i) provision will have been made for the payment of all of the Revenue Obligations to which such subaccount relates and all other Revenue Obligations having a parity or higher ranking lien on any category of Revenues securing such Revenue Obligations; or (ii) the Revenue Obligations to which such subaccount relates are Senior Lien Revenue Obligations and such moneys are applied to the purchase and cancellation of such Revenue Obligations which are subject to mandatory redemption on the next mandatory redemption date, which falls due within 12 months, such Revenue Obligations are purchased at a price not more than would be required for mandatory redemption, and such Revenue Obligations are canceled upon purchase and credited against the redemption otherwise to be made on such mandatory redemption date; or (iii) the Revenue Obligations to which such subaccount relates are Senior Lien Revenue Obligations and such moneys are applied to the purchase and cancellation of such Revenue Obligations at a price less than the amount of principal which would be payable on such Revenue Obligations, together with interest accrued through the date of purchase, and such Revenue Obligations are canceled upon purchase; or (iv) the Revenue Obligations to which such subaccount relates are Senior Lien Revenue Obligations and such moneys are in excess of the then required balance of the related subaccount in the Interest Subaccount or the Principal Subaccount and are applied to redeem a part of such Revenue Obligations on the next succeeding redemption date for which the required notice of redemption may be given.

(f) Debt Service Reserve Account. Upon issuance of the Series 2019 Bonds, there will be deposited into the Debt Service Reserve Fund the amount required by the Fourth Supplemental Indenture. There will be deposited into the same or separate subaccount of the Debt Service Reserve Account the amounts specified in Supplemental Indentures with respect to Additional Obligations. After the issuance of any

Additional Obligations, any increase in the amount of the Debt Service Reserve Requirement resulting from the issuance of Additional Obligations which also are secured by an existing subaccount of the Debt Service Reserve Account will be accumulated, to the extent not covered by deposits from proceeds of Revenue Obligations or funds on hand, over a period not exceeding 61 months from date of delivery of such Additional Obligations in monthly deposits, none of which is less than 1/60 of the amount to be accumulated. The balance of each subaccount of the Debt Service Reserve Account will be maintained at an amount equal to the Debt Service Reserve Requirement for the related Revenue Obligations (or such lesser amount that is required to be accumulated in such subaccount of the Debt Service Reserve Account in connection with the periodic accumulation to the Debt Service Reserve Requirement after the issuance of Additional Obligations or upon the failure of the Authority to provide a substitute Reserve Account Credit Facility in certain events). There will be transferred from the Revenue Fund on a pro rata basis (1) to each subaccount of the Debt Service Reserve Account the amount necessary to restore the amount of cash and securities in such subaccount of the Debt Service Reserve Account to an amount equal to the difference between (a) the Debt Service Reserve Requirement for the related Revenue Obligations (or such lesser monthly amount that is required to be deposited into the Debt Service Reserve Account after the issuance of Additional Obligations or upon the failure of the Authority to provide a substitute Reserve Account Credit Facility in certain events), and (b) the portion of the required balance of such subaccount of the Debt Service Reserve Account satisfied by means of a Reserve Account Credit Facility, and (2) to any Reserve Account Credit Facility Provider the amount necessary to reinstate any Reserve Account Credit Facility which has been drawn down. Whenever for any reason the amount in the related subaccounts of the Interest Subaccount or the Principal Subaccount is insufficient to pay all interest or principal falling due on any General Revenue Obligations within the next seven days, the Authority will make up any deficiency by transfers from the Renewal and Extension Fund. Whenever, on the date that such interest or principal is due on any Senior Lien Revenue Obligations, there are insufficient moneys in the related subaccounts of the Interest Subaccount or the Principal Subaccount available to make such payment, the Authority will, without further instructions, apply so much as may be needed of the moneys in the related subaccount, if any, of the Debt Service Reserve Account to prevent default in the payment of such interest or principal, with priority to interest payments. Whenever by reason of any such application or otherwise the amount remaining to the credit of the related subaccount of the Debt Service Reserve Account is less than the amount then required to be in such subaccount of the Debt Service Reserve Account, such deficiency will be remedied by monthly deposits from the related account or accounts of the Revenue Fund, to the extent funds are available in the related account or accounts of the Revenue Fund for such purpose after all required transfers set forth above have been made.

The Authority may elect to satisfy in whole or in part the Debt Service Reserve Requirement for any Revenue Obligations by means of a Reserve Account Credit Facility, subject to the following requirements: (A) the Reserve Account Credit Facility Provider must have a credit rating issued by a Rating Agency not less than the greater of the then current Rating on the related series of Revenue Obligations or the second highest long-term Rating of such Rating Agency; (B) the Authority will not secure any obligation to the Reserve Account Credit Facility Provider by a lien equal to or superior to the lien granted to the related series of Revenue Obligations; (C) each Reserve Account Credit Facility will have a term of at least one (1) year (or, if less, the remaining term of the related series of Revenue Obligations) and will entitle the Authority to draw upon or demand payment and receive the amount so requested in immediately available funds on the date of such draw or demand; (D) the Reserve Account Credit Facility will permit a drawing by the Authority for the full stated amount in the event (i) the Reserve Account Credit Facility expires or terminates for any reason prior to the final maturity of the related series of Revenue Obligations, and (ii) the Authority fails to satisfy the Debt Service Reserve Requirement by the deposit to the Debt Service Reserve Account of cash, obligations, a substitute Reserve Account Credit Facility, or any combination thereof, on or before the date of such expiration or termination; (E) if the Rating issued by the Rating Agency to the Reserve Account Credit Facility Provider is withdrawn or reduced below the greater of the Rating assigned to the related series of Revenue Obligations immediately prior to such action by the Rating Agency or the second highest long-term Rating of such Rating Agency, the Authority will provide a substitute Reserve Account Credit Facility within sixty (60) days after such rating change, and, if no substitute Reserve Account Credit Facility is obtained by such date, will fund the Debt Service Reserve Requirement in not more than twenty-four (24) equal monthly deposits commencing not later than the first day of the month immediately succeeding the date representing the end of such sixty (60) day period; and (F) if the Reserve Account Credit Facility Provider commences any insolvency proceedings or is determined to be insolvent or fails to make payments when due on its obligations, the Authority will provide a substitute Reserve Account Credit Facility within sixty (60) days thereafter, and, if no substitute Reserve Account Credit Facility is obtained by such date, will fund the Debt Service Reserve Requirement in not more than twenty-four (24) equal monthly deposits commencing not later than the first day of the month immediately succeeding the date representing the end of such sixty (60) day period. If the events described in either clauses (E) or (F) above occur, the Authority will not relinquish the Reserve Account Credit Facility at issue until after the Debt Service Reserve Requirement is fully satisfied by the provision of cash, obligations, or a substitute Reserve Account Credit Facility or any combination thereof. Any amount received from the Reserve Account Credit Facility will be deposited directly into the related subaccounts of the Interest Subaccount and the Principal Subaccount, and such deposit will constitute the application of amounts in the related subaccount of the Debt Service Reserve Account. All repayment of any draw-down on the Reserve Account Credit Facility and any interest or fees due the Reserve Account Credit Facility Provider under such Reserve Account Credit Facility will be secured by a lien on Revenues subordinate to the lien of the related Revenue Obligations for payments into the related subaccounts of the Sinking Fund, the Rebate Fund and payments on any Credit Facility Agreement securing the related Revenue Obligations.

Any such Reserve Account Credit Facility will be pledged to the benefit of the owners of all of the Revenue Obligations secured by it. The Authority reserves the right, if it deems it necessary in order to acquire such a Reserve Account Credit Facility, to amend the Indenture without the consent of any of the owners of the Revenue Obligations in order to grant to the Reserve Account Credit Facility Provider such additional rights as it may demand, provided that such amendment will not, in the written opinion of Bond Counsel filed with the Authority, impair or reduce the security granted to the owners of Revenue Obligations or any of them.

Renewal and Extension Fund; General Reserve Fund. (a) In addition to the deposits to be made to the Renewal and Extension Fund pursuant to the Master Indenture, the Authority will deposit in the Renewal and Extension Fund all termination payments received under any Hedge Agreements. All sums accumulated and retained in the Renewal and Extension Fund will be used first to prevent default in the payment of interest on or principal of any General Revenue Obligations when due and then will be applied by the Authority from time to time, as and when the Authority will determine, to the following purposes and, prior to the occurrence and continuation of an Event of Default, in the order of priority determined by the Authority in its sole discretion: (a) for the purposes for which moneys held in the Revenue Fund may be applied under the Master Indenture, (b) to pay any amounts which may then be due and owing under any Hedge Agreement (including fees, expenses, and indemnity payments) and any termination payments due under a Hedge Agreement, (c) to pay any governmental charges and assessments against the Airport or any part thereof which may then be due and owing, (d) to make acquisitions, betterments, extensions, repairs, or replacements or other capital improvements (including the purchase of equipment) to the Airport deemed necessary by the Authority (including payments under contracts with vendors, suppliers, and contractors for the foregoing purposes), and (e) to acquire Senior Lien Revenue Obligations (other than Special Purpose Revenue Obligations) by redemption or by purchase in the open market as provided and in accordance with the terms and conditions of the Indenture, which Senior Lien Revenue Obligations (other than Special Purpose Revenue Obligations) may be any of the Senior Lien Revenue Obligations (other than Special Purpose Revenue Obligations), prior to their respective maturities, and when so used for such purposes the moneys will be withdrawn from the Renewal and Extension Fund and deposited into the related subaccounts of the Interest Subaccount and the Principal Subaccount for the Revenue Obligations to be so redeemed or purchased. Notwithstanding the preceding sentence, any PFC Revenues or Released PFC Revenues in the Renewal and Extension Fund may only be used for PFC Revenue Bonds, Released Revenue Bonds secured by Released PFC Revenues, related Contracts, and Costs of PFC Facilities.

(b) All deposits to be made to the General Reserve Fund pursuant to the Master Indenture may be used by the Authority for any lawful purpose.

Disposition of Moneys After Payment of Revenue Obligations and Contracts. Any amounts remaining in any fund or account established under the Indenture after payment in full of the principal of, redemption premium, if any, and interest on the Revenue Obligations (or after provision for payment thereof has been made) and obligations treated as Senior Lien Revenue Obligations or Subordinate Lien Obligations pursuant to the Master Indenture, the fees, charges, and expenses of the Paying Agent and Bond Registrar, all amounts owing to any Credit Issuer, any Reserve Account Credit Facility Provider, and any Qualified Hedge Provider or other party to a Contract, and all other amounts required to be paid under the Indenture (including amounts required to be paid into the Rebate Fund), will be retained by the Authority and not be subject to the lien hereof.

No Revenue Obligations Except as Permitted in the Indenture. No Revenue Obligations may be issued and no other obligations, except Contracts, which are secured by any interest in or lien on Pledged Revenues may be entered into pursuant to the Master Indenture.

Additional Senior Lien Revenue Obligations. (a) Any portion or all of a series of Senior Lien Revenue Obligations may be refunded at maturity, upon redemption in accordance with their terms, or upon payment, prepayment or redemption with the consent of the owners of such Senior Lien Revenue Obligations, and the refunding Revenue Obligations so issued will constitute Senior Lien Revenue Obligations secured on a parity with any Revenue Obligations secured on a parity with the refunded Revenue Obligations, if all of the following conditions are satisfied:

(1) the Authority will have obtained a report from an Independent Certified Public Accountant or a Financial Advisor demonstrating that the refunding will reduce the total debt service payments on Outstanding Senior Lien Revenue Obligations, including payments on related Contracts, which are parity secured with the Revenue Obligations to be refunded on a present value basis; or

(2) as an alternative to, and in lieu of, satisfying the requirements of (1), all Outstanding Senior Lien Revenue Obligations which are secured on a parity with the Revenue Obligations to be refunded are being refunded under arrangements which immediately result in making provision for the payment of such Revenue Obligations; and

(3) requirements of (b)(2), (5), and (6) are met with respect to such refunding Revenue Obligations.

(b) Additional Senior Lien Revenue Obligations (including refunding Revenue Obligations which do not meet the requirements of (a)) may also be issued on a parity with Outstanding Senior Lien Revenue Obligations pursuant to a Supplemental Indenture, and the Revenue Obligations so issued will be secured on a parity with such Outstanding Senior Lien Revenue Obligations, if all of the following conditions are satisfied:

(1) There will have been procured and filed with the Trustee either:

(A) a report by an Independent Certified Public Accountant to the effect that the historical related Net Revenues for General Revenues for each of the two most recent audited Fiscal Years, were equal to at least 125% of the Maximum Annual Debt Service Requirement on all related Senior Lien Revenue Obligations which will be Outstanding immediately after the issuance of the proposed Additional Obligations and secured on a parity therewith;

(B) a report by an Airport Consultant to the effect that in each Fiscal Year of the Forecast Period, the related Net Revenues for General Revenues are forecast to equal at least 125% of the Debt Service Requirement in such Fiscal Year on all Senior Lien Revenue Obligations which will be Outstanding immediately after the issuance of the proposed Additional Obligations and secured on a parity therewith; or

(C) a certificate of the Executive Director that an additional amount of Revenue Obligations is needed to complete the Project to be financed by the Revenue Obligations issued under the First Supplemental Indenture, provided that such Revenue Obligations will not exceed $15,000,000.

(2) The payments required to be made into each account or subaccount of the Sinking Fund have been made and the balance in each account or subaccount of the Sinking Fund is not less than the balance required by the Indenture as of the date of issuance of the proposed Additional Obligations.

(3) The Supplemental Indenture authorizing the proposed Additional Obligations must require (i) that the amount to be accumulated and maintained in the subaccount of the Debt Service Reserve Account for Senior Lien Revenue Obligations which are to be secured on a parity with such Additional Obligations with respect to such Debt Service Reserve Account, if any, be increased to not less than 100% of the Debt Service Reserve Requirement computed on a basis which includes all Senior Lien Revenue Obligations which will be Outstanding and secured on a parity with the Additional Obligations with respect to such Debt Service Revenue Account immediately after the issuance of the proposed Additional Obligations and (ii) that the amount of such increase be deposited in such subaccount on or before the date and at least as fast as the rate specified in the Master Indenture.

(4) The Supplemental Indenture authorizing the proposed Additional Obligations must require the proceeds of such proposed Additional Obligations to be used to make capital improvements or otherwise to fund the Costs of one or more Projects, to fund interest on the proposed Additional Obligations or Outstanding Obligations, to refund other obligations issued for such purposes (whether or not such refunding Revenue Obligations satisfy the requirements of (a)), to fund a deposit to the Debt Service Reserve Account or to fund such other reserves as may be necessary or desirable in connection with the issuance of Additional Obligations, and to pay expenses incidental thereto and to the issuance of the proposed Additional Obligations.

(5) The Executive Director will have certified, by written certificate dated as of the date of issuance of the Additional Obligations, that the Authority is in compliance with all requirements of the Indenture.

(6) The Authority will have received an opinion of Bond Counsel, dated as of the date of issuance of the Additional Obligations, to the effect that the Supplemental Indenture and any related Supplemental Indenture authorizing the issuance of Additional Obligations have been duly adopted by the Authority.

(c) Additional Senior Lien Revenue Obligations (including refunding Revenue Obligations which do not meet the requirements of (a)) which will not be secured on a parity with any Outstanding Senior Lien Revenue Obligations (because there are none with a Senior Lien on such Revenues) may be issued, and the Revenue Obligations so issued will be Senior Lien Revenue Obligations, if all of the conditions of (b)(2) through (6) are satisfied.

(d) Obligations which would be Other Airport Obligations but for the existence of a Senior Lien on a category of Revenues securing such obligations may be issued and so secured, and thereafter will be treated as Senior Lien Revenue Obligations, if all of the conditions of (b) are satisfied treating such obligations as Additional Obligations and the issuance and security documents therefor as Supplemental Indentures.

(e) If the Additional Senior Lien Revenue Obligations are to have Senior Liens on more than one category of Revenues, the requirements of (b)(1) must be met with respect to each category of Revenues.

Additional Subordinate Lien Revenue Obligations. (a) Revenue Obligations also may be issued on a Subordinate Lien basis pursuant to a Supplemental Indenture, payable from, unless such Revenue Obligations are Identified Revenue Obligations or to be secured by PFC Revenues or Released PFC Revenues, moneys which would otherwise be deposited in the Renewal and Extension Fund, and the Revenue Obligations so issued will constitute Subordinate Lien Obligations, if all of the following conditions are satisfied:

(1) The Supplemental Indenture authorizing the Subordinate Lien Obligations will provide that such Subordinate Lien Obligations will be junior and subordinate in lien and right of payment (A) directly, to any Outstanding Senior Lien Revenue Obligations or Senior Lien Revenue Obligations issued in the future which have a Senior Lien on a category of Revenues as to which such proposed Additional Obligations have a Subordinate Lien, and (B) indirectly (as a result of the requirements in the Master Indenture, to withdraw certain amounts at certain times from subaccounts related to Subordinate Lien Obligations), to any other Outstanding Senior Lien Revenue Obligations or Senior Lien Revenue Obligations issued in the future.

(2) The Supplemental Indenture authorizing the Subordinate Lien Obligations will, unless such Revenue Obligations are Identified Revenue Obligations or to be secured by PFC Revenues or Released PFC Revenues, establish funds and accounts for the moneys which would otherwise be deposited in the Renewal and Extension Fund, to be used to pay debt service on the Subordinate Lien Obligations, to pay Hedge Payments under related Hedge Agreements, and to provide reserves therefor. If Subordinate Lien Obligations are to be secured by PFC Revenues, Released PFC Revenues or Identified Revenues, the Supplemental Indenture will establish funds and accounts for the moneys securing such Revenue Obligations, to be used to pay debt service on such Revenue Obligations, to pay Hedge Payments under related Hedge Agreements, and to provide reserves therefor.

(3) The requirements of the Master Indenture are met with respect to such Subordinate Lien Obligations.

(b) In the event of any insolvency or bankruptcy proceedings, and any receivership, liquidation, reorganization, or other similar proceedings in connection therewith, relative to the Authority or to its creditors, as such, or to its property, and in the event of any proceedings for voluntary liquidation, dissolution, or other winding up of the Authority, whether or not involving insolvency or bankruptcy, the owners of all Senior Lien Revenue Obligations then Outstanding and parties to related Contracts will be entitled to receive payment in full of all principal and interest due on all such Senior Lien Revenue Obligations, and all payments due under related Contracts in accordance with the provisions of the Indenture before the owners of any Subordinate Lien Obligations having a Subordinate Lien on a category of Revenues as to which such Senior Lien Revenue Obligations have a Senior Lien or related Contracts are entitled to receive any payment from the Pledged Revenues or the amounts held in the funds and accounts created under the Indenture on account of principal of, premium, if any, or interest on the Subordinate Lien Obligations or related Contracts.

(c) In the event that any of the Subordinate Lien Obligations are declared due and payable before their expressed maturities because of the occurrence of an event of default (under circumstances when the provisions of paragraph (b) will not be applicable), no owners of such Subordinate Lien Obligations or parties to related Contracts or Hedge Agreements may receive any accelerated payment from the Pledged Revenues or the amounts held in the funds and accounts created under the Indenture of principal or, premium, if any, or interest on such Subordinate Lien Obligations, payments on related Contracts or Hedge Payments under related Hedge Agreements, until the owners of all Senior Lien Revenue Obligations Outstanding having a Senior Lien on a category of Revenues as to which such Subordinate Lien Obligations have a Subordinate Lien and parties to related Contracts have received payment in full of all principal and interest on all such Senior Lien Revenue Obligations and all payments on related Contracts.

(d) If any Event of Default will have occurred and be continuing (under circumstances when the provisions of paragraph (b) will not be applicable), the owners of all Senior Lien Revenue Obligations then Outstanding and parties to related Contracts will be entitled to receive payment in full of all principal and interest then due on all such Senior Lien Revenue Obligations, and all payments due on related Contracts before the owners of the Subordinate Lien Obligations or parties to related Contracts are entitled to receive any payment from the Pledged Revenues or the amounts held in the funds and accounts created under the Indenture of principal of, premium, if any, or interest on the Subordinate Lien Obligations or payments under related Contracts.

(e) No owner of Senior Lien Revenue Obligations or party to any related Contract will be prejudiced in its right to enforce subordination of the Subordinate Lien Obligations and related Contracts by any act or failure to act on the part of the Authority.

(f) The obligations of the Authority to pay to the owners of the Subordinate Lien Obligations the principal of, premium, if any, and interest thereon in accordance with their terms and to pay parties to related Contracts in accordance with the terms of the related Contracts will be unconditional and absolute. Nothing in the Indenture will prevent the owners of the Subordinate Lien Obligations or parties to related Contracts from exercising all remedies otherwise permitted by applicable law or under the Indenture or the related Contracts upon default thereunder, subject to the rights contained in the Indenture of the owners of Senior Lien Revenue Obligations and parties to related Contracts to receive cash, property, or securities otherwise payable or deliverable to the owners of the Subordinate Lien Obligations and parties to related Contracts, and any Supplemental Indenture authorizing Subordinate Lien Obligations may provide that, insofar as a trustee or paying agent for the Subordinate Lien Obligations is concerned, the foregoing provisions will not prevent the application by such trustee or paying agent of any moneys deposited with such trustee or paying agent for the purpose of the payment of or on account of the principal of, premium, if any, and interest on such Subordinate Lien Obligations and payments under related Contracts if such trustee or paying agent did not have knowledge at the time of such application that such payment was prohibited by the foregoing provisions.

(g) Any series of Subordinate Lien Obligations and related Contracts may have such rank or priority with respect to any other series of Subordinate Lien Obligations and related Contracts as may be provided in the Supplemental Indenture authorizing such series of Subordinate Lien Obligations and may contain such other provisions as are not in conflict with the provisions of the Indenture.

(h) Obligations which would be Other Airport Obligations but for the existence of a Subordinate Lien on a category of Revenues securing such obligations may be issued and so secured, and thereafter will be treated as Subordinate Lien Obligations, if all of the conditions of 503 are satisfied treating such obligations as Subordinate Lien Obligations and the issuance and security documents therefor as Supplemental Indentures.

Additional Identified Revenue Obligations; Additional Special Purpose Revenue Obligations; Hybrid Obligations; Other Airport Obligations. (a) Identified Revenue Obligations may be issued (1) if there are no Outstanding Identified Revenue Obligations which will be secured on a parity with such Additional Obligations, after compliance with the requirements of the Master Indenture, upon satisfaction of the conditions stated therein, and the Revenue Obligations so issued will be treated as Subordinate Lien Obligations for purposes of the Master Indenture; or (2) if there are Outstanding Identified Revenue Obligations which will be secured on a parity with such Additional Obligations, after compliance with the requirements of the Master Indenture and such Supplemental Indenture pursuant to which the Outstanding Identified Revenue Obligations were issued, upon satisfaction of the conditions stated in the Master Indenture and in each such Supplemental Indenture, and the Revenue Obligations so issued will be treated as Subordinate Lien Obligations for purposes of the Master Indenture.

(b) Additional Special Purpose Obligations may be issued after compliance with any requirements therefor set forth in any Supplemental Indenture related to such Special Purpose Obligations or Outstanding Special Purpose Obligations which will be secured on a parity with such Additional Special Purpose Obligations.

(c) Revenue Obligations may be issued which are Hybrid Obligations, if, to the extent such Hybrid Obligations will have a Senior Lien on a category of Revenues, the requirements of the Master Indenture, as to Additional Senior Lien Revenue Obligations, are met and, to the extent such Hybrid Obligations will have a

Subordinate Lien on a category of Revenues, the requirements of the Master Indenture, as to Revenue Obligations issued on a Subordinate lien basis, are met. The Hybrid Obligations so issued will be treated as Subordinate Lien Obligations for purposes of the Master Indenture; provided such treatment will not be applicable if an Event of Default has occurred with respect to Revenue Obligations that have a parity Senior Lien on the same category of Revenues as the Senior Lien on the same category securing such Hybrid Obligations.

(d) Hybrid Obligations which have no liens on a category of Revenues and Other Airport Obligations (other than obligations treated as Senior Lien Revenue Obligations or Subordinate Lien Obligations pursuant to the Master Indenture) may not be accelerated for purposes of being paid from Revenues and, upon an event described in the Master Indenture, as to insolvency or bankruptcy proceedings, or an Event of Default, may not be paid from Revenues until the owners of all Senior Lien Revenue Obligations, Subordinate Lien Obligations, and related Contracts have been paid in full.

Released Revenues; Securitizations. (a) A separable category or portion of revenues, income, receipts and money relating to a definable service, facility or program of the Airport may be withdrawn from General Revenues or PFC Revenues, including for PFC Revenues amounts authorized to be charged and actually charged in excess of a particular dollar amount and thereafter treated as Released Revenues for all purposes, including the security for Released Revenue Obligations, if the following conditions are met:

(1) Filing of a report of an Independent Certified Public Accountant to the effect that historical Net General Revenues or Net PFC Revenues, determined without regard to the category of Revenues proposed to become Released Revenues, for the most recent audited Fiscal Year prior to the date of such report were equal to at least 125%, if General Revenues, and at least 125%, if PFC Revenues, of the Maximum Annual Debt Service Requirement on all General Revenue Obligations or PFC Revenue Obligations, respectively, which will be Outstanding after the category of Revenues becomes Released Revenues;

(2) Rating Agency confirmation that the ratings on the respective Outstanding General Revenue Bonds or PFC Revenue Bonds will not be reduced as a result of such withdrawal of Released Revenues;

(3) Filing of a written request of the Executive Director to release such category of Revenues, accompanied by a written certificate of the Finance Officer certifying the Authority is in compliance with all requirements of the Indenture; and

(4) Either the report described in (1) above will include statements to the effect that there is, or there will be filed a report of an Airport Consultant to the effect that there are, sufficient internal accounting and fiscal operations management practices in place at the Airport to provide an adequate basis for the additional accounting and related procedures required as a result of the release of revenues from General Revenues or PFC Revenues and the subsequent treatment thereof as Released Revenues.

(b) Upon compliance with subsection (a) above, Released Revenues may be sold, leased or loaned to a related or unrelated Person in a securitization or other similar transaction wherein the Authority either receives the current estimated or present value calculated value of such Released Revenues or expects to receive a fee or other denominated amounts for the lease or loan of such Released Revenues.

Identified Revenues. A separable category of revenues, income, receipts and money relating to a definable service, facility or program of the Airport may be identified as Identified Revenues upon the filing of a written request therefor signed by the Executive Director and accompanied either by a report of an Independent Certified Public Accountant or a report of an Airport Consultant, in either case to the effect that there are sufficient internal accounting and fiscal operations management practices in place at the Airport to provide an adequate basis for the additional accounting and related procedures required as a result of the identification of a category of revenues and the subsequent treatment thereof as Identified Revenues. Thereafter such Identified Revenues will be segregated from other General Revenues and, for all purposes related to General Revenue Obligations prior to an Event of Default or a condition described in the Master Indenture, as to amounts in any subaccount of the Sinking Fund, will be used after all other available General Revenues.

Special Revenue Facilities. Facilities to be located at the Airport which are not yet under construction or acquired and, when constructed or acquired, will not result in a material reduction in Net General Revenues and will not be of such a type or design that the subsequent closing thereof will materially impair the general operation of the Airport may be designated by the Authority as "Special Purpose Facilities" by the filing of a certificate of the Executive Director with respect thereto.

Accession of Subordinate Lien Obligations and Related Contracts to Senior Lien Status. By proceedings authorizing Subordinate Lien Obligations or a lien permitted by the Master Indenture, the Authority may provide for the accession of such Subordinate Lien Obligations and related Contracts to the status of complete parity with any Senior Lien Revenue Obligations and related Contracts with a lien on the same category of Revenues if, as of the date of accession, the conditions of the Master Indenture are satisfied, on a basis that includes all Outstanding Senior Lien Revenue Obligations with a lien on the same category of Revenues and such Subordinate Lien Obligations, and if on the date of accession:

(a) The subaccount of the Debt Service Reserve Account, if any, relating to the Senior Lien Revenue Obligations contains an amount equal to the Debt Service Reserve Requirement computed on a basis that includes all Outstanding Senior Lien Revenue Obligations with a lien on the same category of Revenues and such Subordinate Lien Obligations; and

(b) The subaccounts of the Interest Subaccount, the Principal Subaccount, the Hedge Payments Subaccount, the Contract Payments Subaccount and the Loan Repayment Subaccount contain the amounts which would have been required to be accumulated therein on the date of accession if the Subordinate Lien Obligations had originally been issued as Senior Lien Revenue Obligations with a lien on the same category of Revenues.

Credit Facilities and Hedge Agreements. (a) In connection with the issuance of any Revenue Obligations, the Authority may obtain or cause to be obtained one or more Credit Facilities providing for payment of all or a portion of the principal of, premium, if any, or interest due or to become due on such Revenue Obligations, providing for the purchase of such Revenue Obligations by the Credit Issuer, or providing funds for the purchase of such Revenue Obligations by the Authority. In connection therewith the Authority will enter into Credit Facility Agreements with such Credit Issuers providing for, among other things, (i) the payment of fees and expenses to such Credit Issuers for the issuance of such Credit Facilities; (ii) the terms and conditions of such Credit Facilities and the Revenue Obligations affected thereby; and (iii) the security, if any, to be provided for the issuance of such Credit Facilities. The Authority may secure any Credit Facility by an agreement providing for the purchase of the Revenue Obligations secured thereby with such adjustments to the rate of interest, method of determining interest, maturity, or redemption provisions as are specified by the Authority in the applicable Supplemental Indenture. The Authority may in a Credit Facility Agreement agree to directly reimburse such Credit Issuer for amounts paid under the terms of such Credit Facility, together with interest thereon; provided, however, that no Reimbursement Obligation will be created for purposes of the Indenture until amounts are paid under such Credit Facility. Any such Reimbursement Obligation will be deemed to be a part of the Revenue Obligations to which the Credit Facility relates which gave rise to such Reimbursement Obligation, and references to principal and interest payments with respect to such Revenue Obligations will include principal and interest (except for Additional Interest and principal amortization requirements with respect to the Reimbursement Obligation that are more accelerated than the amortization requirements for the related Revenue Obligations, without acceleration) due on the Reimbursement Obligation incurred as a result of payment of such Revenue Obligations with the Credit Facility. Any such Credit Facility will be for the benefit of and secure such Revenue Obligations or portion thereof as specified in the applicable Supplemental Indenture. Notwithstanding the other provisions hereof, the Authority's obligations under a Credit Facility which requires the Credit Issuer to make all interest payments due on the Revenue Obligations may be secured to the extent of such amounts by a pledge of, and lien on, the Pledged Revenues on a parity with the lien created by the Master Indenture to secure the related Revenue Obligations, or may be wholly or partially subordinate in lien and right of payment to the payment of the Revenue Obligations, as determined by the Authority.

(b) In connection with the issuance of any Revenue Obligations or at any time thereafter so long as such Bonds remain Outstanding, the Authority may enter into Hedge Agreements with Qualified Hedge Providers, and no other providers, with respect to any Revenue Obligations. The Authority will authorize the execution, delivery, and performance of each Qualified Hedge Agreement in a Supplemental Indenture, in which it will designate the related Hedged Obligations. The Authority's obligation to pay Hedge Payments on a Qualified Hedge Agreement may be secured by a pledge of, and lien on, the Pledged Revenues on a parity with the lien created by the Master Indenture to secure the related Hedged Obligations, or may be wholly or partially subordinate in lien and right of payment to the payment of the Revenue Obligations, as determined by the Authority.

Other Obligations. The Authority expressly reserves the right, at any time, to enter into one or more other bond indentures and reserves the right, at any time, to issue any other obligations not secured by the amounts pledged under the Indenture.

Rate Covenant. The Authority will continuously own, control, operate, and maintain the Airport in an efficient and economical manner and on a revenue producing basis and will at all times prescribe, fix, maintain, and collect rates, fees, and other charges for the services and facilities furnished by the Airport fully sufficient at all times:

(a) for 100% of the Operating Expenses and for the accumulation in the Revenue Fund of a reasonable reserve therefor; and

(b) such that Net Revenues for General Revenues in each Fiscal Year:

(1) will equal at least 125% of the Debt Service Requirement on all Revenue Obligations secured by General Revenues then Outstanding for the Sinking Fund Year ending on the next July 1 and, for other categories of Revenues, such percentages that may be established pursuant to a Supplemental Indenture;

(2) will enable the Authority to make all required payments, if any, into the Debt Service Reserve Account and the Rebate Fund and on any Contract or Other Airport Obligation;

(3) will enable the Authority to accumulate an amount to be held in the Renewal and Extension Fund, which in the judgment of the Authority is adequate to meet the costs of major renewals, replacements, repairs, additions, betterments, and improvements to the Airport, necessary to keep the same in good operating condition or as is required by any governmental agency having jurisdiction over the Airport; and

(4) will remedy all deficiencies in required payments into any of the funds and accounts mentioned in the Indenture from prior Fiscal Years;

provided the Master Indenture will not be construed as requiring the Airport to impose passenger facility charges in excess of amounts permitted pursuant to the PFC Act.

If the Authority fails to prescribe, fix, maintain, and collect rates, fees, and other charges, or to revise such rates, fees, and other charges, in accordance with the provisions of the Master Indenture in any Fiscal Year, but the Authority in the next Fiscal Year has promptly taken all available measures to revise such rates, fees and other charges as advised by an Airport Consultant, there will be no Event of Default as described in the Master

Indenture, as to failure by the Authority to perform any of the covenants, conditions, agreement, and provisions contained in the Senior Lien Revenue Obligations or in the Master Indenture, until at least the end of such next Fiscal Year and only then if Net Revenues are less than the amount required by this section.

The rates, fees, and other charges will be classified in a reasonable manner to cover users of the services and facilities furnished by the Airport so that, as nearly as practicable, such rates, fees, and other charges will be uniform in application to all users falling within any reasonable class.

Maintenance of the Airport in Good Condition. The Authority covenants that it has and will continue to enforce reasonable rules and regulations governing the Airport and the operation thereof, that all compensation, salaries, fees, and wages paid by it in connection with the operation, maintenance, and repair of the Airport will be reasonable, that it will operate the Airport in an efficient and economical manner and will at all times maintain the Airport in good repair and in sound operating condition, that it will make all necessary repairs, renewals, and replacements to the Airport, and that it will comply with all valid acts, rules, regulations, orders, and directions of any legislative, executive, administrative, or judicial body applicable to the Airport and the Authority's operation thereof. The Authority will not take, or allow any person to take, any action which would cause the Administrator of the Federal Aviation Administration, Department of Transportation, or any successor to the powers and authority of such Administrator, to suspend or revoke the Airport's operating certificates issued under the Federal Aviation Act of 1958, or any successor statute.

Insurance. With respect to the Airport, the Authority will carry adequate public liability, fidelity, and property insurance, such as is maintained by similar airports as the Airport.

The Authority will indemnify itself against the usual hazards incident to the construction of any Project, and without in any way limiting the generality of the above, will: (a) require each construction contractor and each subcontractor to furnish a bond, or bonds, of such type and in amounts adequate to assure the faithful performance of their contracts and the payment of all bills and claims for labor and material arising by virtue of such contracts; and (b) require each construction contractor or the subcontractor to maintain at all times until the completion and acceptance of the Project adequate compensation insurance for all of their employees and adequate public liability and property damage insurance for the full and complete protection of the Authority from any and all claims of every kind and character which may arise by virtue of the operations under their contracts, whether such operations be by themselves or by anyone directly or indirectly for them, or under their control.

All such policies will be for the benefit of and made payable to the Authority and will be on deposit with the Authority; provided, however, the Authority may elect to be a self-insurer with respect to any risks for which insurance is required under the Master Indenture. The cost of such insurance may be paid as an Operating Expense.

All moneys received for losses under any such insurance policies, except public liability policies, are hereby pledged by the Authority as security for the Revenue Obligations until and unless such proceeds are paid out in making good the loss or damage in respect of which such proceeds are received, either by repairing the property damaged or replacing the property destroyed or by depositing the same in the Renewal and Extension Fund. Adequate provision for making good such loss and damage will be made within 120 days from the date of the loss. Insurance proceeds not used in making such provision will be deposited in the Renewal and Extension Fund on the expiration of such 120-day period. Such insurance proceeds will be payable to the Authority by appropriate clause to be attached to or inserted in the policies.

No Sale, Lease, or Encumbrance; Exceptions. Except as expressly permitted in this section or elsewhere in the Master Indenture, the Authority irrevocably covenants, binds, and obligates itself not to sell, lease, encumber, or in any manner dispose of the Airport as a whole or in part until all of the Revenue Obligations and all interest thereon shall have been paid in full or provision for payment has been made in accordance with the Master Indenture.

The Authority shall have and hereby reserves the right to sell, lease, or otherwise dispose of any of the property comprising a part of the Airport in the following manner, if any one of the following conditions exists: (i) such property is not necessary for the operation of the Airport; (ii) such property is not useful in the operation of the Airport; (iii) such property is not profitable in the operation of the Airport; or (iv) the disposition of such property will be advantageous to the Airport and will not adversely affect the security for the holders of the Revenue Obligations. All proceeds of any such sale or disposition received by the Authority shall be deposited in the Revenue Fund unless the Authority directs amounts be deposited in the Renewal and Extension Fund or the Authority is required to deliver such amounts to another Person.

The Authority reserves the right to sell any portion of the Airport to any political subdivision or authority or agency of one or more political subdivisions of the State, provided that there shall be first obtained: (i) an opinion of Bond Counsel to the effect that such sale will not adversely affect the extent to which interest on any Tax-Exempt Bonds is excluded from gross income for federal income tax purposes; and (ii) an opinion of an Airport Consultant expressing the view that such sale will not result in any diminution of Net Revenues to the extent that in any future Fiscal Year the Net Revenues will be less than 100% of the annual Debt Service Requirement on all Senior Lien Revenue Obligations to be Outstanding after such transfer with a lien on any category of Revenues, in the then current and each succeeding Fiscal Year. In reaching this conclusion, the Airport Consultant shall take into consideration such factors as the Airport Consultant may deem significant, including (i) anticipated diminution of Revenues, (ii) anticipated increase or decrease in Operating Expenses attributable to the sale, and (iii) reduction in the annual Debt Service Requirement attributable to the application of the sale proceeds to the provision for payment of Revenue Obligations theretofore Outstanding. All proceeds of any such sale or disposition received by the Authority shall be deposited in the Revenue Fund unless the Authority directs amounts be deposited in the Renewal and Extension Fund or the Authority is required to deliver such amounts to another Person.

The Authority reserves the right to transfer the Airport as a whole to any political subdivision or authority or agency of one or more political subdivisions of the State to which may be delegated the legal authority to own and operate the Airport, or any portion thereof, on behalf of the public, and which undertakes in writing the Authority's obligations under the Indenture, provided that there shall be first obtained: (i) an opinion of Bond Counsel to the effect that such sale will not adversely affect the extent to which interest on any Tax-Exempt Bonds is excluded from gross income for federal income tax purposes; and (ii) an opinion of a Airport Consultant expressing the view that such transfer will not result in any diminution of Net Revenues to the extent that in any future Fiscal Year the Net Revenues will be less than 100% of the average annual Debt Service Requirement on all Senior Lien Revenue Obligations to be Outstanding after such transfer with a lien on any category of Revenues, in the then current and each succeeding Fiscal Year. In reaching this conclusion, the Airport Consultant shall take into consideration such factors as the Airport Consultant may deem significant, including any rate revision to be imposed by the transferee political subdivision, authority, or agency.

No Impairment of Rights. The Authority will not enter into any contract or contracts, nor take any action, the results of which might materially impair the rights of the holders of any Revenue Obligations.

Satisfaction of Liens. The Authority will from time to time duly pay and discharge or cause to be paid and discharged all taxes, assessments, and other governmental charges, if any, lawfully imposed upon the Airport or any part thereof or upon the Pledged Revenues, as well as any lawful claims for labor, materials, or supplies which if unpaid might by law become a lien or charge upon the Airport or the Pledged Revenues or any part thereof or which might impair the security of the Revenue Obligations, except when the Authority in good faith contests its liability to pay the same.

Enforcement of Charges and Connections. The Authority will compel the prompt payment of rates, fees, and charges imposed for service connected with the Airport, and to that end will vigorously enforce all of the provisions of any Indenture or resolution of the Authority having to do with the same, and all of the rights and remedies permitted the Authority under law. The Authority by the Master Indenture expressly covenants and agrees that such charges will be enforced and promptly collected to the full extent permitted by law.

Payments. All payments falling due on the Revenue Obligations and related Contracts will be made by the Authority from the Pledged Revenues or, at the Authority's option, other legally available revenues to the owners thereof when due in full, and all reasonable and authorized charges made by the Bond Registrar and any Paying Agent will be paid by the Authority when due.

No Loss of Lien on Revenues. The Authority will not do, or omit to do, or permit to be done or to be omitted any matter or thing whatsoever whereby the lien of the Indenture on the Pledged Revenues or any part thereof might or could be lost or impaired.

Annual Budget. Before the start of each Fiscal Year, the Authority agrees to adopt an Annual Budget for the Airport for such Fiscal Year in compliance with the rate covenant as stated in the Master Indenture. The Annual Budget and the annual audit of the Airport will make distinctions among different categories of Revenues to comply with, and evidence compliance with, the provisions of the Indenture.

Definition of Events of Default. An "Event of Default" means the occurrence of any one or more of the following:

(a) a failure to pay the principal or redemption price of any Senior Lien Revenue Obligation when the same will become due and payable, either at maturity or by proceedings for redemption or otherwise; or

(b) a failure to pay any installment of interest on any Senior Lien Revenue Obligation when and as such installment of interest will become due and payable; or

(c) a default is made by the Authority in the performance of any obligation in respect to any subaccount in the Debt Service Reserve Account relating to Senior Lien Revenue Obligations and such default continues for 30 days thereafter; or

(d) a court of competent jurisdiction enters an order, judgment, or decree appointing a receiver of the Airport or any of the funds or accounts established in the Master Indenture, or approving a petition seeking reorganization of the Authority under the federal bankruptcy laws or any other applicable law or statute of the United States of America or the State, and such order, judgment, or decree is not be vacated or set aside or stayed within 60 days from the date of the entry thereof; or

(e) under the provisions of any other law for the relief or aid of debtors, any court of competent jurisdiction assumes custody or control of any of the funds or accounts established in the Master Indenture, and such custody or control is not terminated or stayed within 60 days from the date of assumption of such custody or control; or

(f) the Authority fails to perform any of the other covenants, conditions, agreements, and provisions contained in the Senior Lien Revenue Obligations or in the Indenture on the part of the Authority to be performed, and such failure continues for 90 days after written notice specifying such failure and requiring it to be remedied has been given to the Authority by the owners of not less than, or a Credit Issuer securing not less than, 25% in aggregate principal amount of the Senior Lien Revenue Obligations; provided, however, if the failure stated in such notice can be corrected, but not within such 90 day period, the Authority has 180 days after such written notice to cure such default if corrective action is instituted by the Authority within such 90 day period and diligently pursued until the failure is corrected; or

(g) an Event of Default under any Supplemental Indenture relating to Senior Lien Revenue Obligations occurs; or

(h) a failure by any Credit Issuer to pay the purchase price of Senior Lien Revenue Obligations under any Credit Facility then in effect; or

(i) the issuance to the Authority by a Credit Issuer of written notice stating that an "Event of Default" has occurred under any Credit Facility Agreement relating to Senior Lien Revenue Obligations; or

(j) the issuance to the Authority by a Qualified Hedge Provider of written notice stating that an "Event of Default' has occurred under any Hedge Agreement;

provided if the Event of Default relates solely to Revenue Obligations related to a particular category of Revenues and no other event has occurred which, with the lapse of time or the delivery of notice or both, could become an Event of Default with respect to any other Revenue Obligations then Outstanding, such Event of Default will be deemed to apply solely to the related Revenue Obligations and Contracts and the provisions of the Indenture will otherwise remain in full force and effect with respect to all other Revenue Obligations and related Contracts.

Remedies. (a) Upon the happening and continuance of any Event of Default specified in the Master Indenture, the Trustee may and, upon the written declaration of the owners of more than 50% in aggregate principal amount of all Senior Lien Revenue Obligations then Outstanding affected thereby or upon the written demand of a Credit Issuer securing more than 50% in aggregate principal amount of the Senior Lien Revenue Obligations then Outstanding affected thereby, will, declare that the principal of all Senior Lien Revenue Obligations then Outstanding affected thereby become due and payable immediately, together with the interest accrued thereon to the date of such acceleration, at the place of payment provided therein, and interest on such Senior Lien Revenue Obligations will cease to accrue after the date of such acceleration, anything in the Indenture or in the Senior Lien Revenue Obligations to the contrary notwithstanding.

Upon any declaration of acceleration under the Indenture, the Authority will immediately draw under the applicable Credit Facility to the extent permitted by the terms thereof that amount which, together with other amounts on deposit under the Indenture, will be sufficient to pay the principal of and accrued interest on the related Senior Lien Revenue Obligations so accelerated.

The above provisions, however, are subject to the condition that if, after the principal of the Senior Lien Revenue Obligations has been so accelerated, all arrears of interest upon such Senior Lien Revenue Obligations, and interest on overdue installments of interest at the rate on such Senior Lien Revenue Obligations, has been paid by the Authority, the principal of such Senior Lien Revenue Obligations which has matured (except the principal of any Senior Lien Revenue Obligations not then due by their terms except as provided above) have been paid, and the Authority also has performed all other things in respect to which it may have been in default under the Indenture, and the Credit Issuer has reinstated the Credit Facility in the full amount available to be drawn thereunder by written notice to the Authority, then, in every such case, the owners of more than 50% in aggregate principal amount of all Senior Lien Revenue Obligations then Outstanding by written notice to the Authority, may waive such default and its consequences and such waiver will be binding upon the Authority and upon all owners of the Revenue Obligations; but no such waiver will extend to or affect any subsequent default or impair any right or remedy consequent thereon. Notwithstanding the foregoing, as long as the applicable Credit Issuer will not then continue to dishonor draws under the Credit Facility, no Event of Default with respect to the related Senior Lien Revenue Obligations may be waived without the express written consent of such Credit Issuer.

(b) Upon the happening and continuance of any Event of Default, any owner of Senior Lien Revenue Obligations then Outstanding affected by the Event of Default or a duly authorized agent for such owner may proceed to protect and enforce its rights and the rights of the owners of Senior Lien Revenue Obligations by such of the following remedies as it will deem most effectual to protect and enforce such rights:

(1) by mandamus or other suit, action, or proceeding at law or in equity, enforce all rights of the owners of Senior Lien Revenue Obligations, including the right to require the appointment of a receiver for the Airport or to exercise any other right or remedy provided by the Acts and to require the

Authority to perform any other covenant or agreement contained in the Indenture and to perform its duties under the Acts;

(2) by bringing suit upon the Senior Lien Revenue Obligations;

(3) by action or suit in equity, require the Authority to account as if it were the trustee of an express trust for the owners of the Senior Lien Revenue Obligations;

(4) by action or suit in equity, enjoin any acts or things which may be unlawful or in violation of the rights of the owners of the Senior Lien Revenue Obligations; or

(5) by pursuing any other available remedy at law or in equity or by statute.

In the enforcement of any remedy under the Indenture, owners of Senior Lien Revenue Obligations will be entitled to sue for, enforce payment on, and receive any and all amounts then or during any default becoming, and at any time remaining, due from the Authority for principal, redemption premium, interest, or otherwise, under any provision of the Indenture or of the Senior Lien Revenue Obligations, and unpaid, with interest on overdue payments at the rate or rates of interest specified in such Senior Lien Revenue Obligations, together with any and all costs and expenses of collection and of all proceedings under the Indenture and under such Senior Lien Revenue Obligations, without prejudice to any other right or remedy of the owners of Senior Lien Revenue Obligations, and to recover and enforce a judgment or decree against the Authority for any portion of such amounts remaining unpaid, with interest, costs, and expenses, and to collect from any moneys available for such purpose, in any manner provided by law, the moneys adjudged or decreed to be payable.

Remedies Cumulative. No remedy conferred upon or reserved to the holders of any Revenue Obligations is intended to be exclusive of any other remedy or remedies, and each and every such remedy will be cumulative and will be in addition to every other remedy given under the Indenture or now or hereafter existing at law or in equity or by statute.

Waiver of Default. No delay or omission of any holders of any Revenue Obligations to exercise any right or power accruing upon any Event of Default will impair any such right or power or will be construed to be a waiver of any such Event of Default, or an acquiescence therein, and every power and remedy given by the Indenture to the holders of any Revenue Obligations may be exercised from time to time and as often as may be deemed expedient.

Application of Moneys After Default. If an Event of Default occurs and will not have been remedied, the Authority or a receiver appointed for the purpose will apply all Pledged Revenues as follows and in the following order of priority (subject to the Master Indenture):

(a) Expenses of the Trustee, Receiver, Paying Agent and Bond Registrar - to the payment of the reasonable and proper charges, expenses, and liabilities of the Trustee or receiver and the Paying Agent and Bond Registrar under the Indenture with the amounts payable under this (a), if related to a particular series and therefore to a particular category of Revenues, first from such category and second from other categories of Revenues in amounts as determined by the Trustee or receiver or the Paying Agent, and if not so related to a particular series or category of Revenues, then from all Revenues as determined by the Trustee or receiver or the Paying Agent;

(b) Operating Expenses and Renewals and Replacements - then, within each category of Revenues, to the payment of all reasonable and necessary related Operating Expenses and major renewals and replacements to the related facilities at the Airport;

(c) Principal or redemption price, interest and payments on related Contracts - then, within each category of Revenues, to the payment of the interest and principal or redemption price then due on the related Senior Lien Revenue Obligations and payments under related Contracts, as follows:

(1) Unless the principal of all the Senior Lien Revenue Obligations related to such category of Revenues will have become due and payable, all such moneys will be applied as follows:

first: to the payment to the persons entitled thereto of all installments of interest then due on the Senior Lien Revenue Obligations, in the order of the maturity of such installments (with interest on defaulted installments of interest at the rate or rates borne by the Senior Lien Revenue Obligations with respect to which such interest is due, but only to the extent permitted by law), and, if the amount available will not be sufficient to pay in full any particular installment, then to the payment ratably, according to the amounts due on such installment, to the persons entitled thereto, without any discrimination or preference. If some of the Senior Lien Revenue Obligations bear interest payable at different intervals or upon different dates and if at any time moneys from the Debt Service Reserve Account must be used to pay any such interest, the moneys in the Debt Service Reserve Account will be applied (to the extent necessary) to the payment of all interest falling due on the dates upon which such interest is payable to and including the date six months after the date of application of such moneys. After such period, moneys in the Debt Service Reserve Account plus any other moneys available in the Interest Subaccount will be set aside for the payment of interest on Senior Lien Revenue Obligations of each class (a class consisting of all Senior Lien Revenue Obligations payable as to interest on the same dates) pro rata among Senior Lien Revenue Obligations of the various classes on a daily basis so that there will accrue to each owner of a Senior Lien Revenue Obligation throughout each Fiscal Year the same proportion of the total interest payable to such owner of a Senior Lien Revenue Obligation as will so accrue to every other owner of a Senior Lien Revenue Obligation during such Fiscal Year. As to any Compound Interest Bond which is a Senior Lien Revenue Obligation, such interest will accrue on the Accreted Value of such Senior Lien Revenue Obligations and be set aside on a daily basis until the next compounding date for such Senior Lien Revenue Obligations, whereupon it will be paid to the owner of such Senior Lien Revenue Obligation as interest on a defaulted obligation and only the unpaid portion of such interest (if any) will be treated as principal of such Senior Lien Revenue Obligation.

second: to interest portions of Reimbursement Obligations related to Senior Lien Revenue Obligations pursuant to the terms of the related Contracts.

third: to the payment to the persons entitled thereto of the unpaid principal of any of the Senior Lien Revenue Obligations which will have become due at maturity or upon mandatory redemption prior to maturity (other than Senior Lien Revenue Obligations called for redemption for the payment of which moneys are held pursuant to the provisions of the Master Indenture), in the order of their due dates, with interest upon such Senior Lien Revenue Obligations from the respective dates upon which they became due, and, if the amount available will not be sufficient to pay in full Senior Lien Revenue Obligations due on any particular date, together with such interest, then to the payment first of such interest, ratably according to the amount of such interest due on such date, and then to the payment of such principal, ratably according to the amount of such principal due on such date, to the persons entitled thereto without any discrimination or preference. If some of the Senior Lien Revenue Obligations mature (including mandatory redemption prior to maturity as a maturity) upon a different date or dates and if at any time moneys from the Debt Service Reserve Account must be used to pay any such principal falling due, the moneys in the Debt Service Reserve Account not required to pay interest under paragraph first above will be applied to the extent necessary to the payment of all principal falling due prior to the date 12 months after the date of application of such moneys. After such period, moneys in the Debt Service Reserve Account not required to pay interest plus any other moneys available in the Principal Subaccount will be set aside for the payment of principal of Senior Lien Revenue Obligations of each class (a class consisting of all Senior Lien Revenue Obligations payable as to principal on the same date) pro rata among Senior Lien Revenue Obligations of the various classes which mature or must be redeemed pursuant to mandatory redemption prior to maturity throughout each Fiscal Year in such proportion of the total principal payable on each such Senior Lien Revenue Obligation as will be equal among all classes of Senior Lien Revenue Obligations maturing or subject to mandatory redemption within such Fiscal Year. The Accreted Value of a Compound Interest Bond which is a Senior Lien Revenue Obligation (except for interest which will have been paid under paragraph first) will be treated as principal for purposes of this paragraph third.

fourth: to the payment of the principal portions of Reimbursement Obligations related to Senior Lien Revenue Obligations pursuant to the terms of the related Contracts.

fifth: to the payment of the redemption premium on and the principal of any Senior Lien Revenue Obligations called for optional redemption pursuant to their terms.

sixth: to the payment of all other amounts then due on Contracts related to Senior Lien Revenue Obligations.

(2) If the principal of all the Senior Lien Revenue Obligations becomes due and payable, all such moneys will be applied to the payment of the principal and interest then due and unpaid upon the Senior Lien Revenue Obligations, with interest thereon as aforesaid, and due and unpaid payments under related Contracts (excluding termination payments), without preference or priority of principal over interest or payments on Contracts or of interest over principal or payments on Contracts or of payments on Contracts over principal or interest, or of any installment of interest over any other installment of interest, or of any Senior Lien Revenue Obligation over any other Senior Lien Revenue Obligations, or of any such payment under a Contract over any other such payment under a Contract, ratably, according to the amounts due respectively for principal, interest, and payments under Contracts, to the persons entitled thereto without any discrimination or preference.

(d) If a series of Senior Lien Revenue Obligations has a Senior Lien on more than one category of Revenues, payments will be made thereto under (c) pro rata as to the number of Senior Liens; provided if after such payments amounts are owed on such Senior Lien Revenue Obligations and amounts are remaining hereunder, payments thereon will be made from any category of Revenues as to which such series has a Senior Lien. If any amounts remain after payment under (c), further payments will be made with respect to all Subordinate Lien Obligations and Hybrid Obligations (to the extent not already paid) upon the same order and priority as used for Senior Lien Revenue Obligations under (c) within lien classifications as provided in the related Supplemental Indentures.

Notwithstanding anything else in the Master Indenture to the contrary, payments made pursuant to (b), (c) and (d) will be made by category of Revenues to related Revenue Obligations such that:

(i) Amounts traceable to General Revenues including Identified Revenues are used only for General Revenue Obligations and related Contracts until, and unless, all such amounts are paid, after which any amounts traceable to Identified Revenues may be used to pay Identified Revenue Obligations and related Contracts;

(ii) Amounts traceable to PFC Revenues are used only for PFC Revenue Obligations and related Contracts;

(iii) Amounts traceable to Released Revenues are used only for Released Revenue Obligations and related Contracts or otherwise as permitted by the Master Indenture; and

(iv) Amounts not traceable to particular categories of Revenues will be used first as General Revenues for purposes of this section, then as PFC Revenues, then as Identified Revenues, then as Released PFC Revenues, then as other Released Revenues, and then as Special Purpose Revenues.

Remedies Vested in Trustee. All rights of action (including the right to file proof of claims) hereunder or under any of the Revenue Obligations may be enforced by the Trustee without the possession of any of the Revenue Obligations 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 Revenue Obligations.

Control of Proceedings. (a) If an Event of Default with respect to a Revenue Obligation related to a particular category of Revenues has occurred and is continuing, the Holders of a majority in aggregate principal amount of Revenue Obligations of such category then Outstanding will 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 Revenue Obligations or assets solely securing such Revenue in connection with the enforcement of the terms and conditions hereof, provided that such direction is in accordance with law and the provisions hereof (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 Holders of Revenue Obligations secured by such category of Revenues not joining in such direction and provided further that nothing in this Section will impair the right of the Trustee in its discretion to take any other action hereunder which it may deem proper and which is not inconsistent with such direction by Holders.

(b) If an Event of Default with respect to all Revenue Obligations secured by a category of Revenues has occurred and is continuing, the Holders of a majority in aggregate principal amount of such Revenue Obligations then Outstanding will 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 the applicable Revenues or other assets securing such Revenue Obligations in connection with the enforcement of the terms and conditions hereof, provided that such direction is in accordance with law and the provisions hereof (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 Holders not joining in such direction and provided further that nothing in this Section will impair the right of the Trustee in its discretion to take any other action hereunder which it may deem proper in accordance with the Indenture and which is not inconsistent with such direction by Holders.

Individual Bondholder Action Restricted. (a) No holder of any Revenue Obligation will have any right to institute any suit, action or proceeding in equity or at law for the enforcement hereof or for the execution of any trust hereunder or for any remedy hereunder unless:

(i) an Event of Default has occurred under the Master Indenture of which the Trustee is deemed to have notice;

(ii) the Holders of at least 25% in aggregate principal amount of Revenue Obligations secured by the applicable category of Revenues then Outstanding 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 Holder has offered the Trustee indemnity as provided in the Master Indenture;

(iv) the Trustee has failed or refused to exercise the powers in the Master Indenture granted or to institute such action, suit or proceedings 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 Revenue Obligations secured by the applicable category of Revenues then Outstanding in accordance with the Master Indenture.

(b) No one or more Holders of Revenue Obligations will have any right in any manner whatsoever to affect, disturb or prejudice the security hereof or to enforce any right hereunder except in the manner in the Master Indenture provided and for the equal benefit of the Holders of all Revenue Obligations then Outstanding.

(c) Nothing contained in the Master Indenture will 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 hereof on the moneys, funds and properties pledged hereunder for the equal and ratable benefit of all Holders of Revenue Obligations to the extent provided for in the Master Indenture.

Termination of Proceedings. In case any proceeding taken by the Trustee on account of an Event of Default has been discontinued or abandoned for any reason or has been determined adversely to the Trustee or to the Bondholders, then the Authority, the Trustee and the Bondholders will be restored to their former positions and rights hereunder, and all rights, remedies and powers of the Trustee and the Bondholders will continue as if no such proceeding had been taken.

Limitation on Remedies. It is the purpose and intention of the Master Indenture to provide rights and remedies to the Trustee and Bondholders which lawfully may be granted under the provisions of the Act, but should any right or remedy granted in the Master Indenture be held to be unlawful, the Trustee and the Bondholders will be entitled as above set forth, to every other right and remedy provided in the Indenture and by law.

Provision for Payment. Except as otherwise set forth in the Supplemental Indenture authorizing Revenue Obligations, the Revenue Obligations for the payment, prepayment or redemption of which sufficient moneys or sufficient Government Obligations has been deposited with the Paying Agent or the Depository of the Sinking Fund (whether upon or prior to the maturity or the redemption date of such Revenue Obligations) will be deemed to be paid and no longer Outstanding under the Indenture; provided, however, that if such Revenue Obligations are to be redeemed prior to the maturity thereof, notice of such redemption has been duly given as provided in the Master Indenture or firm and irrevocable arrangements have been made for the giving of such notice. Government Obligations will be considered sufficient for purposes of the Master Indenture only: (i) if such Government Obligations are not callable by the issuer of the Government Obligations prior to their stated maturity, and (ii) if such Government Obligations fall due and bear interest in such amounts and at such times as will assure sufficient cash (whether or not such Government Obligations are redeemed by the Authority pursuant to any right of redemption) to pay currently maturing interest and to pay principal and redemption premiums, if any, when due on the Revenue Obligations without rendering the interest on any Tax-Exempt Bonds includable in gross income of any owner thereof for federal income tax purposes.

The Authority may at any time surrender to the Bond Registrar for cancellation by it any Bonds previously authenticated and delivered under the Indenture which the Authority may have acquired in any manner whatsoever. All such Bonds, upon such surrender and cancellation, will be deemed to be paid and retired.

Release of Pledge. If all Revenue Obligations and obligations secured by a lien on a category of Revenues have been paid or provision for payment thereof made pursuant to the Master Indenture and related Supplemental Indenture, then at the option of the Authority the terms and provisions of the Indenture relating solely to such category of Revenues may be determined as void and of no further force or effect; provided the other terms and provisions of the Indenture will remain in effect until the election of the Authority after payment or provision for payment of all Revenue Obligations and obligations secured by a lien created pursuant to the Indenture on any Revenues.

Supplemental Indentures Not Requiring Consent of Bondholders. The Authority, from time to time and at any time, subject to the conditions and restrictions in the Indenture, may adopt one or more Supplemental Indentures which thereafter will form a part of the Indenture, for any one or more or all of the following purposes:

(a) to add to the covenants and agreements of the Authority in the Indenture other covenants and agreements thereafter to be observed or to surrender, restrict, or limit any right or power reserved in the Indenture to or conferred upon the Authority (including but not limited to the right to issue Additional Obligations);

(b) to make such provisions for the purpose of curing any ambiguity, or of curing, correcting, or supplementing any defective provision contained in the Indenture, or in regard to matters or questions arising under the Indenture, as the Authority may deem necessary or desirable and not inconsistent with the Indenture;

(c) to subject to the lien and pledge of the Indenture additional revenues, receipts, properties, or other collateral;

(d) to evidence the appointment of successors to any Depositories, Paying Agent(s), or Bond Registrar(s);

(e) to modify, amend, or supplement the Indenture in such manner as to permit the qualification of the Indenture under the Trust Indenture Act of 1939 or any federal statute hereinafter in effect, and similarly to add to the Indenture such other terms, conditions, and provisions as may be permitted or required by such Trust Indenture Act of 1939 or any similar federal statute;

(f) to make any modification or amendment of the Indenture required in order to make any Revenue Obligations eligible for acceptance by DTC or any similar holding institution or to permit the issuance of any Revenue Obligations or interests therein in book-entry form;

(g) to modify any of the provisions of the Indenture in any respect if such modification will not become effective until after all the Revenue Obligations Outstanding immediately prior to the effective date of such Supplemental Indenture will cease to be Outstanding and if any Revenue Obligations issued contemporaneously with or after the effective date of such Supplemental Indenture will contain a specific reference to the modifications contained in such subsequent proceedings;

(h) to modify the provisions of the Indenture with respect to the disposition of any moneys remaining in the Project Fund upon the completion of any Project or to revise, enlarge or reduce the definition or description of any particular Project;

(i) to create additional subaccounts or to abolish any subaccounts within any account, or to change the amount of the Debt Service Reserve Requirement, but not below the amount specified in such definition;

(j) to modify the Indenture to permit the qualification of any Revenue Obligations for offer or sale under the securities laws of any state in the United States of America;

(k) to modify the Indenture in connection with the issuance of Additional Obligations or Subordinate Lien Obligations permitted to be issued under the Indenture prior to such modification, and such modification may deal with any subjects and make any provisions relating to the Additional Obligations or Subordinate Lien Obligations which the Authority deems necessary or desirable for that purpose;

(l) to make such modifications in the provisions of the Indenture as may be deemed necessary by the Authority to accommodate the issuance of Revenue Obligations which (i) are Compound Interest Bonds (including, but not limited to, provisions for determining the Debt Service Requirement for such Compound Interest Bonds and for treatment of Accreted Value in making such determination) or (ii) bear interest at a Variable Rate;

(m) to make such modifications in the provisions of the Indenture as may be deemed necessary for the Authority to accommodate the issuance of PFC Revenue Obligations; provided such Supplemental Indenture takes effect not later than the first issuance of PFC Revenue Obligations; and

(n) to modify any of the provisions of the Indenture in any respect (other than a modification of the type described in the Master Indenture requiring the unanimous written consent of the holders); provided that (i) for any Outstanding Revenue Obligations which are assigned a Rating and which are not secured by a Credit Facility providing for the payment of the full amount of principal and interest to be paid thereon, each Rating Agency gives written notification to the Authority that such modification will not cause the then applicable Rating on any Revenue Obligations to be reduced or withdrawn, and (ii) for any Outstanding Revenue Obligations which are secured by Credit Facilities providing for the payment of the full amount of the principal and interest to be paid thereon, each Credit Issuer consents in writing to such modification.

Any Supplemental Indenture authorized by the Master Indenture may be adopted by the Authority without the consent of or notice to the owners of any of the Revenue Obligations (except as otherwise set forth in such Supplemental Indenture) at the time Outstanding, notwithstanding any of the provisions of the Master Indenture. Any such Supplemental Indenture of the Authority may modify the provisions of the Indenture in such a manner, and to such extent and containing such provisions, as the Authority may deem necessary or desirable to effect any of the purposes stated above. As used in this Section, the term "modify" means "modify, amend, or supplement" and the term "modification" means "modification, amendment, or supplement." Modifications to any Loan Agreement will also be made only in conformance with any additional provisions required by such Loan Agreement.

The provisions of the Master Indenture will be interpreted by category of Revenues such that each provision of any Supplemental Indenture will be reviewed for compliance therewith upon its effect on the Revenue Obligations secured by the related category of Revenues and whether the consent of any holders, of a majority of holders of a certain category of Revenue Obligations or the consent of all such holders will be determined with respect to each category of Revenues. Supplemental Indentures may be adopted containing provisions which (1) do not require the consents of any holders, (2) require the consents of some but not all holders of Revenue Obligations related to a category of Revenues, (3) require the consents of some but not all holders of Revenue Obligations related to several categories of Revenues, (4) require the consents of all holders of Revenue Obligations related to a category of Revenues, (5) require the consents of all holders of Revenue Obligations, or (6) are covered in a combination of some or all of (1) through (5).

Supplemental Indentures Requiring Consent of Holders of Revenue Obligations. With the consent (evidenced as provided in the Master Indenture) of the owners of not less than a majority in aggregate principal amount of the Outstanding Revenue Obligations of each class (senior and subordinate), voting separately by class, of each series of Revenue Obligations related to an affected category of Revenues or related Revenue Obligations, the Authority may from time to time and at any time adopt a Supplemental Indenture for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of the Indenture or of any Supplemental Indenture; provided, however, that no such Supplemental Indenture will: (a) extend the maturity date or due date of any mandatory sinking fund redemption with respect to any Revenue Obligations Outstanding under the Indenture; (b) reduce or extend the time for payment of principal of, redemption premium, or interest on any Revenue Obligations Outstanding under the Indenture; (c) reduce any premium payable upon the redemption of any Revenue Obligation under the Indenture or advance the date upon which any Revenue Obligation may first be called for redemption prior to its stated maturity date; (d) give to any Revenue Obligation or Revenue Obligations (or related Contracts) a preference over any other Revenue Obligation or Revenue Obligations (or related Contracts) not already permitted by the Indenture; (e) permit the creation of any lien or any other encumbrance on the Pledged Revenues having a lien equal to or prior to the lien created under the Indenture for the Senior Lien Revenue Obligations; (f) reduce the percentage of owners of either class of Revenue Obligations required to approve any such Supplemental Indenture; or (g) deprive the owners of the Revenue Obligations of the right to payment of the Revenue Obligations or from the Pledged Revenues, without, in each case, the consent of the owners of all the Revenue Obligations then Outstanding of the category of Revenue Obligations affected thereby. No amendment may be made under the Master Indenture which affects the rights or duties of any Credit Issuer securing any of the Bonds or any Qualified Hedge Provider under any Hedge Agreement without its written consent. The provisions of this paragraph will be strictly construed such that Supplemental Indentures requiring the consents of owners of Revenue Obligations will be limited to those clearly falling within one of the enumerated categories.

If the Authority intends to enter into or adopt any Supplemental Indenture as described in the Master Indenture, the Authority will mail, by registered or certified mail, to the registered owners of the Revenue Obligations at their addresses as shown on the Bond Register and the holders or assignees of such holders of any Loan Agreement, a notice of such intention along with a description of such Supplemental Indenture not less than 30 days prior to the proposed effective date of such Supplemental Indenture. The consents of the registered owners of the Revenue Obligations and the holders or assignees of such holders of any Loan Agreement need not approve the particular form of wording of the proposed Supplemental Indenture, but it will be sufficient if such consents approve the substance thereof. Failure of the owner of any Revenue Obligations and the holders or assignees of such holders of any Loan Agreement to receive the notice required in the Indenture will not affect the validity of any Supplemental Indenture if the required number of owners of the Revenue Obligations and the holders or assignees of such holders of any Loan Agreement of each class will provide their written consent to such Supplemental Indenture. Modifications to any Loan Agreement will also be made in conformance with any additional provisions required by such Loan Agreement.

Notwithstanding any provision of the Indenture to the contrary, upon the issuance of a Credit Facility to secure any Revenue Obligations and for the period in which such Credit Facility is outstanding, the Credit Issuer may have the consent rights of the owners of the Bonds which are secured by such Credit Facility pertaining to some or all of the amendments or modifications of the Indenture, to the extent provided in the applicable Supplemental Indenture. Notwithstanding the foregoing, if a Credit Issuer is granted the consent rights of the owners of any Revenue Obligations in a Supplemental Indenture and refuses to exercise such consent rights, either affirmatively or negatively, then the registered owners of the Revenue Obligations secured by the related Credit Facility may exercise such consent rights.

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APPENDIX D

SUMMARY OF CERTAIN PROVISIONS OF AIRLINE USE AND LEASE AGREEMENT

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Set forth herein are definitions and summaries of certain terms in the Airline Use and Lease Agreement between the Authority and Scheduled Air Carriers operating at Norfolk International Airport. This summary is not complete and reference is made to the documents themselves, copies of which may be obtained from the Authority for a complete statement of the rights, duties and obligations of the parties thereto.

DEFINITIONS OF CERTAIN TERMS

The following are definitions of certain terms included in the Airline Use and Lease Agreement:

"Affiliate" shall mean any air transportation company that is (i) a parent or subsidiary of Airline, (ii) shares an International Air Transport Association (IATA) flight designator code with Airline at the Airport (Code-Sharing Partner), or (iii) otherwise operates under essentially the same trade name as Airline at the Airport and uses essentially the same livery as Airline; provided that no major airline, as such term is defined by the FAA, shall be classified as an Affiliate of another major airline, unless either clause (i) or (iii) above defines the relationship between such airlines at the Airport.

"Agreement" means the Airline Use and Lease Agreement between Authority and each Signatory Airline, as the same may be amended or supplemented from time to time.

"Air Transportation Business" means the business operated by the Airline at the Airport for commercial transportation by air of persons, property, mail and/or cargo.

"Air Transportation Company" means a company engaged in the business of scheduled or non-scheduled commercial transportation by air of persons, property, mail, and/or cargo.

"Airline" means the Scheduled Air Carrier executing an individual Agreement.

"Airline's Share of Surplus Revenue" means the amount, if any, calculated as a credit to the Signatory Airlines and Affiliates in accordance with the provisions of Exhibit E to the Agreement.

"Amortization Requirements" means the recovery or repayment of capital costs, excluding any amounts funded with PFCs or federal, state, or local grants, in substantially equal annual installments for a Capital Expenditure that is not debt financed. The amortization charge, if any, for each such expenditure shall be computed using the useful life of the Capital Expenditure as the amortization period, an interest component equal to the Thirty-Year Revenue Bond Index, published by the "Bond Buyer," (except that no interest component shall apply to Capital Expenditures funded with Revenues from any Air Transportation Company) and the date as the first day of the Fiscal Year after said Capital Expenditure is placed in service. In no event shall the total Amortization Requirements for a Fiscal Year for all Airline-supported Cost Centers exceed Two Million Dollars ($2,000,000), net of direct rental reimbursements for amortization of new facilities.

"Capital Expenditure" means an expenditure made to acquire, purchase or construct a single capital item or project for the purpose(s) of improving, maintaining or developing the Airport and shall include expenses incurred for development, study, analysis, review or planning efforts. For the purposes of the Agreement, a Capital Expenditure shall be One Hundred Thousand Dollars ($100,000) or more in net cost after application of any applicable federal, state and local grants or PFC funds for such Capital Expenditure and subject to annual adjustment in accordance with the Cost Increase Factor.

"City Airport Assessment" means that sum approved by the Authority to be paid to the City in accordance with an agreement between these two parties dated as of January 18, 2000 and the settlement agreement dated March 23, 1999 between the City and certain airlines, or any successor agreements containing substantially similar terms. The calculation of such sum shall be in the manner set forth in said agreements.

"Code Share Airline" means an Air Transportation Company providing regularly scheduled air service under a common airline code with a Signatory Airline.

"Cost Centers" shall mean those areas or functional activities set forth in Exhibit B to the Agreement.

"Debt Service" means the amount required for the accrual and payment of principal, interest on, and premium, if any, and other fees associated with all series of Bonds and Subordinated Indebtedness.

"Debt Service Reserve Fund" means any funds established by the Authority for monies necessary to satisfy any Debt Service Reserve Requirement of any Resolution or other financing document.

"Debt Service Reserve Requirement" means the requirement, if any, for the Debt Service Reserve Funds for all series of Bonds, Subordinated Indebtedness, and Other Indebtedness.

"Gate" means an aircraft loading position at the Airport, including the associated passenger loading bridge, the passenger holdroom and the stairway between the passenger holdroom and the apron.

"Operation and Maintenance Expenses or O&M Expenses" means expenses paid or accrued by the Authority for operation, maintenance, administration and ordinary current repairs to maintain and operate the Airport in a reasonable and prudent manner. O&M Expenses do not include: (i) the principal of, the premium, if any, or interest payable on any notes, bonds or indebtedness for borrowed money, including capital leases and the purchase price for any such obligations purchased pursuant to tender or otherwise: (ii) any allowance for amortization or depreciation, (iii) any other expenses for which the Authority is paid or reimbursed from any source and which is not includable as Revenues: (iv) any extraordinary items arising from early extinguishment of debt: (v) the City Airport Assessment: and (vi) Capital Expenditures.

"Operation and Maintenance Reserve Requirement" means the reserve maintained to pay not less than three (3) months of budgeted O&M Expenses.

"Other Debt Service" means the amount required during any period for the payment of principal of, interest and premium on, and other fees and amounts associated with Other Indebtedness of the Authority.

"Other Indebtedness" means any obligation incurred by the Authority to fund a Capital Expenditure which is neither Bonds nor Subordinated Indebtedness.

"Resolution" means any ordinance, resolution, indenture or other instrument authorizing the issuance of, and providing security for Bonds, Subordinated Indebtedness or Other Indebtedness.

"Revenues" means income accrued by the Authority, including investment earnings, from operations, leasing or use of the Airport as further defined in any Resolution or other financing document of the Authority (but not including PFC's, federal, state or local grants, nor investment earnings on these funds).

"Scheduled Air Carrier" means any Air Transportation Company performing or desiring to perform pursuant to published schedules, commercial air transportation services over specified routes to and from the Airport and holding the necessary authority from the appropriate federal or state agencies to provide such transportation.

"Signatory Airline" means a Scheduled Air Carrier which: (1) has an agreement with Authority substantially similar to the Agreement and which, operates a minimum of four (4) scheduled domestic flights a week, and leases from the Authority at a minimum one (1) Gate and associated operations space; or (2) has an agreement with Authority substantially similar to the Agreement and operates two (2) scheduled international flights a week. "Signatory Airline" shall also mean any Affiliate as long as it is accommodated by a Signatory Airline.

"Subordinated Indebtedness" means any bonds or other financing instrument or obligation having a lien on Revenues subordinate only to Bonds.

Additional words, and phrases used in the Agreement but not defined therein shall have the meaning set forth in the Indenture, a Resolution(s), or other financing document(s) of the Authority, or, if not so set forth, shall have their usual and customary meaning.

THE AIRLINE USE AND LEASE AGREEMENT

Term

Each Agreement became effective July 1, 2013, and, upon reaching its stated expiration date of June 30, 2018, was amended to extend its term through June 30, 2021, unless sooner terminated. Each Agreement shall be automatically renewed for two (2) additional terms of one year each unless either party shall give the other written notice ninety (90) days prior to the end of the then current term of its intent to terminate at the end of such term.

Use of Airport

Gates are leased on a preferential or common-use basis. Other Airline premises are leased on either an exclusive, common, or joint-use basis. The Agreement grants to the Signatory Airlines the use, in common with others, of the Airport and appurtenances, including the Airfield, Terminal and other areas for the purpose of operating an Air Transportation Business at the Airport.

Each Airline was provided with and agreed to exhibits to the Agreement (Exhibits C and D) setting forth the overall leased premises of each Signatory Airline.

The Signatory Airlines have the right to provide ground handling services and accommodate an Affiliate's Air Transportation Business at the Airport.

A Signatory Airline serves as the financial guarantor for all rentals, landing fees and other charges incurred by Affiliates in the course of such Affiliate's operations at the Airport as an Affiliate of the Signatory Airline.

Airline Requirements

The Signatory Airlines are required to meet certain insurance, environmental, and security standards that are consistent with the provisions contained in medium- and small-hub airport use and lease agreements across the country.

Airport Cost Centers

For the purposes of developing rentals, fee and charges under the Agreement, the Airport has been divided into the following Cost Centers to which all revenues, expenses, and Debt Service on General Revenue Bonds and PFC Revenue Bonds are allocated. Following are the direct Cost Centers:

A. *Airfield*. The Airfield cost center is comprised of the facilities for the general support of air navigation and flight activity requirements. The Airfield includes all runways, taxiways, avigation and other easements, ramp areas, approach and clear zones, safety and infield areas (together with all associated landing and navigational aids), landing area buffer requirements and all noise mitigation costs, and aviation controls and related system requirements.

B. *Terminal*. The Terminal cost center includes all passenger terminal facilities, and other related and appurtenant facilities, whether owned, operated, or maintained by the Authority, an airline or another tenant; together with associated exterior curbs, canopies, lighting, sidewalks, and landscaped areas adjacent to the terminal building, as well as enplanement and deplanement roadways.

C. *Passenger Loading Bridges*. The passenger loading bridges cost center is comprised of passenger loading bridges at the Airport that are owned and maintained by the Authority. Any airline-owned bridges are excluded from this cost center.

D. *Ground Transportation*. The Ground Transportation cost center includes: all public and employee parking facilities or areas, as well as taxi and limousine waiting areas, and all other areas and facilities that accommodate ground transportation, including exterior information and directional graphics, rental car ready/return facilities, and roadways and access roadways on Airport premises, other than the enplanement and deplanement roadways contained in the Terminal cost center.

E. *Other*. The Other cost center consists of those areas and facilities related to air cargo activities at the Airport; general aviation (GA), including any GA terminal facilities, fixed base operator (FBO) facilities, fueling facilities, and hangars; and any other revenue-producing activities on the Airport not assigned or defined above in the other four cost centers.

The Authority has established a series of functional areas in which costs are categorized called indirect Cost Centers, including administrative, general, trade development, maintenance, field, building, janitorial, police, and fire. These indirect Costs Centers are allocated to the direct Cost Centers as provided in Exhibit B-1 of the Agreement.

Rentals, Fees and Charges.

The Agreement provides for the periodic adjustment of Landing Fee Rate and Terminal Building Rental Rates, and other charges, normally in connection with the Authority's budgeting process to allow for variations in revenues, expenses, and other requirements. Detail regarding the calculation of Rentals, Fees, and Charges is provided in Exhibit E of the Agreement.

A. *Landing Fees*. Signatory Airline Landing Fees are calculated according to a compensatory methodology. The Airfield Requirement is calculated by summing all the Annual Debt Service, Debt Service Coverage Requirement, O&M Reserve Requirement, Debt Service Reserve Requirement, O&M Expenses, Amortization Requirement, and City Airport Assessment attributable to the Airfield Cost Center. The Airfield Requirement is then allocated among the Signatory Airlines and Non-Signatory Airlines on the basis of the landing weight for each group of carriers. The Signatory Airlines' share of the Airfield Requirement is then reduced by seventy-five percent (75%) of the Airline's Share of Surplus Revenues, described in (F) below. The adjusted Signatory Airline Airfield Requirement is then divided by the landed weight of the Signatory Airlines to derive the required Landing Fee rate per 1,000 pounds of landed weight.

B. *Terminal Rentals*. Signatory Airline Terminal Rentals are calculated according to a compensatory methodology. The Terminal Requirement is calculated by summing all the Annual Debt Service, Debt Service Coverage Requirement, O&M Reserve Requirement, Debt Service Reserve Requirement, O&M Expenses, Amortization Requirement, and City Airport Assessment attributable to the Terminal Cost Center less payments from Signatory Airlines for O&M Expenses incurred by the Authority attributable to the Terminal Cost Center. The Terminal Requirement is then allocated to the Signatory Airlines on the basis of the square footage leased by Signatory Airlines divided by the usable Terminal space (total Terminal space less mechanical and utility space.) The Signatory Airline's share of the Terminal Requirement is then reduced by twenty-five percent (25%) of the Airline's Share of Surplus Revenues, described in (F) below. The adjusted Signatory Airline Terminal Requirement is then divided by the square footage of Terminal space leased by the Signatory Airlines to derive the average Terminal Rental rate.

C. *Other Fees and Charges*. The Authority sets other fees and charges for Airline Terminal finishes and equipment, employee parking, public address system, flight information display system, telephone equipment, and other concessions and services provided by the Authority at the Airport.

D. *Annual Adjustment*. No later than April 1 of each year, the Authority shall notify the Airline of the proposed operating budget, Capital Improvement Program, and schedule of rates for rentals, fees and charges for the next Fiscal Year. No later than May 15 of sending the proposed operating budget, the Signatory Airlines and the Authority shall meet to discuss the information sent to the Signatory Airlines. Following the meeting, and prior to the end of the then current Fiscal Year, the Authority shall notify the Airline of the rates for rentals, fees and charges to be established for the next Fiscal Year.

E. *Mid-Year Adjustment*. Rates for rentals, fees and charges may, at the option of the Authority, be changed at any other time that unaudited monthly Airport financial data indicates that total rentals, fees and charges are anticipated to vary by more than ten percent (10%) from the total rentals, fees and charges that would be payable based upon the use of the monthly financial data then available for said Fiscal Year.

F. *Airline's Share of Surplus Revenue*. The Signatory Airlines are entitled to a fifty percent (50%) share of net surplus revenues determined by calculating total revenue less (i) operating and maintenance expenses, (ii) payments of the City Airport Assessment, (iii) replenishment of an operating and maintenance reserve requirement (3 months of budgeted expenses), (iv) Debt Service to the extent not paid with PFC Revenues, and (v) replenishment of a capital fund reserve requirement (maximum of $1 million per year with a total maximum capital fund reserve of $5 million). The Signatory Airlines' share is credited seventy-five percent (75%) to landing fees and twenty-five percent (25%) to terminal rentals. As referenced below, the Agreement provides that Airline's Share of Surplus Revenue shall not include revenues from facilities of the Authority financed by non-AMT Bonds of the Authority.

G. Further, the Agreement establishes the calculation of "Parking Incremental Revenue" to be used by the Authority to pay costs associated with the future construction of parking facilities. The "Parking Incremental Revenue" is defined as any incremental parking revenues generated from an increase in parking rates from the rates established on February 1, 2014. The Agreement sets forth a formula for the calculation of the Parking Incremental Revenues as 20% of long-term parking revenue less 20% of total parking revenue credit card fees. Upon the commencement of any debt service payments for parking-related improvements, the Parking Incremental Revenue will be reduced by such debt service amounts but not below zero. The Parking Incremental Revenue is deducted prior to the calculation of the airlines' share of surplus revenues.

H. *Settlement.* By November 1 each year, or as soon as audited financial data for the preceding Fiscal Year is available but no later than December 31 of each year, final rates for rentals, fees and charges for the preceding Fiscal Year shall be recalculated and Airline's Share of Surplus Revenue shall be calculated using audited financial data according to the methods set forth in Exhibit E. Upon the determination of any difference between the actual rentals, fees and charges paid by Signatory Airlines during the preceding Fiscal Year and the rentals, fees and charges that would have been paid by Signatory Airlines using recalculated rates and Airline Share of Surplus Revenue credits, Authority shall, in the event of overpayment, promptly credit to Airline the amount of such overpayment or if in the last year of the Agreement, a cash refund. In the event of underpayment, Authority shall invoice Airline for the amount of such underpayment. The invoiced amount shall be due within thirty (30) days of the receipt of such invoice, after which any unpaid balance shall be subject to interest.

For all purposes of the Agreement, Airline's Share of Surplus Revenue shall not include any revenue from Authority facilities which may now or in the future be financed by any non-AMT Bonds issued by the Authority. In addition, the Authority reserves the right to withhold Airline's Share of Surplus Revenue to the extent that Airline is delinquent or otherwise not current in its payments to Authority of any rentals, fees or charges of any kind, or upon the occurrence of any event of default by Airline until such time as such breach is cured.

In no case shall a Signatory Airline receive an amount of Airline's Share of Surplus Revenue that exceeds the amount of actual rentals, fees and charges, net of any incentive credits or other credits, paid by such Signatory Airline.

Capital Expenditures

The Authority shall submit to the Signatory Airlines its capital improvement program prior to the beginning of each Fiscal Year. The Signatory Airlines have no rights to approve or disapprove Capital Expenditures at the Airport.

Accommodation of New Entrant Airlines

The Authority maintains a policy of providing open access to the Airport and achieving balanced utilization of Airport facilities. The Authority reserves the right to require sharing and temporary use of Airline premises in accordance with the following procedures: (i) vacant or unassigned facilities and aircraft parking positions shall be utilized first to accommodate airlines requiring facilities at the Airport, and (ii) facilities and aircraft parking positions leased to Signatory Airlines shall be utilized second.

The Authority shall retain under its exclusive control and possession all vacant or unassigned facilities at the Airport. Such facilities will be made available first to meet space requirements of Signatory Airlines; second, to Signatory Airlines being relocated by the Authority; and third, to airlines not requiring permanent facilities or for the temporary accommodation of airlines pending allocation of permanent facilities.

Subordination to Resolution

The Agreement and all rights granted to the Airline thereunder are expressly subordinated and subject to the lien and provisions of the pledges, transfer, hypothecation, or assignment made by the Authority in any Resolution, or any proceedings authorizing and providing security for Other Indebtedness.

APPENDIX E

FORM OF OPINION OF BOND COUNSEL

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PROPOSED FORM OF BOND COUNSEL OPINION

Set forth below is the proposed form of the opinion of Kaufman & Canoles, P.C., bond counsel, with respect to the Bonds. It is preliminary and subject to change prior to delivery of the Bonds.

June ___, 2019

Norfolk Airport Authority
Norfolk International Airport
2200 Norview Avenue
Norfolk, Virginia 23518-5897

Norfolk Airport Authority
$54,435,000 Airport Revenue Bonds, Series 2019 (Non-AMT)

Ladies and Gentlemen:

We have examined Chapter 463, Virginia Acts of Assembly of 1948, as amended (the "Act"), certified copies of documents relating to the organization of the Norfolk Airport Authority (the "Authority") and certified copies of proceedings and other papers relating to the issuance and sale by the Authority of its $54,435,000 Airport Revenue Bonds, Series 2019 (Non-AMT) (the "Bonds"). The Bonds are being issued to (a) finance the design, acquisition, construction and equipping of a new parking garage at Norfolk International Airport, (b) pay capitalized interest on the Bonds through the period ending July 1, 2021, (c) provide for a deposit to the Debt Service Reserve Account, and (d) pay costs associated with the issuance of the Bonds. Reference is made to the form of the Bonds for additional information concerning their details, payment and redemption provisions, and the proceedings pursuant to which they are issued. Capitalized terms not defined herein shall have the meanings assigned in the Master Indenture of Trust dated as of April 1, 2001 (the "Master Indenture"), between the Authority and U.S. Bank National Association, as trustee (the "Trustee"), as supplemented by a First Supplemental Indenture of Trust, dated as of April 1, 2001, a Second Supplemental Indenture dated as of May 1, 2011, a Third Supplemental Indenture dated as of October 1, 2011 and a Fourth Supplemental Indenture dated as of June 1, 2019 (the Master Indenture as so supplemented, the "Indenture"). The Bonds are issued under, and are equally and ratably secured by, the Indenture.

Without undertaking to verify the same by independent investigation, we have relied on certifications by representatives of the Authority and others as to certain facts relevant to both our opinion and requirements of the Internal Revenue Code of 1986, as amended (the "Code"). The Authority has covenanted to comply with the current provisions of the Code regarding, among other matters, the use, expenditure and investment of the proceeds of the Bonds and the timely payment to the United States of any arbitrage rebate amounts with respect to the Bonds, all as set forth in proceedings and documents relating to the issuance of and security for the Bonds (the "Covenants").

Based on the foregoing and assuming the due authorization, execution and delivery of all documents by parties other than the Authority, we are of the opinion that:

(1) The Authority is duly organized and validly existing under the Act and has authority under the Act to issue and sell the Bonds.

(2) The Bonds have been duly authorized, executed and delivered in accordance with the Act and the Indenture and constitute valid and binding limited obligations of the Authority, payable as to principal and interest solely from Pledged Revenues (as defined in the Indenture) proceeds received from the sale of the Bonds and such other revenues of the Authority as may, under the Indenture, be available for such payment, including such amounts as may be on deposit in the funds and accounts established under the Indenture; provided that the pledge of Pledged Revenues to secure the Bonds made by the Authority pursuant to the Indenture will not become perfected until such Pledged Revenues have been deposited with the Trustee for deposit into the funds and accounts established under the Indenture. The Bonds shall not be a debt of the Commonwealth of Virginia (the "Commonwealth") or any political subdivision thereof and neither the Commonwealth nor any political subdivision thereof nor the City of Norfolk shall be liable thereon, nor in any event shall such Bonds be payable out of any funds or properties other than those of the Authority.

(3) The Indenture has been duly authorized, executed and delivered by the Authority, constitutes a valid and binding agreement of the Authority, and is enforceable against the Authority in accordance with its terms.

(4) The rights of the holders of the Bonds and the enforceability of such rights, including the enforceability by the other parties thereto of the obligations of the Authority under the Indenture, may be limited or otherwise affected by state and federal bankruptcy, insolvency, reorganization, moratorium, fraudulent conveyance and other laws, now or hereafter in effect, relating to or affecting the rights of creditors generally and to any judicially developed doctrines related thereto. Such obligations also are subject to usual equitable principles, which may limit the specific enforcement of certain remedies.

(5) Interest on the Bonds (including any accrued original issue discount properly allocable to an owner of a Bond) (a) is not included in gross income for federal income tax purposes, and (b) is not an item of tax preference for purposes of the federal alternative minimum income tax imposed on individuals and corporations. The opinion in the preceding sentence is subject to the condition that there is compliance subsequent to the issuance of the Bonds with all requirements of the Code that must be satisfied in order that interest thereon not be included in gross income for federal income tax purposes. Failure by the Authority to comply with the Covenants could cause interest on the Bonds to be included in gross income for federal income tax purposes retroactively to their date of issue. We express no opinion regarding other federal tax consequences of the ownership of or receipt or accrual of interest on the Bonds.

(6) Under existing statutes, interest on the Bonds is exempt from all income taxation by the Commonwealth and any political subdivision thereof.

Our services as bond counsel to the Authority have been limited to rendering the foregoing opinion based on our review of such proceedings and documents as we deem necessary to approve the validity of the Bonds and the tax-exempt status of the interest thereon. The foregoing opinion is in no respect an opinion as to the adequacy of Net Operating Revenues or otherwise as to the Authority's ability to provide for the payment of the Bonds or the accuracy or completeness of any information, including the information contained in the Preliminary Official Statement dated May 24, 2019, or the Official Statement dated June 4, 2019, that may have been relied upon by anyone in making the decision to purchase the Bonds. Our opinions set forth herein are based upon laws, rules, regulations and court decisions in effect as of the date hereof. Our opinions speak as of the date hereof and we undertake no obligation to update or supplement this letter to reflect any changes in law that may occur or become effective after the date hereof or to reflect any facts or circumstances that may hereafter come to our attention.

Very truly yours,

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APPENDIX F

FORM OF CONTINUING DISCLOSURE CERTIFICATE

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CONTINUING DISCLOSURE CERTIFICATE

Norfolk Airport Authority

$54,435,000
Airport Revenue Bonds
Series 2019 (Non-AMT)

This Continuing Disclosure Certificate (the "Disclosure Certificate") is executed and delivered by the Norfolk Airport Authority (the "Issuer") in connection with the issuance of its Airport Revenue Bonds, Series 2019 (Non-AMT), dated as of June 20, 2019, in the aggregate principal amount of $54,435,000 (the "Bonds"). The Bonds are being issued pursuant to a Master Indenture of Trust dated as of April 1, 2001 (the "Master Indenture"), by and between the Issuer and U.S. Bank National Association, as Trustee (the "Trustee"), as previously supplemented and amended by a First Supplemental Indenture dated as of April 1, 2001 (the "First Supplemental Indenture"), a Second Supplemental Indenture dated as of May 1, 2011 (the "Second Supplemental Indenture"), a Third Supplemental Indenture dated as of October 1, 2011 (the "Third Supplemental Indenture"), and as further supplemented by a Fourth Supplemental Indenture (the "Fourth Supplemental Indenture") dated as of June 1, 2019 (the Master Trust Indenture, the First Supplemental Indenture, the Second Supplemental Indenture, the Third Supplemental Indenture, and the Fourth Supplemental Indenture being hereinafter collectively referred to as the "Indenture"). The Issuer covenants and agrees as follows:

SECTION 1. Purpose of this Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the Issuer for the benefit of the holders and beneficial owners of the Bonds and in order to assist the Participating Underwriter in complying with Rule 15c2-12(b)(5) of the Securities and Exchange Commission (the "SEC").

SECTION 2. Definitions. In addition to the definitions set forth in the Indenture or parenthetically defined herein, which apply to any capitalized terms used in this Disclosure Certificate unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

"Annual Report" shall mean any Annual Report provided by the Issuer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

"Dissemination Agent" shall mean the Issuer, acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Issuer and which has filed with the Issuer a written acceptance of such designation.

"Fiscal Year" shall mean the period beginning on July 1 and ending on June 30, or such other 12-month period as may be adopted by the Issuer in accordance with law.

"Listed Events" shall mean any of the events listed in Section 5 of this Disclosure Certificate.

"MSRB" shall mean the Municipal Securities Rulemaking Board. As of the date hereof, the MSRB's required method of filing is electronically via its Electronic Municipal Market Access (EMMA) system, which is currently available at http://emma.msrb.org.

"Official Statement" means the final Official Statement prepared in connection with the Bonds.

"Participating Underwriter" shall mean the original underwriter of the Bonds required to comply with the Rule in connection with an offering of the Bonds.

"Rule" shall mean Rule 15c2-12(b)(5) adopted by the SEC under the Securities Exchange Act of 1934, as in effect on the date of this Disclosure Certificate.

SECTION 3. Provision of Annual Reports.

(a) The Issuer shall, or shall cause the Dissemination Agent to, not later than 180 days after the end of the Issuer's Fiscal Year, beginning with the Issuer's Fiscal Year ending June 30, 2019, provide to the MSRB (in an electronic format as prescribed by the MSRB), an Annual Report which is consistent with the requirements of Section 4 of this Disclosure Certificate. Not later than five (5) business days prior to said date, the Issuer shall provide the Annual Report to the Dissemination Agent (if other than the Issuer). 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 4 of this Disclosure Certificate; provided that the audited financial statements of the Issuer may be submitted separately from the balance of the Annual Report.

(b) If the Issuer is unable to provide to the MSRB an Annual Report by the date required in subsection (a), the Issuer shall file or cause to be filed with the MSRB a notice in substantially the form attached to this Disclosure Certificate as Exhibit A.

SECTION 4. Content of Annual Reports. The Issuer's Annual Report shall contain or incorporate by reference the following:

(a) A copy of its annual financial statements of the Issuer prepared in accordance with generally accepted accounting principles audited by a firm of certified public accountants. If audited annual financial statements are not available by the time specified in Section 3(a) above, audited financial statements will be provided when and if available.

(b) An update of the type of information identified in Exhibit B hereto, which is contained in the tables in the Official Statement with respect to the Bonds.

Any or all of the items listed above may be incorporated by reference from other documents (including official statements), which are available to the public on the MSRB's Internet Web Site or filed with the SEC. The Issuer shall clearly identify each such document incorporated by reference.

SECTION 5. Reporting of Listed Events. The Issuer shall file or cause to be filed with the MSRB, in a timely manner not in excess of ten (10) business days after the occurrence of the event, notice of any of the events listed below with respect to the Bonds. All of the events currently mandated by the Rule are listed below; however, some may not apply to the Bonds.

(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 bondholders, *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 Issuer;[1]

(13) 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 Issuer, 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*;

(14) Appointment of a successor or additional trustee or the change of name of a trustee, *if material*;

[1] For the purposes of the event identified in subparagraph (b)(5)(i)(C)(12) of the Rule, 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 official 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.

(15) Incurrence of a financial obligation[2] of the Issuer, *if material*, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the Issuer, 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[2] of the Issuer, any of which reflect financial difficulties.

SECTION 6. Format; Identifying Information. All documents provided to the MSRB pursuant to this Disclosure Certificate shall be in the format prescribed by the MSRB and accompanied by identifying information as prescribed by the MSRB.

As of the date of this Disclosure Certificate, all documents submitted to the MSRB must be in portable document format (PDF) files configured to permit documents to be saved, viewed, printed and retransmitted by electronic means. In addition, such PDF files must be word-searchable, provided that diagrams, images and other non-textual elements are not required to be word-searchable.

SECTION 7. Termination of Reporting Obligation. The Issuer's obligations under this Disclosure Certificate shall terminate upon the earliest of: (i) the date of legal defeasance, prior redemption or payment in full of all of the Bonds; (ii) the date that the Issuer shall no longer constitute an "obligated person" within the meaning of the Rule; or (iii) the date on which those portions of the Rule which require this written undertaking are held to be invalid by a court of competent jurisdiction in a non-appealable action, have been repealed retroactively or otherwise do not apply to the Bonds.

SECTION 8. Dissemination Agent.

(a) The Issuer may, from time to time, appoint or engage a Dissemination Agent to assist the Issuer in carrying out its obligations under this Disclosure Certificate, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. If the Issuer elects not to appoint a successor Dissemination Agent, it shall perform the duties thereof under this Disclosure Certificate. The Dissemination Agency shall have only such duties as are specifically set forth in this Disclosure Certificate and any other agreement between the Issuer and the Dissemination.

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[2] For purposes of the events identified in subparagraphs (b)(5)(i)(C)(15) and (16) of the Rule, the term "financial obligation" is defined to mean a (A) debt obligation; (B) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (C) a guarantee of (A) or (B). The term "financial obligation" does not include municipal securities as to which a final official statement has been otherwise provided to the MSRB consistent with the Rule. Numerous other terms contained in these subsections and/or in the definition of "financial obligation" are not defined in the Rule; SEC Release No. 34-83885 contains a discussion of the current SEC interpretation of those terms. For example, in the Release, the SEC provides guidance that the term "debt obligation" generally should be considered to include only lease arrangements that operate as vehicles to borrow money.

(b) In addition to the filing duties on behalf of the Issuer described in this Disclosure Certificate, the Dissemination Agent shall:

(1) each year, prior to the date for providing the Annual Report, determine the appropriate electronic format prescribed by the MSRB;

(2) send written notice to the Issuer at least forty-five (45) days prior to the date the Annual Report is due stating that the Annual Report is due as provided in Section 3(a) hereof; and

(3) if the Dissemination Agent is other than the Issuer, certify in writing to the Issuer that the Annual Report has been provided pursuant to this Disclosure Certificate and the date it was provided.

(4) If the Annual Report (or any portion thereof) is not provided to the MSRB by the date required in Section (3)(a), the Dissemination Agent shall file with the MSRB a notice in substantially the form attached to this Disclosure Certificate as Exhibit A.

SECTION 9. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the Issuer may amend this Disclosure Certificate and may waive any provision of this Disclosure Certificate, without the consent of the holders and beneficial owners of the Bonds, if such amendment or waiver does not, in and of itself, cause the undertakings herein (or action of any Participating Underwriter in reliance on the undertakings herein) to violate the Rule, but taking into account any subsequent change in or official interpretation of the Rule. The Issuer will provide notice of such amendment or waiver to the MSRB.

SECTION 10. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the Issuer from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the Issuer chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the Issuer shall have no obligation under this Disclosure Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

SECTION 11. Default. In the event of a failure of the Issuer to comply with any provision of this Disclosure Certificate, any holder or beneficial owner of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Issuer to comply with its obligations under this Disclosure Certificate. A default under this Disclosure Certificate shall not be deemed an event of default under the Indenture, and the sole remedy under this Disclosure Certificate in the event of any failure of the Issuer to comply with this Disclosure Certificate shall be an action to compel performance.

SECTION 12. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the Issuer, the Dissemination Agent, the Participating Underwriter and the holders and beneficial owners from time to time of the Bonds, and shall create no rights in any other person or entity.

DATE: June 20, 2019

NORFOLK AIRPORT AUTHORITY

By:__________________________________
Robert S. Bowen
Executive Director

EXHIBIT "A"

NOTICE OF FAILURE TO FILE ANNUAL REPORT

Name of Issuer:	Norfolk Airport Authority
Name of Bond Issue:	$54,435,000 Norfolk Airport Authority Airport Revenue Bonds, Series 2019 (Non-AMT)
Date of Issuance:	June 20, 2019
CUSIP Numbers:	655857DQ0, 655857DR8, 655857DS6, 655857DT4, 655857DU1, 655857DV9, 655857DW7, 655857DX5, 655857DY3, 655857DZ0, 655857EA4, 655857EB2, 655857EC0, 655857ED8, 655857EE6, 655857EF3, 655857EG1, 655857EH9, 655857EJ5

NOTICE IS HEREBY GIVEN that the Issuer has not provided an Annual Report with respect to the above-named Bonds as required by the Continuing Disclosure Certificate dated June 20, 2019. The Issuer anticipates that the Annual Report will be filed by _______________, 20___.

Dated: ______________, 20___

NORFOLK AIRPORT AUTHORITY

By:____

____
Executive Director

EXHIBIT "B"

OFFICIAL STATEMENT INFORMATION TO BE UPDATED

(a) The Signatory Airlines (as defined in the Official Statement) currently serving the Airport;

(b) The number of enplanements at the Airport for the immediately preceding fiscal year;

(c) Enplanement passenger share of each Signatory Airline for the immediately preceding fiscal year;

(d) Signatory Airline cost per enplanement for the immediately preceding fiscal year;

(e) All indebtedness (other than the Series 2019 Bonds) issued, remarketed or incurred by the Issuer during the immediately preceding fiscal year;

(f) Debt service requirements and calculation of debt service coverage ratio for the immediately preceding fiscal year;

(h) Current rates for rentals, fees and charges for the Signatory Airlines under the Airport Agreements (as defined in the Official Statement);

(i) Revenues from concessions at the Airport for the immediately preceding fiscal year;

(j) Parking fees for the immediately preceding fiscal year;

(k) PFC Revenues (as defined in the Official Statement) for the immediately preceding fiscal year; and

(l) Payments made to the City of Norfolk on the immediately preceding July 1.

APPENDIX G

INFORMATION REGARDING THE DEPOSITORY TRUST COMPANY AND ITS BOOK-ENTRY ONLY SYSTEM

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INFORMATION REGARDING THE DEPOSITORY TRUST COMPANY AND ITS BOOK-ENTRY SYSTEM

The Depository Trust Company ("DTC") will act as securities depository for the Series 2019 Bonds. The Series 2019 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 security certificate will be issued for each maturity of the Series 2019 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 in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of the Series 2019 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2019 Bonds on DTC's records. The ownership interest of each actual purchaser of each Series 2019 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. A Beneficial Owner is, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of the Beneficial Owner's holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2019 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 2019 Bonds, except in the event that use of the book-entry system for the Series 2019 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2019 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 2019 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2019 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2019 Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of the Series 2019 Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Series 2019 Bonds, such as redemptions, tenders, defaults and proposed amendments to the Series 2019 Bond documents. For example, Beneficial Owners of the Series 2019 Bonds may wish to ascertain that the nominee holding the Series 2019 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners.

Redemption notices shall be sent to DTC. If less than all of the Series 2019 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 2019 Bonds unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Authority as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Series 2019 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 2019 Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Authority or the Trustee, on payable dates 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 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 an authorized representative of DTC) is the responsibility of the 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 2019 Bonds at any time by giving reasonable notice to the Authority or the Trustee. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The Authority, under certain circumstances, may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered to DTC.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the Authority believes to be reliable, but neither the Authority or the Authority take any responsibility for the accuracy thereof.

None of the Authority, the Underwriters or the Trustee, as paying agent, will have any responsibility or obligations to the Direct Participants, the Indirect Participants or the Beneficial Owners with respect to (1) the accuracy of any records maintained by DTC, any Direct Participant

or any Indirect Participant; (2) the payment by any Direct Participant or any Indirect Participant of any amount due to any beneficial owner in respect of the principal amount or redemption price of or interest on the Series 2019 Bonds; (3) the delivery by any Direct Participant or any Indirect Participant of any notice to any Beneficial Owner that is required or permitted to be given to Bondholders under the terms of the Indenture; (4) the selection of the beneficial owners to receive payment in the event of any partial redemption of the Series 2019 Bonds; or (5) any consent given or other action taken by DTC as Bondholder.

So long as Cede & Co. is the registered owner of the Series 2019 Bonds, as nominee of DTC, references in this Official Statement to the Owners of the Series 2019 Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners and Cede & Co. will be treated as the only Bondholder of the Series 2019 Bonds for all purposes under the Indenture.

The Authority may enter into amendments to the agreement with DTC or successor agreements with a successor securities depository, relating to the book-entry system to be maintained with respect to the Series 2019 Bonds without the consent of Beneficial Owners or Bondholders.

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NORFOLK AIRPORT AUTHORITY • AIRPORT REVENUE BONDS, SERIES 2019 (NON-AMT)

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Printed by: ImageMaster, LLC
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