New Money and Refunding Issue – Book-Entry Only **RATINGS: (See "Ratings" herein)**

In the opinion of Co-Bond Counsel, interest on the Series 2021 Bonds is not includable in gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions except for interest on any 2021 Bond during any period such 2021 Bond is held by a person who is a "substantial user" of the facilities financed or refinanced by the Series 2021 Bonds or a "related person" within the meaning of Section 147(a) of the Internal Revenue Code of 1986, as amended. The opinion is subject to the condition described in "TAX MATTERS" herein. Interest on the Series 2021 Bonds is treated as an item of tax preference for purposes of computing the federal alternative minimum tax on individuals. Under the laws of the Commonwealth of Pennsylvania, interest on the Series 2021 Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax. For a more complete discussion, see "TAX MATTERS" herein.

$302,040,000
THE CITY OF PHILADELPHIA, PENNSYLVANIA
Airport Revenue and Refunding Bonds, Series 2021
(AMT/Private Activity)

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

Terms All capitalized terms that are not otherwise defined on this cover page have the meanings provided to such terms in this Official Statement.

Series 2021 Bonds The City of Philadelphia, Pennsylvania (the "City"), a corporation and body politic and City of the First Class existing under the laws of the Commonwealth of Pennsylvania (the "Commonwealth") is issuing its $302,040,000 aggregate principal amount of Airport Revenue and Refunding Bonds, Series 2021 (AMT/Private Activity) (the "Series 2021 Bonds") for the benefit of the Philadelphia International Airport (the "Airport") and Northeast Philadelphia Airport (the "Northeast Airport") owned by the City and operated by the Division of Aviation of the City's Department of Commerce.

Purpose The Series 2021 Bonds are being issued for the purpose of providing funds, together with other available moneys, to (i) fund a deposit to the Project Fund to finance certain capital projects as described in this Official Statement, (ii) finance capitalized interest on a portion of the Series 2021 Bonds, (iii) refund all or a portion of the City's Outstanding Airport Revenue Refunding Bonds, Series 2011, consisting of the Series 2011A (AMT) Bonds (the "2011A Bonds") and the Series 2011B (AMT) Bonds (the "2011B Bonds" and together with the 2011A Bonds, the "Refunded Bonds"), as more fully described on Schedule 1 hereto, (iv) pay the costs of the bond insurance policy and (v) pay the costs of issuance of the Series 2021 Bonds, as more fully described herein under "PLAN OF FINANCE".

Security **THE BONDS ARE LIMITED OBLIGATIONS OF THE CITY OF PHILADELPHIA PAYABLE SOLELY FROM THE PLEDGED AMOUNTS (AS DESCRIBED HEREIN). THE BONDS ARE NOT SECURED BY A PLEDGE OF THE FULL FAITH, CREDIT OR TAXING POWER OF THE CITY. THE BONDS DO NOT CREATE ANY DEBT OR CHARGE AGAINST THE TAX OR GENERAL REVENUES OF THE CITY OR CREATE A LIEN AGAINST ANY PROPERTY OF THE CITY OTHER THAN THE PLEDGED AMOUNTS.**

Bond Insurance The scheduled payment of principal of and interest on the Series 2021 Bonds serially maturing on July 1 of the years 2037 through and including 2041 and the term bond maturing on July 1, 2046 (collectively, the "Insured Bonds"), when due will be guaranteed under an insurance policy to be issued concurrently with the delivery of the Insured Bonds by ASSURED GUARANTY MUNICIPAL CORP.

Redemption The Series 2021 Bonds are subject to optional and mandatory redemption prior to maturity. See "DESCRIPTION OF THE SERIES 2021 BONDS – Optional Redemption of the Series 2021 Bonds" and "– Mandatory Redemption".

Payments Interest on the Series 2021 Bonds is payable semiannually on each January 1 and July 1, commencing January 1, 2022.

Tax Status For information on the tax status of the Series 2021 Bonds, see the italicized language at the top of this cover page and "TAX MATTERS" herein.

Delivery It is expected that the Series 2021 Bonds will be available for delivery to The Depository Trust Company ("DTC") via DTC's FAST automated securities transfer program on or about July 7, 2021.

The Sixteenth Supplemental Ordinance provides for certain amendments to the General Ordinance (as defined herein), some of which became effective without the consent of any Bondholders, including the Series 2021 Bondholders, others which became effective upon the consent of the applicable percentage and others of which will become effective upon 100% Bondholder consent. By acceptance of a confirmation of purchase of the Series 2021 Bonds, each Beneficial Owner (i.e., the actual purchasers of the Series 2021 Bonds) will be deemed to have approved and agreed to the amendments to the General Ordinance described herein. See "AMENDMENTS TO THE GENERAL ORDINANCE" herein.

THIS COVER PAGE CONTAINS CERTAIN INFORMATION FOR QUICK REFERENCE ONLY. IT IS NOT INTENDED TO BE A SUMMARY OF THE BONDS OR THIS OFFICIAL STATEMENT. INVESTORS MUST READ THE ENTIRE OFFICIAL STATEMENT, INCLUDING THE APPENDICES, WHICH ARE AN INTEGRAL PART HEREOF, TO OBTAIN INFORMATION ESSENTIAL TO THE MAKING OF AN INFORMED INVESTMENT DECISION REGARDING THE BONDS.

The Series 2021 Bonds are offered when, as and if issued and accepted by the Underwriters, subject to the approving legal opinion of Saul Ewing Arnstein & Lehr LLP and Andre C. Dasent, P.C., both of Philadelphia, Pennsylvania, Co-Bond Counsel. Certain legal matters relating to disclosure will be passed upon for the City by Hardwick Law Firm, LLC and Greenberg Traurig, LLP, both of Philadelphia, Pennsylvania, Co-Disclosure Counsel. Certain legal matters will be passed upon for the Underwriters by Underwriters' Counsel, Squire Patton Boggs (US) LLP, of Washington, D.C. Certain legal matters will be passed upon for the City of Philadelphia by the City Solicitor.

BofA Securities **Ramirez & Co., Inc.**

Oppenheimer & Co. **UBS**

Dated: June 29, 2021

$302,040,000
THE CITY OF PHILADELPHIA, PENNSYLVANIA
Airport Revenue and Refunding Bonds, Series 2021
(AMT/Private Activity)

MATURITY SCHEDULE

Maturity Date (July 1)	Principal Amount	Interest Rate	Price	Yield	CUSIP*
2022	$ 5,000	5.000%	104.611	0.300%	717817XC9
2023	5,000	5.000%	109.078	0.400%	717817XD7
2024	7,815,000	5.000%	113.564	0.420%	717817XE5
2025	15,640,000	5.000%	117.077	0.650%	717817XF2
2026	42,505,000	5.000%	120.315	0.830%	717817XG0
2027	44,640,000	5.000%	123.240	0.990%	717817XH8
2028	20,850,000	5.000%	125.916	1.130%	717817XJ4
2029	6,390,000	5.000%	128.145	1.280%	717817XK1
2030	6,705,000	5.000%	130.289	1.400%	717817XL9
2031	7,045,000	5.000%	132.229	1.510%	717817XM7
2032	4,810,000	5.000%	131.040†	1.620%	717817XN5
2033	5,050,000	5.000%	130.396†	1.680%	717817XP0
2034	5,300,000	5.000%	129.863†	1.730%	717817XQ8
2035	5,565,000	5.000%	129.757†	1.740%	717817XR6
2036	5,845,000	5.000%	129.544†	1.760%	717817XS4
2037±	6,135,000	4.000%	119.315†	1.870%	717817XT2
2038±	6,380,000	4.000%	119.014†	1.900%	717817XU9
2039±	6,635,000	4.000%	118.914†	1.910%	717817XV7
2040±	6,905,000	4.000%	118.714†	1.930%	717817XW5
2041±	7,180,000	4.000%	118.415†	1.960%	717817XX3

$40,440,000, 4.000% Term Bonds due July 1, 2046±, Yield: 2.040%, Price 117.622†, CUSIP* 717817XY1

$50,195,000, 5.000 % Term Bonds due July 1, 2051, Yield: 2.050%, Price 126.510†, CUSIP* 717817XZ8

---

* CUSIP is a registered trademark of the American Bankers Association (the "ABA"). CUSIP data is provided by CUSIP Global Services, which is managed on behalf of the ABA by S&P Capital IQ, a division of McGraw-Hill Financial, Inc. The CUSIP numbers listed above are being provided solely for the convenience of the holders of the 2021 Bonds only at the time of issuance of the 2021 Bonds and the City and the Underwriters do not make any representation with respect to such CUSIP numbers or undertake any responsibility for their accuracy now or at any time in the future. The CUSIP numbers are subject to being changed after the issuance of the 2021 Bonds as a result of various subsequent actions including but not limited to, a refunding in whole or in part of the 2021 Bonds or as a result of the procurement of secondary market portfolio insurance or other similar enhancement by investors that may be applicable to all or a portion of the 2021 Bonds.

† Priced to first optional redemption date of July 1, 2031.

± Insured by Assured Guaranty Municipal Corp.

THE CITY OF PHILADELPHIA, PENNSYLVANIA

MAYOR
JAMES F. KENNEY

MAYOR'S CHIEF OF STAFF
James Engler

MAYOR'S CABINET

Tumar Alexander ..... Managing Director
Rob Dubow ..... Director of Finance
Diana P. Cortes ..... City Solicitor
Nefertiri Sickout ..... Chief Diversity, Equity & Inclusion Officer
Stephanie Tipton ..... Chief Administrative Officer
Michael A. Rashid ..... Director of Commerce
Anne Fadullon ..... Director of Planning & Development
Otis Hackney ..... Chief Education Officer
Sheila Hess ..... City Representative
Sarah E. Stevenson ..... Chief Integrity Officer
Alexander F. DeSantis ..... Inspector General
Richard Lazer ..... Deputy Mayor for Labor Relations
Cynthia Figueroa ..... Deputy Mayor for Children and Families
Deborah Mahler ..... Deputy Mayor for Intergovernmental Affairs

---

CITY TREASURER
Jacqueline Dunn

PHILADELPHIA DEPARTMENT OF COMMERCE
DIVISION OF AVIATION

Rochelle L. Cameron ..... Chief Executive Officer
Tracy S. Borda ..... Chief Financial Officer
Keith Brune ..... Chief Operating Officer
James Tyrrell ..... Chief Revenue Officer
Allen Mehta ..... Acting Chief Information Officer
Cassandra Williams ..... Deputy Chief Financial Officer
Api Appulingam ..... Deputy Director of Capital Development

CITY CONTROLLER
Rebecca Rhynhart

CO-FINANCIAL ADVISORS
Frasca & Associates, LLC and Phoenix Capital Partners, LLP

FISCAL AGENT
U.S. Bank National Association

No dealer, broker, salesperson or other person has been authorized by the City or the Underwriters to give any information or to make representations, other than as contained in this Official Statement, and if given or made, such other information or representations must not be relied upon as having been authorized by the City or the Underwriters. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Series 2021 Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale.

This Official Statement is not to be construed as a contract or agreement between the City, the Underwriters and the purchasers or owners of any Series 2021 Bonds. The information set forth herein has been furnished by the City and includes information obtained from other sources, all of which are believed to be reliable. The information and expressions of opinion herein are subject to change without notice and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City or of the Division of Aviation of the Department of Commerce or in any other matters discussed herein since the date hereof or the date as of which particular information is given, if earlier. Such information and expressions of opinion are made for the purpose of providing information to prospective investors and are not to be used for any other purpose or relied on by any other party.

The order and placement of materials in this Official Statement, including the Appendices, are not to be deemed a determination of relevance, materiality or importance, and this Official Statement, including the cover page, the inside cover page and the Appendices, must be considered in its entirety. The captions and headings in this Official Statement are for convenience only and in no way define, limit or describe the scope or intent, or affect the meaning or construction, of any provisions or sections of this Official Statement. The offering of the Series 2021 Bonds is made only by means of this entire Official Statement.

References to website addresses presented herein, including websites containing information about the City 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 Official Statement for any purpose, including for purposes of Rule 15c2-12 promulgated by the Securities Exchange Commission.

The statements contained in this Official Statement, including the Appendices, and in any other information provided by the City and other parties to this transaction described herein that are not purely historical are forward-looking statements. Such forward-looking statements can be identified, in some cases, by terminology such as "projects," "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "illustrate," "example," and "continue," or the singular, plural, negative or other derivations of these of other comparable terms. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to such parties on the date hereof, and the City assumes no obligation to update any such forward-looking statements. The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including, but not limited to, risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in various important factors. Other such risks and uncertainties include, among others, changes in regional, domestic and international political, social and economic conditions, federal, state and local statutory and regulatory initiatives, the financial condition of individual airlines and carriers and the airline industry generally, changes in the tourism industry, international, federal, state and local regulations regarding air travel, the COVID-19 pandemic, the outbreak of any other disease or public health threat, other future global health concerns, and other events or circumstances beyond the control of the City. Accordingly, actual results may vary from the projections, forecasts and estimates contained in this Official Statement, including the Appendices, and such variations may be material, which could affect the ability to fulfill some or all of the obligations under the Series 2021 Bonds.

The Underwriters (who have provided this sentence for inclusion herein) have reviewed the information in this Official Statement, including the Appendices, in accordance with, and as a part of, their respective 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.

Assured Guaranty Municipal Corp. ("AGM") makes no representation regarding the Series 2021 Bonds or the advisability of investing in the Series 2021 Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "Bond Insurance" and "Appendix IV - Specimen Municipal Bond Insurance Policy".

Upon issuance, the Series 2021 Bonds will not be registered under the Securities Act of 1933, as amended, and will not be listed on any stock or other Securities Exchange, nor have the Ordinances been qualified under the Trust Indenture Act of 1939, as amended, in reliance upon exemptions contained in such acts.

THE BONDS HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS OFFICIAL STATEMENT; ANY REPRESENTATION TO THE CONTRARY MAY BE A CRIMINAL OFFENSE.

THIS OFFICIAL STATEMENT IS BEING PROVIDED TO PROSPECTIVE PURCHASERS EITHER IN BOUND PRINTED FORM ("ORIGINAL BOUND FORMAT") OR IN ELECTRONIC FORMAT ON THE FOLLOWING WEBSITE: WWW.THEMUNIGROUP.COM. THIS OFFICIAL STATEMENT MAY BE RELIED UPON ONLY IF IT IS IN ITS ORIGINAL BOUND FORMAT OR IF IT IS PRINTED IN FULL DIRECTLY FROM SUCH WEBSITE.

[THIS PAGE INTENTIONALLY LEFT BLANK]

Summary of the Offering

This summary is subject in all respects to more complete information contained in this Official Statement and should not be considered a complete statement of the facts material to making an investment decision. The offering of the Series 2021 Bonds to potential investors is made only by means of the entire Official Statement, including the cover page, the inside cover page, and the Appendices.

Issuer:	The City of Philadelphia, Pennsylvania (the "City"), a corporation and body politic and City of the First Class existing under the laws of the Commonwealth of Pennsylvania, for the benefit of the Airport System owned by the City and operated by the Division of Aviation of the City's Department of Commerce.
Bonds Offered:	$302,040,000 aggregate principal amount of Airport Revenue and Refunding Bonds, Series 2021 (AMT/Private Activity) (the "Series 2021 Bonds").
Maturities:	The Series 2021 Bonds mature on the dates and in the principal amounts set forth on the inside cover page hereof.
Interest Payment Dates:	Interest on the Series 2021 Bonds is payable semiannually on each January 1 and July 1, commencing January 1, 2022.
Use of Proceeds:	The Series 2021 Bonds are being issued for the purpose of providing funds, together with other available moneys, to (i) fund a deposit to the Project Fund to finance certain capital projects as described in this Official Statement, (ii) finance capitalized interest on a portion of the Series 2021 Bonds, (iii) refund all or a portion of the City's Outstanding Airport Revenue Refunding Bonds, Series 2011, consisting of the Series 2011A (AMT) Bonds (the "2011A Bonds") and the Series 2011B (AMT) Bonds (the "2011B Bonds" and together with the 2011A Bonds, the "Refunded Bonds"), as more fully described on Schedule 1 hereto, (iv) pay the costs of the bond insurance policy and (v) pay the costs of issuance of the Series 2021 Bonds, all as described herein under "PLAN OF FINANCE".
Redemption:	The Series 2021 Bonds are subject to optional and mandatory redemption prior to maturity. See "DESCRIPTION OF THE SERIES 2021 BONDS – Optional Redemption of the Series 2021 Bonds" and "– Mandatory Redemption" herein.
Security and Sources of Payment:	Pursuant to the General Ordinance (as defined herein), the City has covenanted that the Series 2021 Bonds, together with all other parity Airport Revenue Bonds (as defined herein) issued under and outstanding or subject to the General Ordinance, are and will be equally and ratably secured by a lien on and security interest in (i) Project Revenues (as defined herein); (ii) amounts payable to the City under a Qualified Swap; (iii) all amounts on deposit in or credited to the Aviation Funds (including the Parity Sinking Fund Reserve Account), except for amounts deposited into any Non-Parity Sinking Fund Reserve Subaccount; and (iv) proceeds of the foregoing (the amounts described in subsections (i) through (iv) are sometimes hereinafter referred to, collectively, as the "Pledged Amounts"). The City intends to pledge Passenger Facility Charges ("PFCs") to pay debt service on a portion of

the Series 2021 Bonds. See "SECURITY FOR THE AIRPORT REVENUE BONDS".

In 2017, the Sixteenth Supplemental Ordinance (the "Sixteenth Supplemental Ordinance") to the General Ordinance was approved by the Mayor. The Sixteenth Supplemental Ordinance provides for certain amendments to the General Ordinance, some of which became effective upon enactment without the consent of any Bondholders, some of which became effective upon the consent of 67% of Bondholders and others which will become effective upon the consent of 100% of Bondholders, as described herein under "AMENDMENTS TO THE GENERAL ORDINANCE".

One of the amendments that will become effective with Bondholder consent of 100% in principal amount (or Original Value in the case of Capital Appreciation Bonds) of Airport Revenue Bonds Outstanding, will permit the City to release certain revenues ("Released Revenues") from the definition of "Project Revenues" upon satisfaction of certain historical and projected debt service coverage tests, delivery of an opinion of Bond Counsel to the effect that the tax-exemption of the Airport Revenue Bonds would not be adversely affected, and receipt of a ratings confirmation for such Airport Revenue Bonds. See "AMENDMENTS TO THE GENERAL ORDINANCE" and APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE", herein.

THE BONDS ARE LIMITED OBLIGATIONS OF THE CITY PAYABLE SOLELY FROM THE PLEDGED AMOUNTS. THE BONDS ARE NOT SECURED BY A PLEDGE OF THE FULL FAITH, CREDIT OR TAXING POWER OF THE CITY. THE BONDS DO NOT CREATE ANY DEBT OR CHARGE AGAINST THE TAX OR GENERAL REVENUES OF THE CITY OR CREATE A LIEN AGAINST ANY PROPERTY OF THE CITY OTHER THAN THE PLEDGED AMOUNTS.

See "SECURITY FOR THE AIRPORT REVENUE BONDS" herein.

Parity Sinking Fund Reserve Account:

The City is required to maintain an aggregate balance in the Parity Sinking Fund Reserve Account for all Airport Revenue Bonds which are to be secured by the Parity Sinking Fund Reserve Account equal to the lesser of (a) the greatest amount of Debt Service Requirements on Airport Revenue Bonds payable in any one fiscal year, determined as of any particular date, or (b) the maximum amount permitted by the Internal Revenue Code of 1986, as amended (the "Code"), to be maintained without yield restriction for bonds the interest on which is not includable in gross income for Federal income tax purposes; provided, however, that additional Airport Revenue Bonds may be secured by a Non-Parity Sinking Fund Reserve Account under certain circumstances. See "SECURITY FOR THE AIRPORT REVENUE BONDS –Sinking Fund Reserve Account" herein.

Under the Sixteenth Supplemental Ordinance, an amendment to the General Ordinance affecting the definition of "Sinking Fund Reserve

Requirement" is subject to 100% Bondholder consent. See "AMENDMENTS TO THE GENERAL ORDINANCE" herein.

COVID-19 pandemic:

Coronavirus ("COVID-19") continues to spread across the globe, including the United States. Airports in the United States have been acutely affected by interruptions in travel, reductions in passenger volumes and flights, as well as by the broader economic slowdown resulting from the COVID-19 pandemic. The COVID-19 pandemic has caused significant disruptions in domestic, international and business air travel and has negatively affected the financial condition and operations of the City, the Division of Aviation and the Airport System. In December 2020, vaccinations started to be deployed across the United States and worldwide. The widespread distribution of effective vaccines is expected to have a meaningful impact on demand for air travel. For more information on the effects of the COVID-19 pandemic on the Airport System and its responsive measures implemented to date, see "IMPACT OF COVID-19 ON THE AIRPORT SYSTEM" herein.

Amendments to General Ordinance:

The Sixteenth Supplemental Ordinance provides for amendments to the General Ordinance, some of which became effective upon enactment without the consent of any Bondholders, others which became effective upon 67% consent of Bondholders and some of which will become effective upon 100% consent of Bondholders. By acceptance of a confirmation of purchase of the Series 2021 Bonds, each Beneficial Owner (i.e., the actual purchasers of the Series 2021 Bonds) will be deemed to have approved and agreed to the amendments to the General Ordinance described herein. As of June 1, 2021, 84.6% of Bondholders have consented to the amendments to the General Ordinance. Upon the issuance of the Series 2021 Bonds, it is expected that approximately 95% of Bondholders will have consented to the amendments to the General Ordinance. See "AMENDMENTS TO THE GENERAL ORDINANCE" herein.

Rate Covenant:

The City covenants with the holders of the Airport Revenue Bonds that it will, at a minimum, impose, charge and recognize as revenues in each fiscal year such rentals, charges and fees as shall, together with that portion of the Aviation Operating Fund balance attributable to Amounts Available for Debt Service and carried forward at the beginning of such fiscal year and together with all other Amounts Available for Debt Service to be received in such fiscal year, be equal to not less than the greater of: (a) the sum of: (i) all Net Operating Expenses payable during such fiscal year; (ii) 150% of the amount required to pay the Debt Service Requirements during such fiscal year; (iii) the amount, if any, required to be paid into the Sinking Fund Reserve Account during such fiscal year; and (iv) the amount, if any, required to be paid into the Renewal Fund during such fiscal year; or (b) the sum of: (i) all Operating Expenses payable during such fiscal year, and (ii) (A) all Debt Service Requirements during such fiscal year, (B) all debt service requirements during such fiscal year in respect of all outstanding General Obligation Bonds issued for improvements to the Airport System and all outstanding NSS General Obligation Bonds issued for improvements to the Airport System, (C) all the debt service requirements during such fiscal year on Subordinate Obligations and any other subordinate indebtedness secured by any Amounts Available for Debt Service, (D) all amounts required to repay loans among the funds made pursuant to the General Ordinance, (E) the amount, if any, required to be paid into the Sinking Fund Reserve

Account or Renewal Fund during such fiscal year, and (F) all amounts required to be paid under Exchange Agreements. See "SECURITY FOR THE AIRPORT REVENUE BONDS – Rate Covenant" herein. See also "SECURITY FOR THE AIRPORT REVENUE BONDS – Certain Provisions of General Ordinance Effective Upon City Election and Certain Consents" for a discussion of certain events that may allow the City to use an alternative rate covenant.

Authorized Denominations: The Series 2021 Bonds will be issued as registered bonds in denominations of $5,000 or any integral multiple thereof.

Form and Depository: The Series 2021 Bonds will be delivered solely in registered form under a global book-entry system through the facilities of DTC via DTC's FAST automated securities transfer program. See APPENDIX VIII.

Fiscal Agent: The fiscal agent for the Series 2021 Bonds is U.S. Bank National Association, Philadelphia, Pennsylvania.

Tax Status: For information on the tax status of the Series 2021 Bonds, see the italicized language at the top of the cover page and "TAX MATTERS" herein.

Ratings (Outlook):

	Uninsured	Insured
Moody's:	"A2", stable	"A2", stable
Fitch:	"A", stable	N/A
S&P:	N/A	"AA", stable

See "RATINGS" herein.

[Remainder of page intentionally left blank]

Table of Contents

Page

INTRODUCTION **1**
General 1
The Airport System 1
COVID-19 Pandemic 3
PLAN OF FINANCE **3**
ESTIMATED SOURCES AND USES OF FUNDS **3**
AUTHORIZATION FOR THE SERIES 2021 BONDS **4**
AMENDMENTS TO THE GENERAL ORDINANCE **4**
General 4
Amendments Effective With 100% Bondholder Consent 4
DESCRIPTION OF THE SERIES 2021 BONDS **5**
General 5
Book-Entry Only System 5
Optional Redemption of the Series 2021 Bonds 5
Mandatory Redemption 6
Notice of Redemption 6
SECURITY FOR THE AIRPORT REVENUE BONDS **7**
Pledge of Project Revenues and Funds 7
Definition of Project Revenues 7
City May Pledge Passenger Facility Charges 8
Flow of Funds and Application of Project Revenues 9
Application of PFCs 12
Sinking Fund Reserve Account 12
Renewal Fund 13
Rate Covenant 14
Certain Provisions of General Ordinance Effective Upon City Election and Certain Consents 14
Issuance of Additional Airport Revenue Bonds 14
Authorization for Possible Transfer of Airport System 15
BOND INSURANCE **16**
Bond Insurance Policy 16
Assured Guaranty Municipal Corp. 16
IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT SYSTEM **18**
General 18
Summary of Actions Taken in Response to COVID-19 19
Federal COVID-19 Grants 20
Financial Outlook for the Airport for Fiscal Year 2021 21
Fiscal Year 2022 Budget 21
Continued Impact of COVID-19 on Passenger Traffic 23
Continued Impact of COVID-19 on Aircraft Operations 24
Continued Impact of COVID-19 on Certain Financial and Operating Data 25
Continued Impact of COVID-19 on Airline Service 25
Continued Impact of COVID-19 on Passenger Facility Charges (PFCs) 26
Recovery Forecasts 26
Sources of Liquidity 26
Other Measures 27
Other Information 27
SOURCES OF PROJECT REVENUES UNDER THE GENERAL ORDINANCE **28**
Airport-Airline Use and Lease Agreements 28
Non-Signatory Airline Rentals, Fees, and Charges 29
Certain Other Revenues 29
THE AIRPORT SYSTEM – MANAGEMENT AND DESCRIPTION **30**
General 30
Management of the Airport System 30
Description of the Airport 32
Northeast Airport 34
CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT **35**

Page

General....35
Funding Sources for Airport System Capital Projects....36
THE AIRPORT SYSTEM – AIRPORT ACTIVITY AND SIGNATORY AIRLINES....39
Aviation Activity at the Airport....39
Information Concerning Airlines Operating at the Airport....44
American Airlines....45
Philadelphia Terminal & Equipment Company....45
THE AIRPORT SERVICE REGION....45
FINANCIAL FACTORS....46
Historical Project Revenues and Operating Expenses....46
Management Discussion of Historical Results (to be updated)....47
Non-Airline Revenues....48
Estimated Project Revenues and Expenses....49
Management Discussion of Fiscal Year 2021 (Estimated) and Fiscal Year 2022 (Budget)....49
Outstanding and Additional Indebtedness....50
Schedule of Debt Service....51
Airline Cost per Enplaned Passenger....52
Cash Management and Investment Policies....52
Pensions and OPEBs....52
Hedges and Swaps....52
Letter of Credit Agreements....53
Aviation Liability and Property Insurance....53
CERTAIN INVESTMENT CONSIDERATIONS....54
COVID-19 pandemic....54
General Factors Affecting the Airline Industry....54
Economic Conditions....54
Aviation Fuel Costs....54
Public Health Concerns....55
Cyber Security....55
Demand for Air Travel....55
Capacity of National Air Traffic Control and Airport Systems....55
Aviation Safety and Security Concerns....56
Climate Change Issues and Possible New Regulation....56
New Technologies and Services....56
Cost of Capital Development Program....56
Dominance of American Airlines Presence at the Airport....56
Forward-Looking Statements....57
Market Analysis and Financial Projections....57
Passenger Facility Charges....58
Bankruptcies and Mergers of Operating Airlines or Other Tenants....58
Federal Funding Considerations....59
Federal Regulation Regarding Rates and Charges Disputes....59
Limitations on Bondholders' Remedies....59
TAX MATTERS....60
CHANGES IN FEDERAL AND STATE TAX LAW....62
LEGAL PROCEEDINGS....62
General....62
No Litigation Opinion....62
UNDERWRITING....62
RATINGS....63
CO-FINANCIAL ADVISORS....64
MARKET ANALYSIS AND FINANCIAL PROJECTIONS....64
APPROVAL OF LEGALITY....64
RELATIONSHIPS OF CERTAIN PARTIES....64
ADDITIONAL INFORMATION....64

Page

CONTINUING DISCLOSURE AGREEMENT **65**
CERTAIN REFERENCES **65**

SCHEDULE 1 – REFUNDED BONDS S-1

APPENDIX I – MARKET ANALYSIS AND FINANCIAL PROJECTIONS I-1

APPENDIX II – FINANCIAL STATEMENTS OF THE DIVISION OF AVIATION FISCAL YEAR ENDED JUNE 30, 2020 ..... II-1

APPENDIX III – GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA III-1

APPENDIX IV – SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE IV-1

APPENDIX V – SUMMARY OF CERTAIN PROVISIONS OF THE AIRLINE AGREEMENT V-1

APPENDIX VI – FORM OF APPROVING OPINION OF CO-BOND COUNSEL VI-1

APPENDIX VII – FORM OF CONTINUING DISCLOSURE AGREEMENT VII-1

APPENDIX VIII – BOOK-ENTRY ONLY SYSTEM VIII-1

APPENDIX IX – SPECIMEN MUNICIPAL BOND INSURANCE POLICY IX-1

OFFICIAL STATEMENT

relating to

$302,040,000
THE CITY OF PHILADELPHIA, PENNSYLVANIA
Airport Revenue and Refunding Bonds, Series 2021
(AMT/Private Activity)

INTRODUCTION

General

This Official Statement, including the cover page and appendices attached hereto, sets forth certain information in connection with the offering and sale by the City of Philadelphia, Pennsylvania (the "City"), a corporation and body politic and City of the First Class existing under the laws of the Commonwealth of Pennsylvania (the "Commonwealth"), of its $302,040,000 Airport Revenue and Refunding Bonds, Series 2021 (AMT/Private Activity) (the "Series 2021 Bonds"). The Series 2021 Bonds are authorized and are being issued under and pursuant to The First Class City Revenue Bond Act of October 18, 1972, Act No. 234 (the "Act"), the City's Amended and Restated General Airport Revenue Bond Ordinance, approved June 16, 1995 (Bill No. 950282), as amended and supplemented (the "General Ordinance"), including by the Eighteenth Supplemental Ordinance (Bill No. 190433 approved by the Mayor on June 26, 2019) (the "Eighteenth Supplemental Ordinance" and together with the General Ordinance, the "Ordinances"). U.S. Bank National Association is serving as Fiscal Agent and Sinking Fund Depository for the Series 2021 Bonds (the "Fiscal Agent"). Unless otherwise indicated, capitalized terms used in this Official Statement, including the cover page hereto, are defined in APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE".

THE BONDS ARE LIMITED OBLIGATIONS OF THE CITY PAYABLE SOLELY FROM THE PLEDGED AMOUNTS (AS DESCRIBED HEREIN). THE BONDS ARE NOT SECURED BY A PLEDGE OF THE FULL FAITH, CREDIT OR TAXING POWER OF THE CITY. THE BONDS DO NOT CREATE ANY DEBT OR CHARGE AGAINST THE TAX OR GENERAL REVENUES OF THE CITY OR CREATE A LIEN AGAINST ANY PROPERTY OF THE CITY OTHER THAN THE PLEDGED AMOUNTS.

The Airport System

The Airport System consists of the Philadelphia International Airport (the "Airport") and the Northeast Philadelphia Airport (the "Northeast Airport", together with the Airport are collectively, the "Airport System") and is owned by the City and operated by the Division of Aviation of the City's Department of Commerce (the "Division of Aviation"). According to data reported for calendar year 2019 by Airports Council International – North America, the Airport was ranked the twentieth busiest airport in the United States in terms of total passengers; nineteenth busiest in the nation for aircraft operations; and fifteenth busiest in the nation for cargo tonnage. As set forth in APPENDIX I containing the Report of the Airport Consultant dated June 17, 2021 (the "2021 Report"), supplementing that certain Report of the Airport Consultant dated September 16, 2020 (the "2020 Report", and together with the 2021 Report, collectively, the "Market Analysis and Financial Projections"), the Airport served 11.9 million enplaned passengers in fiscal year 2020, (ending June 30, 2020), which represents a 26.4% decrease compared to fiscal year 2019 due to passenger reductions related to the onset of the COVID-19 pandemic. The Airport is estimating it will have approximately 6.3 million enplanements in fiscal year 2021, which represents an approximate 46% reduction from fiscal year 2020 and demonstrates a full year of the effects of the COVID-19 pandemic on enplanements. American Airlines (referred to herein as "American" or "American Airlines"), together with its regional airline affiliates, accounted for approximately 2.6 million enplaned passengers from the beginning of fiscal year 2021 through March 2021, or 64% of the Airport's enplaned passengers during the same nine (9) month period for fiscal year 2020. For a further description of the Airport System, the Service Area of the Airport and the Air Transport Industry, see "THE AIRPORT SYSTEM – MANAGEMENT AND DESCRIPTION", "THE AIRPORT SYSTEM – AIRPORT

ACTIVITY AND SIGNATORY AIRLINES", "THE AIRPORT SERVICE REGION" and "CERTAIN INVESTMENT CONSIDERATIONS".

Brief descriptions of the Series 2021 Bonds, the security therefor, the Airport System and certain data about the City are included in this Official Statement. Such descriptions do not purport to be comprehensive or definitive. All references in this Official Statement to the Act, the General Ordinance, the Sixteenth Supplemental Ordinance and the Eighteenth Supplemental Ordinance are qualified by reference to the definitive form of each such document in its entirety. Copies of the Act, the General Ordinance, the Sixteenth Supplemental Ordinance, the Eighteenth Supplemental Ordinance and the financial statements of the City for the fiscal year ended June 30, 2020, are available from the Office of the Director of Finance, 13th Floor, Municipal Services Building, 1401 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19102. A copy of the financial statements of the City for the fiscal year ended June 30, 2020 may be downloaded at http://www.phila.gov/investor. The foregoing website is not incorporated herein by reference. The Market Analysis and Financial Projections, composed of the 2021 Report and the 2020 Report (as Attachment 2 to the 2021 Report), are attached hereto as APPENDIX I. Financial statements of the Division of Aviation for the fiscal year ended June 30, 2020, are attached hereto as APPENDIX II. Certain information concerning the government of and fiscal affairs of the City is attached hereto as APPENDIX III. A summary of the legislation authorizing the issuance of the City's Airport Revenue Bonds and certain amendments currently in effect is attached hereto as APPENDIX IV. A summary of certain provisions of the Airport-Airline Use and Lease Agreement (the "Airline Agreement") is attached hereto as APPENDIX V. The form of approving opinion of Co-Bond Counsel that will be delivered in connection with the issuance of the Series 2021 Bonds is attached hereto as APPENDIX VI. The form of the Continuing Disclosure Agreement (as defined herein) is attached hereto as APPENDIX VII. The information concerning the book-entry only system is attached hereto as APPENDIX VIII. A specimen bond insurance policy is attached hereto as APPENDIX IX.

The City Controller has examined and expressed opinions on the basic financial statements of the City contained in the fiscal year 2020 Annual Comprehensive Financial Report ("ACFR"). The City Controller has not participated in the preparation of this Official Statement nor in the preparation of the budget estimates and projections and cash flow statements and forecasts set forth in various tables contained in this Official Statement. Consequently, the City Controller expresses no opinion with respect to any of the data contained in this Official Statement other than what is contained in the ACFR for the fiscal year 2020.

Any historical financial information described in this Official Statement, including in APPENDIX II – "FINANCIAL STATEMENTS OF THE DIVISION OF AVIATION FISCAL YEAR ENDED JUNE 30, 2020" and APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA" attached hereto should be considered in light of the negative effects of the COVID-19 pandemic discussed herein. The effects of the COVID-19 pandemic continue to evolve and the full impact on the City's and Airport System's financial condition and operations is unknowable at this time.

Under the caption "CERTAIN INVESTMENT CONSIDERATIONS" is a discussion of certain investment risks which, among others, may affect repayment of and security for the Series 2021 Bonds.

Certain statements contained in this Official Statement, including the Appendices, and in any other information provided by the City and other parties to this transaction described herein that are not purely historical are forward-looking statements. Such forward-looking statements can be identified, in some cases, by terminology such as "projects," "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "illustrate," "example," and "continue," or the singular, plural, negative or other derivations of these of other comparable terms. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to such parties on the date hereof, and the City assumes no obligation to update any such forward-looking statements. The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including, but not limited to, risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in various important factors. Other such risks and uncertainties include, among others, changes in regional, domestic and international political, social and economic conditions, federal, state and local statutory and regulatory initiatives, the financial condition of individual airlines and carriers and the airline industry generally, changes in the tourism industry,

international, federal, state and local regulations regarding air travel, the COVID-19 pandemic, the outbreak of any other disease or public health threat, other future global health concerns, and other events or circumstances beyond the control of the City. Accordingly, actual results may vary from the projections, forecasts and estimates contained in this Official Statement, including the Appendices, and such variations may be material, which could affect the ability to fulfill some or all of the obligations under the Series 2021 Bonds.

COVID-19 Pandemic

In March 2020, a novel strain of coronavirus ("COVID-19") was declared a global pandemic by the World Health Organization. Airports in the United States, as well as airlines, have been acutely affected by interruptions in travel, reductions in passenger volumes and flights, as well as by the broader economic slowdown resulting from the COVID-19 pandemic. For information respecting the COVID-19 pandemic and its effects on the Airport System, please see "IMPACT OF COVID-19 ON THE AIRPORT SYSTEM" herein. For more information regarding the City's COVID-19 measures and the effects of the COVID-19 pandemic on the City's operations, see APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA – Overview – Fiscal Health of the City".

PLAN OF FINANCE

The Series 2021 Bonds are being issued for the purpose of providing funds, together with other available moneys, to (i) fund a deposit to the Project Fund to finance certain capital projects as described in this Official Statement, (ii) finance capitalized interest on a portion of the Series 2021 Bonds, (iii) refund all or a portion of the City's Outstanding Airport Revenue Refunding Bonds, Series 2011, consisting of the Series 2011A (AMT) Bonds (the "2011A Bonds") and the Series 2011B (AMT) Bonds (the "2011B Bonds" and together with the 2011A Bonds, the "Refunded Bonds"), as more fully described on Schedule 1 hereto, (iv) pay the costs of the bond insurance policy and (v) pay the costs of issuance of the Series 2021 Bonds.

ESTIMATED SOURCES AND USES OF FUNDS

SOURCES OF FUNDS	
Principal Amount of the Series 2021 Bonds	$302,040,000.00
Original Issue Premium	68,938,169.80
Release from the Parity Sinking Fund Reserve Account	1,937,417.66
Total Sources of Funds	$372,915,587.46
USES OF FUNDS	
Deposit to Aviation Capital Fund	$200,000,000.00
Capitalized Interest	20,078,399.44
Refunding Deposit	150,426,207.80
Costs of Issuance*	2,410,980.22
Total Uses of Funds	$372,915,587.46

* Includes underwriters' discount, the cost of the bond insurance policy, printing costs, rating agency fees, legal fees and other expenses.

[Remainder of page intentionally left blank]

AUTHORIZATION FOR THE SERIES 2021 BONDS

The Series 2021 Bonds are authorized and are being issued under the Act, the General Ordinance and the Eighteenth Supplemental Ordinance. The Act authorizes a City of the First Class to issue revenue bonds to finance certain revenue producing projects and to refund any such bonds or other bonds of the City issued for the foregoing purposes. Such bonds must be payable solely from Pledged Amounts (as defined in the General Ordinance). See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE" herein.

All of the bonds and notes, including the City of Philadelphia, Pennsylvania, Airport Revenue Commercial Paper Notes (the "Commercial Paper Notes"), issued under the General Ordinance are referred to herein collectively as the "Airport Revenue Bonds." See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE – The Amended and Restated General Airport Revenue Bond Ordinance – Summary of Operative Provisions of the General Ordinance-Covenants of the City".

AMENDMENTS TO THE GENERAL ORDINANCE

General

In 2017, the Sixteenth Supplemental Ordinance (Bill No. 170308) (the "Sixteenth Supplemental Ordinance") was approved by the Mayor. The Sixteenth Supplemental Ordinance provides for certain amendments to the General Ordinance, some of which became effective upon enactment without the consent of any Bondholders, others of which became effective upon 67% Bondholder consent. Those amendments that will become effective upon 100% consent of Bondholders are noted below. Only certain of the amendments of the Sixteenth Supplemental Ordinance are detailed below.

Amendments Effective With 100% Bondholder Consent

The following amendments will become effective upon the written consent of 100% in principal amount, or Original Value in the case of Capital Appreciation Bonds, of the Airport Revenue Bonds Outstanding:

- The addition of a definition of "Released Revenues" and an exclusion of the "Released Revenues" from the definition of "Project Revenues" to permit the City to release certain revenues from the pledge of the Ordinance in favor of the Bondholders upon (a) satisfaction of certain historical and projected debt service coverage tests, (b) delivery of an opinion of bond counsel to that effect that tax-exemption on the Airport Revenue Bonds is not adversely affected, and (c) ratings confirmation; and

- the definition of "Sinking Fund Reserve Requirement" will be amended to be the least of (a) 10% of principal amount (or proceeds in the case of discount bonds) of the Bonds, (b) maximum annual debt service on the Bonds and (c) 125% of average annual debt service on the Bonds.

The City, through the Director of Finance, will publish notice to all Bondholders upon the occurrence of the consent of one-hundred percent (100%) of the Bondholders. Publication through the Electronic Municipal Market Access System ("EMMA") or such other nationally recognized municipal securities information repository will constitute acceptable notice.

A full list of the amendments effective upon 100% Bondholder consent is included in the footnotes contained in APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE".

BY ACCEPTANCE OF A CONFIRMATION OF PURCHASE OF THE SERIES 2021 BONDS, EACH BENEFICIAL OWNER (I.E., THE ACTUAL PURCHASERS OF THE SERIES 2021 BONDS) WILL BE DEEMED TO HAVE APPROVED AND AGREED TO THE AMENDMENTS TO THE GENERAL ORDINANCE DESCRIBED HEREIN.

In connection with the issuance of the Series 2021 Bonds, the consent of 95.35% of the Bondholders will be obtained.

DESCRIPTION OF THE SERIES 2021 BONDS

General

The Series 2021 Bonds will be dated, will bear interest at the rates and will mature on the dates (subject to prior redemption) as shown on the inside cover page of this Official Statement. The Series 2021 Bonds are secured as described herein under "SECURITY FOR THE AIRPORT REVENUE BONDS". The Series 2021 Bonds have been issued in fully-registered form, registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC").

Interest on the Series 2021 Bonds is payable semiannually on each January 1 and July 1 (the "Interest Payment Dates"), beginning on January 1, 2022. The record date for the Series 2021 Bonds shall be each December 15 and June 15 preceding the respective Interest Payment Date (each, a "Record Date"). Interest is payable on such Interest Payment Dates until maturity or prior redemption by check or draft mailed by the Fiscal Agent to the registered owners of the Series 2021 Bonds as of the close of business on the respective Record Date. Any person who is the registered owner of at least $1,000,000 principal amount of Series 2021 Bonds may, by written request to the Fiscal Agent, at least three (3) days before the Record Date in connection with which such request is made, request that interest be paid by wire transfer to an account at a financial institution in the United States as may be specified in such written request. The principal or redemption price of the Series 2021 Bonds is payable at the principal Philadelphia corporate trust office of the Fiscal Agent upon surrender of the Series 2021 Bonds.

Book-Entry Only System

DTC will act as securities depository for the Series 2021 Bonds. The Series 2021 Bonds will be initially issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Bond certificate will be issued for each maturity of each series of the Series 2021 Bonds, each in the aggregate principal amount thereof, and will be deposited with DTC.

When the book-entry system is in effect, payments relating to, and transfers of, Beneficial Owner's interests in the Series 2021 Bonds will be accomplished by book entries made by DTC and, in turn, by DTC Participants who act on behalf of the Beneficial Owners. See APPENDIX VIII – "BOOK-ENTRY ONLY SYSTEM".

Optional Redemption of the Series 2021 Bonds

The Series 2021 Bonds maturing on and after July 1, 2032, are subject to redemption prior to maturity in whole at any time or in part from time to time (and if in part, in such order of maturity as the City may direct and within a maturity by lot) on and after July 1, 2031, at the redemption price of 100% of the principal amount thereof, together with accrued interest to the date fixed for redemption.

[Remainder of page intentionally left blank]

Mandatory Redemption

The Series 2021 Bonds maturing on July 1, 2046, which have been insured by Assured Guaranty Municipal Corp., are subject to mandatory redemption prior to maturity, in part, as drawn by lot by the Fiscal Agent by application of moneys required to be deposited for that purpose in the Sinking Fund at a redemption price equal to 100% of the principal amount of each such 2021 Bond to be redeemed, together with accrued interest to the date of redemption in accordance with the Act and the General Ordinance on the dates and in the principal amounts as set forth below:

Sinking Fund Payment Date July 1	Sinking Fund Payment
2042	$7,465,000
2043	7,765,000
2044	8,075,000
2045	8,400,000
2046†	8,735,000

†Final Maturity.

The Series 2021 Bonds maturing on July 1, 2051, are subject to mandatory redemption prior to maturity, in part, as drawn by lot by the Fiscal Agent by application of moneys required to be deposited for that purpose in the Sinking Fund at a redemption price equal to 100% of the principal amount of each such 2021 Bond to be redeemed, together with accrued interest to the date of redemption in accordance with the Act and the General Ordinance on the dates and in the principal amounts as set forth below:

Sinking Fund Payment Date July 1	Sinking Fund Payment
2047	$ 9,085,000
2048	9,540,000
2049	10,015,000
2050	10,515,000
2051†	11,040,000

†Final Maturity.

Notice of Redemption

As provided more fully in the General Ordinance and in the forms of the Series 2021 Bonds, notice of redemption of such Series 2021 Bonds shall be given by the Fiscal Agent by mailing a copy of the redemption notice by first class mail, postage prepaid, to each Holder of Series 2021 Bonds to be redeemed at such Holder's registered address as it appears in the Bond Register, not less than thirty (30) or more than sixty (60) days prior to the redemption date. Each notice shall be given in the name of the City and shall contain the CUSIP number, and, in the case of partial redemption of any Series 2021 Bonds, the certificate numbers and the respective principal amounts of the Series 2021 Bonds to be redeemed, the publication date, the redemption date, the redemption price and the name and address of the redemption agent, and shall further identify the Series 2021 Bonds by date of issue, interest rate and maturity date. Failure to mail any notice or any defect in a mailed notice or in the mailing thereof in respect of any notice shall not affect the validity of the redemption proceedings.

If at the time of mailing the notice of redemption, the City shall not have deposited with the Fiscal Agent moneys sufficient to redeem the Series 2021 Bonds called for redemption, such notice may state that it is conditional in that it is subject to the deposit of the redemption moneys with the Fiscal Agent not later than the redemption date, and such notice shall be of no effect unless such moneys are so deposited. Notice having been given, irrevocable instructions having been delivered to the Fiscal Agent to pay the Refunded Bonds or portions thereof and funds having been deposited in the Sinking Fund in accordance with the requirements of the General Ordinance, all interest on the Series 2021 Bonds called for redemption shall cease to accrue from the date fixed for redemption.

SECURITY FOR THE AIRPORT REVENUE BONDS

Pledge of Project Revenues and Funds

Pursuant to the General Ordinance, the City has covenanted that the Series 2021 Bonds, together with all other parity Airport Revenue Bonds issued under and outstanding or subject to the General Ordinance, are and will be equally and ratably secured by a lien on and security interest in (i) Project Revenues (as defined below); (ii) amounts payable to the City under a Qualified Swap; (iii) all amounts on deposit in or credited to the Aviation Funds (including the Parity Sinking Fund Reserve Account), except for amounts deposited into any Non-Parity Sinking Fund Reserve Subaccount; and (iv) proceeds of the foregoing (the amounts described in subsections (i) through (iv) are sometimes herein referred to, collectively, as the "Pledged Amounts"). See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE – The Amended and Restated General Airport Revenue Bond Ordinance – Summary of Operative Provisions of the General Ordinance Pledge of Revenues; Grant of Security Interest; Limitation on Recourse".

The Sixteenth Supplemental Ordinance provides for certain amendments to the General Ordinance, some of which amendments became effective upon enactment without the consent of any Bondholders, others of which became effective upon 67% Bondholder consent and others of which will become effective upon 100% Bondholder consent. See "AMENDMENTS TO THE GENERAL ORDINANCE" and in APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE".

To the extent that the Fiscal Agent maintains such Pledged Amounts, the Fiscal Agent shall hold and apply the Pledged Amounts in trust, for the equal and ratable benefit and security of all Holders of parity Airport Revenue Bonds issued under or subject to the General Ordinance. The General Ordinance provides that such Pledged Amounts may also be pledged for the benefit of a letter of credit issuer, municipal bond insurance provider, standby purchaser, swap provider or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price of and interest on any series of Airport Revenue Bonds on an equal and ratable basis with any other Airport Revenue Bonds.

THE BONDS ARE LIMITED OBLIGATIONS OF THE CITY PAYABLE SOLELY FROM THE PLEDGED AMOUNTS. THE BONDS ARE NOT SECURED BY A PLEDGE OF THE FULL FAITH, CREDIT OR TAXING POWER OF THE CITY. THE BONDS DO NOT CREATE ANY DEBT OR CHARGE AGAINST THE TAX OR GENERAL REVENUES OF THE CITY OR CREATE A LIEN AGAINST ANY PROPERTY OF THE CITY OTHER THAN THE PLEDGED AMOUNTS.

Definition of Project Revenues

The General Ordinance defines Project Revenues to include all of the revenues, rents, rates, tolls or other charges imposed upon all lessees, occupants and users of the Airport System and all moneys received by or on behalf of the City from all sources during any fiscal year (except as hereinafter excluded) from or in connection with the ownership, operation, improvements and enlargements of the Airport System, or any part thereof and the use thereof including, without limitation, revenues pledged or appropriated for the benefit of the Airport System, all rentals, rates, charges, landing fees, use charges, concession revenues, income derived from the City's sale of services, fuel, oil, and other supplies or commodities and all other charges received by the City or accrued by it from the Airport System, and any investment income realized from the investment of the foregoing, except as provided below, and all accounts, contract rights and general intangibles representing the Project Revenues, all consistently determined in accordance with the accrual basis of accounting adjusted to meet particular requirements of the Airline Agreements (if any of the Airline Agreements are in effect) and the General Ordinance.

Project Revenues as defined in the preceding paragraph *do not include* the following:

(a) (i) any and all Passenger Facility Charges, or any taxes which the City may from time to time impose upon users of the Airport System, and

(ii) Designated PFC Revenues for Debt Service,

(b) any governmental grants and contributions in aid of capital projects,

(c) such rentals as may be received pursuant to Special Facility Agreements for Special Purpose Facilities,

(d) unless pledged pursuant to a Supplemental Ordinance pursuant to Section 4.02 of the General Ordinance, Customer Facility Charges,

(e) proceeds of the sale of Airport Revenue Bonds and any income realized from the investment of proceeds of the sale of Airport Revenue Bonds maintained in the Aviation Capital Fund and income realized from investments of amounts maintained in the Renewal Fund and Sinking Fund Reserve Account,

(f) except as required by applicable laws, rules or regulations, net proceeds from the sale of Airport assets, including the sale or transfer of all or substantially all of the assets of the Airport System under Section 9.01 of the General Ordinance unless the Division of Aviation determines to include any such net proceeds as Project Revenues and such determination is evidenced by written notification by the City to the Fiscal Agent,

(g) proceeds of insurance or eminent domain (other than proceeds that provide for lost revenue due to business interruption or business loss), and

(h) net amounts payable to the City under a Qualified Swap (other than termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap).

As described under "AMENDMENTS TO THE GENERAL ORDINANCE", upon the written consent of 100% in principal amount, or Original Value in the case of Capital Appreciation Bonds, of the Airport Revenue Bonds Outstanding, the Sixteenth Supplemental Ordinance adds a definition of "Released Revenues" to the General Ordinance and excludes "Released Revenues" from the definition of "Project Revenues" in the General Ordinance to permit the City to release certain revenues from the pledge of the General Ordinance in favor of the Bondholders upon (a) satisfaction of certain historical and projected debt service coverage tests, (b) delivery of an opinion of bond counsel to the effect that the tax-exempt status of the Airport Revenue Bonds is not adversely affected, and (c) ratings confirmation.

City May Pledge Passenger Facility Charges

Under federal law, the City is permitted under certain circumstances to pledge Passenger Facility Charges ("PFCs") to the payment of debt service on bonds pursuant to a supplemental ordinance. However, the pledge of PFCs is limited to the allowable costs of approved PFC projects ("PFC-Eligible" projects) and may not be used to pay debt service on any bonds issued to finance projects that are not PFC-Eligible projects. See also "CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT – Funding Sources for Airport System Capital Projects – Passenger Facility Charges" for additional information concerning the impact of federal law on the City's ability to collect and pledge PFCs, and "CERTAIN INVESTMENT CONSIDERATIONS – Passenger Facility Charges".

The City pledged PFCs as additional security for the 2011A Bonds and for a portion of the City's Airport Revenue and Refunding Bonds, Series 2020C (AMT/Private Activity) (the "2020C Bonds") listed under the section captions "FINANCIAL FACTORS – Outstanding and additional Indebtedness" (together with any other Bonds that are additionally secured by PFCs, the "PFC-Pledge Bonds"). The outstanding principal amount of the 2011A Bonds will be refunded with a portion of the proceeds of the Series 2021 Bonds. PFCs were not pledged as additional security for the 2011B Bonds.

Pursuant to the Bond Committee Determination, the City intends to pledge PFCs to pay debt service on a portion of the Series 2021 Bonds as authorized by the Eighteenth Supplemental Ordinance. Prior to pledging such PFCs to pay any debt service on the Series 2021 Bonds the following is required: (1) written confirmation from the Rating Agencies in accordance with the requirements of Section 4.02 of the General Ordinance, and (2) a certificate of the Director of Finance filed with the Fiscal Agent that includes (a) a description of the allocation of such PFCs with respect to such debt service payments on such portion of Series 2021 Bonds and (b) a representation by the City

that the PFC-Pledge Bonds constitute bonds issued for PFC-Eligible Projects (the "2021 PFC-Pledge Certificate"). Any 2021 PFC-Pledge Certificate shall be filed through EMMA or such other nationally recognized municipal securities information repository.

Upon the issuance of the Series 2021 Bonds and refunding of the Refunded Bonds, a portion of the 2020C Bonds and a portion of the Series 2021 Bonds will be secured on an equal and ratable basis, without preference or priority, by a first lien on pledged PFCs. To the extent collected and available, the Airport currently expects to pledge PFCs in the amount of $77.3 million and $53.0 million, respectively, to debt service payments on the 2020C Bonds and a portion of the Series 2021 Bonds through fiscal year 2026, the end of the projection period reflected in the Market Analysis and Financial Projections. The Airport anticipates pledging an additional $79.1 million for either existing or future debt through the end of the projection period. The City may issue Airport Revenue Bonds or other obligations that are secured by PFCs on a parity with the 2020C Bonds and 2021 Bonds, subject to the terms and conditions of a Supplemental Ordinance. See " – Application of PFCs" herein.

PFC-Pledge Bonds and any future Airport Revenue Bonds that are issued for PFC-Eligible projects (to the extent the City pledges PFCs for Debt Service pursuant to a Supplemental Ordinance) share a first priority parity lien with respect to all pledged PFCs up to an amount in any year equal to the PFCs pledged for such PFC-Eligible projects.

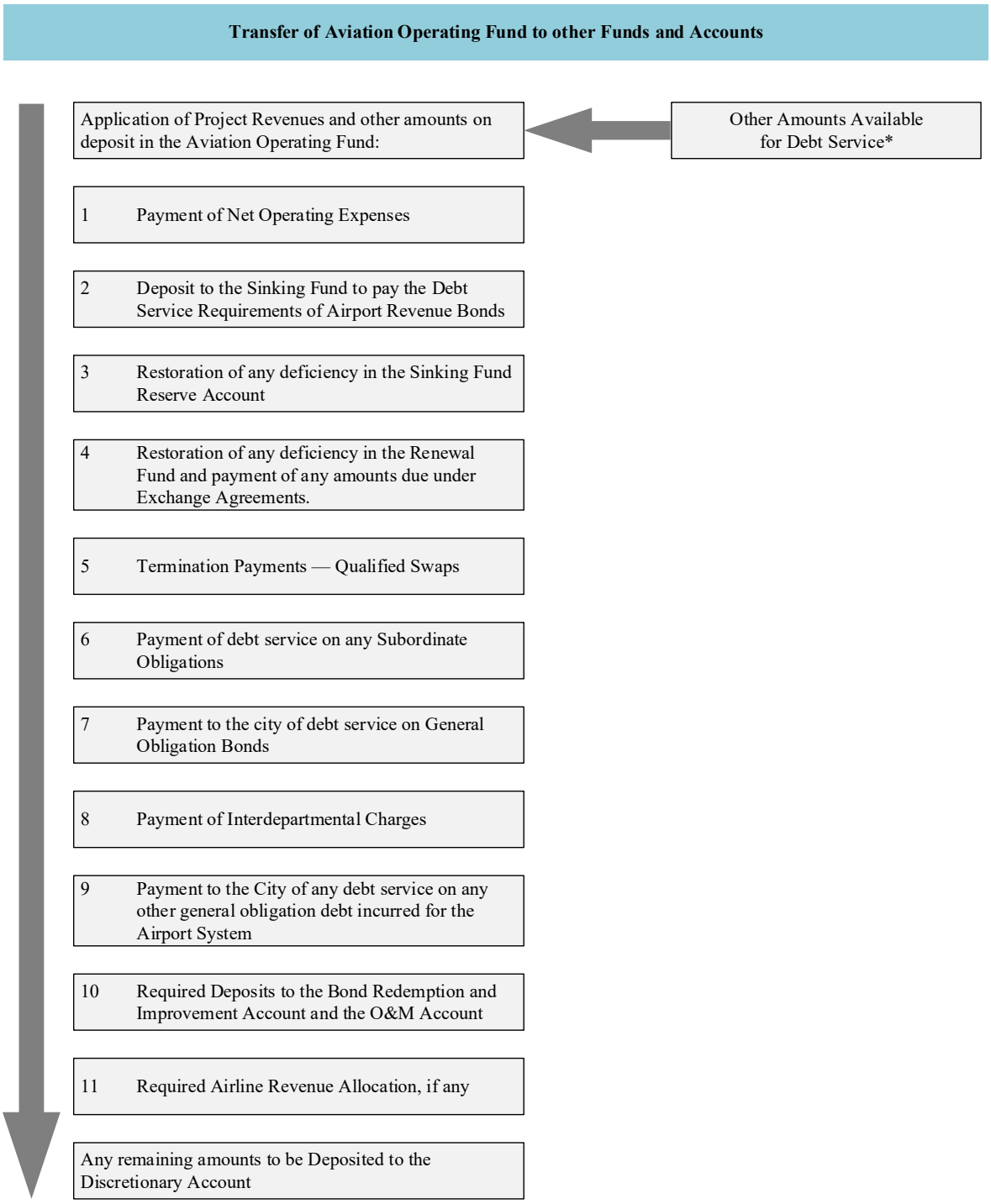
At this time, the City will pledge PFCs as additional security for only a portion of the Series 2021 Bonds.

Flow of Funds and Application of Project Revenues

The following is a diagram showing the flow of funds under the General Ordinance. A more complete description of the flow of funds follows the diagram.

[Remainder of page intentionally left blank]

Flow of Funds



* Includes pledged PFC Revenues; grants-in-aid for capital projects deposited into the Sinking Fund; and portions of the Aviation Operating Fund related to the Bond Improvement and Redemption Account, the O&M Account, and the Discretionary Account, created under the Airline Agreement.

SOURCE: General Ordinance, as defined herein.

PREPARED BY: AVK Consulting, Inc., August 2020.

The priority and application of Project Revenues under the terms of the General Ordinance and other amounts received which relate to the Airport System into the Aviation Funds are set forth below:

Under the provisions of the General Ordinance, the City is required to deposit all Project Revenues and other amounts received which relate to the Airport System into the Aviation Funds. The Aviation Funds are to be held separate and apart from all other funds and accounts of the City and the Fiscal Agent and the funds and accounts therein shall not be commingled with or loaned or transferred among themselves or to any other funds or accounts of the City (except for transfers between City funds which are expressly permitted by the General Ordinance). Amounts on deposit in the Aviation Operating Fund shall be applied by the City or the Fiscal Agent, as the case may be, in the following order of priority:

(a) To pay such sums constituting Net Operating Expenses in a timely manner.

(b) For deposit in the appropriate accounts of the Sinking Fund, the amount necessary to provide for the timely payment of the Debt Service Requirements.

(c) For deposit in the Sinking Fund Reserve Account or the appropriate subaccount thereof, the amount, if any, required to eliminate any deficiencies therein; provided, however, in the event there are insufficient amounts available to replenish all of the accounts or subaccounts within the Sinking Fund Reserve Account, the amount to be deposited in each Sinking Fund Reserve Account or subaccount shall be determined by dividing the Sinking Fund Reserve Requirement on the Outstanding Bonds secured thereby by the sum of the Sinking Fund Reserve Requirements on all Bonds Outstanding under the General Ordinance and multiplying that result by the total amount available to be deposited under this clause (c).

(d) For deposit in the Renewal Fund the amount, if any, required to eliminate any deficiency therein, and to pay amounts due and payable under Exchange Agreements.

(e) To pay termination amounts to a Qualified Swap Provider due as a result of the termination of a Qualified Swap and termination amounts, if any, payable to JP Morgan Chase Bank – New York with respect to Payments upon Early Termination on the Interest Rate Swap Transaction effective June 15, 2005.

(f) For deposit in the Subordinate Obligation Fund (i) the amount necessary to provide for the timely payment of the principal or redemption price of and interest on Subordinate Obligations, (ii) on or before the dates that other payments are due under any credit facility, liquidity facility or swap agreement constituting Subordinate Obligations, to deposit the amount necessary to make such payments, (iii) forward to the paying agent in respect of bond anticipation notes (payable by exchange for, or out of the proceeds of the sale of Subordinate Obligations) the amount necessary to provide for the timely payment of interest thereon (to the extent not capitalized), and (iv) deposit in the applicable subaccount of the Sinking Fund Reserve Account for a series of Subordinate Obligations the amounts, if any, required to eliminate any deficiency in such account.

(g) To pay to the City the amount necessary to provide for the timely payment of the principal or redemption price of and interest on General Obligation Bonds[*].

(h) To pay any Interdepartmental Charges.

(i) To pay to the City the amount necessary to provide for the timely payment of the principal or redemption price of and interest on NSS (non-self-sustaining) General Obligation Bonds[*].

Any amounts remaining in the Aviation Operating Fund following any transfer then required to be made pursuant to subparagraphs (a)-(i) above, may be used at the written direction of the City for any Airport System purposes. In the Airline Agreement, the City has provided its written direction to use such remaining amounts as provided in subparagraphs (j)-(m) below.

[*] No such general obligation debt of the City is currently outstanding.

So long as any Series 2021 Bonds or bonds are outstanding, the deposit and application of Project Revenues for each fiscal year during the term of the Airline Agreement shall be governed by the General Ordinance. The City is expressly permitted in the General Ordinance to use amounts remaining in the Aviation Operating Fund following any transfers pursuant to subparagraphs (a)-(i) above for the Bond Redemption and Improvement Requirement, the O&M Requirement, the Airline Revenue Allocation and City Revenue Allocation (as defined in the Airline Agreement). Pursuant to Section 4.06 of the General Ordinance, any amounts remaining in the Aviation Operating Fund following any transfer then required to be made pursuant to subparagraphs (a)-(i) above may be used for any Airport System purposes at the written direction of the City. The City has directed that such amounts remaining will be applied or credited in the following manner:

(j) Bond Redemption and Improvement Account. In accordance with the provisions of the General Ordinance and the Airline Agreement, amounts on deposit in the Bond Redemption and Improvement Account are available for use by the City for the payment of deficiencies with respect to the Debt Service Requirements and the Sinking Fund Reserve Requirement, as provided under the General Ordinance. If (i) no such deficiencies exist, (ii) the City is not in default under the General Ordinance and (iii) a Majority-in Interest of the Eligible Signatory Airlines, determined pursuant to the Airfield Area MII Formula, mutually agree (whose agreement will not be unreasonably withheld), then the Division of Aviation may use such amounts for: repair, renewals, replacements or alterations to the Airport System, redemption of Bonds, costs of Capital Projects or equipment, purchase of Bonds, arbitrage rebate pursuant to Section 148(f) of the Code or for any lawful Airport System purposes.

In accordance with the provisions of the General Ordinance and the Airline Agreement, the balance of moneys on deposit in the Bond Redemption and Improvement Account shall equal the "Bond Redemption and Improvement Requirement." The Bond Redemption and Improvement Requirement shall mean an amount not to exceed the lesser of (1) the amount of Debt Service Reserve Surety Bonds fulfilling the City's Sinking Fund Reserve requirements, or (2) twenty-five percent (25%) of the Debt Service Requirement. At the termination of the Airline Agreement, it is the City's intention to retain the balance in the Bond Redemption and Improvement Account in an Airport related account with substantially the same purpose.

(k) O&M Account. The O&M Account is available for use by the City for the payment of Operating Expenses in the City's sole discretion in the event the then current Airport Revenues allocated to Operating Expenses in the Annual Budget are deemed to be insufficient.

(l) Airline Revenue Allocation. For each fiscal year during the term of the Airline Agreement, the Airline Revenue Allocation shall be equal to fifty percent (50%) of the prior fiscal year's total net revenue from the Outside Terminal Areas Cost Center reduced by an amount of up to $7,000,000, to the extent net revenue from the Outside Terminal Areas Cost Center equals or exceeds $7,000,000.

(m) Discretionary Account. Following any and all transfers required by subparagraphs (a)-(l) above, any amounts remaining in the Aviation Operating Fund, less the Airline Revenue Allocation shall be deposited in the Discretionary Account to be used at the written direction of the City for any Airport System purposes.

Application of PFCs

The PFCs shall be deposited, upon receipt, in the Aviation Capital Fund, and the amount of PFCs pledged to the PFC-Pledge Bonds shall be transferred therefrom, at least semiannually, and deposited in the Sinking Fund for PFC-Pledge Bonds. Such PFCs deposited into the Sinking Fund for the PFC-Pledge Bonds are on parity with the PFCs deposited into the Sinking Fund for the other PFC-Pledge Bonds.

Sinking Fund Reserve Account

Under the General Ordinance, the City is required to maintain a Parity Sinking Fund Reserve Account within the Sinking Fund known as the Parity Sinking Fund Reserve Account. The City is required to maintain an aggregate balance in the Parity Sinking Fund Reserve Account for all Airport Revenue Bonds which are to be secured by the Parity Sinking Fund Reserve Account, equal to the lesser of (a) the greatest amount of Debt Service Requirements on Airport Revenue Bonds payable in any one fiscal year, determined as of any particular date, or (b) the maximum

amount permitted by the Internal Revenue Code of 1986, as amended (the "Code"), to be maintained without yield restriction for bonds the interest on which is not includable in gross income for Federal income tax purposes; provided, however, that additional Airport Revenue Bonds may be secured by a Non-Parity Sinking Fund Reserve Account under certain circumstances. See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE – The Amended and Restated General Airport Revenue Bond Ordinance – Summary of Operative Provisions of the General Ordinance –Establishment of Funds and Accounts".

As described above under "AMENDMENTS TO THE GENERAL ORDINANCE", the City has amended the definition of "Sinking Fund Reserve Requirement", which amendment will become effective upon the receipt of consent of 100% in principal amount, or Original Value in the case of Capital Appreciation Bonds, of the holders of Airport Revenue Bonds Outstanding, to be equal to the least of (a) 10% of principal amount (or proceeds in the case of discount bonds) of the Bonds, (b) maximum annual debt service on the Bonds and (c) 125% of average annual debt service on the Bonds. See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE".

In the event that the moneys in the Debt Service Account of the Sinking Fund are insufficient to pay as and when due, the principal of (and premium, if any) or interest on any Airport Revenue Bonds or other obligations payable from the Debt Service Account then due (including any amounts payable out of the Sinking Fund under Swap Agreements), the Fiscal Agent is authorized and directed (i) with respect to Airport Revenue Bonds secured by the Parity Sinking Fund Reserve Account, to withdraw an amount equal to the deficiency from the Parity Sinking Fund Reserve Account, and use such amount to pay debt service on the Airport Revenue Bonds secured thereby, and (ii) with respect to Airport Revenue Bonds secured by a Non-Parity Sinking Fund Reserve Subaccount, to withdraw an amount equal to the deficiency from such Non-Parity Sinking Fund Reserve Subaccount and use such amount to pay debt service on the Airport Revenue Bonds secured thereby. If by reason of such withdrawal or for any other reason there is a deficiency in the Sinking Fund Reserve Account or any subaccount thereof, the City has covenanted to restore such deficiency promptly from Project Revenues, in no event later than the next interest payment date for Airport Revenue Bonds outstanding under the General Ordinance.

Any moneys in the Sinking Fund Reserve Account or any subaccount thereof in excess of the applicable Sinking Fund Reserve Requirement shall be transferred on an annual basis to the Debt Service Account of the Sinking Fund at the written direction of the City.

Under the General Ordinance, in lieu of the required deposits into the Sinking Fund Reserve Account, the City may cause to be deposited in such Account an unconditional and irrevocable surety bond, an insurance policy or an irrevocable letter of credit in the required amount ("Sinking Fund Reserve Facilities"); provided that such surety bond, insurance policy or irrevocable letter of credit, or the issuer thereof (as applicable), at least meets the credit ratings threshold prescribed in the General Ordinance.

In connection with the amendments made effective upon 67% Bondholder consent, the City has amended the credit ratings threshold applicable to Sinking Fund Reserve Facilities by lowering the rating requirement from "the second highest rating category" to the "A" category, or Original Value in the case of Capital Appreciation Bonds, of the holders of the Airport Revenue Bonds Outstanding.

Upon issuance and delivery of the Series 2021 Bonds, the Parity Sinking Fund Reserve Requirement will be $121,146,378, all of which will be funded with cash or cash equivalents.

Renewal Fund

The General Ordinance establishes a renewal fund (the "Renewal Fund") in the amount of $2,500,000 (the "Renewal Fund Requirement"). The amount required to be maintained in the Renewal Fund may be increased or decreased from time to time as determined by the Consultants. The Renewal Fund is maintained by the Fiscal Agent and, under the General Ordinance, may be used (i) to pay the cost of major repairs, renewals and replacements of Airport System facilities for purposes of meeting unforeseen contingencies and emergencies arising from the operation of the Airport System, (ii) to pay expenses chargeable as Operating Expenses if Project Revenues are insufficient, for whatever reason, to cover such Operating Expenses in any fiscal year, (iii) to pay debt service on Airport Revenue

Bonds, or (iv) to repay any loan from the Aviation Capital Fund to the Aviation Operating Fund, in accordance with the requirements of the General Ordinance. If the amount in the Renewal Fund drops below the Renewal Fund Requirement, such deficiency must be restored by regular quarterly deposits from Project Revenues which shall not be required to exceed the total of $500,000 in any fiscal year. If the moneys and investments in the Renewal Fund are in excess of the Renewal Fund Requirement, the amount of such excess, on order of the Director of Finance, shall be paid over by the City to the Debt Service Account of the Sinking Fund, to be used and applied as are all other moneys deposited in or on deposit therein.

Rate Covenant

The City covenants with the holders of the Series 2021 Bonds, that it will, at a minimum, impose charges and recognize as revenues in each fiscal year such rentals, charges and fees as shall, together with that portion of the Aviation Operating Fund balance attributable to Amounts Available for Debt Service and carried forward at the beginning of such fiscal year and together with all other Amounts Available for Debt Service to be received in such fiscal year, equal not less than the greater of:

(a) the sum of: (i) all Net Operating Expenses payable during such fiscal year; (ii) 150% of the amount required to pay the Debt Service Requirements during such fiscal year; (iii) the amount, if any, required to be paid into the Sinking Fund Reserve Account during such fiscal year; and (iv) the amount, if any, required to be paid into the Renewal Fund during such fiscal year; or

(b) the sum of: (i) all Operating Expenses payable during such fiscal year; and (ii) (A) all Debt Service Requirements during such fiscal year; (B) all debt service requirements during such fiscal year in respect of all outstanding General Obligation Bonds issued for improvements to the Airport System and all outstanding NSS General Obligation Bonds issued for improvements to the Airport System; (C) all the debt service requirements during such fiscal year on Subordinate Obligations and any other subordinate indebtedness secured by any Amounts Available for Debt Service; (D) amounts required to repay loans among the funds made pursuant to Section 4.05(c) of the General Ordinance; (E) the amount, if any, required to be paid into the Sinking Fund Reserve Account or Renewal Fund during such fiscal year; and (F) all amounts required to be paid under Exchange Agreements.

For a further discussion of the funds and accounts, priority of payment, the Rate Covenant, the Alternative Rate Covenant which may be elected by the City, and other provisions of the General Ordinance, see APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE –The Amended and Restated General Airport Revenue Bond Ordinance" herein.

Certain Provisions of General Ordinance Effective Upon City Election and Certain Consents

The City may elect an alternative rate covenant in lieu of the Rate Covenant (the "Alternative Rate Covenant"), upon the conveyance of all or substantially all of the City's right, title and interest in the Airport System, the occurrence of certain other circumstances and the consent of certain parties, all as set forth in the General Ordinance. As of the date hereof, the City has no plans to elect the Alternative Rate Covenant, however, the City may elect the Alternative Rate Covenant in the future. For additional information about the City's election and calculation of the Alternative Rate Covenant, see APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE – The Amended and Restated General Airport Revenue Bond Ordinance – Conveyance of System and Assignment, Assumption and Release of Obligations – *Alternative Rate Covenant".*

Issuance of Additional Airport Revenue Bonds

The General Ordinance permits the issuance of Additional Bonds which, except as otherwise provided in the General Ordinance, will be equally and ratably secured with the Series 2021 Bonds and all other outstanding parity bonds issued under and/or subject to the General Ordinance. Additional Bonds may be issued under the General Ordinance to pay the costs of Projects relating to the Airport System, to reimburse the City for the prior payment of such costs, to fund any such costs for which the City shall have outstanding obligations, to refund bonds of the City previously issued for such purposes or to finance other costs relating to the Airport System permitted under the Act;

provided that, among other requirements, in each case other than certain refundings of bonds, the City obtains reports of the Consultants stating, among other things, that (i) for either the immediately preceding fiscal year of the City, or any period of 12 full consecutive months during the 18-month period preceding the delivery of the Consultants' reports, the Airport System yielded pledged Amounts Available for Debt Service, sufficient to satisfy the Rate Covenant, (ii) the Airport System will, in the opinion of the Consultant, yield pledged Amounts Available for Debt Service for each of the five fiscal years (or three fiscal years in the event that the Consultant is professionally unable to provide an opinion for a period in excess of three fiscal years) ended immediately following the issuance of the Series 2021 Bonds, sufficient to comply with the Rate Covenant, and (iii) a statement that the Airport System is in good operating condition or that adequate steps are being taken to return the Airport System to good operating condition. For a discussion of the issuance and assumption of additional Bonds under the General Ordinance, see APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE – The Amended and Restated General Airport Revenue Bond Ordinance – Summary of Operative Provisions of the General Ordinance – Conditions of and Provisions Relating to Issuing Bonds".

Authorization for Possible Transfer of Airport System

The General Ordinance provides that, under certain circumstances, the City has the ability to transfer the Airport System to a municipal authority created pursuant to the Municipality Authorities Act, P.L. 382, No. 164 (May 2, 1945), as amended, or to an authority created pursuant to other authorizing legislation or to another entity which will assume all of the obligations evidenced by the bonds outstanding under the Ordinances, including the Series 2021 Bonds. See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE – The Amended and Restated General Airport Revenue Bond Ordinance – Summary of Operative Provisions of the General Ordinance – Conveyance of System and Assignment, Assumption and Release of Obligations" for a summary of the conditions which must be satisfied prior to any such transfer. The City has no plans to transfer the Airport System to a municipal authority at this time.

[Remainder of page intentionally left blank]

BOND INSURANCE

Bond Insurance Policy

Concurrently with the issuance of the Series 2021 Bonds, Assured Guaranty Municipal Corp. ("AGM") will issue its Municipal Bond Insurance Policy (the "Policy") for the Series 2021 Bonds serially maturing on July 1 of the years 2037 through and including 2041 and the term bond maturing on July 1, 2046 (collectively, the "Insured Bonds"). The Policy guarantees the scheduled payment of principal of and interest on the Insured Bonds when due as set forth in the form of the Policy included as APPENDIX IX to this Official Statement.

Assured Guaranty Municipal Corp.

AGM is a New York domiciled financial guaranty insurance company and an indirect subsidiary of Assured Guaranty Ltd. ("AGL"), a Bermuda-based holding company whose shares are publicly traded and are listed on the New York Stock Exchange under the symbol "AGO". AGL, through its operating subsidiaries, provides credit enhancement products to the U.S. and international public finance (including infrastructure) and structured finance markets and asset management services. Neither AGL nor any of its shareholders or affiliates, other than AGM, is obligated to pay any debts of AGM or any claims under any insurance policy issued by AGM.

AGM's financial strength is rated "AA" (stable outlook) by S&P Global Ratings, a business unit of Standard & Poor's Financial Services LLC ("S&P"), "AA+" (stable outlook) by Kroll Bond Rating Agency, Inc. ("KBRA") and "A2" (stable outlook) by Moody's Investors Service, Inc. ("Moody's"). Each rating of AGM should be evaluated independently. An explanation of the significance of the above ratings may be obtained from the applicable rating agency. The above ratings are not recommendations to buy, sell or hold any security, and such ratings are subject to revision or withdrawal at any time by the rating agencies, including withdrawal initiated at the request of AGM in its sole discretion. In addition, the rating agencies may at any time change AGM's long-term rating outlooks or place such ratings on a watch list for possible downgrade in the near term. Any downward revision or withdrawal of any of the above ratings, the assignment of a negative outlook to such ratings or the placement of such ratings on a negative watch list may have an adverse effect on the market price of any security guaranteed by AGM. AGM only guarantees scheduled principal and scheduled interest payments payable by the issuer of bonds insured by AGM on the date(s) when such amounts were initially scheduled to become due and payable (subject to and in accordance with the terms of the relevant insurance policy), and does not guarantee the market price or liquidity of the securities it insures, nor does it guarantee that the ratings on such securities will not be revised or withdrawn.

Current Financial Strength Ratings

On October 29, 2020, KBRA announced it had affirmed AGM's insurance financial strength rating of "AA+" (stable outlook). AGM can give no assurance as to any further ratings action that KBRA may take.

On July 16, 2020, S&P announced it had affirmed AGM's financial strength rating of "AA" (stable outlook). AGM can give no assurance as to any further ratings action that S&P may take.

On August 13, 2019, Moody's announced it had affirmed AGM's insurance financial strength rating of "A2" (stable outlook). AGM can give no assurance as to any further ratings action that Moody's may take.

For more information regarding AGM's financial strength ratings and the risks relating thereto, see AGL's Annual Report on Form 10-K for the fiscal year ended December 31, 2020.

Capitalization of AGM

At March 31, 2021:

- The policyholders' surplus of AGM was approximately $2,805 million.

- The contingency reserves of AGM and its indirect subsidiary Municipal Assurance Corp. ("MAC") (as described below) were approximately $959 million. Such amount includes 100% of AGM's contingency reserve and 60.7% of MAC's contingency reserve.

- The net unearned premium reserves and net deferred ceding commission income of AGM and its subsidiaries (as described below) were approximately $2,121 million. Such amount includes (i) 100% of the net unearned premium reserve and deferred ceding commission income of AGM, (ii) the net unearned premium reserves and net deferred ceding commissions of AGM's wholly owned subsidiaries Assured Guaranty UK Limited ("AGUK") and Assured Guaranty (Europe) SA ("AGE"), and (iii) 60.7% of the net unearned premium reserve of MAC.

The policyholders' surplus of AGM and the contingency reserves, net unearned premium reserves and deferred ceding commission income of AGM and MAC were determined in accordance with statutory accounting principles. The net unearned premium reserves and net deferred ceding commissions of AGUK and AGE were determined in accordance with accounting principles generally accepted in the United States of America.

Merger of MAC into AGM

On April 1, 2021, MAC was merged into AGM, with AGM as the surviving company. Prior to that merger transaction, MAC was an indirect subsidiary of AGM (which indirectly owned 60.7% of MAC) and AGM's affiliate, Assured Guaranty Corp., a Maryland-domiciled insurance company ("AGC") (which indirectly owned 39.3% of MAC). In connection with the merger transaction, AGM and AGC each reassumed the remaining outstanding par they ceded to MAC in 2013, and AGC sold its indirect share of MAC to AGM. All of MAC's direct insured par exposures have become insured obligations of AGM.

Incorporation of Certain Documents by Reference

Portions of the following documents filed by AGL with the Securities and Exchange Commission (the "SEC") that relate to AGM are incorporated by reference into this Official Statement and shall be deemed to be a part hereof:

(i) the Annual Report on Form 10-K for the fiscal year ended December 31, 2020 (filed by AGL with the SEC on February 26, 2021); and

(ii) the Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2021 (filed by AGL with the SEC on May 7, 2021).

All information relating to AGM included in, or as exhibits to, documents filed by AGL with the SEC pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, excluding Current Reports or portions thereof "furnished" under Item 2.02 or Item 7.01 of Form 8-K, after the filing of the last document referred to above and before the termination of the offering of the Series 2021 Bonds shall be deemed incorporated by reference into this Official Statement and to be a part hereof from the respective dates of filing such documents. Copies of materials incorporated by reference are available over the internet at the SEC's website at http://www.sec.gov, at AGL's website at http://www.assuredguaranty.com, or will be provided upon request to Assured Guaranty Municipal Corp.: 1633 Broadway, New York, New York 10019, Attention: Communications Department (telephone (212) 974-0100). Except for the information referred to above, no information available on or through AGL's website shall be deemed to be part of or incorporated in this Official Statement.

Any information regarding AGM included herein under the caption "BOND INSURANCE – Assured Guaranty Municipal Corp." or included in a document incorporated by reference herein (collectively, the "AGM Information") shall be modified or superseded to the extent that any subsequently included AGM Information (either directly or through incorporation by reference) modifies or supersedes such previously included AGM Information. Any AGM Information so modified or superseded shall not constitute a part of this Official Statement, except as so modified or superseded.

Miscellaneous Matters

AGM makes no representation regarding the Series 2021 Bonds or the advisability of investing in the Series 2021 Bonds. In addition, AGM has not independently verified, makes no representation regarding, and does not accept any responsibility for the accuracy or completeness of this Official Statement or any information or disclosure contained herein, or omitted herefrom, other than with respect to the accuracy of the information regarding AGM supplied by AGM and presented under the heading "BOND INSURANCE".

IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT SYSTEM

The information and data contained in this section are being provided solely for the purpose of describing the impacts of the COVID-19 pandemic on the Airport, its operations and its financial condition. The City is under no obligation to update the information and data contained herein and such information and data shall not be deemed to be "Annual Financial Information" under the City's Rule 15c2-12 undertakings.

General

On March 11, 2020, the World Health Organization declared COVID-19 a worldwide pandemic. Since then, national and international governments have focused on containing the disease by limiting, and in some cases prohibiting, non-essential travel and minimizing person-to-person contact. State and local governments in the United States have issued "stay at home" or "shelter in place" orders, which restrict most aspects of everyday life, including discretionary travel, business operations, and schooling. Since the outbreak of the COVID-19 pandemic, the Governor of the Commonwealth and the Mayor of the City of Philadelphia have instituted a series of stay at home orders, which have since expired or been supplanted, in order to mitigate the spread of the virus.

On November 23, 2020, both the Governor of the Commonwealth and the Commonwealth's Secretary of Health imposed parallel "Limited Time Stay at Home Orders", replacing the prior regulatory restrictions adopted earlier in the crisis. As of the date of this Official Statement, the Commonwealth's COVID-19 restrictions, other than mask-wearing, have been lifted. Mask-wearing requirements are expected to remain in place in the Commonwealth until at least 70% of Pennsylvanians over the age of 18 are vaccinated. Beginning on May 21, 2021, the following changes went into effect in Philadelphia: (i) increased indoor and outdoor dining capacity in restaurants; (ii) no density limitations for business office operations; (iii) no density limitations for retail stores, bowling alleys, museums, and libraries, among other establishments; (iv) operation of gyms and indoor pools with certain occupancy limits and caps on class size; (v) allowance of indoor and outdoor gatherings and operation of theaters with capacity limits; (vi) allowance of indoor and outdoor catered events with capacity limits; (vii) operation of outdoor pools without density or capacity limitations; and (viii) operation of casinos with capacity limits. On June 11, 2021, all of the City's COVID-related restrictions were lifted. For more information regarding the City's COVID-19 measures and the effects of the COVID-19 pandemic on the City's operations, see APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA – Overview – Fiscal Health of the City".

According to the Centers for Disease Control and Prevention ("CDC"), three COVID-19 vaccines are now available in the United States, which are produced by Pfizer Pharmaceutical, Moderna and Janssen Pharmaceutical (Johnson & Johnson). In the City, vaccine distribution for frontline healthcare workers began in mid-January. Over the next several months, Philadelphians had access to COVID-19 vaccinations based on a phased schedule of priority populations informed by guidance from the CDC. As of April 16, 2021, all Philadelphians over the age of 12 are eligible to receive the COVID-19 vaccinations.

Due to the continually evolving nature of the COVID-19 pandemic, including variants of COVID-19 and the effectiveness of the COVID-19 vaccines, the full impact of the COVID-19 pandemic on the Airport cannot be fully quantified at this time. Prospective investors should be aware that the restrictions and limitations related to COVID-19, and the current impact to the air travel industry and the national and global economies may continue or increase for an indeterminate period of time and, therefore, have an adverse impact on the operations and revenues of the Airport. See "CERTAIN INVESTMENT CONSIDERATIONS – COVID-19 pandemic".

The COVID-19 pandemic and resulting restrictions have severely disrupted, and continue to disrupt, the airline industry. The scope and severity of COVID-19 related travel restrictions and "stay at home" or "shelter in place" orders vary by jurisdiction. Many countries have issued "stay at home" or "shelter in place" orders which have been adjusted or revised over the past several months by their respective governments. Some countries have closed their borders entirely to travelers from certain other countries in response to COVID-19 and others have imposed strict travel requirements, including proof of a negative COVID-19 test within so many days prior to travel. In addition, some jurisdictions require mandatory quarantine before or after travel from other locations, further depressing demand for passenger air travel.

As of the date of this Official Statement, airports in the United States have been acutely affected by interruptions in travel, reductions in passenger volumes and flights, as well as by the broader economic slowdown resulting from the COVID-19 pandemic. Airlines have reported unprecedented reductions in passenger volumes. In response, airlines have reduced flights and personnel to match capacity to reduced demand for air travel. Currently, this reduction in demand and capacity is expected to continue in the near term, although with modest incremental improvement.

Airlines serving the Airport specifically have reduced or cancelled flights and curtailed their overall capacity to balance against the decrease in demand for both domestic and international air travel. The COVID-19 pandemic and resultant restrictions have had an adverse effect on airlines serving the Airport, Airport concessionaires and Airport revenues as more fully discussed herein. The Airport has witnessed a sharp contraction in activity since March 2020. April 2020 represented the low point in terms of enplaned passengers, which totaled 62,294 or 4.5% as compared to enplanements in April 2019. Retail, food and other service concessionaires located in terminal facilities at the Airport have reported significant declines in sales, and the majority of the locations are temporarily closed as a result of reduced passenger traffic. In addition, the reduction in air travel has had an adverse effect on parking, ground transportation companies and rental car activity and, consequently, such related revenues for the Airport. See APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS" attached hereto for a discussion of the current and projected effects of the COVID-19 pandemic on the Airport's operations and revenues.

This section describes some of the effects that the COVID-19 pandemic has had on the Airport's passenger traffic, finances and operations and the measures the Airport has implemented to address such impacts as of the date of this Official Statement. The COVID-19 pandemic also has resulted in significant challenges for airlines serving the Airport, including substantial financial losses and announcements of layoffs and/or reductions in personnel. The full economic impact of the COVID-19 pandemic on the Airports and airline travel continues be difficult to predict at this time.

Summary of Actions Taken in Response to COVID-19

Recognizing the significant impact of the COVID-19 pandemic on the Airport System's overall operations and financial performance, the Division of Aviation implemented the following actions throughout 2020 and 2021 to reduce operating expenses.

- Implementation of an early retirement program ("ERP"), which is being offered during a limited window to allow eligible employees to retire early without penalty[*];
- Reduction of the scope of various contractual services;
- Implementation of a hiring freeze on non-critical positions;
- Significant limitations on the availability of over-time work for personnel;
- One-year suspension of contractual labor rate increases;

[*] Any savings resulting from the ERP are not included in any of the financial metrics presented in this Official Statement.

- Initial suspension and continued significant reduction of all non-essential employee travel and other reimbursables;

- Significantly reduced and limited vehicle allowance;

- Approximate one-year reduction of salaries for non-civil service employees (which was also implemented on a City-wide basis);

- Approximate one-year temporary closure of non-secure portions of Terminal A-East and ongoing evaluation of other temporary closures of terminal facilities and reductions in personnel based on evolving operational demands;

- Additional steps implemented by the Division of Aviation to provide temporary relief to the airlines and concessionaires operating at Philadelphia International Airport included:

    - Suspension of the Minimum Annual Guarantee (MAG) for all concessionaires and allowance of only agreed-upon percentages of gross revenues to be paid until such time as airline traffic levels return to 70% of pre-COVID traffic levels; and

    - Deferral of payments for concessionaires and landing fees and terminal rental rates for airlines for up to three months between the months of February and July 2020[*]. Repayment of all deferrals occurred between September 1, 2020 through December 31, 2020.

Federal COVID-19 Grants

The United States government passed legislative and regulatory actions as well as implemented measures to mitigate the broad disruptive effects of the COVID-19 pandemic. The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") was approved by the federal government in March 2020 to address the crisis created by the COVID-19 pandemic and included direct aid, in the form of grants, for airports. The Division of Aviation was awarded approximately $116.4 million of Federal COVID-19 Grants (defined herein) under the CARES Act in fiscal year 2020. These funds have been fully drawn and were used to pay debt service and operating expenses in fiscal years 2020 and 2021.

A second round of emergency relief funding, known as the Coronavirus Response and Relief Supplemental Appropriation Act ("CRRSA"), was approved by the federal government in December 2020. CRRSA is an additional legislative measure to mitigate the effects of the COVID-19 pandemic and includes funds to be awarded to eligible U.S. airports and eligible concessionaires. The Division of Aviation was awarded approximately $28.9 million in April 2021, which includes approximately $3.4 million in funding for airport concessionaires. The Division anticipates utilizing the $28.9 million in fiscal year 2022 for debt service and operating expenses.

A third round of emergency relief funding, known as the American Rescue Plan Act ("ARPA"), was approved by the federal government in March 2021 as another additional legislative measure to mitigate the effects of the COVID-19 pandemic and includes funds to be awarded to eligible U.S. airports and eligible concessionaires. The Federal Aviation Administration (the "FAA") allocated approximately $115.2 million under ARPA to the Division of Aviation, which includes approximately $13.7 million in funding for airport concessionaires. The Division anticipates utilizing these grant funds in fiscal years 2023 and 2024, but reserves the right to modify, advance or delay the application of these funds from fiscal years 2022 through 2025. Federal grants received under the CARES Act, CRRSA or ARPA are hereinafter collectively referred to as "Federal COVID-19 Grants".

[*] Concessionaires and airlines were given the option to defer payments for any three-month time period between February and July 2020.

Subject to certain exceptions, the Federal COVID-19 Grants contain certain requirements that must be met by receiving airports, including a requirement to employ at least 90% of the number of individuals employed (after making adjustments for retirements or voluntary employee separations) as of March 27, 2020. With the most recent award of the CRRSA Federal COVID-19 Operating Grant, the Airport is subject to the above-referenced employment requirement through September 30, 2021.

Additionally, the Division of Aviation continues to evaluate and seek other available sources of Commonwealth assistance and federal aid as they become available.

The following sections contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended. Such statements may involve known and unknown risks, uncertainties, and other factors which may cause the actual results, performance and achievements to be materially different from future results, performance and achievements expressed or implied by such forward-looking statements. Investors are cautioned that the actual results could differ materially from those set forth in such forward-looking statements. Such risks and uncertainties include but are not limited to (i) those relating to the possible invalidity of the underlying assumptions and estimates, (ii) possible changes or developments in social, economic, business, industry, market, legal, and regulatory circumstances, and (iii) conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners, and competitors, and legislative, judicial, and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive, and market conditions and future business decisions, all of which are difficult or impossible to predict accurately. For these reasons, there can be no assurance that the forward-looking statements included in this Official Statement will prove to be accurate. Important factors that could cause the City's and Airport's actual results and financial condition included in this Official Statement to differ materially from those indicated in the forward-looking statements include, among others, certain factors related to the COVID-19 pandemic as set forth herein.

Undue reliance should not be placed on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to the Division of Aviation and the City on the date hereof, and the Division of Aviation and the City assume no obligation to update any such forward-looking statements if or when expectations or events, conditions, or circumstances on which such statements are based occur or fail to occur, other than as indicated under the caption "CONTINUING DISCLOSURE" and in "APPENDIX VII -- FORM OF CONTINUING DISCLOSURE AGREEMENT".

Financial Outlook for the Airport for Fiscal Year 2021

Total Project Revenues for fiscal year 2021 are estimated to be $332.7 million (inclusive of $37.6 million of Federal COVID-19 Grants received under the CARES Act), which is $57.5 million below actual Total Project Revenues of $390.2 million for fiscal year 2020. Estimated Operating Expenses for fiscal year 2021 were reduced through savings achieved during the fiscal year and measures adopted in response to the COVID-19 pandemic. Operating Expenses for fiscal year 2021 are estimated to be $253.8 million, which is $21.0 million below actual Operating Expenses for fiscal year 2020 of $274.8 million. The $37.6 million of Federal COVID-19 Grants received under the CARES Act that were used to pay operating expenses and debt service in fiscal year 2021, combined with revenues and the reconciliation of airline rates and charges under the Airline Lease, are anticipated to result in Net Revenues sufficient to meet the Rate Covenant under the General Ordinance for fiscal year 2021. For a comparison of certain operating and financial data for fiscal year 2021 compared to audited figures for fiscal year 2020, see "Continued Impact of COVID-19 on Certain Financial and Operating Data" herein.

Fiscal Year 2022 Budget

Given the uncertainty created by the COVID-19 pandemic and the evolving nature of its effects, forecasts are subject to some level of volatility. The proposed fiscal year 2022 budget reflects, among other things, the continued potential impacts of the COVID-19 pandemic, estimated as of May 2021, on the sources of revenue available to the Division of Aviation. It should be reviewed in conjunction with the investment considerations set forth herein, see

"CERTAIN INVESTMENT CONSIDERATIONS" and is subject to subsequent developments and other potential effects of the COVID-19 pandemic as they unfold.

The remaining portion of the Federal COVID-19 Grants received under the CARES Act were utilized in fiscal year 2021 as described above to pay debt service and operating expenses. The Division of Aviation plans to utilize the $28.9 million of Federal COVID-19 Grants received under CRRSA to pay operating expenses, debt service and concession credits in fiscal year 2022. Although the ARPA grant has not been awarded to date, the Division of Aviation plans to utilize these Federal COVID-19 Grants in fiscal years 2023 and 2024, but may decide to modify, advance or delay the application of the Federal COVID-19 Grants received under ARPA between fiscal years 2022 and 2024 depending on the Airport System's rate of recovery.

Approach to Development of the Fiscal Year 2022 Budget. The Division of Aviation established a fiscal year 2022 budget with the assumption of an 8% increase in passenger traffic, but was able to continue to reduce the operating budget by approximately 5% as compared to the final fiscal year 2021 operating budget (the fiscal year 2021 budget was reduced by 10% from the final fiscal year 2020 budget).

Fiscal Year 2022 Budget Highlights. Total revenues are estimated to be $332.3 million, including landing fees and terminal rentals of $188.6 million, non-airline operating revenues of $87.3 million, surplus revenues from prior years of $27.5 million, and $28.9 million of Federal COVID-19 Grants under CRRSA. Total operating expenses are estimated to be $245.0 million for fiscal year 2022, reflecting a $11.7 million reduction from the fiscal year 2021 budget due to various cost-cutting measures implemented at the Airport System, including: 6.5% reduction in personnel and fringe cost; 6.0% reduction in contractual services; and 1.0% reduction in services from other City departments. In addition, the Division of Aviation was able to reduce net debt service by 18.7% before application of PFCs to debt service.

As shown in APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS", the Division of Aviation expects to meet its obligations as they become due and to comply with the Rate Covenant under the General Ordinance. The information provided below is presented to provide investors with interim information which supports the Division of Aviation's conclusion that a slow recovery is underway. It must be noted that predictions as to the duration and extent of any anticipated recovery are impossible to forecast at this time and constitute "forward-looking statements." See disclaimer above regarding forward-looking statements.

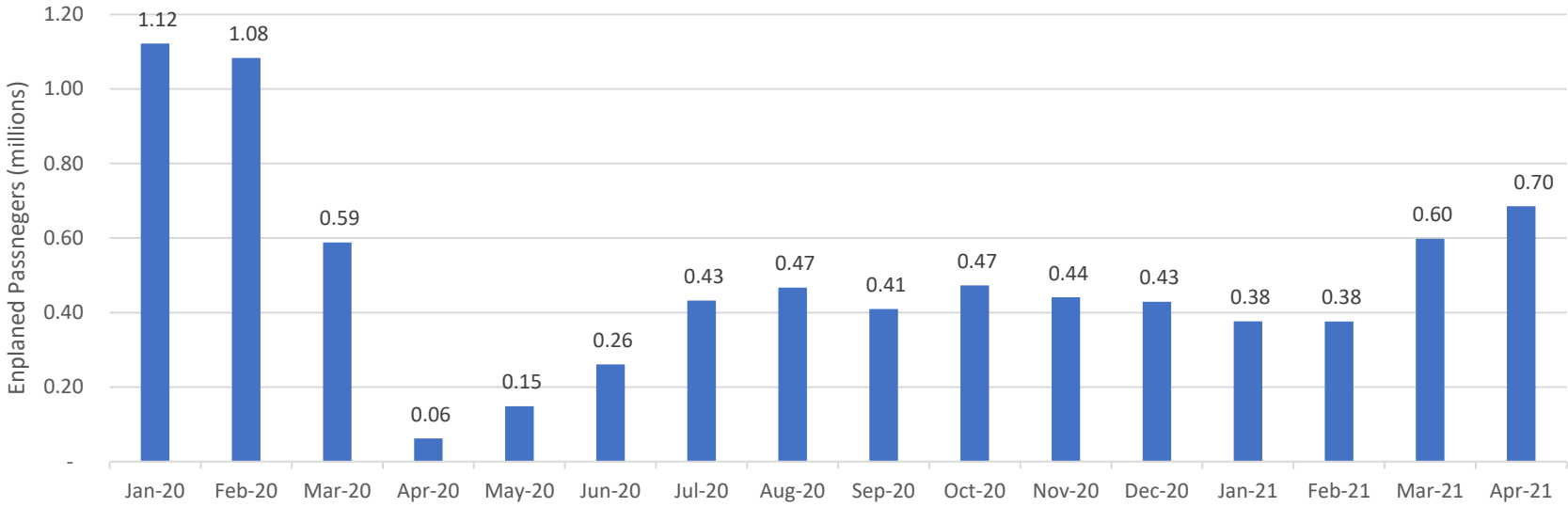
[Remainder of page intentionally left blank]

Continued Impact of COVID-19 on Passenger Traffic

During the first eight months of fiscal year 2020, passenger traffic at the Airport increased by 5.5%. As a result of the COVID-19 pandemic, beginning in March 2020, passenger activity at the Airport decreased substantially. Fiscal year 2020 enplaned passengers at the Airport were 11.9 million, which represented a 26.4% decrease compared to fiscal year 2019.

The low point for passenger volume at the Airport was April 2020. A modest recovery in passenger activity began in the summer of 2020, with growth stalling in the following fall and winter. Passenger activity increased in April 2021, reaching the highest levels for the Airport in the previous twelve months, as the recovery in demand for air travel began to accelerate. The following chart shows monthly enplaned passengers at the Airport for the period spanning from January 2020 through April 2021. See APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS" for the effects of the COVID-19 pandemic on air traffic at the Airport in terms of departing seat capacity, enplaned passengers and operations.

Monthly Enplaned Passengers at the Airport – January 2020 through April 2021



Source: City of Philadelphia, Division of Aviation.

Continued Impact of COVID-19 on Aircraft Operations

The following is an excerpt of the Aviation Activity Report, which shows plane movements and passenger and cargo operations at the Airport on a monthly and rolling twelve-month basis for March 2021 as compared to March 2020.

Aviation Activity Report
Month and Twelve Months Ending March
City of Philadelphia, Division of Aviation

Activity	Monthly Basis			Twelve Months Ending March		
	March 2021	March 2020	% Change	March 2021	March 2020	% Change
Landed Weight - Revenue (000 lbs.)	1,051,164	1,493,143	(29.6)%	10,906,494	22,153,116	(50.8)%
Operations	18,165	26,396	(31.2)%	184,834	386,364	(52.2)%
Enplaned Passengers	598,251	588,368	1.7%	4,473,921	15,804,133	(71.7)%
Cargo (Mail + Freight) (Tons)	58,132	49,604	17.2%	628,774	619,613	1.5%

Source: City of Philadelphia, Division of Aviation.

Total aircraft operations at the Airport in March 2021 were approximately 31% lower compared to March 2020 on a monthly basis. The Airport anticipates airlines will continue to gradually increase capacity on existing routes and restart additional destinations assuming the continuation and/or expansion of existing vaccination programs and growing demand for domestic leisure travel. See " – Continued Impact of COVID-19 on Airline Service" herein.

[Remainder of page intentionally left blank]

Continued Impact of COVID-19 on Certain Financial and Operating Data

The following information is provided to show percentage variances for certain estimated operating and financial data for fiscal year 2021 compared to audited figures for fiscal year 2020.

Selected Financial and Operating Data
City of Philadelphia, Division of Aviation
Fiscal Years Ending June 30

Selected Information	2020		2021*		Variance (%)
Enplaned Passengers	11.8	M	6.3	M	(46.4)%
Total Operations (takeoffs/landings)	18.3	M	10.0	M	(45.2)%
Total Landed Weights	317,344		203,600		(35.8)%
Landing Fees	$ 55.1	M	$85.3	M	54.9%
Terminal Rents	109.3	M	143.5	M	31.3%
Other Project Revenues					
Concessions					
Parking and Ground Transportation	43.4	M	3.4	M	(92.2)%
Terminal Concessions	30.6	M	9.1	M	(70.4)%
Rental Car	15.5	M	10.6	M	(31.6)%
Other Concessions	10.3	M	4.5	M	(56.4)%
Building and other rentals	25.1	M	23.1	M	(7.7)%
Federal COVID-19 Grants	78.8	M	37.6	M	(52.3)%
Other	22.0	M	15.6	M	(28.9)%
Total Project Revenues	$390.1	M	$332.7	M	(14.7)%
Operating costs					
Operating Expenses	$274.8	M	$253.8	M	(7.6)%
Debt Service Requirements	127.9	M	125.3	M	(2.1)%
Total	$402.7	M	$379.1	M	(5.9)%

*Fiscal year 2021 information is based on the City's preliminary estimates from eight months of actual data and budgetary projections.
Source: City of Philadelphia, Division of Aviation.

Continued Impact of COVID-19 on Airline Service

Airlines have reduced or suspended service at the Airport during the COVID-19 pandemic. By April 2020, Foreign flag airlines Aer Lingus, Air Canada, British Airways, Icelandair, Lufthansa, and Qatar Airways had suspended all services to the Airport. British Airways resume limited service between September 2020 and January 2021. Published airline schedules indicate British Airways is expected to resume daily service to the Airport in June 2021. Qatar Airways resumed service to the Airport in September 2020, operating an average of four flights per week, as compared to daily service before the COVID-19 pandemic. The resumption of service to the Airport for Aer Lingus, Air Canada, Icelandair, and Lufthansa is unknown as of May 2021. All U.S. airlines serving the Airport prior to the pandemic have maintained some level of service, with the exception of Sun Country Airlines which suspended service to the Airport between September 2020 and April 2021. Published airline schedules are subject to change as airlines may delay resumption of service due to reduced demand for passenger travel or restrictions on cross-border travel. The information reflected herein is as of the date indicated herein and is subject to change.

Continued Impact of COVID-19 on Passenger Facility Charges (PFCs)

PFCs collected during fiscal year 2021 are estimated to be $23.0 million, which is $32.62 million less than fiscal year 2020 collections of $55.6 million. In developing the fiscal year 2022 budget, the Division of Aviation assumed an 85% increase in enplanements and PFCs compared to estimated fiscal year 2020, which results in an expected increase in PFC collections to $42.5 million. The Division of Aviation held a PFC fund balance of $129.5 million as of March 31, 2021. See " – Sources of Liquidity" below. This balance, together with the estimated reduced future collections due to the COVID-19 pandemic, are projected to be sufficient to pay the PFC approved eligible portion of debt service on Bonds outstanding through maturity.

The Airport's general guidelines respecting the use of PFC Revenues currently permit (i) leveraging PFCs to a maximum of 80% of annual PFC collections and (ii) using PFC Revenues on a Pay-Go basis to fund capital projects from the remaining PFC fund balance after an amount equal to one half of the annual PFC-eligible debt service is reserved, both of which will be useful in managing expenditures during the COVID-19 pandemic. The Airport intends to submit additional PFC applications both to leverage debt service and to fund projects in support of its capital development program ("CDP Projects") through 2026. See APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS" for projection of PFC Revenues to be pledged under the baseline forecast.

Recovery Forecasts

Due to the uncertainty regarding the full financial and operational impact of the COVID-19 pandemic on the Airport, APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS" contains two recovery scenarios: a baseline forecast and a low scenario. The baseline forecast assumes passenger volume returns to fiscal year 2019 levels beginning in fiscal year 2023. The low scenario assumes the ongoing vaccination programs will have limited efficacy, thereby slowing the containment of the virus and prolonging the COVID-19 pandemic beyond the timeline assumed in the baseline forecast, such that recovery to fiscal year 2019 levels is not anticipated to occur until after fiscal year 2026, beyond the projection period. See APPENDIX I for additional information on projections for recovery and future activity and the assumptions upon which these estimates are based.

For a discussion of certain metrics for fiscal year 2021 revenues (estimated) and fiscal year 2022 budgeted revenues, see Table 10 – Summary of Project Revenues and Expenses.

Sources of Liquidity

As of March 31, 2021, the Division of Aviation had 514 days cash on hand in the Aviation Operating Fund available for payment of Operating Expenses. Additional accounts are available to the Division of Aviation for the payment of deficiencies with respect to the Debt Service Requirements and the Sinking Fund Reserve or, with approval by a Majority-in-Interest of Signatory Airlines, for any lawful Airport System purpose. The table on the following page describes some of the financial resources available to the Division of Aviation as of March 31, 2021.

[Remainder of page intentionally left blank]

Sources of Liquidity as of March 31, 2021
City of Philadelphia, Division of Aviation
(in millions)

Aviation Operating Fund	
Unrestricted*	$319.4
Restricted**	25.6
Total Aviation Operating Fund	$345.0
Other Available Funds	
PFC Fund Balance	$129.5
Available Commercial Paper	269.7
Undrawn Federal COVID-19 Grants***	28.9
Total Other Available Funds	$428.1

* Includes O&M Account and discretionary account balances and prior year surpluses available for airline rates and charges.

** Includes the Bond Redemption & Improvement Account.

*** As of April 1, 2021, all of the $116.4 million of Federal COVID-19 Grants received under the CARES Act were drawn. To date, no funds have been drawn on the $28.9 million of Federal COVID-19 Grants under CRRSA.

As an additional source of liquidity, the Division of Aviation also has a Parity Sinking Fund Reserve Account with respect to its Bonds (held by the Trustee). As of June 15, 2021, $126,877,383.64 are on account in the Parity Sinking Fund Reserve Account.

Other Measures

If Airport revenues were to be lower than anticipated or costs higher than expected, additional strategies to achieve savings could potentially include reducing or limiting increases in operations and maintenance expenses, deferring or resizing the scope of projects in the CDP (in addition to those already deferred or resized), delaying or reducing the size of planned issuances of debt, refunding additional Bonds, other debt restructurings to realize near term savings, pledging additional PFCs to pay debt service, adjusting airline and non-airline rates and charges, temporary closures of terminal facilities and reductions in personnel based on evolving operational demands, and other cost-cutting measures with respect to existing service contracts and personnel expenses.

Other Information

The CARES Act also included approximately $50 billion for passenger airlines in the United States. Prospective purchasers of the Series 2021 Bonds should review the SEC Reports (as defined herein) of the Signatory Airlines. This reference to the Signatory Airlines' SEC Reports is for informational purposes only, and such reports shall not be deemed incorporated herein by reference. Neither the Airport System nor the City is obligated to provide such information.

COVID-19 continues to spread and the pandemic is ongoing. Information respecting the pandemic and its effects evolves on a daily basis, rendering predictions increasingly difficult to make with any reasonable degree of certainty. Neither the City nor the Division of Aviation can predict (i) the duration or extent of the COVID-19 pandemic or any other outbreak or pandemic; (ii) the scope or duration of restrictions or warnings related to air travel, gatherings or any other activities, and the duration or extent to which airlines will reduce services at the Airport, or whether airlines will cease operations at the Airport or shut down in response to such restrictions or warnings; (iii) what effect any COVID-19 or other outbreak or pandemic-related restrictions or warnings may have on air travel, including to and from the Airport, the retail and services provided by Airport concessionaires, Airport costs or Airport revenues; (iv) whether and to what extent COVID-19 or another outbreak or pandemic may disrupt the local, state, national or global economy, manufacturing or supply chain, or whether any such disruption may adversely affect Airport-related construction, the costs, sources of funds, schedule or implementation of the Airport System's capital program, or other Airport operations; (v) the extent to which the COVID-19 pandemic or another outbreak or

pandemic, or the resultant disruption to the local, state, national or global economy, may result in changes in demand for air travel, including long-term changes in consumer behavior, or may have an impact on the airlines, concessionaires or other vendors serving the Airport System, or the airline and travel industry, generally; (vi) whether or to what extent the Airport System may provide additional deferrals, forbearances, adjustments or other changes to the Airport System's arrangements with its tenants and concessionaires; or (vii) whether any of the foregoing may have a material adverse effect on the finances and operations of the Airport System.

Prospective investors should assume that the restrictions and limitations related to COVID-19, and the current upheaval to the air travel industry and the national and global economies, may increase at least over the near term, recovery may be prolonged and, therefore, have an adverse impact on Airport revenues. Future outbreaks, pandemics or events outside the Airport System's control may further reduce demand for travel, which in turn could cause a decrease in passenger activity at the Airport and declines in revenues.

Information respecting the COVID-19 pandemic appears elsewhere in this Official Statement. See also, "CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT", "THE AIRPORT SYSTEM – AIRPORT ACTIVITY AND SIGNATORY AIRLINES", "INVESTMENT CONSIDERATIONS – COVID-19 pandemic" and APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS" herein.

For more information on the City's response to COVID-19 and the related financial impact on the City, see APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA – Overview – Fiscal Health of the City".

The City and the Division of Aviation continue to closely monitor and assess the effects of the COVID-19 pandemic and its impact on the City's and Airport's financial position and operations. The complete fiscal impact of COVID-19 on the City and the Airport is likely to change significantly as the situation further develops and cannot be fully quantified at this time.

SOURCES OF PROJECT REVENUES UNDER THE GENERAL ORDINANCE

Airport-Airline Use and Lease Agreements

Beginning July 1, 2015, the City and the principal airlines serving the Airport operated under the terms of an Airport-Airline Use and Lease Agreement (which is referred to herein as the "Airline Agreement") that, similar to prior agreements, established procedures for the annual review and adjustment of airline rentals, fees, and charges so that the Airport System yielded Amounts Available for Debt Service at least sufficient to comply with the Rate Covenant. The Airline Agreement had a five-year term through June 30, 2020, with options for two one-year extensions. The Airline Agreement is currently extended through June 30, 2022.

The Airport and the Signatory Airlines were in the process of negotiating a new Airline Agreement prior to the onset of the COVID-19 pandemic. The Airport and Signatory Airlines intend to resume negotiations later this year respecting the new Airline Agreement, which would be expected to take effect July 1, 2022.

The City has executed the Airline Agreement with the fifteen airlines at the Airport: Aer Lingus, Air Canada, Alaska Airlines, American Airlines, British Airways, Delta Air Lines, FedEx, Frontier Airlines, JetBlue Airways, Lufthansa, Qatar Airways, Southwest Airlines, Spirit Airlines, United Airlines and UPS.

For purposes of developing rentals, fees and charges under the Airline Agreement, the Airport System has been divided into the following cost centers to which all revenues, expenses, and debt service on Airport Revenue Bonds are allocated: Airfield Area, Terminal Area, Ramp Area, Other Buildings and Areas, Northeast Airport and Outside Terminal Area.

The procedures in the Airline Agreement for setting airline rentals, fees and charges are such as to ensure continued compliance with the Rate Covenant.

As more fully described below under "–Non-Signatory Airline Rentals, Fees, and Charges", airlines that do not sign the Airline Agreement are subject to a City regulation that would require them to pay more than the Signatory

Airlines. To operate at the Airport, such airlines are required to execute an Operating License Agreement with the City, with most terms and conditions the same as the Airline Agreement, but higher rates and charges.

Certain airlines that supply regional jet service to the Signatory Airlines under the same livery as the Signatory Airline will be asked to execute an Operating License under essentially the same terms and conditions as the Airline Agreement.

Under the Airline Agreement, as of March 2021, the Signatory Airlines have approved approximately $1.3 billion in Capital Expenditures, to be utilized for the approved Capital Development Program (CDP) discussed more fully under the heading "CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT". The Airline Agreement does not limit or restrict the right of the City to implement additional Capital Expenditures within the Airport System at any time; the lack of approval of the Capital Expenditures by a Majority-in-Interest of the Signatory Airlines ("MII Approval") after consultation with the City (other than certain exempted projects that do not require approval) prevents the City from including the cost of such Capital Expenditures in the applicable rate base for the Airline Cost Centers during the term of the Airline Agreement. MII Approval obligates the respective Signatory Airlines to pay rentals, fees, and charges as required by the Airline Agreement to enable the City to comply with the Rate Covenant.

A summary of certain provisions of the Airline Agreement are set forth in APPENDIX V – "SUMMARY OF CERTAIN PROVISIONS OF THE AIRLINE AGREEMENT". This summary is in all respects subject to and qualified by the complete, definitive form of the Airline Agreement in its entirety, copies of which are available from the Office of the Director of Finance at the address set forth under the heading "ADDITIONAL INFORMATION" herein.

Non-Signatory Airline Rentals, Fees, and Charges

If any airline enters into the Airline Agreement, then such Signatory Airline shall be governed by the rates and charges and terms and conditions as set forth in the Airline Agreement. Non-signatory Airlines rates and charges to use the Airport System are governed by the Airport Rates and Charges Regulation (the "Airport Rates and Charges Regulation"). The Airport Rates and Charges Regulation became effective July 1, 2020 and supersedes all previous rates and charges regulations.

Pursuant to the Airport Rates and Charges Regulation, Non-Signatory Airlines are required to pay amounts equal to 115% of the calculated Signatory Airline Landing Fee Rate, Terminal Rentals, International Common Use Area Fees, and Domestic Common Use Area Fees.

Certain Other Revenues

Some air carriers operating at the Airport are governed by duly promulgated regulations of the Department of Commerce of the City, rather than pursuant to written agreements. Certain of these carriers are not tenants and, whether scheduled or nonscheduled, their operations at the Airport do not warrant the undertaking of the obligations imposed upon carriers entering into written agreements. Pursuant to the Airline Agreement, rates and charges paid by such carriers may not be substantially less than the rates and charges paid by the Signatory Airlines.

Users of the Airport other than Signatory Airlines and other air carriers include providers of aviation services, such as ground handlers, fixed base operators, fuelers and in-flight kitchen operators. Concessionaires provide services and products to passengers and visitors, and include, among other things, restaurant and fast-food service, newsstands and gift shops, rental cars, taxi and limousine and other forms of ground transportation and on-Airport and off-Airport parking. See "Philadelphia Parking Authority" below. Lease and license agreements with the providers of these products and services provide the Airport with rentals and concession revenues.

All food, beverage and retail concessions in the terminal buildings are managed and operated under the Master Lease and Concession Management Agreement (the "Master Lease") between the City and MarketPlace PHL LLC ("MarketPlace"), which was executed in December 2014 and became effective January 2015. The Master Lease provides for MarketPlace to develop and manage Airport terminal concessions showcasing national brands and local Philadelphia products. The Master Lease Agreement has a seven (7) year term expiring on December 31, 2021 and

contains two consecutive renewal terms of three (3) years and two (2) years, respectively. Both existing renewal terms are in the process of being exercised by the City upon approval from Philadelphia's City Council ("City Council"), thereby contemporaneously extending the term to December 31, 2026. An additional 3-year renewal option will be added, exercisable in the City's sole discretion, which would extend the term, if exercised, to December 31, 2029.

Rental car companies (a) pay ground rent to the Airport on their facilities, (b) pay the Airport a privilege fee pursuant to City regulation, and (c) collect for payment to the Airport the Customer Facility Charges described below under "CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT – Funding Sources for Airport System Capital Projects – Customer Facility Charges for Rental Car Facility" pursuant to a Commonwealth law and a City enabling ordinance. Customer Facility Charges are not pledged for the payment of the Series 2021 Bonds or any of the other Bonds Outstanding.

In 2016, the Pennsylvania General Assembly temporarily authorized Transportation Network Companies ("TNC") operations in the City via a budget bill. In July of 2016, the Airport negotiated identical temporary license agreements with two national TNCs, which expired on September 30, 2016. In October 2016, the Pennsylvania General Assembly passed a bill that allows the Airport to adopt contracts, licenses, and regulations relating to the duties and responsibilities on Airport property of TNCs, including the imposition of reasonable fees. On December 1, 2016, the Airport entered into identical three-year license agreements with two TNCs. Both the temporary and three-year license agreements provide that the TNCs pay per-trip fees of $3.00 pick-up and $2.60 per drop-off to the Airport based on the number of passenger drop-offs and pick-ups. Following a 30-day extension, the agreement expired on December 31, 2019. The Airport and the TNCs recently entered into two identical license agreements as of January 1, 2020. The agreements have four-year terms and provide that TNCs pay per-trip fees to the Airport in the amount of $3.50 per passenger pick-up and drop-off during the first and second years and $4.00 per passenger pick up during the third and fourth years.

THE AIRPORT SYSTEM – MANAGEMENT AND DESCRIPTION

General

The Airport System consists of the Airport and the Northeast Airport, and it is owned by the City and operated by the Division of Aviation. The City is classified as a large air traffic hub by the FAA. In calendar year 2019, the Airport was ranked 20th busiest airport in the United States in terms of total passengers and 15th in terms of total cargo weight handled according to Airports Council International. In the fiscal year ended June 30, 2020, approximately 11.9 million passengers were enplaned at the Airport. Origin-destination traffic for fiscal year 2020 accounted for approximately 66% of annual passengers, with the remaining 34% being passengers connecting between flights.

Management of the Airport System

The Chief Executive Officer of the Division of Aviation, Rochelle L. Cameron, is responsible for the operation of the Airport System. As of March 31, 2021, there were approximately 744 Division of Aviation employees, 152 Police Department, 73 Fire Department, 18 Law Department, and 23 Office of Fleet Management persons employed by the City's Division of Aviation.

Airport System operations are conducted under the supervision of the following members of the Division of Aviation Staff:

Rochelle L. Cameron, Chief Executive Officer. Ms. Cameron was appointed Chief Executive Officer ("CEO") of the Airport in January 2016. As CEO, Ms. Cameron serves as the City's chief aviation representative in local, state, national and international affairs. She is responsible for directing the planning, development and administration of all activities of the City's Division of Aviation, including both Philadelphia International Airport and Northeast Philadelphia Airport. Ms. Cameron has served on the Airport's leadership team since 2011. From December 2014 until her appointment as CEO in January 2016, she was the Chief Operating Officer responsible for overseeing all day-to-day operations. She began her tenure at the Airport when she was named Deputy Director of Aviation, Finance and Administration in June 2011.

Before joining the Philadelphia International Airport, Ms. Cameron had 13 years' experience working for the Metropolitan Washington Airports Authority. Her experience also includes seven years as an active duty officer in the United States Air Force and one year as an Air Force civilian employee. She completed her military service in 1998 as an active duty Captain. Ms. Cameron holds a Bachelor of Arts degree in Political Science from the University of Notre Dame and an MBA in Business Administration from Auburn University at Montgomery. She is a Certified Public Accountant in the Commonwealths of Pennsylvania and Virginia, and a Certified Member of the American Association of Airport Executives (AAAE).

Ms. Cameron serves on the Board of Directors of Airports Council International-North America as Chair of the U.S. Policy Council and the National Policy Committee of AAAE. She is also a member of the Boards of Directors for the U.S. Travel Association, the Philadelphia Convention and Visitors Bureau and the World Trade Center of Greater Philadelphia. She is also Chair of the Federal Reserve Bank of Philadelphia's Economic and Community Advisory Council.

Tracy S. Borda, Chief Financial Officer. Ms. Borda was appointed Chief Financial Officer ("CFO") in January 2016. She is responsible for the Airport's financial strategy and oversees all financial functions, including financial reporting and forecasting, treasury and investor relations, budget development and management, audit, procurement, and materials management. Ms. Borda joined Philadelphia International Airport in 1995 as the Internal Audit Manager and has held various positions, including Airport Administrative Manager, Assistant Director of Aviation, and Deputy Director of Aviation – Finance and Administration. Ms. Borda holds a Bachelor of Science degree in Finance with a concentration in Economics from the Pennsylvania State University and an MBA from Temple University. She is a Certified Public Accountant in the Commonwealth of Pennsylvania and a Certified Member of the American Association of Airport Executives (AAAE). Ms. Borda serves on the Finance Committee Steering Group for Airports Council International - North America and is a member of the American Institute of Certified Public Accountants, Pennsylvania Institute of Certified Public Accountants, and the Government Financial Officers Association.

Keith Brune, Chief Operating Officer. Mr. Brune was appointed Chief Operating Officer ("COO") in October 2017. He oversees all day-to-day operations of the Philadelphia International Airport and the Northeast Airport, including landside and airside operations, security and maintenance of terminals and facilities, and capital development. Mr. Brune joined the Division of Aviation as an Airport Operations Officer in 1991 and has held various positions, including Airport Operations Superintendent, Acting Facilities Maintenance Manager, Airport Operations Manager and Deputy Director, Operations and Facilities. Mr. Brune holds Bachelor of Science and Master of Aeronautical Science degrees from Embry-Riddle Aeronautical University and is an Accredited Airport Executive ("A.A.E.") and a certified International Airport Professional (IAP) through Airports Council International. Additionally, Mr. Brune served ten years with the United States Air Force and is a former adjunct instructor of aviation at Embry-Riddle Aeronautical University and Drexel University. He is a member of the Board of Directors for the Delaware County (PA) Transportation Management Association and the Aviation Council of Pennsylvania. He was appointed and currently serves on the Governor's Aviation Advisory Committee and is a member of several committees for both American Association of Airport Executives (AAAE) and Airports Council International (ACI).

James Tyrrell, Chief Revenue Officer. Mr. Tyrrell was appointed to the position of Chief Revenue Officer in January 2016 and is responsible for business and real estate related functions, including the development, purchase, sale, use and lease of all Airport properties and facilities. He also oversees air service and cargo development, guest experience, food, beverage and retail concessions, rental cars and other business development activities, including wireless internet access, advertising contracts and all airline agreements. Additional responsibilities include commercial management and business development at the Northeast Philadelphia Airport. Prior to his current appointment, Mr. Tyrrell had served as the Deputy Director of Aviation, Property Management and Business Development since February 2001 and prior to that, in various other capacities including as the Airport's Properties Manager and as an Airport Properties Assistant. Mr. Tyrrell holds a Bachelor of Science degree in marketing and management from Saint Joseph's University. He serves on the Airports Council International-North America's (ACI-NA) Air Cargo Committee and previously served on ACINA Commercial Management and Business Diversity committees and is a Certified Member of the American Association of Airport Executives (AAAE).

Allen Mehta, Acting Chief Information Officer. Mr. Mehta was appointed to the position of Deputy Chief Technology Officer in September 2019. He oversees all IT network infrastructure and operations, including network security, telecoms, wireless, data centers, disaster recovery, on-prem and cloud environment, CCTV, access control, software and website development as well as the IT innovation team. He ensures that infrastructure and network operation services operate with a high degree of reliability and resiliency and develops and ensures adherence to yearly business and strategic plan initiatives. Before joining the Airport, Mr. Mehta served as Chief Information Officer at Lanter Delivery Systems. He holds a Bachelor of Science degree in Information Systems from the University of Phoenix and MBA from the University of Southern California, Mr. Mehta is well-versed in emerging IT trends to ensure the Airport is ready for continued industry challenges and changes.

Cassandra Williams, Deputy Chief Financial Officer. Ms. Williams was appointed Deputy Chief Financial Officer in January 2020. She is responsible for assisting in the management of all financial and audit matters as well as developing and implementing financial strategies to ensure that the Airport's financial requirements are met while keeping costs of operations at a minimum so as to continue to properly service the airline community and invest in infrastructure and new initiatives. She joined the Division of Aviation as the Controller where she was responsible for financial reporting, accounting strategies, and internal controls. Prior to her current role, Ms. Williams had the opportunity to serve as the Director of Finance in local governments around the state of Pennsylvania. Additionally, she has worked in financial positions at Fortune 500 companies and was an auditor at a Big Four public accounting firm. She holds a Bachelor of Science degree in Accounting from Rutgers University, a Master of Business Administration from St. John's University, and a Juris Doctorate from Temple University. She is a Certified Public Accountant, serves as the Recording Secretary for the East Region of the Government Finance Officers Association, and is a member of the Pennsylvania Institute of Certified Public Accountants, Women's Transportation Seminar (WTS), as well as Airports Council International – North America (ACI-NA).

Api Appulingam, PE, Deputy Director of Capital Development. Ms. Appulingam was appointed Deputy Director of Aviation, Capital Development in June 2019. She brings innovation to the capital development program, making critical improvements, and developing new infrastructure through architectural, engineering, environmental, planning and sustainability projects. Prior to her current role, Ms. Appulingam served as the Philadelphia Office Leader for RS&H, Inc. where she led significant aviation development projects for general aviation and commercial service airports in the United States and internationally. Ms. Appulingam earned a Bachelor of Science degree in Civil Engineering from Texas A&M University and a Master of Business Administration in Project Management/Corporate Finance from University of Dallas. She is also a registered Professional Engineer (P.E.), serves as the Philadelphia Chapter's President-Elect for Women's Transportation Seminar (WTS), and is the Diversity, Equity, and Inclusion Committee Chair for the Northeast Chapter/American Association of Airport Executives (NEC/AAAE), and was recently appointed to the Free Library of Philadelphia Board of Trustees.

Description of the Airport

The Airport was opened in 1940 and is owned by the City and operated by the Division of Aviation. The Airport serves residents and visitors from a broad geographic area that includes portions of four states: Pennsylvania, New Jersey, Delaware and Maryland. The primary service region of the Airport consists of the Philadelphia-Camden-Wilmington, PA-NJ-DE-MD Metropolitan Statistical Areas. See "THE AIRPORT SERVICE REGION" herein. The Airport is located partly in the southwestern section of the City and partly in the northeastern section of Delaware County, 7.2 miles from Center City, Philadelphia. It is adjacent to Interstate 95 and is served by a commuter rail line with direct service to Center City, Philadelphia, operated by the Southeastern Pennsylvania Transportation Authority ("SEPTA").

Land. The Airport contains approximately 2,598 acres located partly in the southwestern section of the City and partly in the northeastern section of Delaware County, about 7.2 miles from Center City, Philadelphia.

Airfield. The airfield consists of parallel runways 9L-27R and 9R-27L, crosswind runway 17-35 and commuter runway 8-26, together with interconnecting taxiways and aircraft parking aprons. The runway system can handle the largest commercial aircraft currently operated by the Signatory Airlines. The current lengths and widths of runways comprising the runway system are set forth in the table below.

Runway	Length (ft)	Width (ft)
9R-27L	12,000	200
9L-27R	9,500	150
17-35	6,501	150
8-26	5,000	150

Passenger Terminals. The passenger terminal complex located north of the two main runways comprises seven terminal units, each providing a concourse for aircraft loading and unloading; a landside building for passenger ticketing, check-in, and security screening; and a separate baggage claim building. The landside buildings and baggage claim buildings are served by separate curbside roadway systems. The terminal complex provides a total of approximately 3.3 million square feet of space and 126 aircraft gates.

Ticketing and baggage claim operations occupy the ground level and are served by ground level roadways. Airline operational facilities and baggage pick-up areas are located on the ground level of the Terminal Building and in the concourses. While airline office space is provided adjacent to ticket counter locations or in concourses, there are also offices in the connectors, the tower levels in A/B, B, and F Terminals, and the baggage claim buildings. Approximately 151,000 square feet of space in the passenger terminals has been developed for food, beverage and retail concessions, which are located throughout the post-security terminal buildings and concourses and in the baggage claim buildings.

Parking and Outside Terminal Area. The Outside Terminal Area includes public parking facilities, ground transportation and rental car facilities, and a hotel.

The Philadelphia Parking Authority (the "PPA") currently owns and operates five multi-story parking garages (approximately 11,823 spaces) at the Airport, and it also operates a number of surface parking lots (approximately 7,117 spaces) at the Airport (collectively, the "Improvements"), pursuant to a Contract for Parking Services between the City and the PPA dated as of October 1, 1974 (as amended, the "Parking Services Contract"). The land on which the Improvements are located is leased by the PPA from the City, acting through the Department of Commerce, Division of Aviation, pursuant to a Lease Agreement between the City and the PPA dated as of October 1, 1974 (as amended, the "Lease Agreement").

On August 14, 2020, pursuant to the Lease Agreement and the Parking Services Contract, the City exercised its option to purchase the Improvements. Upon satisfaction of certain conditions as set forth in the Lease Agreement and Parking Services Contract, including the repayment of all debt issued and outstanding under the PPA's bond indenture and all other outstanding debt of the PPA related to the Improvements (collectively, the "PPA Debt Outstanding"), all of which the Airport anticipates will occur soon, title to the Improvements would be transferred from the PPA to the City, free and clear of all liens, and the Improvements would thereafter automatically become part of the Airport System.

Eight car rental brands (Alamo, Avis, Budget, Dollar, Enterprise, Hertz, Thrifty, and National) lease facilities and parking areas adjacent to the parking garages and offer shuttle bus pickup and drop-off service to passengers. See "CERTAIN INVESTMENT CONSIDERATIONS – Bankruptcies and Mergers of Operating Airlines or Other Tenants" herein. Off-Airport rental car operators include Payless Car Rental and Sixt. Although the car rental concessions are physically located in the Outside Terminal Area, the majority of the revenues payable by the car rental companies are Project Revenues.

The Airport utilizes a contractor to manage its ground transportation dispatch system and provides for the sequencing of taxicabs and limousines in the Airport's taxicab holding area and their orderly dispatch to and from the terminal baggage claim facilities. An eight-zone system for delineating commercial traffic is in effect on the north and south sides of the baggage claim areas, which provides separate zones for SEPTA's Hi-Speed Line, rental car

shuttles, parking shuttles, hotel shuttles, taxicabs, inter-terminal shuttles, limousine and shuttle van services and charter buses and courier services. The City imposes egress fees for commercial vehicles based upon the seating capacity. All commercial vehicles are subject to the fees and must pay to enter the commercial roadway at a tollbooth. The only exception to the fees is for those operators who do not operate "for hire" (i.e., rental car courtesy vehicles and hotel courtesy vehicles). See also "SOURCES OF PROJECT REVENUES UNDER THE GENERAL ORDINANCE – Certain Other Revenues" herein for a discussion of TNCs.

Host Marriott Corporation operates a 14-story hotel adjacent to the Terminals A-B parking garage and connected to Terminal B via a skybridge on approximately three acres leased from the City. It features a restaurant, lounge and eleven meeting rooms, including a grand ballroom which is approximately 8,640 square feet in area. Hotel customer parking is provided in the adjacent parking garage and connected to the hotel by a skybridge.

General Aviation Facilities. Atlantic Aviation, a fixed-base operator located at the easternmost end of the Airport, services general aviation operations. This 29-acre facility, constructed and operated by Atlantic Aviation, opened in May 2000 with: an 8,800 square-foot terminal building; two 24,000 square-foot open hangars; a fuel farm consisting of two 20,000-gallon jet fuel tanks and one 10,000-gallon aviation gas tank; and 18 acres of ramp space.

Cargo and Other Facilities. There are six active cargo facilities located at the western end of the Airport, which include: the shared American Airlines/United Airlines building, two American Airlines buildings, two Aero Philadelphia buildings, Prologis, Inc. and Ridgely Group. UPS Air Cargo operates its east coast package handling and sorting hub from an approximately 700,000 square-foot building located at the southeastern side of the Airport.

American Airlines operates a 56,000 square foot ground service equipment facility at the west end of the Airport that handles repairs and upkeep on equipment that service American Airlines' daily arrivals and departures to and from Airport. The building achieved Leadership in Energy and Environmental Design (LEED) Silver certification.

American Airlines also operates an aircraft maintenance hangar, a 25,000 square foot cold storage facility and parking apron on 9.15 acres of land located in Cargo City.

Hertz Rent-A-Car operates a maintenance facility located on 10 acres of land at the corner of 84th Street and Bartram Avenue.

In addition, as part of a cargo expansion strategy, the Airport entered into an agreement with Aviation Facilities Company for the redevelopment of an existing cargo building and joined The International Air Cargo Association to expand its relationships with other businesses involved in the cargo industry. In June 2021, the Airport announced preliminary plans to expand its cargo facility footprint by approximately 135 acres, including approximately 800,000 square feet of new cargo building space and ten wide-body aircraft parking positions. These plans envision soliciting private tenants to invest in the phased development of the project.

Northeast Airport

The Northeast Airport is a general aviation airport that has two runways. The Northeast Airport does not provide commercial service, is owned by the City and operated by the Division of Aviation and is included in the City's Aviation Fund. The Northeast Airport is located on a 1,116-acre site situated within the City limits about 10 miles by road northeast of Center City, Philadelphia, and provides for general aviation, air taxi and corporate aviation, as well as occasional military aviation use.

The Northeast Airport currently has no scheduled commercial service. In recent years, the Northeast Airport has handled approximately 75,000 general aviation operations annually. There are 85 T-hangars and nine corporate hangars in use, and six open hangars available for general aviation activities. General aviation fuel services for both propeller and jet aircraft as well as aircraft and avionics maintenance are available.

Two fixed based operators service general aviation operations at the Northeast Airport. Atlantic Aviation is located on the southwest side of the Northeast Airport. This facility consists of the following facilities: an 8,000

square-foot terminal building, four open hangars totaling a combined 73,280 square feet, 65 T-hangars, a fuel farm consisting of two 15,000-gallon tanks, and 17 acres of ramp space. The North Philadelphia Jet Center is located on the northeast side of the Northeast Airport. The Jet Center opened in 1977 and has subsequently been renovated. The Jet Center includes a two-story 8,000 square-foot terminal building, two open hangars totaling a combined 20,000 square feet, a fuel farm consisting of four 10,000-gallon fuel tanks, and 20 T-hangars.

Leonardo Helicopters ("Leonardo") operates out of a 275,000 square foot facility, on a 39-acre site at Northeast Airport. The facility includes final assembly lines for the AW119Kx and AW139 helicopters, a parts supply depot for the Americas and a fully approved FAA and JAA repair station. Leonardo also performs helicopter customization, as well as providing maintenance services for customer aircraft based in the local area. Leonardo is also working on developing the AW609 which is a tiltrotor (VTOL) vertical takeoff and landing aircraft.

CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT

General

The Division of Aviation maintains an on-going Capital Development Program ("CDP") that addresses the Airport's development needs, as well as the repair and maintenance of its existing facilities.

As of October 2020, a total of $2.40 billion in CDP Projects had been approved by the Signatory Airlines. To date, $1.27 billion of these projects have either been completed or removed from the list of approved projects, resulting in remaining project approvals of $1.13 billion.

As a result of the COVID-19 pandemic, the Division of Aviation re-evaluated the remaining $1.13 billion of approved projects and identified $344.0 million in approved projects that would not be advancing or would be deferred beyond fiscal year 2026, the end of the projection period contained in the Market Analysis and Financial Projections. The majority of the $344.0 million projects not advancing or deferred consists of a new air traffic control tower ($197 million), airport support facilities ($57 million), and the design of additional widebody gates ($30 million). Working with the Signatory Airlines, the Division of Aviation also increased existing approved projects by $122.5 million and added $352.9 million in new projects bringing the current total to $1.26 billion for approved CDP Projects as set forth on the following page in Table 1 – Approved Capital Development Program.

The CDP is comprised of numerous projects that focus on renewal and rehabilitation of the terminals, airfield pavement, security and information technology enhancements, and airfield enabling projects for cargo development at Philadelphia International Airport, and airfield pavement and tenant improvements at the Northeast Airport. Below are highlights of the projects currently expected to advance during the projection period:

Airfield and Apron Improvements

Airfield and apron improvement projects comprise approximately $388.9 million or 31% of the projects advancing within the CDP and include: taxiway rehabilitation, apron reconstruction, wetlands mitigation, airfield security and access control, and lighting and electrical improvements.

Terminal and Landside Improvements

Terminal and landside improvement projects comprise approximately $752.2 million or 60% of the projects advancing within the CDP and include: checked baggage system renovations, loading bridge replacement, terminal systems rehabilitation and improvements, terminal interior improvements, roof replacement, restroom renovation, roadway signage, and electrical substation improvements.

Security and Information Technology

Security and Information Technology (IT) improvement projects comprise approximately $89.9 million or 7% of the projects advancing within the CDP and include: CCTV upgrades, wireless and network upgrades, badging

system upgrades, building management system upgrades, and construction of redundant IT support facilities to maintain business continuity.

Northeast Airport

Northeast Airport improvement projects comprise approximately $31.8 million or 3% of the projects advancing within the CDP and include: runway reconstruction, taxiway rehabilitation, airfield lighting, and tenant upgrades.

Table 1
Approved Capital Development Program
City of Philadelphia, Division of Aviation
(in thousands)

Project Description	**Estimated Project Cost**
Airfield and Aprons	$ 388,866
Terminal and Landside	752,239
Security and Technology	89,910
PNE Airfield and Taxiways	31,770
Total	$ 1,262,785

Source: City of Philadelphia, Division of Aviation.
Prepared by: AVK Consulting, Inc., May 2021.

Funding Sources for Airport System Capital Projects

Airport System Capital Projects have been financed primarily through Airport Revenue Bonds (including the Commercial Paper Notes), federal and Commonwealth grants-in-aid, PFCs, and Customer Facility Charge (CFC) Revenues as set forth in Table 2 below. The Airport expects to continue to fund capital development projects with a combination of federal and Commonwealth grants-in-aid, PFCs, CFC Revenues and proceeds from additional issues of Airport Revenue Bonds.

Table 2
Estimated Funding of Current Capital Development Program as of March 2021
City of Philadelphia, Division of Aviation
(in thousands)

SOURCES OF FUNDING	
Pay Go PFCs / Grants	$ 474,760
Operating Funds	4,300
Existing Debt	165,243
Series 2021 Bonds	200,000
2025 Bonds	266,365
Future Debt	152,117
Estimated Total Sources of Funds	$ 1,262,785

Source: City of Philadelphia, Division of Aviation.
Prepared by: AVK Consulting, Inc., May 2021.

Airport Revenue Bonds. The financing of a portion of the Capital Developments for the Airport System has been accomplished through the sale of Airport Revenue Bonds. See "INTRODUCTION – Outstanding and Additional Indebtedness" for a list of the outstanding Airport Revenue Bonds. No general obligation bonds of the City issued to

finance Capital Developments to the Airport System are currently outstanding or contemplated. The Market Analysis and Financial Projections include approximately $466.4 million of project costs funded with Airport Revenue Bonds through fiscal year 2026. See APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS".

Federal Grants-in-Aid. The Airport and Airway Improvement Act of 1982 created the Airport Improvement Program (the "AIP"), which is administered by the FAA and funded by the Airport and Airway Trust Fund. This fund is financed by various federal aviation user taxes. Grants are available to airport operators across the country in the form of "entitlement" funds and "discretionary" funds. Entitlement funds are apportioned annually based upon cargo volume and enplaned passengers, and discretionary funds are available at the discretion of the FAA based upon a national priority system. Actual entitlement funds will vary with the actual number of passenger enplanements and cargo volume, with total appropriations for the AIP and with any revision of the existing statutory formula for calculating such funds. In addition, pursuant to the PFC Act (defined below) and the Aviation Investment and Reform Act for the 21st Century, an airport's annual Federal entitlement grants are reduced by 50% following the imposition of PFCs at the $3.00 level and by 75% following imposition at the $4.00 or $4.50 level.

In Federal fiscal year 2020, the Airport was awarded approximately $51.8 million in AIP entitlement and discretionary funds. During the previous five Federal fiscal years (2014-2019), the Airport has received approximately $20.7 million per year.

Commonwealth Grants-in-Aid and Other Assistance. The Pennsylvania Department of Transportation (PennDOT), through Act 164 of 1984, provides grants for airport improvements. Over the last five years, the Airport has received approximately $800,000 per year for improvements at the Airport and received an average of $138,000 per year in matching AIP funds for improvements at the Northeast Airport. In addition, over the last five years, the Airport has received $500,000 from the Commonwealth for the rehabilitation of the SEPTA train platforms and has also been awarded $1,400,000 for the relocation of Tinicum Island Road.

Passenger Facility Charges. PFCs are authorized by the Aviation Safety and Capacity Expansion Act of 1990, as amended (the "PFC Act"), and implemented by the FAA pursuant to published regulations issued with respect to the PFC Act (the "PFC Regulations"). The PFC Act permits a public agency, such as the City, which controls certain commercial service airports to charge each paying passenger enplaning at the Airport (subject to certain limited exceptions) a PFC of up to $4.50. Pursuant to the PFC Act and to the City's current approvals from the FAA, the City may, with certain exceptions, charge each paying passenger who enplanes at the Airport a PFC of $4.50. The annual amount of PFCs payable to the City depends upon the number of passenger enplanements at the Airport. The PFC Act requires air carriers and their agents to collect the PFCs and to remit to the City once each month the proceeds of such collections, less a $0.11 handling fee and without interest earned prior to such remittance.

PFCs are to be used to finance FAA-approved airport-related projects that preserve or enhance capacity, safety or security of the national air transportation system, reduce noise from an airport that is part of the system or provide an opportunity for enhanced competition between or among air carriers or foreign air carriers. Examples of projects that could meet those objectives include airport development or planning, airfield rehabilitation/improvements, airport noise compatibility measures, roads and access projects, and terminal development such as the planning and construction of gates and related areas that facilitate the movement of passengers and baggage.

The FAA approval provides that bond documents, such as the General Ordinance, may define pledged airport revenues in a manner that would include PFCs. However, the FAA approval also provides that the use of PFCs is limited to the allowable costs of approved PFC projects ("PFC-Eligible" projects) and may not be used to pay debt service on any bonds issued to finance non-PFC-Eligible projects. The use of PFCs deposited in the special PFC account in the Aviation Capital Fund for any other project would require special FAA approval. Under the General Ordinance, PFCs do not constitute Project Revenues, but may be included in Amounts Available for Debt Service to the extent that such PFCs have been pledged pursuant to a Supplemental Ordinance. PFCs may also be made available for debt service, including as Designated PFC Revenues for Debt Service pursuant to the Sixteenth Supplemental Ordinance. See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE". PFCs have been pledged as additional security for the 2011A Bonds, to be refunded with the proceeds of the Series 2021 Bonds, and for a portion of the Series 2021 Bonds pursuant to the

Eighteenth Supplemental Ordinance; however, the remaining portion of Series 2021 Bonds are not payable from Designated PFC Revenues for Debt Service.

The City has, since September 1992, been authorized by the FAA to impose a PFC on eligible passengers enplaned at the Airport and to use PFCs to pay the costs of various FAA-approved projects. The PFC was initially $3.00 per enplaned passenger and, effective April 1, 2001, was increased to $4.50 per enplaned passenger. The City currently has authority from the FAA to impose the PFC and to collect PFCs, inclusive of investment earnings, in an aggregate amount of $1.56 billion. The estimated expiration date of such authority is July 2023.

As of June 30, 2020, PFCs received by the City, including investment earnings, totaled approximately $1.4 billion, of which approximately $1.3 billion had been expended on approved project costs, including PFC-Eligible Debt Service Requirements of the PFC-Pledge Bonds. Further detail on the City's PFCs is provided in Table 3.

The City is authorized to use PFCs to pay all or a portion of the PFC-Eligible Debt Service Requirements of the PFC-Pledge Bonds in an aggregate amount not exceeding the PFC-Eligible Debt Service Requirements of the PFC-Pledge Bonds. The City pledges PFCs, to the extent annually available to the City, equal to the total amount of the PFC-Eligible Debt Service on the PFC-Pledge Bonds over the life of such PFC-Pledge Bonds. The amount of such PFCs to be applied toward debt service on any annual basis will be determined year-to-year by the City. See also "SECURITY FOR THE AIRPORT REVENUE BONDS – City May Pledge Passenger Facility Charges" for a discussion of PFCs pledged for debt service on a portion of the Series 2021 Bonds.

See "CERTAIN INVESTMENT CONSIDERATIONS – Passenger Facility Charge Revenues".

Table 3
Annual PFCs
City of Philadelphia, Division of Aviation
Fiscal Years Ending June 30

Fiscal Year	Collections	Interest	Total Revenues
1993-2009	$ 702,774,809	$38,546,595	$ 741,321,404
2010	61,696,738	353,391	62,050,129
2011	62,338,653	191,092	62,529,745
2012	59,885,669	325,805	60,211,474
2013	58,495,629	414,832	58,910,461
2014	60,377,268	329,507	60,706,775
2015	60,644,306	436,648	61,080,954
2016	61,256,560	538,897	61,795,457
2017	55,151,223	933,337	56,084,560
2018	60,302,833	1,337,307	61,640,140
2019	63,596,713	2,348,424	65,945,137
2020	55,582,198	1,991,200	57,573,398
Total	$1,362,102,599	$47,747,035	$1,409,849,634
	Expenditures through June 30, 2020		$1,291,165,737
	PFC Account Balance		$ 118,683,896

Source: City of Philadelphia, Division of Aviation.

Customer Facility Charges For Rental Car Facility. On November 25, 2013, the Governor of Pennsylvania signed a comprehensive transportation bill into law which permitted the Airport to establish and collect a customer facility charge ("CFC") of not more than $8 per rental day on customers renting motor vehicles from Airport rental

car operators. The proceeds of the CFC collections are to be used solely for the planning, development, financing, construction and operation of a consolidated rental car facility ("CONRAC") and associated transportation system referenced in the CDP. Rental car operators began collecting CFCs in May 2014 at $8 per rental day from their customers and remitting them to the Airport. As of June 30, 2020, CFC collections total approximately $182.3 million.

The CONRAC project has been deferred due to the financial effects of the COVID-19 pandemic. Effective September 1, 2020, the Airport implemented a reduced CFC at $4 per rental day. This fee will continue to be collected by rental car operators from their customers and remitted directly to the Airport.

THE AIRPORT SYSTEM – AIRPORT ACTIVITY AND SIGNATORY AIRLINES

Aviation Activity at the Airport

As of April 2021, the airlines serving the Airport provided a total of 246 average daily scheduled departures to 97 destinations, including 84 domestic and 13 international destinations. As discussed in the section titled "IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT SYSTEM", the outbreak and spread of COVID-19 resulted in a sharp contraction of activity in the second half of fiscal year 2020. The virus was first detected in East Asia in late 2019 and by March 2020 was rapidly spreading to other regions globally, severely impacting demand for air travel. Airlines responded by parking aircraft and reducing capacity across their networks. May 2020 represented the low point in terms of capacity reductions, in which scheduled departing seats represented 25.1% of prior year seat capacity for the total U.S. and 22.1% for the Airport. Passenger activity decreased at a faster rate than seat capacity, with April 2020 representing the low point for passenger traffic. Enplaned passengers at the Airport in April 2020 represented 4.5% of enplaned passengers in April 2019. Passenger activity began to increase marginally in June 2020. A modest recovery in airline capacity occurred over the second half of the 2020 calendar year and the first quarter of the 2021 calendar year. Airlines accelerated their restoration of capacity in the second quarter of 2021, with June 2021 scheduled departing seats representing 85.0% of June 2019 scheduled departing seats for all U.S. airports. As of the date of this Official Statement, June 2021 scheduled departing seats represented 71.0% of June 2019 scheduled departing seats for the Airport. A full recovery to fiscal year 2019 levels of passenger activity is not expected until fiscal year 2025 at the earliest in accordance with the baseline forecast discussed in Appendix I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS". For more information regarding the effects of the COVID-19 pandemic on passenger traffic, finances and operations at the Airport as of the date of this Official Statement, see "IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT SYSTEM" herein.

[Remainder of page intentionally left blank]

Table 4 below provides the air carriers serving the Airport or Signatories to the Airline Agreement as of March 2021.

Table 4
Airlines at the Airport as of March 2021
City of Philadelphia, Division of Aviation

LEGACY/MAINLINE U.S. AIRLINES (4)	LOW-COST AIRLINES (5)	REGIONAL AIRLINES (11)	ALL-CARGO AIRLINES (3)	FOREIGN AIRLINES (5)
Alaska Airlines	**Frontier Airlines**	**Air Wisconsin (dba United Express)**	**AmeriJet International**	**Aer Lingus**
American Airlines	**JetBlue Airways**	**Commutair (dba United Express)**	**FedEx**	**Air Canada**
Delta Air Lines	**Southwest Airlines**	**Endeavor Air (dba Delta Connection)**	**UPS Air Cargo**	**British Airways**
United Airlines	**Spirit Airlines**	**Envoy Air (dba American Eagle)**		**Lufthansa**
	Sun Country Airlines	**GoJet Airlines (dba Delta Connection and United Express)**		**Qatar Airways**
		Mesa Airlines (dba United Express)		
		Piedmont Airlines (dba American Eagle)		
		PSA Airlines (dba American Eagle)		
		Republic Airways (dba American Eagle and Delta Connection)		
		Shuttle America (dba Delta Connection)		
		Sky West Airlines (dba Delta Connection and United Express)		

Source: City of Philadelphia, Division of Aviation.

American Airlines is the principal air carrier operating at the Airport, and the Airport serves as a primary hub in American Airlines' route system. American Airlines currently leases 75 gates under the American Airlines Airline

Agreement and utilizes another 17 gates on a common-use basis, for 73% of the total 126 gates at the Airport. As set forth in Table 6 below, American Airlines, together with its regional airline affiliates, accounted for approximately 2.6 million enplaned passengers, or 64.0% of the Airport's enplaned passengers for the 9-month period commencing July 2020 through March 2021, followed by Spirit and Frontier Airlines each with 8.6% of such enplaned passengers for the same 9-month period.

Table 5 presents historical data for domestic and international enplaned passengers at the Airport and Table 6 provides enplanement activity by airline.

As shown in Table 5 below, passenger traffic was generally stable during fiscal years 2011 through 2016 with enplaned passengers ranging between 15.2 million and 15.7 million. Between fiscal year 2011 and fiscal year 2016, the total number of enplaned passengers (domestic and international) at the Airport increased at a compound annual growth rate of 0.1%.

In fiscal year 2017, enplaned passenger traffic decreased by 5.6%, largely attributed to capacity reductions and schedule restructuring undertaken by American Airlines. The decrease in international enplaned passengers as a result of the discontinuation of service in 2016 was offset, in part, by a capacity increase at London Heathrow Airport, a critical hub that provides access to a large local passenger base as well as to passengers connecting from other airports. Additional international capacity growth by Air Canada, which increased service to Montreal, Canada and nonstop service to Reykjavik, Iceland by Icelandair in May 2017, partially offset the effect of capacity reductions that occurred in fiscal year 2017.

In fiscal year 2018, enplaned passenger traffic increased by 3.0%, partly due to more scheduled departing seats to international destinations, as American Airlines launched seasonal service to Budapest, Hungary and Prague, Czech Republic. American also launched new service to six domestic destinations, including Des Moines, Iowa, New York, New York (JFK), and San Antonio, Texas. In March 2018, American Airlines also resumed year-round international service to Zurich, Switzerland. Frontier Airlines and Spirit Airlines were the second and third largest airlines in terms of growth in enplaned passengers in fiscal year 2018. Aer Lingus began serving the Airport in March 2018 with service to Dublin, Ireland.

In fiscal year 2019, enplaned passenger traffic increased by 5.5%, with American Airlines once again representing the largest driver of total growth. American's new domestic destinations included Asheville, North Carolina, Chattanooga, Tennessee, and Worcester, Massachusetts. American continued to expand its transatlantic gateway at the Airport with new international service to Berlin, Germany, Bologna, Italy, and Dubrovnik, Croatia. Frontier Airlines and Spirit Airlines continued to increase service to new and existing destinations. Sun Country Airlines began serving the Airport in fiscal year 2019 with service to Minneapolis – Saint Paul, Minnesota.

In fiscal year 2020, enplaned passenger traffic decreased by 26.4% due to the onset of the COVID-19 pandemic commencing in March 2020. For fiscal year 2021, enplaned passenger traffic is estimated to decrease by approximately 50% from fiscal year 2020, demonstrating one full year of the effects of the COVID-19 pandemic on passenger traffic.

Between fiscal year 2011 and fiscal year 2020, the total number of enplaned passengers (domestic and international) at the Airport decreased at a compound annual growth rate of (3.0%), as demonstrated on the following table.

[Remainder of page intentionally left blank]

Table 5
Historical Enplaned Passengers
City of Philadelphia, Division of Aviation
(Fiscal Years Ending June 30)

Fiscal Year	Domestic	International	Total	Total Annual Increase (Decrease)
2011	13,635,784	1,975,799	15,611,583	2.8
2012	13,368,218	1,975,908	15,344,126	(1.7)
2013	13,246,485	1,969,400	15,215,885	(0.8)
2014	13,273,937	2,042,116	15,316,053	0.7
2015	13,272,717	2,040,021	15,312,738	(0.0)
2016	13,695,700	1,987,858	15,683,558	2.4
2017	12,967,584	1,839,298	14,806,882	(5.6)
2018	13,372,943	1,872,510	15,245,453	3.0
2019	14,046,663	2,041,761	16,088,424	5.5
2020	10,531,456	1,315,951	11,847,407	(26.4)
		Compound Annual Growth Rate		
2011-2016	0.1%	0.1%	0.1%	
2011-2020	(2.8%)	(4.4%)	(3.0%)	

Source: City of Philadelphia, Division of Aviation.
Note: For fiscal year 2021, enplanements are estimated to be 6.3 million, which is approximately 46% lower than fiscal year 2020 enplanement levels.

[Remainder of page intentionally left blank]

Table 6
Historical Total Enplaned Passengers
City of Philadelphia, Division of Aviation
(Fiscal Year Ending June 30)

	Fiscal Year 2016		Fiscal Year 2017		Fiscal Year 2018		Fiscal Year 2019		Fiscal Year 2020		Fiscal Year to Date through March 2021	
Airlines [1]	**Enplaned Passengers**	**Share**	**Enplaned Passengers**	**Share**	**Enplaned Passengers**	**Share**	**Enplaned Passengers**	**Share**	**Enplaned Passengers**	**Share**	**Enplaned Passengers**	**Share**
American Airlines	11,397,694	72.7%	10,361,644	70.0%	10,633,000	69.7%	11,199,232	69.6%	7,965,468	67.2%	2,563,132	64.0%
Spirit Airlines	245,438	1.6%	361,782	2.4%	421,325	2.8%	515,578	3.2%	489,571	4.1%	343,723	8.6%
Frontier Airlines	554,469	3.5%	648,505	4.4%	725,039	4.8%	864,308	5.4%	841,985	7.1%	343,113	8.6%
Southwest Airlines	1,133,501	7.2%	1,152,350	7.8%	1,123,008	7.4%	1,096,018	6.8%	744,815	6.3%	241,370	6.0%
Delta Air Lines	1,145,534	7.3%	1,040,270	7.0%	972,614	6.4%	968,184	6.0%	751,934	6.3%	229,179	5.7%
United Airlines	640,419	4.1%	644,036	4.3%	667,653	4.4%	633,708	3.9%	429,336	3.6%	141,765	3.5%
JetBlue Airways	183,285	1.2%	205,817	1.4%	218,290	1.4%	223,713	1.4%	177,613	1.5%	93,469	2.3%
Alaska Airlines	59,076	0.4%	64,154	0.4%	141,157	0.9%	163,207	1.0%	114,340	1.0%	26,635	0.7%
Qatar Airways	61,745	0.4%	52,728	0.4%	66,047	0.4%	80,795	0.5%	63,574	0.5%	13,386	0.3%
Sun Country Airlines	-	0.0%	-	0.0%	-	0.0%	6,934	0.0%	22,880	0.2%	2,966	0.1%
British Airways	128,290	0.8%	118,177	0.8%	88,688	0.6%	97,561	0.6%	79,991	0.7%	2,771	0.1%
Air Canada	61,797	0.4%	77,018	0.5%	93,978	0.6%	99,909	0.6%	72,582	0.6%	0	0.0%
Lufthansa German Airlines	69,405	0.4%	73,251	0.5%	71,971	0.5%	78,033	0.5%	56,945	0.5%	0	0.0%
Aer Lingus	-	0.0%	-	0.0%	10,951	0.1%	46,969	0.3%	29,418	0.2%	0	0.0%
Icelandair	-	0.0%	-	0.0%	9,690	0.1%	11,379	0.1%	6,492	0.1%	0	0.0%
Other [2]	2,905	0.0%	7,150	0.0%	2,042	0.0%	2,896	0.0%	463	0.0%	708	0.0%
Total	15,683,558	100.0%	14,806,882	100.0%	15,245,453	100.0%	16,088,424	100.0%	11,847,407	100.0%	4,002,217	100.0%

Notes: Figures may not add to totals shown due to rounding.
[1] Includes regional affiliated airlines, as applicable.
[2] Includes airlines with minimal market shares or that may not operate at the Airport as of fiscal year 2021.
Source: City of Philadelphia, Division of Aviation.

Air service at the Airport has been introduced or discontinued by multiple air carriers over time. For a discussion of the preliminary effects of the COVID-19 pandemic on air service, see "IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT SYSTEM – Continued Impact of COVID-19 on Airline Service" herein. The Airport also provides significant air cargo service as shown in Table 7 below. United Parcel Service (UPS) operates a regional cargo hub at the Airport that connects the UPS network with mid-Atlantic and European markets. The Airport ranks second among UPS' continental U.S. hubs in terms of destinations served and third in terms of cargo weight. Additionally, passenger airlines carry belly cargo to and from the Airport.

Table 7
Historical Air Cargo (in US tons)
City of Philadelphia, Division of Aviation
(Fiscal Years Ending June 30)

Fiscal Year	Freight	Mail	Total	Growth
2011	449,683	23,937	473,620	2.7%
2012	416,731	27,151	443,882	(6.3%)
2013	388,383	28,285	416,668	(6.1%)
2014	395,661	29,545	425,206	2.0%
2015	402,194	26,681	428,875	0.9%
2016	414,891	22,866	437,757	2.1%
2017	424,009	24,659	448,668	2.5%
2018	487,086	23,344	510,430	13.8%
2019	554,606	21,665	576,271	12.9%
2020	573,499	40,341	613,840	6.5%
		Compound Annual Growth Rate		
2011-2020	2.7%	6.0%	2.9%	

Source: City of Philadelphia, Division of Aviation.
Note: For fiscal year 2021, air cargo tonnage is estimated to be 626,000, which is approximately 2.0% greater than fiscal year 2020 levels.

Information Concerning Airlines Operating at the Airport

General. The Airline Agreement requires the Signatory Airlines to make payments in each fiscal year in amounts which, together with other Project Revenues and other pledged Amounts Available for Debt Service such as pledged PFCs, are sufficient to pay Operating Expenses and annual debt service on all of the City's outstanding Airport Revenue Bonds and general obligation bonds issued by the City for the Airport System are sufficient to comply with the Rate Covenant. See "SOURCES OF PROJECT REVENUES UNDER THE GENERAL ORDINANCE – Airport-Airline Use and Lease Agreements".

Certain domestic Signatory Airlines serving the Airport are reporting companies subject to the information requirements of the Securities Exchange Act of 1934 and, in accordance therewith, must file reports and other information with the Securities and Exchange Commission (the "Commission"). Certain information, including financial information, concerning such a Signatory Airline (or its agent corporation) is disclosed in certain reports and statements filed with the Commission. Such reports and statements can be inspected in the Public Reference Room of the Commission at 100 F Street, N.E., Washington, D.C. 20549, or at the Commission website at http://www.sec.gov, and copies of such reports and statements can be obtained from the Public Reference Section of the Commission at 100 F Street, N.E., Washington, D.C. 20549, at prescribed rates.

In addition, each Scheduled Airline is required to file periodic reports of financial and operating statistics with the Department of Transportation. Such reports may be inspected at the following location: Office of Aviation Information Management; Data Requirements and Public Reports Division Research and Special Programs Administration, Department of Transportation, 400 Seventh Street, S.W., Washington, D.C. 20590.

Domestic airlines serving the Airport that are privately held, foreign airlines serving the Airport, and foreign corporations operating airlines serving the Airport (unless such foreign airlines have American Depositary Receipts ("ADR") registered on a national exchange) are not required to file information with the Commission. Such airlines, or foreign corporations operating airlines, serving the Airport file limited information only with the Department of Transportation ("DOT"). Additional data may be posted at the websites of the respective airlines. The City makes no representation as to the accuracy or completeness of any such information prepared and filed by any of the Signatory Airlines.

American Airlines

The Airport currently serves as a major hub for the combined American Airlines system. As set forth in the Table 6 above, American Airlines, together with its regional airline affiliates, accounted for approximately 2.6 million enplaned passengers, or 64% of the Airport's enplaned passengers for the 9-month period from July 2020 through March 2021. See "CERTAIN INVESTMENT CONSIDERATIONS – Dominance of American Airlines Presence at the Airport" herein.

On July 16, 2020, American Airlines announced a partnership with JetBlue that includes codeshare cooperation to support connectivity between the two airlines at John F. Kennedy International Airport in New York (JFK) and Boston Logan International Airport (BOS). American expects the partnership will support growth at American Airlines' hub at JFK and that this growth will be incremental to its network. According to its Vice President of Network Planning, the Airport will retain its position as American Airlines' primary transatlantic gateway. See APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS" herein.

Based on its current activities at the Airport, American Airlines is an "obligated person" as such term is defined by Rule 15c2-12 promulgated by the Commission ("Rule 15c2-12") and as used in the Continuing Disclosure Agreement to be executed by the City and accepted and acknowledged by American Airlines in connection with the delivery of the Series 2021 Bonds. See "CONTINUING DISCLOSURE AGREEMENT" and APPENDIX VII – "FORM OF CONTINUING DISCLOSURE AGREEMENT".

Philadelphia Terminal & Equipment Company

In 2016, Airlines operating at the Airport that have executed the Airline Agreement established Philadelphia Terminal & Equipment Company ("PhiliTEC"), a special purpose limited liability company to manage the maintenance and operation of certain facilities, equipment, systems and services at the Airport twenty-four (24) hours a day, seven (7) days a week. The City entered into a Maintenance and Operating License Agreement with PhiliTEC on February 10, 2017, providing for PhiliTEC's assumption of maintenance and operating responsibilities thereafter as agreed. The City and PhiliTEC agreed for PhiliTEC's assumption on July 1, 2017 of responsibility for the operation of, and provision of maintenance services for, aircraft deicing facilities. The City and PhiliTEC agreed for PhiliTEC's assumption on August 1, 2017 of responsibility (including financial responsibility) for the operation of, and provision of corrective and preventive maintenance services for, Airport passenger boarding bridges, outbound baggage handling systems, international recheck systems, inbound arriving baggage handling systems, electric GSE charging stations, and lavatory waste stations. Prior to August 1, 2017 the City had paid contractors for these maintenance and operating services. Ownership of the systems and facilities remains with the City.

THE AIRPORT SERVICE REGION

Philadelphia International Airport is the principal airport serving the City of Philadelphia and surrounding areas of Pennsylvania, New Jersey, Delaware, and Maryland. The Airport serves as an international passenger gateway for the region and as a connecting hub and leading transatlantic gateway for American Airlines. The Airport also serves as an international air cargo hub. According to APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS", the Airport Service Region (or Air Trade Area as referred to therein) had a population of approximately 6.1 million in 2019. Its population has increased at a compound annual growth rate of 0.2% since 2010, compared to a compound annual growth rate of 0.6% for the nation as a whole.

FINANCIAL FACTORS

The City Controller has not participated in the preparation of the budget estimates and projections set forth in various tables contained in this Official Statement or otherwise set forth herein. The financial statements, tables, statistics and other information contained in this Official Statement have been provided by the Division of Aviation and can be reconciled to the financial statements in the City's ACFR for the fiscal years 2016 through 2020.

Historical Project Revenues and Operating Expenses

Table 8 contains data provided by the Division of Aviation from its unaudited accrual basis reports and presents information regarding Project Revenues and expenses of the City's Airport System. The information presented in Table 8 reconciles to the Basic Financial Statements contained in the City's ACFR, which is audited by the Office of the City Controller.

Table 8
Summary of Historical Project Revenues and Expenses of the Airport System
City of Philadelphia, Division of Aviation
(Fiscal Years Ending June 30)
(in thousands)

	Amounts Available for Debt Service	**2016**	**2017**	**2018**	**2019**	**2020**
1.	Space Rentals	$108,115	$ 113,400	$ 123,705	$ 116,966	$ 85,717
2.	Landing Fees	73,968	80,457	90,438	83,890	55,080
3.	Ramp Area rentals	1,213	572	427	212	(130)
4.	International Terminal revenues	34,025	33,747	34,141	31,823	23,616
5.	Subtotal, Airline Rentals, Fees and Charges	$217,321	$ 228,176	$ 248,711	$ 232,891	$ 164,400
6.	Nonairline Revenue	123,434	133,658	132,183	157,420	221,893
7.	Interest Income	494	232	773	3,132	3,874
8.	Total Project Revenues	$341,249	$ 362,066	$ 381,667	$ 393,443	$ 390,168
9.	Passenger Facility Charges (PFCs) Available for Debt Service	31,176	33,693	31,201	31,189	31,200
10.	Portion of Fund Balance Attributable to Amounts Available for Debt Service	71,220	87,875	107,820	126,824	144,218
11.	Total Amounts Available for Debt Service	$443,645	$483,634	$520,688	$551,456	$565,586
	Expenses					
12.	Net Operating Expenses	$132,149	$ 136,498	$ 150,972	$ 161,161	$ 151,739
13.	Required Renewal Fund Deposit	500	250	0	0	0
14.	Interdepartmental Charges	106,775	116,753	116,749	121,054	123,017
15.	Total Expenses	$239,424	$ 253,501	$ 267,721	$ 282,215	$ 274,756
16.	Net Revenue	$204,221	$ 230,133	$ 252,967	$ 269,241	$ 290,830
17	Revenue Bond Debt Service	$120,595	$ 122,596	$ 127,790	$ 126,007	$ 127,910
	Rate Covenant Test of the General Ordinance					
18.	Test 1 (Ln 11-Ln 12-Ln 13)/(Ln 17)	2.58	2.83	2.89	3.10	3.24
19.	Test 2 (Ln 11-Ln 15)/(Ln 17)	1.69	1.88	1.98	2.14	2.27

Source: City's ACFR.

Management Discussion of Historical Results (to be updated)

Table 8 presents the annual revenues and expenses of the Airport System for fiscal years 2016 through 2020. The information contained in Table 8 is presented on the accrual basis of accounting adjusted to meet the particular requirements of the General Ordinance and the current and the Airline Agreement. See APPENDIX II – "FINANCIAL STATEMENTS OF THE DIVISION OF AVIATION FISCAL YEAR ENDED JUNE 30, 2020".

Fiscal Years 2019 and 2020

Between fiscal years 2020 and 2019, Total Project Revenues, which consist of both Airline and Non-Airline Revenues, decreased to $390.2 million from $393.4 million due to the impacts of the COVID-19 pandemic. The decrease in Project Revenues would have been more substantial but was mostly offset by the receipt of $78.9 million of Federal COVID-19 Grants under the CARES Act. Total Operating Expenses decreased to $274.8 million in fiscal year 2020 from $282.2 million in fiscal year 2019 due to reductions in contractual services and materials and supplies.

Net Revenue

Net Revenue represents the balance of Total Amounts Available for Debt Service after total Expenses. Net Revenue increased from $269.2 million in fiscal year 2019 to $290.8 million in fiscal year 2020. This increase is attributable to the decrease in Total Operating Expenses described previously, an increase in interest income, continued funding of the O&M Account, and an increase in prior fund balances available for Debt Service.

Rate Covenants

As illustrated in Table 8, the rate covenants prescribed in the General Ordinance were satisfied in each fiscal year. The increase in debt service coverage from fiscal year 2016 to fiscal year 2020 is primarily attributable to increases in OTA net revenues.

[Remainder of page intentionally left blank]

Non-Airline Revenues

Non-Airline Revenues consist of those Project Revenues generated at the Airport System from sources other than airlines (e.g., automobile parking, rental cars, restaurants, retail, landside building and ground rents, hangar and cargo rentals). A majority of the Airport System's Non-Airline Revenues are generated from concessions. The following Table 9 presents Non-Airline Revenue at the Airport from fiscal year 2016 through fiscal year 2020.

Table 9
Summary of Historical Non-Airline Revenues of the Airport System
City of Philadelphia, Division of Aviation
(Fiscal Years Ending June 30)
(in thousands)

	2016	2017	2018	2019	2020
Concessions Non-Airline Revenues					
Automobile Parking	$ 28,600	$ 32,556	$ 33,624	$ 37,152	$ 30,613
Rental Car	18,925	19,037	19,088	19,822	33,654
Restaurants and Retail	28,871	29,845	33,082	38,726	15,473
Ground Transportation	3,821	6,851	7,760	9,906	9,770
Other Concessions	9,839	10,299	11,198	18,823	10,344
	$ 90,057	$ 98,588	$ 104,752	$ 124,429	$ 99,855
Other Non-Airline Revenues					
Building and Ground Rentals	$ 17,437	$ 19,295	$ 16,014	$ 25,486	$ 22,542
Hangar and Cargo Rentals	2,361	2,312	3,443	3,443	2,515
Sales of Utilities	3,175	2,871	2,875	2,587	2,565
Other Landing and Fuel Flowage Fees	1,713	2,583	2,735	2,863	2,761
Federal COVID-19 Grants	-	-	-	-	78,850
Miscellaneous	9,691	8,240	2,557	1,894	16,416
Total Non-Airline Revenues	$ 123,434	$ 133,890	$ 132,376	$ 160,702	$ 225,504

Source: City of Philadelphia, Division of Aviation.

Concession revenues were approximately $90.1 million in fiscal year 2016, and increased to approximately $124.4 million in fiscal year 2019, reflecting a compound annual growth rate of 11.4%. The increase in fiscal year 2016 through fiscal year 2019 resulted from enhanced food, beverage and retail concession offerings at the Airport, the entry of TNCs and increased utilization of the Airport's long-term parking lot. Concession revenues decreased by 19.7% in fiscal year 2020 due to the COVID-19 pandemic.

[Remainder of page intentionally left blank]

Estimated Project Revenues and Expenses

Table 10 presents Project Revenues and expenses of the City's Airport System, as estimated for fiscal year 2021 and as budgeted for fiscal year 2022.

Table 10
Summary of Project Revenues and Expenses
City of Philadelphia, Division of Aviation
Estimated FY 2021 and Budget FY 2022
(Fiscal Years Ending June 30)
(in thousands)

		Estimated FY 2021*	Budget FY 2022
Amounts Available for Debt Service			
Airline Rentals, Fees and Charges[1]		$ 228,811	$ 216,100
Non-Airline Revenue		66,307	87,302
Federal COVID-19 Grants		37,586	28,914
Total Project Revenues		$ 332,704	$ 332,216
Passenger Facility Charges (PFCs) Available for Debt Service[2]		62,618	31,976
Portion of Fund Balance Attributable to Amounts Available for Debt Service[3]		160,843	173,522
Total Amounts Available for Debt Service	[A]	$ 556,165	$ 537,814
Expenses			
Net Operating Expenses	[B]	$ 133,907	$ 133,790
Interdepartmental Charges		119,886	111,238
Total Operating Expenses	[C]	$ 253,793	$ 245,028
Bond Debt Service Requirements	[D]	$ 125,250	$ 118,264
Total Expenses		$ 379,043	$ 363,292
Net Revenue	[A-C=E]	$ 302,272	$ 292,786
1.50x Coverage Requirement (Test 1)	[(A-B) / D]	3.37	3.42
1.00x Coverage Requirement (Test 2)	[E / D]	2.41	2.48

* Fiscal year 2021 information is based on the City's preliminary estimates from eight months of actual data and budgetary projections

1. Includes required revenue for Terminal Area rentals, International and Common Use Fees, Ramp Area rentals and Airline Landing Fees.
2. Includes pledged PFC Revenues for eligible Debt Service on the Series 2011A and the Series 2020C Bonds. The 2011A Bonds will be refunded with the proceeds of the Series 2021 Bonds. PFC Revenues will be pledged for the payment of the eligible Debt Service on the Series 2021 Bonds.
3. Per Section 5.01(a) of the General Ordinance, that portion of Aviation Operating Fund balance available for use as Amounts Available for Debt Service.

Source: City of Philadelphia, Division of Aviation.

Management Discussion of Fiscal Year 2021 (Estimated) and Fiscal Year 2022 (Budget)

In fiscal year 2021, the Airport applied an additional $31.0 million of PFCs for Debt Service above what is normally applied to alleviate the impacts of the COVID-19 pandemic on airline revenues. In fiscal year 2022, the Airport plans to apply $15 million of PFCs for Debt Service for this same purpose. Total expenses are expected to decrease by $15.7 million or 4.1%, comprised of a $8.8 million decrease in Operating Expenses and a $6.9 million

increase in Debt Service. Based on fiscal year 2022 budgeted Operating Expenses, Debt Service and Non-Airline Revenues, the required Airline Rentals, Fees and Charges in the fiscal year 2022 budget are $216.1 million, a $12.7 million reduction of 6% decrease over estimated fiscal year 2021. Non-Airline Revenues are expected to increase by $21.0 million. Other Amounts Available for Debt Service, which include PFCs for debt service and portions of fund balance attributable to amounts available for debt service, are expected to decrease by $18 million.

Outstanding and Additional Indebtedness

The following table reflects the Airport's debt secured on a parity basis by the Pledged Amounts, including its Commercial Paper Notes, and, by Series, its Bonds issued under the General Ordinance that will be outstanding as of July 7, 2021. It includes the Series 2021 Bonds but excludes the Refunded Bonds.

Series	Principal Amount Outstanding
2005C	$ 60,400,000
2015A	76,585,000
2017 Taxable Loan	115,535,000
2017A	123,365,000
2017B	512,510,000
2020A	187,140,000
2020B	43,135,000
2020C*	145,220,000
2021*	302,040,000
Commercial Paper	80,343,000
Total	**$1,646,273,000**

*The City pledged PFCs to pay Debt Service on a portion of the 2020C Bonds. As discussed herein, the City will pledge PFCs to pay Debt Service on a portion of the Series 2021 Bonds. See "SECURITY FOR THE AIRPORT REVENUE BONDS – City May Pledge Passenger Facility Charges Revenues" above for further information on the Pledged PFCs that additionally secure only the PFC-Pledge Bonds.

The City may issue additional Airport Revenue Bonds for new capital projects or to refund outstanding Airport Revenue Bonds as more fully described herein under "SECURITY FOR THE AIRPORT REVENUE BONDS – Issuance of Additional Airport Revenue Bonds". If the City receives the approval of the Signatory Airlines as required under the Airline Agreement, or if the project does not require the approval of the Signatory Airlines under the Airline Agreement, the City is authorized to include the debt service on Airport Revenue Bonds issued to finance such approved capital projects in the airlines' rates, fees and charges. See "CAPITAL DEVELOPMENT PROJECTS AT THE AIRPORT – Funding Sources for Airport System Capital Projects – Airport Revenue Bonds" herein.

The City established a $350 million commercial paper program (i.e., the Commercial Paper Notes) in August of 2019 to provide funding for capital projects for the Airport System, among other uses, and approved by the Signatory Airlines. The Commercial Paper Notes are secured by direct pay letters of credit provided by TD Bank, N.A., which expires in 2024 and by Citibank, N.A. and Wells Fargo Bank, National Association, which each expire in 2022, as well as Pledged Amounts on parity with the other outstanding Airport Revenue Bonds.

[Remainder of page intentionally left blank]

Schedule of Debt Service

The following schedule of debt service shows the debt service requirements on the Series 2021 Bonds together with estimated debt service on other outstanding Airport Revenue Bonds, taking into account the refunding of the Refunded Bonds but exclusive of Commercial Paper Notes.

Table 11
Schedule of Debt Service
City of Philadelphia, Division of Aviation
(Fiscal Years Ending June 30)

	Series 2021 Bonds			Other Outstanding Airport Revenue Bonds	
Fiscal Year	Principal	Interest[1]	Total Debt Service on Series 2021 Bonds*	Existing Debt Service	Total Debt Service*
2022	$ 5,000	$ 6,018,246	$ 6,023,245	$ 111,216,674	$ 117,239,920
2023	5,000	7,296,776	7,301,775	111,233,262	118,535,038
2024	7,815,000	9,462,158	17,277,158	129,145,427	146,422,585
2025	15,640,000	13,974,000	29,614,000	129,135,892	158,749,892
2026	42,505,000	13,192,000	55,697,000	87,958,180	143,655,180
2027	44,640,000	11,066,750	55,706,750	87,978,121	143,684,871
2028	20,850,000	8,834,750	29,684,750	106,965,956	136,650,706
2029	6,390,000	7,792,250	14,182,250	80,918,405	95,100,655
2030	6,705,000	7,472,750	14,177,750	77,404,468	91,582,218
2031	7,045,000	7,137,500	14,182,500	77,454,865	91,637,365
2032	4,810,000	6,785,250	11,595,250	77,491,997	89,087,247
2033	5,050,000	6,544,750	11,594,750	77,542,683	89,137,433
2034	5,300,000	6,292,250	11,592,250	77,594,983	89,187,233
2035	5,565,000	6,027,250	11,592,250	77,639,208	89,231,458
2036	5,845,000	5,749,000	11,594,000	70,027,156	81,621,156
2037	6,135,000	5,456,750	11,591,750	70,074,690	81,666,440
2038	6,380,000	5,211,350	11,591,350	59,010,721	70,602,071
2039	6,635,000	4,956,150	11,591,150	59,072,038	70,663,188
2040	6,905,000	4,690,750	11,595,750	59,129,150	70,724,900
2041	7,180,000	4,414,550	11,594,550	43,418,668	55,013,218
2042	7,465,000	4,127,350	11,592,350	43,486,173	55,078,523
2043	7,765,000	3,828,750	11,593,750	48,939,675	60,533,425
2044	8,075,000	3,518,150	11,593,150	49,021,783	60,614,933
2045	8,400,000	3,195,150	11,595,150	49,084,778	60,679,928
2046	8,735,000	2,859,150	11,594,150	49,170,471	60,764,621
2047	9,085,000	2,509,750	11,594,750	49,248,792	60,843,542
2048	9,540,000	2,055,500	11,595,500	5,410,700	17,006,200
2049	10,015,000	1,578,500	11,593,500	5,408,400	17,001,900
2050	10,515,000	1,077,750	11,592,750	5,409,950	17,002,700
2051	11,040,000	552,000	11,592,000	-	11,592,000
Total*	$302,040,000	$173,677,280	$475,717,280	$1,975,593,265	$2,451,310,545

* Figures may not add to totals shown due to rounding.
(1) Net of Capitalized Interest.
Source: City of Philadelphia, Office of City Treasurer.

Airline costs for landing fees, terminal rentals and other use charges are often expressed on a cost per enplaned passenger basis. The following Table 12 presents the airline costs (which include landing fees, terminal rentals and other use charges) per enplaned passenger taken from the City's financial records.

Airline Cost per Enplaned Passenger

The table below demonstrates Airline cost per enplaned passenger as of June 30 for fiscal years 2016 through 2021.

Table 12
Airline Cost per Enplaned Passenger
City of Philadelphia, Division of Aviation
(Fiscal Years Ending June 30)

Fiscal Year	Airline Cost Per Enplaned Passenger
2016	$14.97
2017	15.59
2018	15.09
2019	14.47
2020	16.09
2021	25.39*
2022	20.92**

* Estimated
** Budgeted
Source: City of Philadelphia, Division of Aviation.
Prepared by: AVK Consulting, Inc. May 2021

Cash Management and Investment Policies

As a division of the City, the Airport is subject to the City's cash management and investment policies. See APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA – CITY CASH MANAGEMENT AND INVESTMENT POLICIES".

Pensions and OPEBs

As a division of the City, the Airport is subject to the City's pension plan and OPEBs liability. See APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA – PENSION SYSTEM" and "– OTHER POST-EMPLOYMENT BENEFITS".

Hedges and Swaps

General. The City has adopted a swap policy for the use of swaps, caps, floors, collars and other derivative financial products. See APPENDIX III – "GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA – OTHER FINANCING RELATED MATTERS – Swap Policy".

The General Ordinance authorizes the City, at the time of issuance of a series of Bonds or at any time thereafter, to enter into interest rate exchange agreements, interest rate swap agreements or other similar agreements, to the extent permitted by applicable law and in accordance with the General Ordinance, if the City determines that such agreement will assist the City in more effectively managing its interest costs. Such agreements may be effected as Qualified Swaps or as Exchange Agreements. Payments under Qualified Swaps (other than termination payments) are made from the Sinking Fund and are calculated as part of Debt Service Requirements, and payments under Exchange Agreements (other than termination payments) are made only after required deposits to the Sinking Fund and the Sinking Fund Reserve are made and are on a parity with required deposits to the Renewal Fund. Termination

payments on Qualified Swaps and on a certain Exchange Agreement (discussed below) are permitted to be made only after required transfers to the Sinking Fund, Sinking Fund Reserve and the Renewal Fund have been made.

The General Ordinance provides, among other things, that the City will not enter into a Qualified Swap or Exchange Agreement unless it receives written confirmation from a rating agency that such agreement, in and of itself, will not result in a downgrade, withdrawal or suspension of the credit ratings on the series of Bonds.

In 2002, the City entered into a swap agreement. In 2005, JP Morgan Chase Bank – New York, the counterparty exercised its option, and the interest rate swap agreement (the "Swap Agreement") commenced. The Swap Agreement is associated with the 2005C Bonds and terminates on June 15, 2025 if not previously terminated by the counterparty. The Swap Agreement is an "Exchange Agreement," as such term is defined in the General Ordinance. The City's obligations under the Swap Agreement are payable solely from and secured solely by Project Revenues in the order of priority listed in Section 4.06 of the General Ordinance, that is, subject and subordinate to the City's obligations to pay Net Operating Expenses, Debt Service Requirements (including debt service on the Series 2021 Bonds, payments on Qualified Swaps and Credit Facility charges secured on a parity to Bonds) and obligations to replenish the Sinking Fund Reserve. Further, the City's obligation to pay termination payments with respect to the Swap Agreement and the security interest in Project Revenues therefor are subject and subordinate to its obligation to make periodic payments under the Swap Agreement. As of May 31, 2021, the fair value of the Swap Agreement was (negative) $4,086,471 to the City, including accrued interest.

Letter of Credit Agreements

The City has entered into two letter of credit agreements relating to the 2005C Bonds as detailed in the table below. Under the terms of such letter of credit agreements, following a purchase of the applicable bonds, the City may be required to amortize such bonds more quickly than as originally scheduled at issuance.

Table 13
Letter of Credit Agreements
City of Philadelphia, Division of Aviation
(Related to Series 2005C Bonds)

Sub-Series	Amount Outstanding	Bond Maturity Date	Provider	Expiration Date
2005C-1	$30,200,000	June 15, 2025	Wells Fargo Bank	July 22, 2022
2005C-2	$30,200,000	June 15, 2025	Wells Fargo Bank	July 22, 2022

Source: City of Philadelphia, Division of Aviation.

The City has also entered into three letter of credit agreements for the Airport's Commercial Paper Notes as described above under "–Outstanding and Additional Indebtedness". Such letter of credit agreements will expire in 2022 and 2024.

Aviation Liability and Property Insurance

The City maintains comprehensive Aviation Liability Insurance coverage for claims arising out of bodily injury, personal injury or property damage arising from the operations of the Airport System. This insurance coverage provides a combined single limit of $600 million. The Self-Insured Retention is $1,500,000 each occurrence/$1,500,000 annual aggregate. "War Risk" coverage in the amount of $100 million is also provided under the City's General Liability Insurance policy. The City also maintains "All Risks" Property Insurance coverage for property at the Airport System (including real and business) in the amount of $2 billion with deductibles of $250,000

at Philadelphia International Airport and $100,000 at Northeast Airport and International Plaza (Buildings 1 and 2). The Property policy also includes but is not limited to business interruption (including loss of rents and extra expense), mechanical breakdown coverage, electronic data processing coverage, flood, earthquake, and terrorism coverage.

CERTAIN INVESTMENT CONSIDERATIONS

The purchase and ownership of the Series 2021 Bonds entails certain investment risks. Prospective purchasers of the Series 2021 Bonds are urged to read this Official Statement, including the Appendices, in its entirety. The factors set forth below, among others, may affect repayment of and the security for the Series 2021 Bonds.

COVID-19 pandemic

For a discussion of the preliminary and potential effects of the COVID-19 pandemic on the Division of Aviation's financial performance and operations, see "IMPACT OF COVID-19 PANDEMIC ON THE AIRPORT SYSTEM" herein.

General Factors Affecting the Airline Industry

The revenues of the Airport are affected substantially by the economic health of the airport transportation industry and the airlines serving the Airport. Particularly, since 2001 the airline industry has undergone structural changes and sustained significant financial losses until recently. The economic condition of the industry is volatile and the industry is sensitive to a variety of factors, including (i) the cost and availability of fuel, labor, aircraft, and insurance, (ii) general economic conditions, (iii) international trade, (iv) currency values, (v) competitive considerations, including the effects of airline ticket pricing, (vi) traffic and capacity constraints, (vii) governmental regulation, including security regulations and taxes imposed on airlines and passengers, and maintenance and environmental requirements, (viii) passenger demand for air travel, and (ix) disruption caused by public health risks, airline accidents, criminal incidents and acts of war or terrorism. Due to the discretionary nature of business and personal travel spending, airline passenger traffic and revenues are heavily influenced by the strength of the U.S. economy, other regional economies, corporate profitability, safety and security concerns and other factors. Ongoing structural changes to the industry are the result of a number of factors including the impact of low cost carriers, internet travel web sites and carriers reorganizing under the U.S. Bankruptcy Code.

Economic Conditions

The financial performance of the air transportation industry correlates with the state of the national economy and the global economy. Future increases in passenger traffic will depend largely on the ability of the U.S. to sustain growth in economic output and income. There can be no assurances that the prolonged weak economic conditions or other national and international fiscal concerns will not have an adverse effect on the air transportation industry.

Aviation Fuel Costs

Airline earnings are significantly affected by changes in the price of aviation fuel. According to the Air Transport Association (the "ATA"), fuel, along with labor costs, is one of the largest cost components of airline operations, and therefore is an important and uncertain determinate of an air carrier's operating economics. There has been no shortage of aviation fuel since the "fuel crisis" of 1974, but there have been significant fluctuations in the price of fuel.

Airline earnings are affected by changes in the price of aircraft fuel, which in turn is affected by natural disasters, hostilities and political unrest in various parts of the world, Organization of the Petroleum Exporting Countries (OPEC) policy, the increased demand for fuel caused by the rapid growth of the economies of certain countries, disruptions to production and refining operations, the levels of fuel inventory maintained by certain industries, currency fluctuations, the amount of fuel reserves maintained by governments, and other factors determining demand and supply. While current fuel costs have decreased, significant and prolonged high aviation fuel costs or any decreases in the availability of aviation fuel would likely have an adverse impact on air transportation industry economics and the ability to provide air service.

In addition, there have been recent concerns about possible fuel shortages that were raised by the cyberattack on the Colonial Pipeline in May 2021, which impacted delivery of fuel to airports in the eastern United States, including the airlines fuel consortium at the Airport. However, while the Airport is served by the airline consortium that utilizes the Colonial Pipeline, the Airport maintains several days of fuel on-site provided by another refinery.

Public Health Concerns

Travel restrictions and alerts, as well as other public health measures, may be imposed to limit the spread of communicable diseases which may arise. In recent years, the World Health Organization and the U.S. Department of Health and Human Services (through the Secretary of the Department of Homeland Security) declared public health emergencies as the result of outbreaks of a certain serious communicable disease, including as a result of the outbreak and continued spread of COVID-19. The widespread outbreak of and any travel imposed restrictions imposed in relation to the communicable disease could negatively impact passenger activity at the Airport.

Cyber Security

Computer networks and data transmission and collection are vital to the safe and efficient operation 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.

To mitigate against the potential risks posed by cybersecurity incidents or attacks on business operations, the Airport invests in multiple forms of cybersecurity and operational safeguards, including utilizing a national risk management framework to assess the probability and impact of cybersecurity incidents. The Airport also established a Chief Information Security Officer position in 2017 to develop a proactive cybersecurity risk mitigation strategy. In addition, the Airport trains its employees and contractors in cybersecurity risks and maintains a cybersecurity liability insurance policy.

Demand for Air Travel

Airline fares have an important effect on passenger demand, particularly for relatively short trips where the automobile, rail or other land travel modes are alternatives and for price-sensitive "discretionary" travel, such as vacation travel. Airfares are influenced by airline operating costs and debt burden, passenger demand, capacity and yield management, market presence and competition. If airlines are unable to charge fares sufficiently high to cover operating costs and interest expense they will experience financial difficulty, which could adversely affect Airport revenues and the willingness of the airlines to approve additional capital development projects.

Many factors have combined to alter consumer travel patterns. The COVID-19 pandemic has resulted in a marked increase in teleconferencing and video conferencing in lieu of air travel for business. The threat of terrorism against the United States remains high. As a result, the federal government has mandated various security measures that have resulted in security taxes and fees and longer passenger processing and wait times at airports. Both add to the costs of air travel and make air travel less attractive to consumers relative to ground transportation, especially to short-haul destinations.

Capacity of National Air Traffic Control and Airport Systems

Demands on the nation's air traffic control system continue to cause aircraft delays and restrictions, both on the number of aircraft movements in certain air traffic routes and on the number of landings and takeoffs at certain airports. These restrictions affect airline schedules and passenger traffic nationwide. In addition, increasing demands on the national air traffic control and airport systems could cause increased delays and restrictions in the future.

Aviation Safety and Security Concerns

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

Although the U.S. government, airlines and airport operators have upgraded security measures to guard against terrorist incidents and maintain confidence in the safety of airline travel, no assurance can be given that these precautions will be successful. The possibility of intensified international hostilities and further terrorist attacks involving or affecting commercial aviation are a continuing concern that may affect future travel behavior and airline passenger demand.

Further, future enhanced securities procedures may significantly increase inconvenience and delays at airports, including the Airport, again impacting passenger demand for air travel.

Climate Change Issues and Possible New Regulation

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 U.S. Environmental Protection Agency (the "EPA") does not currently regulate greenhouse gas ("GHG") emissions from aircraft, 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. No assurances can be provided as to the likelihood or potential impact of any such future proposed or enacted regulations.

New Technologies and Services

The growth of new technologies and services may impact the Airport's ability to generate revenues and its costs to provide services to meet the needs of its tenants and customers. For example, the rising popularity of TNCs such as Uber Technologies Inc. and Lyft, Inc., may impact Airport ground transportation, parking and rental car revenues. At this time, the Airport cannot predict the impact of TNCs on its operating revenues.

Cost of Capital Development Program

The ability of the Airport to complete its Capital Development Program may be adversely affected by various factors including: (1) incorrect assumptions for cost and schedule estimates, (2) design and engineering oversights, (3) changes to the scope of the projects, including changes to federal security regulations, (4) delays in contract awards, (5) material and/ or labor shortages, (6) unforeseen site conditions, (7) adverse weather conditions and other force majeure events, (8) contractor defaults, (9) labor disputes, (10) unanticipated economic events such as inflation, (11) delays related to public health emergencies, and (12) environmental issues. No assurance can be made that the projects will not exceed the currently budgeted amounts. Any schedule delays or cost increases could result in the need to issue additional indebtedness, including additional tax-exempt bonds and may result in increased costs per enplaned passenger to the airlines or other rate increases.

Dominance of American Airlines Presence at the Airport

General. As noted above under "THE AIRPORT SYSTEM – AIRPORT ACTIVITY AND SIGNATORY AIRLINES – American Airlines," American Airlines is, by far, the largest Signatory Airline at the Airport. A large portion of American Airlines' business relates to connecting traffic. If American Airlines ceases or significantly reduces operations at the Airport, other airlines may not pick up all of the traffic. The loss of American Airlines could also leave the remaining Signatory Airlines with significant additional financial commitments.

The City has no information regarding the financial condition of American Airlines and its future plans generally, and with regard to the Airport in particular, other than from bankruptcy court filings and filings with the Commission. The Commission's web site is http://www.sec.gov.

Neither the City nor the Underwriters undertake any responsibility for or make any representations as to the accuracy or completeness of the content of information available from the Commission, including but not limited to, updates of such information or links to other internet sites accessed through the Commission's web site. See also "Effect of Bankruptcies and Mergers on Various Airline Agreements" and "Limitations on Bondholders' Remedies" below.

Pending Legislation. Bill 210421, under consideration by City Council, would require payment of "prevailing wage" to certain workers employed by lessees at the Airport and their contractors and subcontractors. Similar laws requiring payment of prevailing wage to workers at other airports have been proposed or have taken effect around the nation.

The bill was passed by City Council on June 24, 2021. The Mayor has until September 16, 2021 to sign the bill for it to become law, or the bill could take effect on that date without the Mayor's signature.

American Airlines has made a written statement that it is in support of raising wages and providing healthcare for workers at the Airport, but it is opposed to the bill in its current form.

If the bill is passed, the increase in wages will not apply to American Airlines until the new Airline Agreement is renewed or amended, anticipated to occur on July 1, 2022. As of the date of this Official Statement, neither the City nor the Division of Aviation can determine the impact, if any, that a proposed increase in wages will have on airport operations generally, or on the operations of American Airlines at the Airport.

Forward-Looking Statements

The statements contained in this Official Statement, including the Appendices, and in any other information provided by the City and other parties to this transaction described herein that are not purely historical are forward-looking statements. Such forward-looking statements can be identified, in some cases, by terminology such as "may," "will," "should," "expects," "projects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "illustrate," "example," and "continue," or the singular, plural, negative or other derivations of these of other comparable terms. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to such parties on the date hereof, and the City assumes no obligation to update any such forward-looking statements. The forward-looking statements included herein are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including, but not limited to, risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in various important factors. Other such risks and uncertainties include, among others, changes in regional, domestic and international political, social and economic conditions, federal, state and local statutory and regulatory initiatives, the financial condition of individual airlines and carriers and the airline industry generally, changes in the tourism industry, international, federal, state and local regulations regarding air travel, the COVID-19 pandemic, the outbreak of any other disease or public health threat, other future global health concerns, and other events or circumstances beyond the control of the City. Accordingly, actual results may vary from the projections, forecasts and estimates contained in this Official Statement, including the Appendices, and such variations may be material, which could affect the ability to fulfill some or all of the obligations under the Series 2021 Bonds.

Market Analysis and Financial Projections

The financial projections in the Market Analysis and Financial Projections regarding the Airport are based generally upon certain assumptions, as well as economic, demographic and development trends. See APPENDIX I – "MARKET ANALYSIS AND FINANCIAL PROJECTIONS", including, particularly, Section 8.1 – "Assumptions Underlying the Projections" therein. Inevitably, some of the assumptions and other data used to develop the projections will not be realized, and unanticipated events and circumstances may occur. Therefore, the actual financial

results achieved during the projection periods will vary from the financial projections, and such differences may be material.

Passenger Facility Charges

In the event that the City does not collect expected PFCs, it may have to use other Pledged Amounts to pay debt service on the PFC-Pledge Bonds. Such an event likely would require the City to increase rates and fees, including landing fees and terminal rentals, and/or reduce operating expenses to pay debt service costs and other costs of capital projects.

The ability of the City to collect annually sufficient PFCs depends upon a number of factors including the operation of the Airport by the City, the number of enplanements at the Airport, the use of the Airport by the carriers collecting the PFCs (the "Collecting Carriers"), and the efficiency and ability of the Collecting Carriers to collect and remit PFCs to the City. The City relies upon the Collecting Carriers' collection and remittance of PFCs and both the City and the FAA rely upon the air carriers' reports of enplanements and collections.

Further, the City's authority to impose PFCs is expected to expire in 2021. The City cannot guarantee that a new application to extend that authority will be timely submitted to, or approved by, the FAA.

In addition, the FAA may terminate the City's authority to impose PFCs, subject to informal and formal procedural safeguards, or the PFC Act, the PFC Regulations, or the City's approvals from the FAA could be amended in a manner that would adversely affect the City's ability to collect and use PFCs.

The PFC Act provides that PFCs collected by the airlines constitute a trust fund held for the beneficial interest of the eligible agency (i.e., the City) 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 airlines 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 Enabling Act, as amended in December 2003, provides that (1) PFCs are and remain trust funds, (2) an airline in bankruptcy may not grant to any third party any security or other interest in PFC revenue, and (3) an airline in bankruptcy must segregate in a separate account PFC revenue equal to its average monthly PFC liability. Despite these enhanced statutory protections, it is unclear whether the City would be able to recover the full amount of PFC trust funds collected or accrued with respect to an airline in the event of a liquidation or cessation of business. The City also cannot predict whether an airline operating at the Airport, that files for bankruptcy, would have properly accounted for PFCs owed to the City or whether the bankruptcy estate would have sufficient moneys to pay the City in full for PFCs owed by such airline. All airlines operating at the Airport are current in the payment of PFCs owed to the City.

Bankruptcies and Mergers of Operating Airlines or Other Tenants

General; Bankruptcies and Mergers. The Airport derives a substantial portion of its operating revenues from landing fees, rentals and concession fees. The financial strength and stability of the airlines and other tenants serving the Airport, together with numerous other factors, influence the level of aviation activity at the Airport. In addition, individual airline decisions regarding the level of service, particularly hubbing activity and aircraft size (such as the use of regional jets) can affect total enplanements.

The airlines serving the Airport have all been impacted by the financial difficulties and bankruptcies of other carriers and have experienced an increase in costs and a resulting decline in financial condition to varying degrees. Since 2001, several airlines with operations at the Airport have filed for and have subsequently emerged from bankruptcy protection. The Hertz Corporation filed for bankruptcy in May 2020 but continues to operate. Additional bankruptcies, liquidations, mergers or major restructurings of other airline or tenants could occur. It is not possible to predict the impact on the Airport of the recent, potential and any future bankruptcies, liquidations, mergers or major restructurings of other airlines or tenants.

Further airline consolidation is possible and could change airline service patterns, particularly at the connecting hub airports of the merged airlines. The Airport cannot predict what impact, if any, such consolidations will have on airline traffic at the Airport.

Assumption or Rejection of Agreements. In the event of bankruptcy proceedings involving one or more of the Signatory Airlines, other air carriers or other tenants, the debtor or its bankruptcy trustee must determine within a time period determined by the court whether to assume or reject the Airline Agreement or other Airport agreements. In the event of assumption, the debtor would be required to cure any prior defaults and to provide adequate assurance of future performance under the relevant agreements. Rejection of a lease or executory contract by any of the Signatory Airlines, other air carriers or other tenants would give rise to an unsecured claim of the City for damages, the amount of which in the case of a lease is limited by the Bankruptcy Code. With respect to the Signatory Airlines, the costs of Terminal Building Area vacated as a result of a rejection of an Airline Agreement by a Signatory Airline in bankruptcy would be passed on to the remaining Signatory Airlines under their Airline Agreements. If the bankruptcy of one or more Signatory Airlines were to occur, there can be no assurance that the remaining Signatory Airlines would be able, individually or collectively, to meet their obligations under the Airline Agreements. See "THE AIRPORT SYSTEM –AIRPORT ACTIVITY AND SIGNATORY AIRLINES – Information Concerning the Signatory Airlines".

If contractual agreements with the airlines do not exist, rates and charges for use of the Airport System will be set by regulation of the City – currently, the Airport Rates and Charges Regulation.

Federal Funding Considerations

The City depends upon federal funding for the Airport not only in connection with grants and PFC authorizations but also because federal funding provides for certain expenses respecting TSA, air traffic control and other FAA staffing and facilities. The FAA currently operates under the FAA Reauthorization Act of 2018, which extends FAA's funding and authorities through September 30, 2023. Federal funding is also impacted by sequestration under the federal Budget Control Act of 2011, as amended most recently by the Bipartisan Budget Act of 2019. Except to the extent changed by Congress from time to time, sequestration could affect FAA, TSA and Customs and Border Protection budgets and staffing, which could result in staffing shortages and furloughs and traffic delays at the Airport and nationwide.

Federal Regulation Regarding Rates and Charges Disputes

The FAA Authorization Act of 1994 establishes that airline rates and charges set by airports be "reasonable" and mandates an expedited administrative process by which the Secretary of Transportation (the "Secretary") shall review rates and charges complaints. An affected air carrier may file a written complaint requesting a determination of the Secretary as to reasonableness within 60 days after such carrier receives written notice of the establishment or increase of such fee. During the pendency of the review, the airlines must pay the disputed portion of the fee to the airport under protest, subject to refund to the extent such fees are found to be unreasonable by the Secretary. The airport must obtain a letter of credit, surety bond or other suitable credit facility equal to the amount in dispute unless the airport and the complaining carriers agree otherwise. Application of these provisions could adversely impact the amount of airline rates and charges received by airports.

Limitations on Bondholders' Remedies

The rights and remedies of the Fiscal Agent and the Bondholders with respect to the Series 2021 Bonds are subject to various provisions of Chapter 9 of the United States Bankruptcy Code (the "Bankruptcy Code"), which permits, under certain circumstances, a political subdivision or public agency or instrumentality of a state to file a voluntary petition in bankruptcy in the nature of a plan for adjustment in the repayment of debts if, generally, the entity is insolvent or unable to meet its debts as they mature. Such a petition may be filed by a political subdivision (such as the City) only if the state legislature has specifically authorized (by description or by name) the entity to be a debtor under Chapter 9 of the Bankruptcy Code or a governmental officer or organization empowered by state law to give such authorization has done so. The Financially Distressed Municipalities Act, Act No. 1987-47 of the Commonwealth of Pennsylvania, approved July 10, 1987, amended in 1992 and now known as the Municipalities Financial Recovery Act, Act No. 1992-69 of the Commonwealth, approved June 30, 1992 ("Financial Recovery Act"),

provides, among other things, for the restructuring of debt of a financially distressed municipality and the method by which such entities are permitted to apply for relief under the Bankruptcy Code. In addition, the Financial Recovery Act empowered the Department of Community Affairs of the Commonwealth (now the Department of Community and Economic Development) to declare certain municipalities' financially distressed upon the occurrence of certain events and the making of certain determinations by such Department.

With respect to the City, certain provisions of the Financial Recovery Act have been preempted by the Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class, Act No. 1991-6 of the Commonwealth, approved June 5, 1991 (the "PICA Act"). The provisions of the Financial Recovery Act relating to the City that were not preempted have been suspended with respect to the City by the PICA Act. The PICA Act prevents the City from filing a petition for relief under Chapter 9 of the Bankruptcy Code as long as PICA has outstanding any bonds issued pursuant to the PICA Act. As of April 30, 2021, the principal amount of PICA Bonds outstanding was $56,075,000. The final maturity date of the PICA Bonds is June 15, 2023, absent earlier redemption. If no such bonds were outstanding, the PICA Act requires approval in writing by the Governor of the Commonwealth for a filing under Chapter 9 by the City. If the provisions of the PICA Act relating to the authorization by the Governor for the City to file a petition under Chapter 9 of the Bankruptcy Code were invoked, such provisions could limit the enforcement of rights and remedies by holders of the Series 2021 Bonds and other Airport Revenue Bonds. Because the term of the Series 2021 Bonds extends beyond the latest maturity date of the bonds issued by PICA, there is a possibility that the City could file for bankruptcy protection under the Bankruptcy Code. Should the City ever file under Chapter 9 of the Bankruptcy Code, the rights and remedies of the holders of the Series 2021 Bonds and other Airport Revenue Bonds may be adversely affected.

The enforceability of the rights and remedies of the Fiscal Agent and the holders of Series 2021 Bonds may also be limited by other bankruptcy or insolvency or other laws now or hereafter in effect affecting the rights or remedies of creditors generally, or be subject to principles of equity, if equitable remedies are sought.

TAX MATTERS

General

The Internal Revenue Code of 1986, as amended (the "Code") contains provisions relating to the tax-exempt status of interest on obligations issued by governmental entities which apply to the Series 2021 Bonds. These provisions include, but are not limited to, requirements relating to the use and investment of the proceeds of the Series 2021 Bonds and the rebate of certain investment earnings derived from such proceeds to the United States Treasury Department on a periodic basis. These and other requirements of the Code must be met by the City subsequent to the issuance and delivery of the Series 2021 Bonds in order for interest thereon to be and remain excludable from gross income for purposes of federal income taxation. The City has made covenants to comply with such requirements.

In the opinion of Co-Bond Counsel, interest on the Series 2021 Bonds is not includable in gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions, except for interest on any Series 2021 Bond during any period such Series 2021 Bond is held by a person who is a "substantial user" of the facilities financed or refinanced by the Series 2021 Bonds or a "related person" within the meaning of Section 147(a) of the Code. The opinion of Co-Bond Counsel is subject to the condition that the City complies with all applicable federal income tax law requirements that must be satisfied subsequent to the issuance of the Series 2021 Bonds in order that interest thereon continues to be excluded from gross income. Failure to comply with certain of such requirements could cause the interest on the Series 2021 Bonds to be so includable in gross income retroactive to the date of issuance of the Series 2021 Bonds. The City has covenanted to comply with all such requirements. Interest on the Series 2021 Bonds is treated as an item of tax preference for purposes of computing the federal alternative minimum tax on individuals.

In addition to the matters addressed below, prospective purchasers of the Series 2021 Bonds should be aware that ownership of the Series 2021 Bonds may result in collateral tax consequences to certain taxpayers, including but not limited to, foreign corporations, certain S corporations, financial institutions, recipients of social security and railroad retirement benefits and property or casualty insurance companies. Co-Bond counsel expresses no opinion regarding any other federal tax consequences relating to the Series 2021 Bonds or the receipt of interest thereon.

Prospective purchasers of the Series 2021 Bonds should consult their own tax advisors as to the impact of these other tax consequences.

Co-Bond Counsel's opinion will be based on existing law, which is subject to change. Such opinion is further based on factual representations made to Co-Bond Counsel as of the date of delivery of the Series 2021 Bonds. Co-Bond Counsel assumes no duty to update or supplement its opinion to reflect any facts or circumstances that may thereafter come to Co-Bond Counsel's attention, or to reflect any changes in law that may thereafter occur or become effective.

Alternative Minimum Tax on Individuals

For purposes of computing the federal alternative minimum tax on individuals, the Code treats as an item of tax preference interest on a "specified private activity bond." The Series 2021 Bonds are "specified private activity bonds" for this purpose.

Deduction for Interest Paid by Financial Institutions to Purchase or Carry Tax-Exempt Obligations

The Code, subject to limited exceptions not applicable to the Series 2021 Bonds, denies the interest deduction for indebtedness incurred or continued to purchase or carry tax-exempt obligations, such as the Series 2021 Bonds. With respect to banks, thrift institutions and other financial institutions, the denial to such institutions is one hundred percent (100%) for interest paid on funds allocable to the Series 2021 Bonds and any other tax-exempt obligations acquired after August 7, 1986.

Reportable Payments and Backup Withholding

The payments of interest on the Series 2021 Bonds will be reported to the Internal Revenue Service by the payor on Form 1099 unless the holder is an "exempt person" under Section 6049 of the Code. A holder who is not an exempt person may be subject to "backup withholding" at a specified rate prescribed in the Code if the holder does not file Form W-9 with the payor advising the payor of the holder's taxpayer identification number. Holders should consult with their brokers regarding this matter.

The payor will report to the holders and to the Internal Revenue Service for each calendar year the amount of any "reportable payments" during such year and the amount of tax, if any, with respect to payments made on the Series 2021 Bonds.

Accounting Treatment of Amortizable Bond Premium

The Series 2021 Bonds are hereinafter referred to as the "Premium Bonds." An amount equal to the excess of the initial public offering price of a Premium Bond set forth on the inside cover page 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. As premium is amortized, 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 is reduced, no federal income tax deduction is allowed.

Purchasers of any Premium Bonds, whether at the time of initial issuance or subsequent thereto, should consult their own tax advisors with respect to the determination and treatment of premium for federal income tax purposes and with respect to state and local tax consequences of owning Premium Bonds.

Commonwealth of Pennsylvania Tax Exemption

In the opinion of Co-Bond Counsel, under the laws of the Commonwealth of Pennsylvania as enacted and construed on the date hereof, interest on the Series 2021 Bonds is free from taxation for state and local purposes within the Commonwealth of Pennsylvania, but such exemption does not extend to gift, estate, succession or inheritance

taxes or any other taxes not levied or assessed directly on the Series 2021 Bonds or the interest thereon. Profits, gains or income derived from the sale, exchange, or other disposition of the Series 2021 Bonds are subject to state and local taxation within the Commonwealth of Pennsylvania. Specifically, interest on the Series 2021 Bonds is exempt from the Pennsylvania personal income tax and the Pennsylvania corporate net income tax.

CHANGES IN FEDERAL AND STATE TAX LAW

Legislative or administrative actions and court decisions, at either the federal or state level, could have an impact on the treatment of interest on the Series 2021 Bonds for federal or state income tax purposes, and thus on the value or marketability of the Series 2021 Bonds. This could result 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 otherwise. It cannot be predicted whether or in what form any such proposals may be enacted or whether if enacted such proposals would apply to bonds issued prior to enactment. In addition, regulatory or other actions are from time to time announced or proposed which, if implemented or concluded in a particular manner, could adversely affect the market value, marketability or tax status of the Series 2021 Bonds. It cannot be predicted whether any such regulatory or other actions will be implemented or whether the Series 2021 Bonds would be impacted thereby.

Purchasers of the Series 2021 Bonds should consult their tax advisors regarding any pending or proposed legislation, regulatory initiatives or litigation. The opinions expressed by Co-Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of issuance and delivery of the Series 2021 Bonds, and Co-Bond Counsel have expressed no opinion as of any date subsequent thereto or with respect to any proposed or pending legislation, regulatory initiatives or litigation.

Prospective purchasers of the Series 2021 Bonds should be aware that the ownership of tax-exempt obligations, such as the Series 2021 Bonds, may result in collateral federal income tax consequences. Such prospective purchasers should consult their own tax advisors as to the consequences of investing in the Series 2021 Bonds.

LEGAL PROCEEDINGS

General

The City is involved in several claims and lawsuits arising in the ordinary course of operations of the Airport System. The City estimates that any liability assessed against the City, as a result of claims that are not covered by insurance or otherwise, would not materially and adversely affect the Series 2021 Bonds, the sources of payment and security for the Series 2021 Bonds or the financial condition or operations of the Airport System. There has been no litigation seeking to enjoin the issuance, sale or delivery of the Series 2021 Bonds.

No Litigation Opinion

Upon delivery of the Series 2021 Bonds, the City Solicitor will furnish an opinion, in form satisfactory to Co-Bond Counsel and to the Underwriters, to the effect that, among other things, except for litigation which in the opinion of the City Solicitor is without merit and except as disclosed in this Official Statement, there is no litigation or other legal proceeding pending in any court, or, to the knowledge of the Law Department after investigation, threatened in writing against the City, to restrain or enjoin the issuance, sale or delivery of the Series 2021 Bonds or in any way contesting the validity or enforceability of the Series 2021 Bonds.

UNDERWRITING

The Series 2021 Bonds are being purchased by the underwriters listed on the cover page of this Official Statement (the "Underwriters"), for which BofA Securities, Inc, is acting as representative (the "Representative"), at a purchase price of $369,804,523.09, which represents the principal amount of the Series 2021 Bonds of $302,040,000, plus original issue premium of $68,938,169.80, and less an underwriters' discount of $1,173,646.71. The Underwriters will purchase all of the Series 2021 Bonds if any Series 2021 Bonds are purchased. The obligation of

the Underwriters to purchase the Series 2021 Bonds is subject to certain terms and conditions set forth in the purchase contract related to the Series 2021 Bonds.

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

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the City for which they received or will receive customary fees and expenses. In addition, affiliates of some of the Underwriters are lenders, and in some cases agents or managers for the lenders, under the City's letters of credit.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the City.

BofA Securities, Inc. ("BofA Securities"), as an underwriter of the Series 2021 Bonds, has entered into a distribution agreement with its affiliate Merrill Lynch, Pierce, Fenner & Smith Incorporated ("MLPF&S"). As part of this arrangement, BofA Securities may distribute securities to MLPF&S, which may in turn distribute such securities to investors through the financial advisor network of MLPF&S. As part of this arrangement, BofA Securities may compensate MLPF&S as a dealer for their selling efforts with respect to the Series 2021 Bonds.

UBS Financial Services Inc. ("UBS FSI"), one of the underwriters of the Series 2021 Bonds has entered into a distribution and service agreement with its affiliate UBS Securities LLC ("UBS Securities") for the distribution of certain municipal securities offerings, including the Series 2021 Bonds. Pursuant to such agreement, UBS FSI will share a portion of its underwriting compensation with respect to the Series 2021 Bonds with UBS Securities. UBS FSI and UBS Securities are each subsidiaries of UBS Group AG.

The initial public offering prices of the Series 2021 Bonds set forth on the inside cover page of this Official Statement may be changed without notice by the Underwriters. The Underwriters may offer and sell Bonds to certain dealers (including dealers' depositing Bonds into investment trusts, certain of which may be sponsored or managed by the Underwriters) and others at prices lower that the offering prices set forth on the inside cover page.

RATINGS

Moody's Investors Service, Inc. ("Moody's") and Fitch Ratings ("Fitch") have assigned ratings to the uninsured Series 2021 Bonds, of "A2", stable outlook, and "A", stable outlook, respectively. The Insured Bonds have been assigned insured ratings of "A2", stable outlook, by Moody's and "AA", stable outlook by S&P.

A rating, including any related outlook with respect to potential changes in such ratings, reflects only the view of the agency giving such rating and is not a recommendation to buy, sell or hold the Series 2021 Bonds. An explanation of the significance of any such rating may be obtained only from the rating agency furnishing the same. Such ratings may be changed at any time, and no assurance can be given that they will not be revised downward or withdrawn entirely by any of such rating agencies if, in the judgment of any of them, circumstances so warrant. Any such downward revision or withdrawal of any of such ratings may have an adverse effect on the market price or marketability of the Series 2021 Bonds.

CO-FINANCIAL ADVISORS

Frasca & Associates, LLC and Phoenix Capital Partners, LLP have been retained by the City as Co-Financial Advisors in connection with the issuance of the Series 2021 Bonds and, in such capacity, have assisted the City in the preparation of documents related to the Series 2021 Bonds.

Although the Co-Financial Advisors have read and participated in the preparation of this Official Statement, they have not independently verified any of the information set forth herein. The information contained in this Official Statement has been obtained primarily from the City's records and from other sources that are believed to be reliable, including financial records of the City, reports of consultants and other entities that may be subject to interpretation. No guarantee is made as to the accuracy or completeness of any such information. No person, therefore, is entitled to rely upon the participation of the Co-Financial Advisors as an implicit or explicit expression of opinion as to the completeness and accuracy of the information contained in this Official Statement.

MARKET ANALYSIS AND FINANCIAL PROJECTIONS

The 2021 Report contained in APPENDIX I was prepared by Ricondo & Associates, Inc. ("Ricondo") and AVK Consulting, Inc. ("AVK") (collectively, the "Consultants") in connection with the issuance of the Series 2021 Bonds. Such 2021 Report is set forth herein in reliance upon the knowledge and experience of such firms as airport consultants. The Consultants have consented to the inclusion of the 2021 Report herein.

See "CERTAIN INVESTMENT CONSIDERATIONS – Market Analysis and Financial Projections" herein.

APPROVAL OF LEGALITY

Certain legal matters incident to the authorization, issuance and sale of the Series 2021 Bonds will be passed upon by Saul Ewing Arnstein & Lehr LLP and Andre C. Dasent, P.C., each of Philadelphia, Pennsylvania, Co-Bond Counsel. The proposed form of such approving opinion is included herein as APPENDIX VI. Certain legal matters incident to the disclosure relating to the Series 2021 Bonds will be passed upon by Hardwick Law Firm, LLC and Greenberg Traurig, LLP, both of Philadelphia, Pennsylvania, Co-Disclosure Counsel. Hawkins Delafield & Wood LLP, as General Fund Disclosure Counsel to the City, will be delivering an opinion to the City and the Underwriters with respect to Appendix III. Certain legal matters will be passed upon for the Underwriters by Squire Patton Boggs (US) LLP, of Washington, D.C., Counsel to the Underwriters. Certain legal matters will be passed upon for the City of Philadelphia by the City Solicitor.

RELATIONSHIPS OF CERTAIN PARTIES

The firms serving as Co-Bond Counsel, Co-Disclosure Counsel and Underwriters' Counsel have each, in the past, provided legal services to the City and periodically (including currently) represent the City on matters unrelated to the issuance and sale of the Series 2021 Bonds.

ADDITIONAL INFORMATION

It is the practice of the City in connection with the issuance and sale of each issue of the City's bonds or notes, to require in its contract with its underwriters that the underwriters deposit the Official Statement of the City relating to such issue of bonds or notes with a nationally recognized municipal securities information repository (a "Repository") as soon as practicable after delivery of such Official Statement. It is also the City's practice to file its ACFR, which contains the audited combined financial statements of the City with the Municipal Securities Rulemaking Board (MSRB) on EMMA. The ACFR for the City's fiscal year ended June 30, 2020 was filed with EMMA on February 25, 2021. The ACFR is prepared by the Office of the Director of Finance of the City in conformance with guidelines adopted by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants audit guide, Audits of State and Local Government Units. Upon written request to the Office of the Director of Finance and payment of the costs of duplication and mailing, the City will make available copies of the ACFR for the fiscal year ended June 30, 2020. Such a request should be addressed to: Office of the Director of Finance, Municipal Services Building, 1401 John F. Kennedy Boulevard, Philadelphia, PA 19102. A copy

of the financial statements of the City for the fiscal year ended June 30, 2020, may be downloaded at http://www.phila.gov/investor. The ACFR contains pertinent information with respect to the Division of Aviation. The City also expects to provide financial and other information as to the City from time to time to Moody's, S&P and Fitch in connection with securities ratings issued by those rating agencies for bonds or notes of the City.

The foregoing statement as to filing or furnishing of additional information reflects the City's current practices but is not a contractual obligation to the holders of the City's bonds or notes.

CONTINUING DISCLOSURE AGREEMENT

In order to assist the Underwriters in complying with the requirements of Section (b)(5) of Rule 15c2-12 promulgated by the Securities and Exchange Commission, the City will enter into a continuing disclosure undertaking (the "Continuing Disclosure Agreement") for the benefit of the owners of the Series 2021 Bonds in substantially the form set forth in APPENDIX VII. See APPENDIX VII – "FORM OF CONTINUING DISCLOSURE AGREEMENT" for the detailed provisions of the proposed form of Continuing Disclosure Agreement.

At this time, only the City and American Airlines (which is a party to the Airline Agreement and pursuant thereto currently accounts for at least 20% of Project Revenues, as defined in the General Ordinance for the past two fiscal years) are "obligated persons" for annual reporting purposes under the criteria specified in the Continuing Disclosure Agreement. Pursuant to the Continuing Disclosure Agreement, American Airlines has agreed to make available, and the City agrees to use its best efforts to require any future obligated persons to make available financial information and operating data on a timely basis with respect to themselves as required by the Rule. American Airlines will acknowledge the Continuing Disclosure Agreement and agree to make available such information for as long as it remains an obligated person under the criteria specified in the Continuing Disclosure Agreement. Upon expiration of its Airline Agreement, in the absence of another contractual arrangement between the City and American Airlines, American Airlines may cease to be an obligated person under Rule 15c2-12. The City and American Airlines are in material compliance with all of their written undertakings to provide continuing disclosure with respect to airport revenue bonds issued within the last five years pursuant to the General Ordinance as supplemented through the Eighteenth Supplemental Ordinance.

CERTAIN REFERENCES

All summaries of the Act, the General Ordinance, the Sixteenth Supplemental Ordinance, the Eighteenth Supplemental Ordinance, the Airline Agreements contained in this Official Statement, including the Appendices hereto, are only brief outlines of certain provisions thereof and do not constitute complete statements of such documents or provisions. Reference is made hereby to the complete documents for the complete terms and provisions thereof. Copies of these documents are available from the Office of the Director of Finance, 13th Floor, Municipal Services Building, 1401 John F. Kennedy Boulevard, Philadelphia, Pennsylvania 19102.

All quotations from and summaries and explanations of the Constitution and laws of the Commonwealth and Ordinances of the City contained herein do not purport to be complete and are qualified by reference to the official compilations thereof in their entireties and all references to the Series 2021 Bonds are qualified by reference to the complete, definitive forms of the Series 2021 Bonds. All capitalized terms used herein which are not defined herein or in APPENDIX IV shall have the meanings ascribed to them in the Act and the General Ordinance. See APPENDIX IV – "SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE".

Any statements made in this Official Statement involving matters of opinion, projections or estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized.

The Appendices are integral parts of this Official Statement and must be read together with all parts of this Official Statement.

This Official Statement has been duly approved, executed and delivered by the following officer on behalf of the City.

CITY OF PHILADELPHIA

By: /s/ Rob Dubow
Rob Dubow, Director of Finance

SCHEDULE 1
REFUNDED BONDS

The following table sets forth the maturity date for each of the Refunded Bonds, the outstanding principal amount of the Refunded Bonds, the principal amount of each such maturity being refunded, the redemption price of such maturity and the applicable CUSIP numbers for each maturity.

Series	Maturity (June 15)	Outstanding Principal Amount	Amount To Be Refunded	Redemption Price	CUSIP*
2011A	2022	$ 8,980,000	$ 8,980,000	100%	717817QJ2
2011A	2023	9,440,000	9,440,000	100	717817QK9
2011A	2024	9,920,000	9,920,000	100	717817QL7
2011A	2025	10,435,000	10,435,000	100	717817QM5
2011A	2026	37,035,000	37,035,000	100	717817QN3
2011A	2027	38,900,000	38,900,000	100	717817QP8
2011A	2028	14,825,000	14,825,000	100	717817QQ6
2011B	2022	1,675,000	1,675,000	100	717817RE2
2011B	2023	1,735,000	1,735,000	100	717817RF9
2011B	2024	1,805,000	1,805,000	100	717817RG7
2011B	2025	1,880,000	1,880,000	100	717817RH5
2011B	2026	1,960,000	1,960,000	100	717817RJ1
2011B	2027	2,040,000	2,040,000	100	717817RK8
2011B	2028	2,145,000	2,145,000	100	717817RL6
2011B	2029	2,245,000	2,245,000	100	717817RM4
2011B	2030	2,350,000	2,350,000	100	717817RN2
2011B	2031	2,465,000	2,465,000	100	717817RP7

* Neither the City nor the Underwriters make any representation with respect to such CUSIP numbers or undertake any responsibility for their accuracy now or at any time in the future.

(This Page Intentionally Left Blank)

APPENDIX I
MARKET ANALYSIS AND FINANCIAL PROJECTIONS

(This Page Intentionally Left Blank)

June 17, 2021

Ms. Rochelle Cameron
Chief Executive Officer
The City of Philadelphia, Department of Commerce
Division of Aviation Executive Offices
3rd Floor, Terminal D/E
Philadelphia, Pennsylvania 19153

RE: The City of Philadelphia, Pennsylvania
Airport Revenue and Refunding Bonds, Series 2021 (AMT/Private Activity)

Dear Ms. Cameron:

This Report of the Airport Consultant (the 2021 Report) serves to reaffirm the findings from the Report of the Airport Consultant, dated September 16, 2020 (the 2020 Report), with consideration of information made available since the 2020 Report. The 2020 Report was prepared in connection with the issuance of the City of Philadelphia, Pennsylvania (the City) Airport Revenue Refunding Bonds, Series 2020A (Non-AMT); the City Airport Revenue Bonds, Series 2020B (Non-AMT), and the City Airport Revenue and Refunding Bonds, Series 2020C (AMT), collectively referred to as the 2020 Bonds.[1]

The 2020 Report set forth the findings, assumptions, and forecasts related to air traffic, and projections related to the financial analyses that were developed by Ricondo & Associates, Inc. (Ricondo) and AVK Consulting, Inc. (AVK), collectively referred to herein as the Consultants. The information was presented in conjunction with the issuance of the 2020 Bonds by the City of Philadelphia, which owns and operates Philadelphia International Airport (PHL or the Airport) and Northeast Philadelphia Airport (PNE). This 2021 Report, which is based on the findings of the 2020 Report and the updated information in connection with the City's planned issuance of its Airport Revenue and Refunding Bonds, Series 2021 (AMT/Private Activity) (the 2021 Bonds) serves to reaffirm the overall conclusions the Consultants made in the 2020 Report regarding the City's ability to comply with the Rate Covenants and coverage requirements in Sections 5.01 and 5.04 (c) (i), respectively, of the General Ordinance (hereinafter defined), as well as the reasonableness of the resulting projected airline costs. Unless otherwise defined herein, all capitalized terms in this 2021 Report are used as defined in the Official Statement for the 2021 Bonds and/or the General Ordinance. US Bank National Association (the Fiscal Agent) is serving as the Fiscal Agent and Sinking Fund Depository for the 2021 Bonds. Pursuant to Section 5.04 of the General Ordinance, the 2021 Report was prepared by

[1] In December 2017, the Consultants prepared the Report of the Airport Consultant (the 2017 Report) which was prepared in connection with the issuance of the City's Airport Revenue and Refunding Bonds, Series 2017. The 2017 Report can be found at https://www.phl.org/drupalbin/media/RefundingBo2017AB.pdf. The 2020 Report, which is included as an attachment, served to reaffirm the findings of the 2017 Report. Both the 2017 Report and the 2020 Report should be read in their entirety for an understanding of the analysis, assumptions, and opinions presented herein.

nationally recognized independent consultants having broad experience in the operation of airport systems of the magnitude and scope of the Airport System (PHL and PNE).

The 2021 Bonds

The 2021 Bonds are to be issued pursuant to The First Class City Revenue Bond Act of the Commonwealth of Pennsylvania, as well as the City's Amended and Restated General Revenue Bond Ordinance, approved by the Mayor on June 16, 1995, as amended and supplemented (the Original Ordinance) including the Eighteenth Supplemental Ordinance, approved by the Mayor on June 26, 2019 (the Eighteenth Supplemental Ordinance). The Original Ordinance and the Eighteenth Supplemental Ordinance are collectively referred to as the General Ordinance.

The City is expected to use the proceeds from the sale of the 2021 Revenue and Refunding Bonds, together with other available funds, to:

(i) Pay a portion of the costs of the Airport Capital Development Program (CDP), as defined in the Report,
(ii) Refund, on a current basis, all or a portion of the Series 2011A and Series 2011B Bonds (collectively the 2011 Bonds),
(iii) Fund a deposit to the related Sinking Fund Reserve for the 2021 Bonds, if any,
(iv) Fund capitalized interest on a portion of the 2021 Bonds, and
(v) Pay costs and expenses relating to the issuance of the 2021 Bonds.

Pursuant to the terms of the General Ordinance, the 2021 Bonds will be secured by Pledged Amounts, meaning generally all amounts received or receivable, directly or indirectly, by the City for the use and operation of the Airport System on a parity with the City's Outstanding Airport Revenue Bonds.

Table 1 summarizes the 2021 Bonds.

TABLE 1 SUMMARY OF THE 2021 BONDS

	SERIES 2021
Use	Revenue and Refunding
Security	Pledged Amounts[1]
Status	[AMT/Private Activity]

NOTE:
1 This includes certain Passenger Facility Charge (PFC) Revenues
SOURCE: City of Philadelphia, Division of Aviation, June 2021.

The General Ordinance debt service coverage covenants, flow of funds, and additional bond requirements remain as summarized in Section 1.2 of the 2017 Report.

Purpose of This Report of the Airport Consultant

The Consultants prepared the 2020 Report for the stated purposes as expressly set forth in the 2020 Report and for the sole use of the City and its intended recipients. The techniques and methodologies used in preparing the 2020 Report were consistent with industry practices at the time of preparation and the 2020 Report should be read in its entirety for an understanding of the analysis, assumptions, and opinions presented. The 2020 Report was included as Appendix I in each of the Official Statements for the issuance of the 2020 Bonds. It is attached to this 2021 Report for reference as **Attachment 2**. The 2020 Report incorporated projections of debt service associated with the 2020 Bonds and future General Airport Revenue Bonds (GARBs) anticipated by the City to be issued through Fiscal Year (FY) 2026.[2]

This 2021 Report summarizes relevant information that was made available since the 2020 Report was prepared, including information regarding the 2021 Bonds; updated data regarding ongoing and future Airport capital projects, the economic base for air transportation at PHL, air traffic at the Airport, Airport financial operations including actual 2020 Bonds debt service and anticipated debt service on the 2021 Bonds; and the anticipated refunding of the Series 2011A and Series 2011B Bonds.

On the basis of the updated analysis set forth in this 2021 Report, the Consultants reaffirm their opinion and are of the opinion that the Pledged Amounts (as defined in Section 4.02 of the General Ordinance) projected to be generated and available each year of the Projection Period (FY 2022 to FY 2026) are sufficient to comply with the Rate Covenant established in Section 5.01 of the General Ordinance and that the resulting projected airline costs should remain reasonable. As required under Section 5.04 of the General Ordinance, this 2021 Report demonstrates that the Rate Covenant (i) was met for the Fiscal Year immediately preceding the date of the 2021 Report, and (ii) it is projected to be met for each of the five (5) Fiscal Years immediately following the issuance of the 2021 Bonds. This 2021 Report also documents that no deficiency exists in the Sinking Fund Reserve Account. These requirements of Section 5.04 of the General Ordinance are referred to as the Additional Bonds Test.

Additionally, the industry continues to experience significant impacts from the coronavirus disease 2019 (COVID-19 pandemic). These impacts, as they are related to the 2021 Bonds, are included within the Updated Information Regarding Air Traffic section of this 2021 Report.

Table 2 summarizes key updates and findings by subject matter since the 2020 Report that support the Consultants' conclusion.

This 2021 Report, along with the 2020 Report, is intended for inclusion as Appendix I in the Official Statement for the issuance of the 2021 Bonds. The approach and assumptions used in preparing this 2021 Report are consistent with industry practices for similar reports prepared in connection with the sale of airport revenue and refunding bonds. While the Consultants believe the approach and assumptions are reasonable, some assumptions regarding future trends and events set forth in this 2021 Report including

[2] Fiscal Year ending June 30.

enplaned passenger forecasts, may not materialize. Therefore, achievement of the financial projections presented in this 2021 Report is dependent on the occurrence of future events, which cannot be assured, and the variations may be material.

TABLE 2 SUMMARY OF KEY VARIABLES AND CHANGES SINCE 2020 REPORT WAS PREPARED

VARIABLE	2021 REPORT UPDATE
Airport Capital Program	The Airport and the Signatory Airlines agreed to a revised Capital Development Program (CDP) totaling $1.26 billion in March 2021, which includes the reprogramming or deletion of most of the projects deferred at the time of the 2020 Report. A significant portion of the CDP will be financed during the Projection Period. The Airport anticipates CDP projects can be further deferred or advanced, as needed, based on recovery to pre-COVID-19 pandemic activity levels.
Economic Base for Air Transportation	National and local unemployment rates remain above pre-COVID-19 pandemic levels. Current short-term (1-3 years) projections of gross regional product and gross domestic product growth rates are slightly higher than the projections available at the time the 2020 Report was prepared. The consultants anticipate the long term-economic base will return to growth rates experienced prior to the COVID-19 pandemic.
Air Traffic Projections	The consultants' baseline forecast projects air traffic will recover to levels experienced prior to the COVID-19 pandemic within the Projection Period. The recovery is assumed to take longer than the recovery of traffic projected in the 2020 Report baseline forecast due to slower than anticipated recovery in demand.
Operating Expenses	Budget 2022 Operating Expenses have been reduced by an additional 5 percent from budget 2021 in response to the COVID-19 pandemic. Operating expenses are projected to increase with activity but are not anticipated to exceed the amounts included in the 2020 Report. The Airport anticipates it could further reduce operating expenses if the recovery from the COVID-19 pandemic falls short of current projections.
Non-Airline Revenues	Non-airline revenues are projected to be lower. which is attributable to the updated activity forecast relative to the 2020 Report. This projected decrease is anticipated to be offset, in part, by additional Federal COVID-19 Grants the Airport expects to utilize during the Projection Period. Non-airline revenues are projected to return to pre-COVID-19 pandemic levels by FY 2026.
Debt Service	The debt service includes existing debt, net of the refunding of the 2011 Bonds, and future debt anticipated during the Projection Period to fund the CDP. Debt service is lower in most years compared to the 2020 Report due to the actual savings from the 2020 Bonds and the projected savings from the refunding of the 2011 Bonds. Depending on the timing of recovery from the COVID-19 pandemic, the Airport anticipates it could accelerate or further defer capital projects, which could affect the amount of debt issued during the Projection Period.
Projected CPE	The Airline Revenue Required and CPE remain reasonable during the Projection Period. The CPE is higher than the projected CPE in the 2020 Report which reflects the updates described in this table.
Projected Debt Service Coverage Ratio	Debt service coverage under the Baseline Forecast exceeds the minimum requirements during each year of the Projection Period. The coverage is lower than projected coverage in the 2020 Report which reflects the updates described in this table.

SOURCES: AVK Consulting, Inc., June 2021; Ricondo & Associates, Inc., June 2021.

Airport Capital Development Program Update

Under the Airline Agreement, the Signatory Airlines have approved approximately $2.4 billion in Capital Development Program (CDP) projects to date, of which approximately $1.27 billion have been completed or deleted from the list of approved projects, resulting in remaining project approvals of $1.13 billion.

As a result of the COVID-19 pandemic, in the last quarter of Calendar Year 2020, the Division of Aviation re-evaluated the remaining $1.13 billion and identified $344.0 million in approved projects that would not be advancing. The majority of this $344.0 million consisted of: a new airport traffic control tower ($197 million), airport support facilities ($57 million), and design of additional widebody gates ($30 million). In consultation with the Signatory Airlines in December 2020, the Division of Aviation increased existing approved projects by $122.5 million, which primarily includes airfield improvements at both PHL and PNE. The Signatory Airlines also approved $352.9 million in additional in new projects, bringing the current total CDP to $1.26 billion. A significant portion of the $352.9 million in new project costs include $101.3 million in terminal restroom renovations and reconstruction, $90.7 million in taxiway and airfield improvements at PHL, and $56.3 million in terminal roof and HVAC replacements and upgrades.

In general, the CDP is comprised of numerous projects that focus on renewal and rehabilitation work of the terminals, airfield pavement, security and information technology enhancements, and airfield enabling projects for cargo development at PHL and airfield pavement and tenant improvements at the PNE.

Table 3 presents the updated estimated sources and uses of funds for the portion of the CDP that is advancing during the Projection Period. As shown in Table 3, $466.4 million in Airport Revenue Bonds are expected to be issued to finance the CDP during the Projection Period, including the 2021 Bonds.

TABLE 3 ESTIMATED SOURCES AND USES OF FUNDS FOR APPROVED CDP COSTS

(Dollars in millions)

PROJECTS	TOTAL APPROVED COST
Airfield and Aprons	$388.9
Terminal and Landside	752.2
Security and Technology	89.9
PNE Airfield and Tenant Improvements	31.8
TOTAL CAPITAL PROJECTS ADVANCING DURING PROJECTION PERIOD	**$1,262.8**

FUNDING SOURCES	TOTAL ESTIMATED FUNDING SOURCES
Existing Debt	$165.2
Pay-as-you-go PFCs/Grants	474.8
Operating revenues	4.3
2021 Bonds	200.0
2025 Bonds	266.4
Future Debt Beyond the Projection Period	152.1
TOTAL FUNDING SOURCES	**$1,262.8**

SOURCE: City of Philadelphia, Division of Aviation, June 2021.

Updated Information Regarding the Economic Base for Air Transportation

The Consultants reviewed certain socioeconomic information made available since the date of the 2020 Report. The information suggests that no material change in economic conditions has occurred that invalidates the 2020 Report's findings regarding the Airport's Air Trade Area (the Philadelphia Metropolitan Statistical Area [MSA] or ATA) economic base for air transportation, and the findings remain valid for this Report's Projection Period. The projected near-term economic performance for the ATA and the United States is slightly higher than reflected in the 2020 Report and the projected long-term (through the Projection Period) economic performance for the ATA and the United States is unchanged.

The economic base of the ATA remains capable of supporting increases in demand for air transportation at the Airport during the Projection Period. The following subsections provide an overview of recent economic and demographic data and projections, including near-term (2021 and 2022) projections from the Congressional Budget Office (CBO) and International Monetary Fund (IMF) for the United States when available, and a discussion of recent developments impacting the local and national economies. Comparisons are made between the data and projections available at the time of the 2020 Report and the data and projections available at the time of this 2021 Report. Because the ATA is significantly impacted by overall economic conditions in the United States, data for the United States is considered a proxy for ATA data in instances where recent (2020) data and/or near-term (2021 to 2023) projections for the ATA are not available.

Gross Domestic Product and Gross Regional Product

COVID-19 was first identified in December 2019 and was declared a pandemic by the World Health Organization in March 2020. In Quarter 1 (Q1) 2020 real US gross domestic product (GDP) decreased at an annual rate of 5.0 percent from the preceding quarter. In Q2 2020 it decreased at an annual rate of 31.4 percent from the preceding quarter due to the significant economic effects of the COVID-19 pandemic, as reported in the 2020 Report.[3,4] Since then, US GDP increased in Q3 2020 and Q4 2020 from the preceding quarters, at annual rates of 33.4 percent and 4.3 percent, respectively. For the full year 2020, US GDP decreased 3.5 percent, compared to a 2.2 percent increase in 2019. The advance estimate for US GDP in Q1 2021 is a 6.4 percent annual rate of increase from the preceding quarter. Real gross regional product (GRP) data for the ATA in 2020 are not available at the time of this Report. Current data available for the state of Pennsylvania show that the state's real GRP levels during 2020 were slightly more volatile than in the United States. For the state of Pennsylvania GRP decreased 5.8 percent in Q1, followed by a 34.0 percent decrease

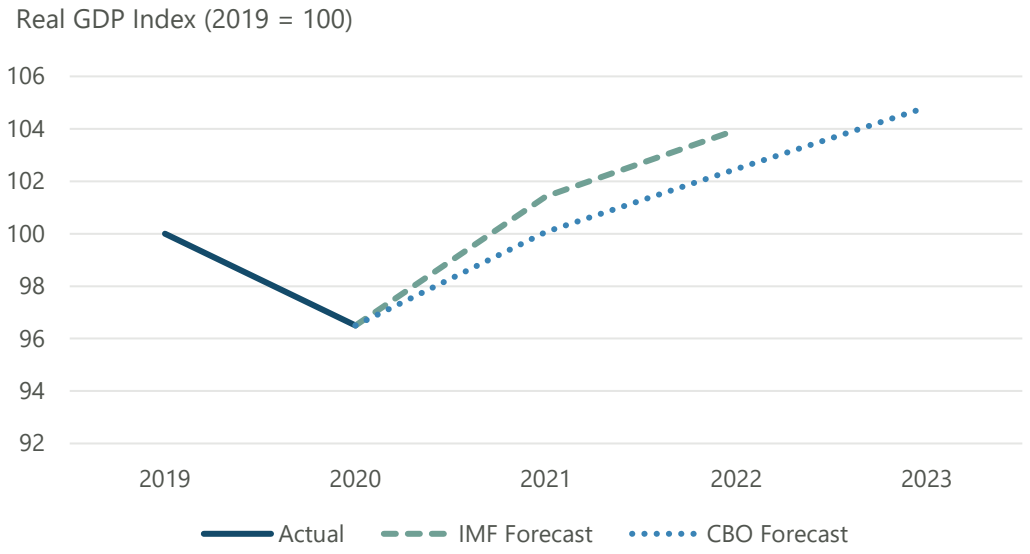
[3] The Q2 2020 real US GDP growth reported in the 2020 Report (-32.9 percent) differs from what it is reported in this Report because the 2020 Report figure was based on the "advance" estimate released by the Bureau of Economic Analysis on July 30, 2020.

[4] US Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product: Fourth Quarter 2020 and Year 2020 (Advance Estimate), January 28, 2021.

in Q2, and then increased Q3 and Q4 by 35.5 percent and 3.7 percent, respectively[5] For the full year 2020, Pennsylvania GRP decreased 4.4 percent, compared to a 2.4 percent increase in 2019.

As in the 2020 Report, it is assumed that the ATA and US economies will recover from the impacts of the COVID-19 pandemic in the near-term (1-3 years). **Exhibit 1** presents actual and IMF and CBO projections of US GDP. As shown, the IMF and CBO projections both have real US GDP returning to or exceeding 2019 levels in 2021.

EXHIBIT 1 ACTUAL AND SHORT-TERM PROJECTION OF REAL US GROSS DOMESTIC PRODUCT



NOTES:
The CBO forecast for 2021 to 2023 represents the fourth quarter GDP only; actual and IMF forecast represent annual GDP.
CBO – Congressional Budget Office
GDP – Gross Domestic Product
IMF – International Monetary Fund
SOURCES: US Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product: Fourth Quarter 2020 and Year 2020 (Advance Estimate), January 28, 2021; International Monetary Fund, World Economic Outlook Update, April 2021; Congressional Budget Office, An Overview of the Economic Outlook: 2021 to 2031, February 2021.

Population

As presented in the 2020 Report, Woods & Poole Economics, Inc. projected the ATA's population to increase at a compound annual growth rate (CAGR) of 0.3 percent between 2019 and 2026 (from 6.1 million to 6.3

[5] US Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product by State, Third Quarter 2020, December 23, 2020.

million), and at a CAGR of 0.6 percent for the United States (from 329.3 million to 344.5 million). The population projection assumed in this Report remains unchanged from what was presented in the 2020 Report.

Unemployment Rate

Beginning in March 2020, the effects of the COVID-19 pandemic are visible in unemployment numbers. Both the ATA and the nationwide unemployment rate peaked in April 2020, at non-seasonally adjusted rates of 14.8 percent and 14.4 percent, respectively. At the time of the 2020 Report, the most recent data for the ATA were for July 2020, when the non-seasonally adjusted unemployment rate was reported to be 14.1 percent[6] and the most recent data for the nation were for August 2020, when the nationwide non-seasonally adjusted unemployment rate was reported to be 8.5 percent. A decrease in the unemployment rate occurred in subsequent months, with both the ATA and national non-seasonally adjusted unemployment rates falling below 8 percent in September 2020 and remaining there through March 2021 for the ATA and April 2021 for the nation (latest data available). In March 2021, the ATA non-seasonally adjusted unemployment rate was 7.3 percent[7] and in April 2021, the national non-seasonally adjusted unemployment rate was 5.7 percent.

In February 2021, the CBO projected a further decline of the national unemployment rate, to 5.3 percent by Q4 2021.[8] This represents a significant decline in unemployment from April 2020, when the national non-seasonally adjusted unemployment rate was 14.4 percent, but it is still higher than the 3.8 percent US non-seasonally adjusted unemployment rate in February 2020, the last month before impacts from the COVID-19 pandemic were experienced in the United States.

Employment

In 2019, prior to the COVID-19 pandemic, seasonally adjusted US employment and ATA employment increased at averages of 168,000 jobs and 3,700 jobs per month, respectively.[9] At the time of the 2020 Report, US employment and ATA employment had fallen by averages of 1,896,000 jobs and 45,900 jobs per month, respectively (March 2020 through August 2020), as a direct result of the COVID-19 pandemic.[10] Due to continued resumption of economic activity in the following months, the average monthly decreases in jobs for the full year 2020 for the United States and the ATA were 785,000 and 19,800, respectively. At the end of 2020, there were 9,416,000 fewer jobs in the United States and 237,000 fewer jobs in the ATA than

---

[6] US Department of Commerce, Bureau of Labor Statistics, September 2020 (preliminary data).

[7] These data are preliminary.

[8] Congressional Budget Office, An Overview of the Economic Outlook: 2021 to 2031, February 2021.

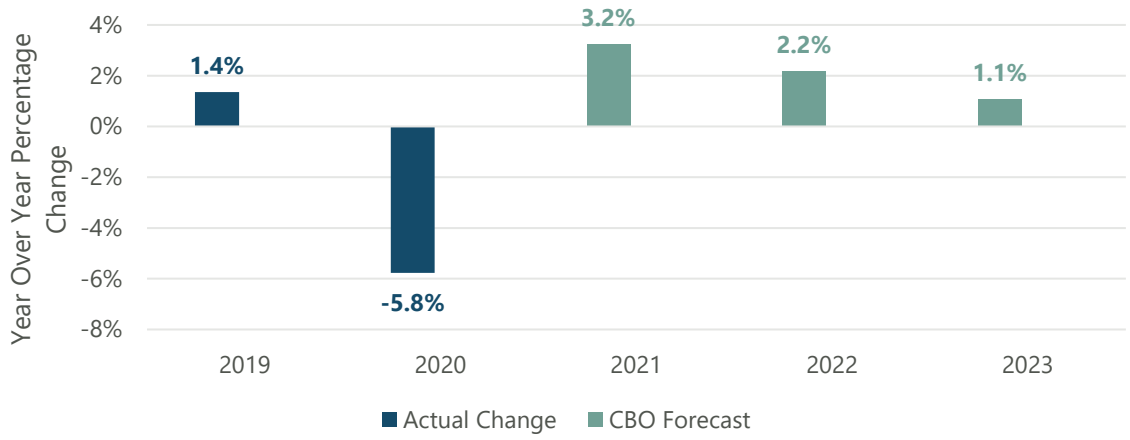
[9] US Department of Commerce, Bureau of Labor Statistics, employment, hours, and earnings from the Current Employment Statistics survey data, accessed April 28, 2021. Employment data described here vary from employment data represented in the 2020 Report due to revisions in the data by the Bureau of Labor Statistics. All employment data unless described otherwise are seasonally adjusted.

[10] Ibid.

there were at the end of 2019. Employment recovery continued in Q1 2021, with US employment increasing at an average of 539,000 jobs per month and ATA employment increasing at an average of 12,100 jobs per month. March 2020 employment was 4.4 percent lower than March 2019 employment for the United States, whereas March 2020 employment was 6.3 percent lower than March 2019 employment for the ATA, [11] suggesting ATA employment was more impacted by the effects of the pandemic than the nation as a whole.

Exhibit 2 presents the annual percentage change in US employment for 2019 and 2020, as well as the CBO's projected annual percentage change for 2021 through 2023. According to the CBO, US employment is not projected to recover to pre-pandemic levels until 2023.[12]

EXHIBIT 2 ACTUAL AND SHORT-TERM PROJECTED US EMPLOYMENT



NOTE:
CBO – Congressional Budget Office
SOURCES: US Department of Commerce, Bureau of Labor Statistics, employment, hours, and earnings from the Current Employment Statistics survey (National) data, accessed February 7, 2021; Congressional Budget Office, An Overview of the Economic Outlook: 2021 to 2031, February 2021.

Based on the analysis in the 2020 Report, as well as the most recent unemployment data and economic projection information previously described, and despite the continuing short-term significant economic impacts of the COVID-19 pandemic, the Consultants' opinion is unchanged: the ATA's economic base remains strong and will continue to support long-term growth in demand for air transportation services at the Airport. The Consultants' review of the most recent economic data and information suggests that the economic projections presented in the 2020 Report remain valid.

[11] US Department of Commerce, Bureau of Labor Statistics, Current Employment Statistics data, accessed April 28, 2021.

[12] Congressional Budget Office, An Overview of the Economic Outlook: 2021 to 2031, February 2021.

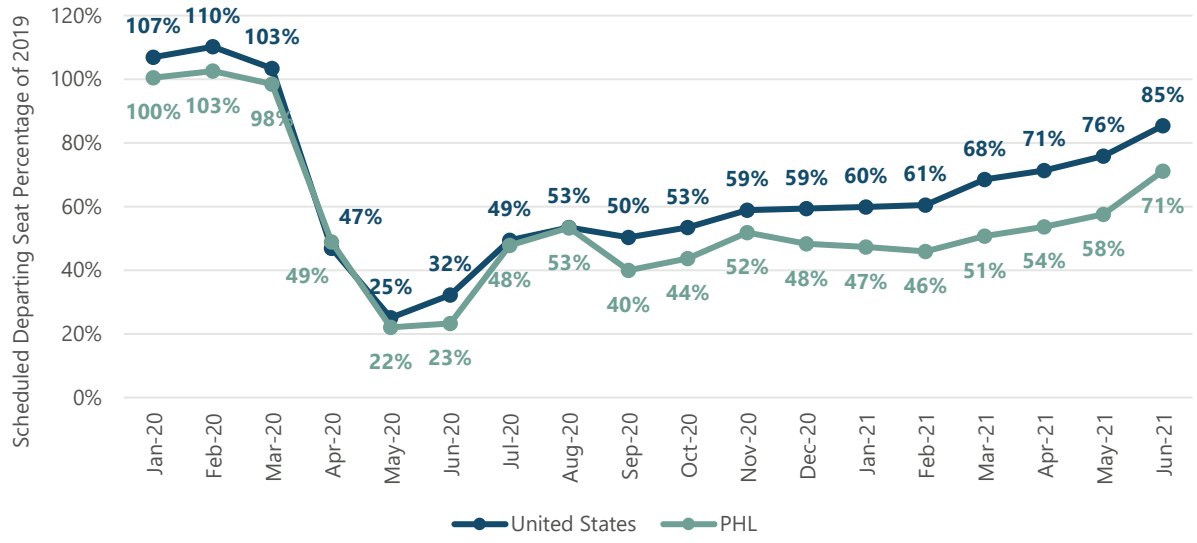
Updated Information Regarding Air Traffic

COVID-19 Pandemic Impact on Air Traffic

In FY 2019 the PHL handled 16.1 million enplaned passengers, which represented a 5.5 percent increase over FY 2018 and set a record for the highest number of enplaned passengers in a single FY. In the first eight months of FY 2020 enplaned passengers were 5.6 percent higher than the first eight months of FY 2019 and the Airport was on track to break the record for enplaned passengers set in FY 2019. However, the outbreak and spread of COVID-19 depressed demand for air travel at the Airport beginning in March 2020, having first impacted travel in East Asia in early 2020 before rapidly accelerating to other regions globally. Airlines responded to the collapse in demand by parking aircraft and drastically reducing capacity across their networks. By May 2020, which represented the low point in terms of passenger airline capacity reductions, scheduled departing seats represented 25.1 percent of May 2019 for all US airports and 22.1 percent of May 2019 capacity for the Airport. A modest recovery in airline capacity occurred over the second half of CY 2020 and into the first quarter of 2021. Airlines accelerated their restoration of capacity in the second quarter of 2021, with June 2021 scheduled departing seats representing 85.0 percent of June 2019 scheduled departing seats for all US airports. June 2021 scheduled departing seats represent 71.0 percent of June 2019 scheduled departing seats for the Airport.

Exhibit 3 presents departing seat capacity by month as a percentage of the same month in 2019 for January 2020 through June 2021 for the United States and PHL.

EXHIBIT 3 MONTHLY SCHEDULED DEPARTING SEATS AS A PERCENTAGE OF 2019



SOURCE: Innovata (published airline schedules), June 2021.

Passenger volumes have decreased at a faster rate than seat capacity systemwide. Through the majority of April 2020, which represented the low point in terms of passenger activity, the Transportation Security Administration (TSA) reported daily airport screening throughput for all US airports was approximately 5 percent of the volume on the equivalent same day in 2019. For PHL, April 2020 enplaned passengers represented 4.5 percent of April 2019 enplaned passengers. By June 2020 the Airport's percentage of prior year enplaned passengers had increased to 16.9 percent. In the second half of CY 2020 the modest recovery in passenger activity had plateaued at approximately 30 percent of 2019 passengers. The recovery began to accelerate in March 2021 when enplaned passengers represented 44.6 percent of March 2019 enplaned passengers, increasing to 50.0 percent of 2019 enplaned passengers in April 2021. **Table 4** presents the PHL's actual enplaned passengers, passenger airline operations, and total landed weight for January 2020 through April 2021; it also includes the percentage the activity represented for the same month of 2019.

TABLE 4 PHL ENPLANED PASSENGERS, PASSENGER OPERATIONS AND TOTAL LANDED WEIGHT

	ENPLANED PASSENGERS	% OF 2019	OPERATIONS	% OF 2019	LANDED WEIGHT	% OF 2019
Jan-20	1,122,169	102.3%	29,464	100.5%	1,712,668	101.6%
Feb-20	1,083,133	103.9%	28,083	104.9%	1,618,518	105.5%
Mar-20	588,060	43.8%	26,396	83.0%	1,492,717	82.7%
Apr-20	62,294	4.5%	11,487	35.6%	676,985	37.2%
May-20	148,546	9.8%	9,899	28.3%	587,280	29.6%
Jun-20	260,864	16.9%	10,861	31.9%	629,171	32.7%
Jul-20	432,131	27.5%	18,678	53.9%	1,064,359	53.4%
Aug-20	466,795	29.6%	19,920	56.2%	1,099,134	53.9%
Sep-20	409,676	30.7%	14,883	45.8%	884,717	47.8%
Oct-20	473,029	32.9%	15,350	44.7%	978,522	49.9%
Nov-20	440,935	33.7%	17,112	54.1%	1,027,203	57.0%
Dec-20	428,894	31.7%	17,990	55.2%	1,154,405	59.2%
Jan-21	376,561	34.3%	16,211	55.3%	932,992	55.4%
Feb-21	375,945	36.1%	14,278	53.3%	820,193	53.5%
Mar-21	598,251	44.6%	18,165	57.1%	1,051,164	58.2%
Apr-21	685,532	50.0%	19,036	59.0%	1,083,591	59.6%

NOTE: Landed weight represents millions of thousand-pound units.
SOURCE: City of Philadelphia, Division of Aviation, June 2021.

Many countries, including the United States, have provided financial assistance to airlines in the form of grants and guaranteed loans. The United States has passed three different acts since the onset of the pandemic which have provided financial aid to US airlines:

- Coronavirus Aid, Relief, and Economic Security Act (CARES), signed into law on March 27, 2020
- Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA), signed into law on December 27, 2020
- American Rescue Plan Act (ARPA), signed into law on March 11, 2021

Airlines have been required to maintain minimum service levels within their domestic route networks and at least 90 percent of their pre-COVID-19 pandemic employment levels through September 30, 2021 as a condition for receiving this financial assistance. Airlines that received the aid have been barred from issuing or paying dividends, issuing stock buybacks, authorizing furloughs, or reducing salaries for a specified period, and executives are subject to compensation limits.

Considerations for Evaluating Short- and Long-Term Impact to Aviation Activity and Patterns

The development of a forecast recovery scenario for air travel—globally, nationally and for the Airport—considers the following factors:

- The severity of the downturn in demand and the timeline and pace of the recovery are unknown. However, the widespread distribution of effective vaccines to stop the spread of COVID-19 is expected to enable a meaningful recovery in demand for air travel. During Q1 2021 earnings calls, most US airlines reported an increase in demand that coincides with the deployment of mass vaccination programs underway since December 2020. Airlines have reported an increase in bookings and have indicated they expect a meaningful and sustained recovery to begin in the second half of 2021. Recovery of demand has been uneven across different sectors of travel, with corporate and long-haul international travel lagging domestic leisure travel.
- A prolonged contraction of demand for air travel increases the likelihood of structural changes to the airline industry as compared to a "return to normal" recovery. These structural changes may include airline bankruptcies and failures, consolidation, hub closures and other network changes.
- Airlines have announced the retirement of certain aircraft types from their operating fleets, which in some cases represent an accelerated timeline for retiring older aircraft that airlines were already planning to retire in the next few years. Changes in fleet mix and average aircraft size could change the number of operations required to accommodate passenger demand.
- Governments have imposed short-term regulatory changes, including requiring airlines to maintain service to certain destinations and bans on certain cross-border travel. Extending these temporary changes as well as potentially imposing additional regulatory changes, such as government-coordinated scheduling and ticket pricing, would impact demand for air travel and patterns of activity.

Table 5 includes the International Air Transport Association's summary of the restrictions on air travel for US citizens. The table includes countries with nonstop service from the Airport in 2019, as of June 2021.[13] As of June 2021 the United States requires a negative COVID-19 test within the last three days or documentation of recovery from COVID-19 for all incoming international travelers, including US citizens.

- PHL has represented a critical component of the American Airlines (American) route network. In the year ending December 2019 the Airport was American's fifth largest hub and largest transatlantic gateway. As presented in **Table 6**, the Airport's share of American's total systemwide scheduled departing capacity has decreased marginally through Q2 2021 as compared to full year 2019. American has maintained more capacity at its hubs at Dallas / Fort Worth International Airport (DFW) and Charlotte Douglas International Airport (CLT) than at its other large connecting hubs as these two hubs are especially well-positioned geographically to support domestic connectivity while nonstop service has been reduced or cancelled across much of American's route network during the COVID-pandemic. The Airport is also disproportionally impacted by restrictions limiting transatlantic travel. As these restrictions are lifted and demand recovers, the Airport is expected to retain its position as a critical connecting hub and international gateway for American while continuing to serve a large local origin and destination (O&D) market.
- In July 2019 American announced a partnership with JetBlue Airways (JetBlue) that includes reciprocal codeshare cooperation and loyalty program recognition with the objective of enhancing both airlines' presence and competitive position in the Northeast United States. On February 18, 2021 American and JetBlue announced that together they will be launching a total of 33 new routes from Boston Logan International Airport (BOS), John F. Kennedy International Airport (JFK), LaGuardia Airport (LGA) and Newark Liberty International Airport (EWR) in May and June 2021. Reciprocal codeshare flights on select routes began on February 25, 2021. Reciprocal loyalty program benefits will begin in spring 2021. While the partnership is designed to support growth at American's hub at JFK and improve its market presence in the New York City and Boston markets, it is expected that this growth will be incremental to American's network and that the Airport will retain its position as American's primary transatlantic gateway. American has launched a similar partnership with Alaska Airlines with the objective of increasing the presence of both airlines along the west coast of the United States.

[13] Restrictions are subject to change as COVID-19 cases rise and fall in different regions of the world.

TABLE 5 INTERNATIONAL TRAVEL RESTRICTIONS (COUNTRIES WITH NONSTOP SERVICE FROM PHL IN 2019)

DESTINATION COUNTRY	STATUS	COVID-19 TEST OR VACCINATION	QUARANTINE UPON ENTRY
Aruba	Open To Visitors	Required	
Bermuda	Open To Visitors	Required	
Mexico	Open To Visitors		
Bahamas	Partially Restrictive	Required	
Canada	Partially Restrictive	Required	
Croatia	Partially Restrictive		
Czech Republic	Partially Restrictive		
Dominican Republic	Partially Restrictive		
France	Partially Restrictive	Required	
Germany	Partially Restrictive	Required	
Greece	Partially Restrictive	Required	Required
Hungary	Partially Restrictive		
Iceland	Partially Restrictive		
Ireland	Partially Restrictive	Required	
Italy	Partially Restrictive	Required	
Jamaica	Partially Restrictive	Required	
Netherlands	Partially Restrictive		
Portugal	Partially Restrictive	Required	
Saint Lucia	Partially Restrictive	Required	
Sint Maarten	Partially Restrictive		
Spain	Partially Restrictive	Required	
Switzerland	Partially Restrictive	Required	
Turks and Caicos Islands	Partially Restrictive	Required	
United Kingdom	Partially Restrictive	Required	
Cayman Islands	Very Restrictive	Required	Required
Qatar	Very Restrictive	Required	Required

NOTE:
The data represent restrictions as of June 2021. Restrictions on US citizens may not apply to permanent residents of the destination country or certain visa holders; Restrictions only apply to air travel and may be different for land or sea border crossings.
SOURCE: International Air Transport Association (IATA), June 2021.

TABLE 6 PHL SHARE OF AMERICAN AIRLINES SYSTEM DEPARTING SEAT CAPACITY

REGION	FULL YEAR 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021
Domestic	4.8%	4.4%	4.7%	5.0%	4.3%	3.4%	3.6%
International	9.4%	6.6%	3.2%	2.2%	3.8%	3.3%	4.6%
Total	**5.2%**	**4.6%**	**4.7%**	**4.9%**	**4.3%**	**3.4%**	**3.7%**

SOURCE: Innovata (published airline schedules), June 2021

Updated Forecast of Passengers and Operations

The updated forecast, referred to herein as the Baseline Forecast, is based on an evaluation of actual activity for 2017, 2018, 2019 and January through April 2021. Forecast activity for May 2021 through June 2021 is based on published airline schedules, estimates of the percentage of scheduled flights that will be operated, and passenger load factors. Published airline schedules were not used after June 2021 because airlines are expected to file updated schedules closer to the departure dates. The forecast of departing seat capacity for July 2021 through the end of FY 2024 was based on an estimate of departures and average seats per departure by month and airline. Forecast departing seats were multiplied by estimated load factors to derive the forecast for enplaned passengers. Gradual increases in capacity and load factor represent the recovery in demand, which considers seasonal patterns in passenger activity. The Baseline Forecast of activity, used for the financial analysis described in the following sections, and included in Appendix 1, assumes annual passenger activity returns to FY 2019 levels in FY 2025, two years later than the projected recovery to FY 2019 passenger levels in the 2020 Report's Baseline Forecast. The extension of the recovery timeline is due to the slower restoration of airline capacity and demand for air travel in the second half of calendar year (CY) 2020 and first quarter of CY 2021 than was anticipated in the Baseline Forecast in the 2020 Report. The longer recovery is also based on the following factors:

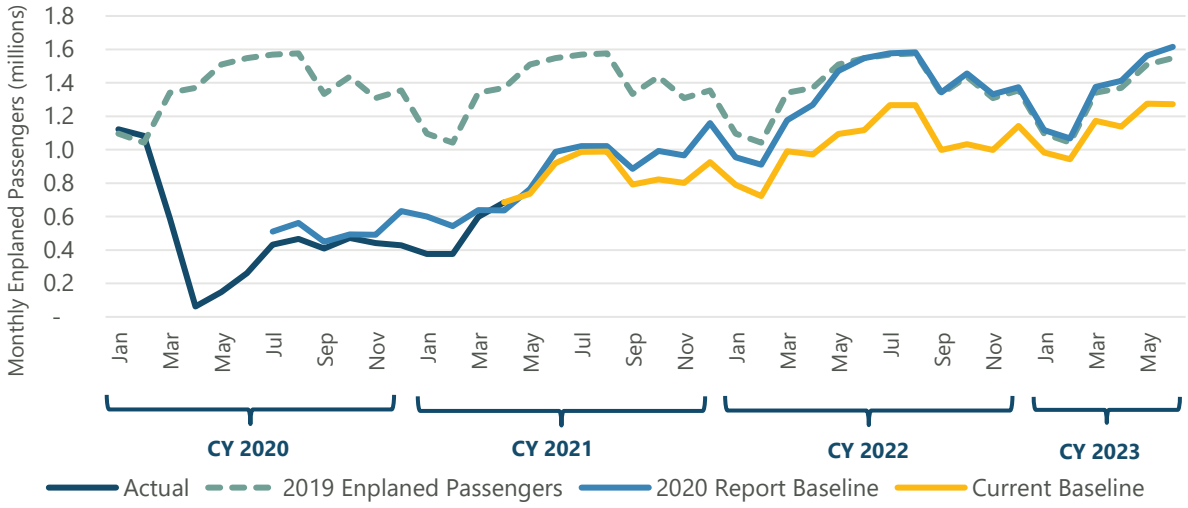
- The slower pace of vaccination programs in many countries relative to the United States.
- The increase of COVID-19 infections rates and spread of new variants of the COVID-19 virus in regions such as India and South America in the first half of 2021, which could spread to other areas.
- Prolonged international travel restrictions.

These factors led to a shift in the assumed pace of recovery and resulted in a revised air traffic forecast. This supported the Consultants' assessment of financial projections with reduced activity relative to the 2020 Report.

Due to the uncertainty of the timing and pattern of recovery for air travel, a sensitivity analysis was developed based on a scenario forecast. The Low Scenario assumes there is limited efficacy of the ongoing vaccination programs, which slows the containment of the virus and prolongs the COVID-19 pandemic beyond the timeline assumed in the Baseline Forecast. Other factors, including extended economic impacts of the pandemic and prolonged restrictions on international travel, may also contribute to a prolonged contraction in demand for air travel. The Low Scenario projects enplaned passengers will remain below the FY 2019 pre-pandemic baseline at the end of the Projection Period in FY 2026.

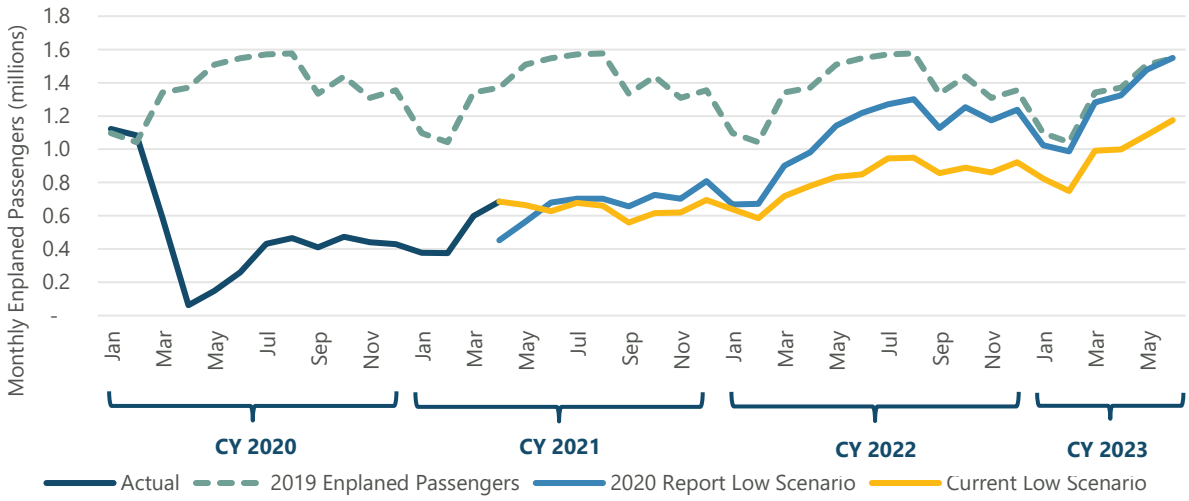
Exhibit 4 and **Exhibit 5** present the monthly enplaned passengers through June 2023 for the Baseline Forecast and the Low Scenario to demonstrate the trajectory of the forecast recovery to pre-pandemic levels of activity under different assumptions.

EXHIBIT 4 BASELINE FORECAST MONTHLY ENPLANED PASSENGERS DURING THE RECOVERY



SOURCES: City of Philadelphia, Division of Aviation (historical activity), June 2021; Ricondo & Associates, Inc. (forecast), June 2021.

EXHIBIT 5 LOW SCENARIO MONTHLY ENPLANED PASSENGERS DURING THE RECOVERY

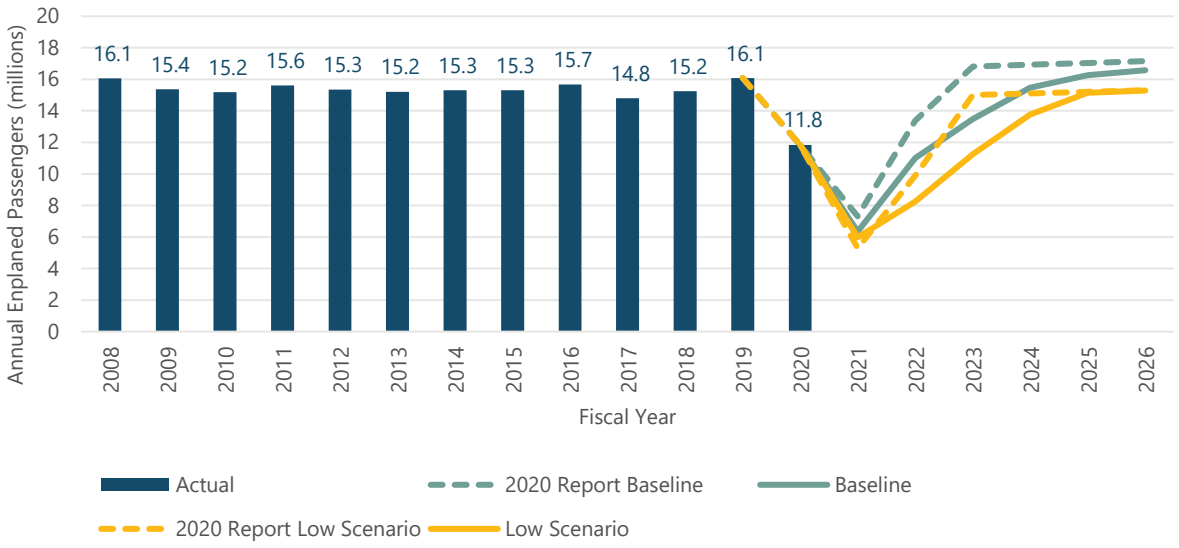


SOURCES: City of Philadelphia, Division of Aviation (historical activity), June 2021; Ricondo & Associates, Inc. (forecast), June 2021.

Neither the Baseline Forecast nor the Low Scenario assumes that major structural changes, such as closure of the American hub, will occur during the Projection Period. As most airlines have decreased capacity across their system in response to reduced demand, hubs play a critical role in linking destinations and enabling connectivity across their route networks. It is expected that American will retain its network strategy based on the hub-and-spoke business model during and after the recovery from the COVID-19 pandemic.

Exhibit 6 presents the historical and forecast total enplaned passengers by fiscal year for the Baseline Forecast and Low Scenario for the current forecast and the forecast presented in the 2020 Report.

EXHIBIT 6 HISTORICAL AND FORECAST ENPLANED PASSENGERS



SOURCES: City of Philadelphia, Division of Aviation, June 2021 (historical activity); Ricondo & Associates, Inc., June 2021 (forecast).

Table 7 presents the historical enplaned passengers from FY 2008 through FY 2020.

Table 8 presents the projected enplaned passengers for the Baseline Forecast and Low Scenario. In the Baseline Forecast enplaned passengers increase from 16.1 million in FY 2019 to 16.6 million in FY 2026, which represents a CAGR of 0.4 percent. In the Low Scenario enplaned passengers are 15.3 million in FY 2026, which represents a CAGR of -0.7 percent.

The passenger operations forecast was based on the enplaned passenger forecast and estimated load factors and average seats per departure. The operations forecast served as the basis for the landed weight forecast. **Table 9** presents the Airport's historical and forecast passenger airline operations and total landed weight, inclusive of all-cargo operations, for the Baseline Forecast and Low Scenario.

TABLE 7 HISTORICAL ENPLANED PASSENGERS

FISCAL YEAR	DOMESTIC	INTERNATIONAL	TOTAL
2008	14,187,734	1,865,239	16,052,973
2009	13,536,340	1,826,403	15,362,743
2010	13,334,229	1,859,512	15,193,741
2011	13,635,784	1,975,799	15,611,583
2012	13,368,218	1,975,908	15,344,126
2013	13,246,485	1,969,400	15,215,885
2014	13,273,937	2,042,116	15,316,053
2015	13,272,717	2,040,021	15,312,738
2016	13,695,700	1,987,858	15,683,558
2017	12,967,584	1,839,298	14,806,882
2018	13,372,943	1,872,510	15,245,453
2019	14,046,663	2,041,761	16,088,424
2020	10,531,456	1,315,951	11,847,407
Compound Annual Growth Rate			
2008 to 2014	-1.1%	1.5%	-0.8%
2008 to 2019	-0.1%	0.8%	0.0%
2008 to 2020	-2.5%	-2.7%	-2.5%

SOURCE: City of Philadelphia, Division of Aviation, June 2021.

TABLE 8 FORECAST ENPLANED PASSENGERS

BASELINE FORECAST				
FISCAL YEAR	DOMESTIC	INTERNATIONAL	TOTAL	TOTAL PERCENT OF 2019
2019 (Actual)	14,046,663	2,041,761	16,088,424	NA
2020 (Actual)	10,531,456	1,315,951	11,847,407	73.6%
2021	6,085,292	259,160	6,344,452	39.4%
2022	10,044,302	963,853	11,008,155	68.4%
2023	12,063,890	1,428,220	13,492,110	83.9%
2024	13,503,403	1,975,821	15,479,225	96.2%
2025	14,178,574	2,074,612	16,253,186	101.0%
2026	14,462,145	2,116,104	16,578,250	103.0%
2019 to 2026 Compound Annual Growth Rate	0.4%	0.5%	0.4%	
LOW SCENARIO				
FISCAL YEAR	DOMESTIC	INTERNATIONAL	TOTAL	TOTAL PERCENT OF 2019
2019 (Actual)	14,046,663	2,041,761	16,088,424	NA
2020 (Actual)	10,531,456	1,315,951	11,847,407	73.6%
2021	5,739,653	239,896	5,979,549	37.2%
2022	7,611,031	625,364	8,236,395	51.2%
2023	10,207,080	1,036,796	11,243,876	69.9%
2024	12,334,197	1,427,703	13,761,901	85.5%
2025	13,567,617	1,570,474	15,138,091	94.1%
2026	13,703,293	1,586,179	15,289,472	95.0%
2019 to 2026 Compound Annual Growth Rate	-0.4%	-3.5%	-0.7%	

SOURCES: City of Philadelphia, Division of Aviation, June 2021 (historical activity); Ricondo & Associates, Inc., June 2021 (forecast).

TABLE 9 FORECAST PASSENGER OPERATIONS AND TOTAL LANDED WEIGHT

BASELINE FORECAST				
FISCAL YEAR	PASSENGER OPERATIONS	OPERATIONS PERCENT OF 2019	TOTAL LANDED WEIGHT	LANDED WEIGHT PERCENT OF 2019
2019 (Actual)	333,715	NA	21,963,532	NA
2020 (Actual)	237,111	71.1%	18,318,544	83.4%
2021	169,757	50.9%	13,212,049	60.2%
2022	244,404	73.2%	17,642,316	80.3%
2023	284,362	85.2%	20,337,221	92.6%
2024	304,714	91.3%	21,618,093	98.4%
2025	319,819	95.8%	22,707,872	103.4%
2026	321,627	96.4%	23,027,827	104.8%
2019 to 2026 Compound Annual Growth Rate	-0.5%		0.7%	
LOW SCENARIO				
FISCAL YEAR	PASSENGER OPERATIONS	OPERATIONS PERCENT OF 2019	TOTAL LANDED WEIGHT	LANDED WEIGHT PERCENT OF 2019
2019 (Actual)	333,715	NA	21,963,532	NA
2020 (Actual)	237,111	71.1%	18,318,544	83.4%
2021	164,419	49.3%	12,913,889	58.8%
2022	190,211	57.0%	14,869,036	67.7%
2023	232,317	69.6%	17,740,407	80.8%
2024	283,353	94.3%	20,490,114	93.3%
2025	308,494	94.3%	22,054,261	100.4%
2026	309,668	94.4%	22,177,041	101.0%
2019 to 2026 Compound Annual Growth Rate	-1.1%		0.1%	

NOTE:
N/A - Not Applicable
SOURCES: City of Philadelphia, Division of Aviation, June 2021 (historical activity); United States Department of Transportation T-100 Database, June 2021 (allocation of operations); Ricondo & Associates, Inc., June 2021 (forecast).

Updated Financial Analysis

Airport-Airline Use and Lease Agreement Update

The Airport-Airline Use and Lease Agreement (the Airline Agreement) is a five-year agreement with two additional one-year renewals. The initial term of the Airline Agreement expired on June 30, 2020. The Airport and Signatory Airlines have executed both of the two additional one-year renewals, which extends the Airline Agreement through June 30, 2022.

The Airport and the Signatory Airlines were in the process of negotiating a new agreement prior to the onset of the COVID-19 pandemic. The Airport and the Signatory Airlines intend to resume negotiations later this year for a new agreement that would take effect on July 1, 2022.

For the financial analysis included in this report, it was assumed that the provisions of the Airline Agreement regarding the setting of rentals, fee, and charges, including the definition of Airport Cost Centers, Airline Cost Centers; and MII approval requirements, will remain in effect through the Projection Period ending FY 2026.

Airline Rents and Fees

Under the Airline Agreement, the Terminal Rental Requirement, the Ramp Area Requirement, and the Airfield Area Requirement are established through a cost center residual rate-setting methodology. These requirements are collectively referred in the Airline Agreement as Airline Revenues.

The Airline Agreement sets forth the following Airline Cost Centers for the purpose of setting rents and fees to be recovered through Airlines Revenues:

- **Terminal Area.** The Terminal Area includes the Airport passenger terminal buildings, the sidewalk and curb adjacent to the landside of the terminal buildings, the boarding bridges and all pedestrian bridges connecting the terminal buildings with the landside vehicular parking garages.
- **Ramp Area.** The Ramp Area includes those outside operations areas of the Airport designated for the Terminal Area consisting of the aircraft parking positions, ramp space and canopy space that extend from the face of the Terminal Area to the outer limits of the vehicle service road to the South, bordering the fence line on the West, and to the taxilane object free area to the Northeast.
- **Airfield Area.** The Airfield Area includes the areas of the Airport comprising hard surface and grass areas within the airfield perimeter fence, reserved for aircraft operations and aircraft-related activities, including, but not limited to, areas provided for aircraft landing, taking-off, taxiing, safety overruns and parking, as designated from time to time; and other appurtenances on the Airport related to the aeronautical use of the Airport.
- **Other Buildings and Areas.** Other Buildings and Areas include those Airport facilities including, but not limited to: airline, general aviation and corporate hangars; commissary; fueling facilities; industrial facilities, airline freight, express and mail handling facilities; the eastside aprons and hangars; and certain non-airline facilities (including office, retail, warehouses, etc.) including any property purchased for indirect aviation purposes.
- **Northeast Philadelphia Airport.** Northeast Philadelphia Airport includes the airport facilities operated by the Division located in the northeast portion of City.

The Terminal Area Requirement and the Ramp Area Requirement are derived by recovering the cost of Operating Expenses, Debt Service, and Fund Requirements net of non-Airline revenues allocable to the Terminal Area and Ramp Area Cost Centers, respectively. The Airfield Area Requirement is derived by recovering the cost of Operating Expenses, Debt Service, and Fund Requirements net non-Airline revenues allocable the Airfield Area, Other Buildings and Areas, and Northeast Philadelphia Airport Cost Centers.

Airline Revenue Allocation

Under the Airline Agreement, the OTA Cost Center is a City cost center, which may be subject to revenue sharing with the Airlines. The OTA Cost Center includes the terminal roadway, hotel, parking and car rental facilities appurtenant, adjacent to or used in connection with the Airport as they now exist or may be developed, extended, or improved from time to time. Hotel, parking, cab and limousine, rental car facilities, advertising outside of the terminal, and certain rental car concession fee revenues are allocable to the OTA Cost Center.[14]

Net revenues remaining in the OTA after the payment of allocable Operating Expenses, Debt Service, and Fund Requirements in excess of $7,000,000 annually are split equally between the City and the Airlines. The Airlines' share of OTA net revenues is referred to as the Airline Revenue Allocation and is applied in the subsequent year to first offset any net costs in the Other Buildings and Areas Cost Center. If the Airline Revenue Allocation exceeds the net costs in this Cost Center, the excess will be allocated between the Terminal Area and Airfield Area Cost Centers based on the pro rata share of Airline Revenue allocable to each Cost Center.

Updated Operating Expenses Projections

Historical Operating Expenses

Operating Expenses for FY 2018 through FY 2020, as presented each year in the City's Financial Report of the Airport System filed with the Fiscal Agent, pursuant to Section 5.05 of the General Ordinance are presented in **Table 10**. Operating Expenses increased at a compound annual growth rate of 5.5 percent, from approximately $253.5 million in FY 2017 to approximately $282.2 in FY 2019. This increase in Operating Expenses can be primarily attributed to increasing contractual service costs and personnel and fringe benefits costs.

TABLE 10 HISTORICAL OPERATING EXPENSES

OPERATING EXPENSES	2018	2019	2020	COMPOUND ANNUAL GROWTH RATE
Total Operating Expenses (thousands)	$267,721	$282,215	$274,793	1.3%
Operating Expenses annual growth rate		5.4%	-2.6%	
Enplaned Passengers (thousands)	15,245	16,088	11,847	-11.8%
Enplaned Passengers growth rate		3.0%	5.5%	
Total Operating Expenses per Enplaned Passenger	$17.56	$17.54	$23.19	14.9%

SOURCE: City of Philadelphia, Division of Aviation, June 2021.

[14] Per the Airline Agreement, Rental Car Concession Fees generated from Alamo and Enterprise car rental brands and any other new entrant rental car companies are allocable to the OTA Cost Center.

Budgeted and Projected Operating Expenses

The Airport's FY 2022 airline rates and charges budget was finalized in May 2021 and included the following cost reductions and additional costs:

- Continuing hiring freeze on non-critical positions
- Continuing restrictions on overtime for all Airport personnel, including police and fire
- An assumed 2 percent pay increases for all City union employees
- An assumed 2.75 percent pay increase for all Police and Fire personnel
- Further reductions in budget FY 2021 contractual services
- A restructuring of the City's pension obligations allocation, resulting in significant reduction in pension costs allocable to the Airport Significantly reduced and limited vehicle allowance

Projected Operating Expenses

Updated Operating Expense projections include the following assumptions:

- A 2.0 percent increase in Division of Aviation union employee expenses through FY 2023, and a 3.0 percent annual increase through the remainder of the Projection Period
- A 2.75 percent increases in police and fire personnel costs through FY 2023, and a 3.5 percent annual increase through the remainder of the Projection Period
- No additional reductions in personnel, although the City has implemented an early retirement program that was offered through May 2021
- Fringe benefit projections based on City's allocation of pension costs to the Airport and a 3.0 percent annual increase in health and welfare benefits
- A 6.0 percent increase in contractual services in FY 2023 and FY 2024 to reflect the need to add back services cut between the FY 2021 and FY 2022 budget process as the Airport begins to recover
- An average increase of 2.8 percent in contractual services after FY 2024
- Increases ranging from 1.5 to 3.0 percent for other operating costs, including utilities, taxes, insurance, materials and supplies, and equipment
- Operating expense growth is the same under all traffic forecast scenarios

Updated Non-Airline Revenues

Prior to the onset of the COVID-19 pandemic, fiscal year to date 2020 non-airline revenues were tracking ahead of FY 2019. **Table 11** summarizes historical growth in concession revenues, which make up the majority of non-airline revenues, between FY 2018 and FY 2020. As shown, concession revenues decreased between FY 2018 and FY 2020 at a compound annual growth rate of 1.3 percent, less than the decrease in enplaned passengers during this same period reflecting the strong growth prior to March 2020.

TABLE 11 HISTORICAL CONCESSION REVENUES

CONCESSION REVENUES	2018	2019	2020	COMPOUND ANNUAL GROWTH RATE
Automobile Parking	$32,527	$35,764	$36,199	1.7%
Rental Cars	18,040	18,480	14,298	-11.0%
Restaurants and Retail	31,082	38,726	30,613	-0.8%
Ground Transportation	10,145	12,595	8,401	4.5%
Other	10,717	11,497	10,344	-1.8%
TOTAL CONCESSION REVENUES	**$102,511**	**$117,061**	**$99,855**	**-1.3%**
Total Concession Revenues Annual Growth Rate		14.2%	-14.7%	
Enplaned Passengers (thousands)	15,245	16,088	11,847	-11.8%
Enplaned Passengers Growth Rate		5.5%	-26.4%	
Concession Revenues per Enplaned Passenger	**$6.72**	**$7.28**	**$8.43**	12.0%

SOURCE: City of Philadelphia, Division of Aviation, September 2020.

Projected Non-Airline Revenues

Updated projected non-airline revenues include the following assumptions:

- Concession minimum annual guarantees, currently waived, will be reinstated when enplaned passengers reach 70 percent of FY 2019 levels.
- Concession per passenger spend rates are assumed to be lower than historical levels in the near-term, reflecting more leisure travelers and less business travelers.
- Increases in ground transportation fees for off-Airport parking and TNCs are based on negotiated fees and regulation rates.
- Annual consumer price index adjustments or negotiated rent increases to ground, land, and buildings rents, where applicable
- Growth for concession revenues is equal to growth in enplaned passengers and inflation.

Federal COVID-19 Grants

In response to the COVID-19 pandemic, the federal government has approved three relief packages (collectively referred to in this Report as Federal COVID-19 Grants) that provide operating grants and concessionaire relief to airports:

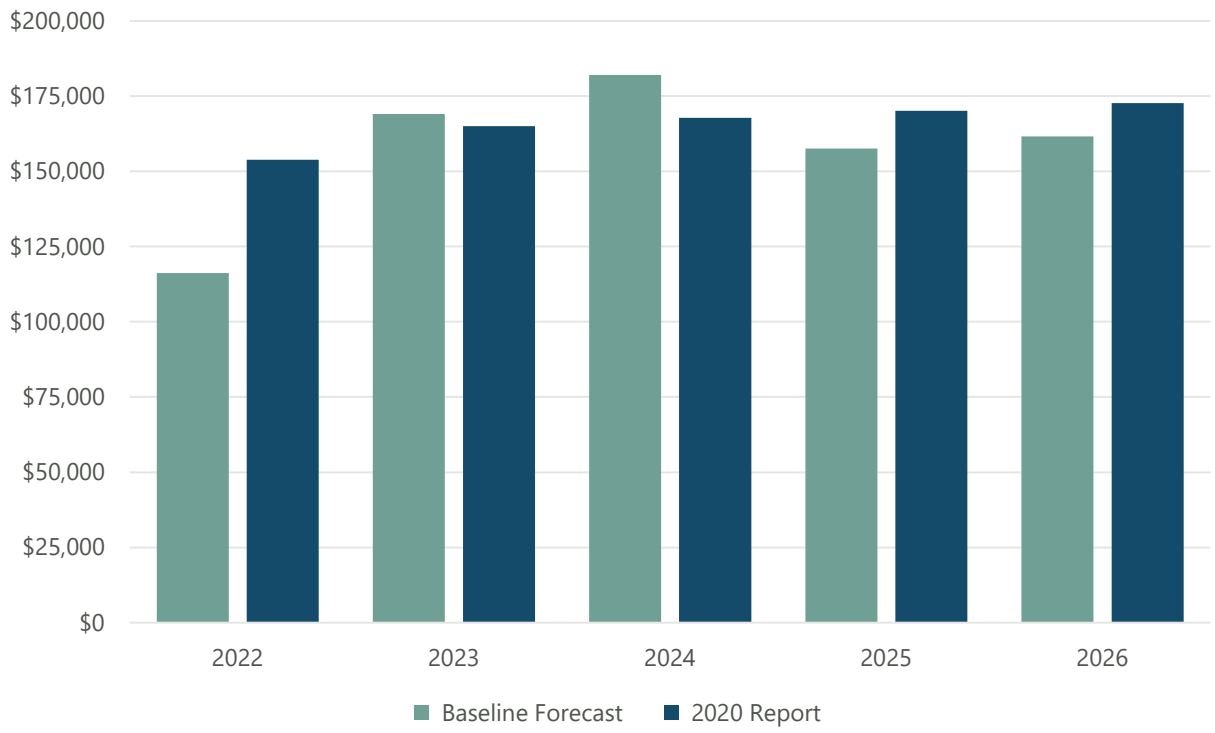
- The Coronavirus Aid, Relief, and Economic Security Act (CARES), which was approved in March 2020, awarded the Airport with $116.4 million in operating grants.
- The Coronavirus Response and Relief Supplemental Appropriation Act (CRRSA), which was approved in December 2020, awarded the Airport with a total $28.9 million in operating grants ($25.5 million) and relief for concessionaires ($3.4 million).

- The American Rescue Plan Act (ARPA), which was approved in March 2021 and has yet to be awarded, is expected to provide the Airport with approximately $115.3 million in operating grants ($101.6 million) and relief for concessionaires ($13.7 million).

To date, the Airport has drawn all of the CARES Act funds and applied $78.8 million of the funds in FY 2020 and intends to apply the remaining $37.6 million in FY 2021. The Airport intends to apply all the $28.9 million in CRSSA funds in FY 2022. Once awarded, the Airport currently expects to apply the ARPA funds in FY 2023 and FY 2024. The timing of the application of ARPA funds may be accelerated if funds are needed earlier than FY 2023 or delayed if the Airport determines that some funding is needed after FY 2024.

Exhibit 7 shows the updated projected non-airline revenue and the projection from the 2020 Report.

EXHIBIT 7 UPDATED PROJECTED NON-AIRLINE REVENUES (IN MILLIONS)



SOURCES: City of Philadelphia, Divisions of Aviation (2022), June 2021; AVK Consulting, Inc. (2023-2026), June 2021.

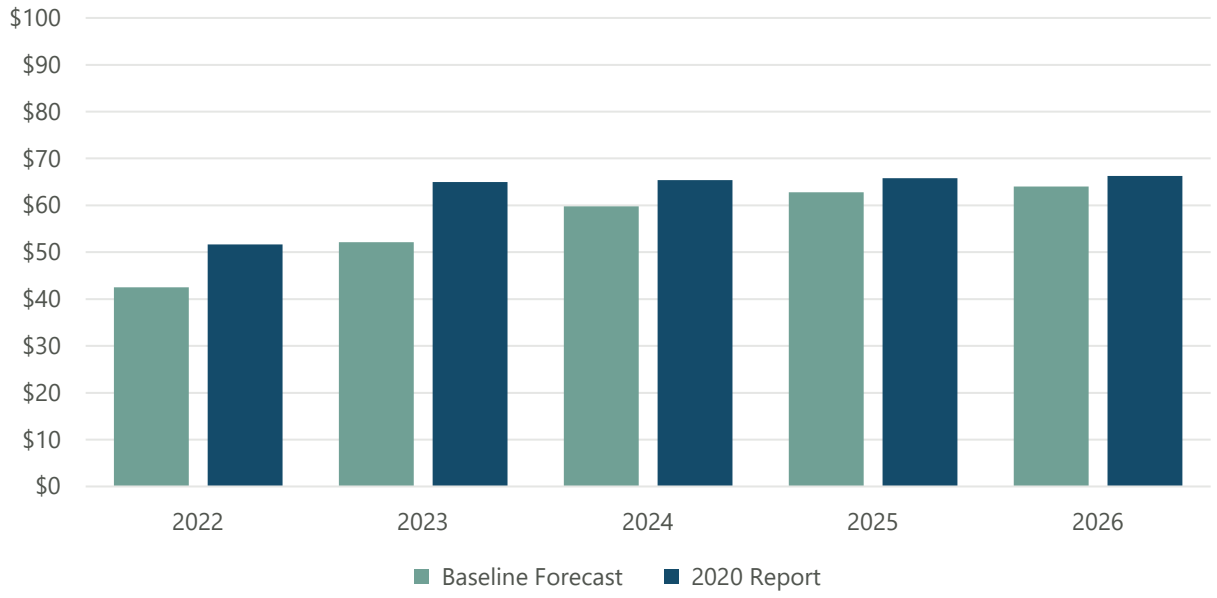
Updated Other Amounts Available for Debt Service

Passenger Facility Charge Revenue

During the Projection Period, the PFC Revenues assume the current collection rate of $4.50 per qualifying enplaned passenger, net of a $0.11 per passenger administrative fee to be retained by the airlines. Prior to the COVID-19 pandemic, the Airport collected in approximately $60 million per year in PFC Revenues. The projected PFC Revenues are in line with the growth of enplaned passenger activity. As of March 31, 2021, the Airport's PFC fund balance is $129.5 million. Currently, the entire PFC fund balance is available to pledge as other Amounts Available for Debt Service. During the Projection Period, is it assumed that the Airport would submit additional PFC applications that will result in an increase to the annual amount pledged.

Exhibit 8 summarizes projected PFC Revenues collections under the Baseline Forecast. As shown, annual collections range from a low of $42.5 million and a high of $64.0 million between FY 2022 and FY 2026. The reduction of PFC Revenues relative to the 2020 Report reflects the reduced air traffic activity as a result of the slower projected recovery period.

EXHIBIT 8 PROJECTED PFC ANNUAL REVENUE COLLECTIONS



SOURCES: AVK Consulting, Inc. (2022-2026), June 2021.

Currently, the Airport pledges approximately $32 million annually to GARB debt service. During FY 2021, given the Airport's healthy PFC fund balance and in an effort to reduce airline costs, the Airport pledged approximately $62 million in PFC Revenues as Other Amounts Available for Debt Service.

As stated previously, the Airport intends to submit additional PFC applications both to leverage debt service and to fund CDP projects during the Projection Period. The Airport's general guidelines as to the use of PFC Revenues are, as follows:

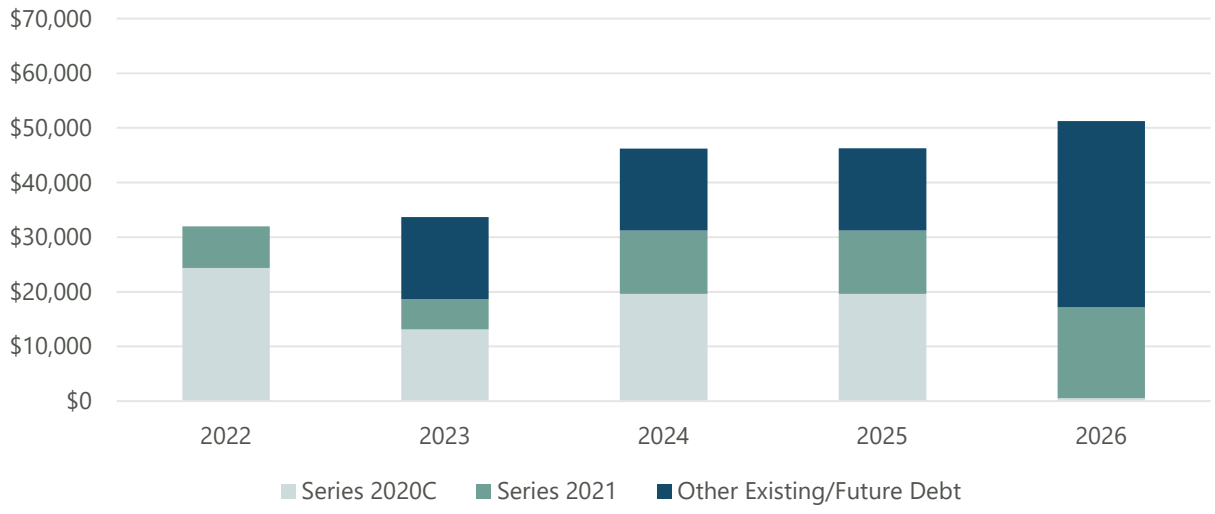
- Leveraged PFCs will be no more than 80 percent of annual PFC collections.
- An amount equal to half of the annual PFC-eligible debt service will be reserved within the PFC fund balance.
- Additional PFC Revenues available after the reserve is met, may be used on a pay-as-you-go basis to fund capital projects.

Table 12 summarizes the amount of PFC Revenues to be pledged by series of bonds under the Baseline Forecast. Pledged PFC Revenues range from a low of $32.3 million in FY 2022 to a high of $51.2 million in FY 2026.

TABLE 12 PROJECTED PFC REVENUES PLEDGED

(Dollars in Thousands for Fiscal Years Ending June 30)

PLEDGED PFC REVENUES BY SERIES	2022	2023	2024	2025	2026
Outstanding Bonds					
Series 2020C	$24,633	$13,130	$19,643	$19,638	$516
Proposed Bonds					
Series 2021	7,656	5,543	11,596	11,609	16,678
Other Existing / Future Debt	--	15,000	15,000	15,000	134,029
TOTAL PROJECTED PLEDGED PFC REVENUES	**$32,289**	**$33,673**	**$46,239**	**$46,247**	**$51,223**



SOURCE: City of Philadelphia, Division of Aviation (2022). June 2021; AVK Consulting, Inc. (2023-2026), June 2021.

Updated Operating Fund Balances and Funds Available for Debt Service

As of March 31, 2021, the Division of Aviation had $296.9 million of Aviation Operating Fund balances. **Table 13** presents the estimated annual Operating fund balances through the Projection Period assuming annual revenues, expenses, and deposits occur as projected in this 2021 Report. Operating fund balances are estimated to increase from $235.0 million in FY 2022 to $376.0 million in FY 2026.

TABLE 13 ESTIMATED AVIATION OPERATING FUND BALANCES

(Dollars in Thousands as of June 30th)

OPERATING FUNDS	2022	2023	2024	2025	2026
O&M Account	$23,664	$24,782	$25,906	$27,100	$28,371
Bond R&I Account	25,902	26,032	26,162	26,935	28,816
Aviation Operating Fund balance[1]	185,445	215,600	268,786	293,278	318,860
TOTAL OPERATING FUNDS	**$235,011**	**$266,414**	**$320,854**	**$347,313**	**$376,047**

NOTE:
1 Aviation Operating Fund balance includes amounts in the Discretionary Account.
SOURCE: City of Philadelphia, Division of Aviation (2022 fund balance) June 2021; AVK Consulting, Inc. (2023 – 2026) June 2021.

A portion of the Aviation Operating Fund balances represent other Amounts Available for Debt Service, which includes the amounts in the Airport's Discretionary, O&M, and Bond Redemption and Improvement (Bond R&I) Accounts. As of March 31, 2021, the combined balance in these accounts was $160.8 million. As stated previously, this analysis assumes the same business terms as the current Airline Agreement throughout the Projection Period. Deposits (withdrawals) to (from) these accounts are assumed to be equal to the following:

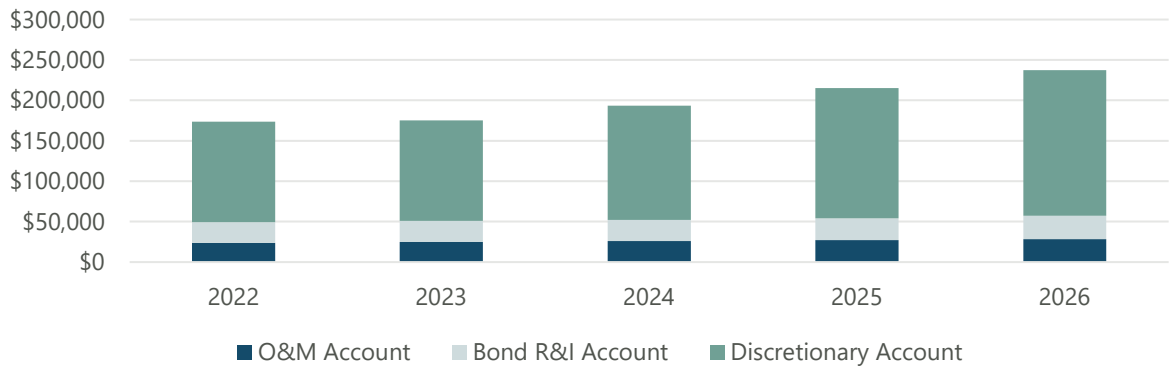
- Discretionary Account – equal to the Airport's share of annual Outside Terminal Area (OTA) net revenues
- O&M Account – equal to $1 million annually
- Bond Redemption and Improvement Account – deposits or withdrawals equal to maintaining a balance of 25 percent of annual net Debt Service Requirements

Table 14 presents the projected other amounts available for Debt Service annually under the Baseline Forecast. Since the onset of the COVID-19 pandemic, the Airport has not deferred any of the annual deposits required under the Airline Agreement.

TABLE 14 PROJECTED AVIATION OPERATING FUNDS AVAILABLE FOR DEBT SERVICE

(Dollars in Thousands for Fiscal Years Ending June 30)

OPERATING FUNDS AVAILABLE FOR DEBT SERVICE	2022	2023	2024	2025	2026
O&M Account	$23,664	$24,782	$25,906	$27,100	$28,371
Bond R&I Account	25,902	26,032	26,162	26,935	28,816
Discretionary Account	123,956	124,576	141,465	161,010	180,182
TOTAL OPERATING FUNDS AVAILABLE FOR DEBT SERVICE	**$173,522**	**$175,390**	**$193,533**	**$215,045**	**$237,369**



SOURCE: City of Philadelphia, Division of Aviation (2022 fund balance), June 2021 AVK Consulting, Inc. (2023 – 2026) June 2021.

Updated Debt Service Requirements

Updates to projected annual Debt Service Requirements, net of capitalized interest, interest earnings on Sinking Fund Reserves, and Pledged PFC Revenues, on all current outstanding Bonds and projected future Bonds are discussed in this section. Updated projected Debt Service is provided in Table 1-3 in **Attachment 1** of this 2021 Report.

2021 Bond Debt Service

The 2021 Bonds includes the current refunding of the Series 2011A and the Series 2011B Bonds and the issuance of $200 million of new money to fund the current portion of the CDP. The majority of the expected savings from the refunding portion of 2021 Bonds will be used to reduce annual Debt Service in FY 2022 and FY 2023. Savings beyond FY 2023 are expected to be negligible. Debt Service Requirements are projected to increase from approximately $118.6 million in FY 2022 to approximately $160.4 million in FY 2025, reflecting the phasing in of the new money portion of the 2021 Bonds. Debt Service Requirements decrease to $156.0 million in FY 2026 as the Series 2005C Bonds mature in FY 2025.

The 2020 Bonds are assumed to have a term of 30 years, and for the purposes of this analysis, interest on the 2020 Bonds is assumed at current market interest rates as of May 2021 plus 75 basis points.

Additional Airport Revenue Bond Debt Service Requirements

The Airport expects to incur on average $150 million of capital expenditures annually to fund priority CDP projects throughout the Projection Period. The project expenditures will be funded with a combination of pay-as-you-go PFCs, grants, and commercial paper note proceeds. As mentioned previously, the financial analysis includes Debt Service Requirements on future Bonds (the proposed 2025 Bonds) to be issued to fund the Airport's CDP and include the takeout of commercial paper notes in FY 2025.[15] Debt Service Requirements on these Bonds are allocated to Cost Centers based on the type of capital projects funded Debt Service Requirements on these future Bonds are projected to be approximately $11.3 million in FY 2026, which represents approximately a half a year debt service since interest is assumed to be capitalized until December 31, 2026.

In August 2020, pursuant to the Lease Agreement and the Parking Services Contract with Philadelphia Parking Authority (PPA), the City exercised its option to purchase the airport parking facilities and improvements. Upon satisfaction of certain conditions as set forth in the Lease Agreement and Parking Services Contract, including the repayment of all debt associated with the airport parking operation, the title of the financed airport parking facilities and improvements could be transferred from the PPA to the City. Any potential improvement of revenue, net of expenses and debt, resulting from the airport's direct oversight and ownership of the parking operation have not been incorporated into the financial analysis.

Debt Service Requirements

As shown on Table 1-3, Debt Service Requirements in the updated financial analysis present Debt Service, net of capitalized interest, interest earnings on Sinking Fund Reserves, and pledged PFC Revenues. Net Debt Service Requirements are projected to range from $86.3 million in FY 2022 to $104.8 million in FY 2026.

Updated Net Airline Revenues Required and Rates and Fees

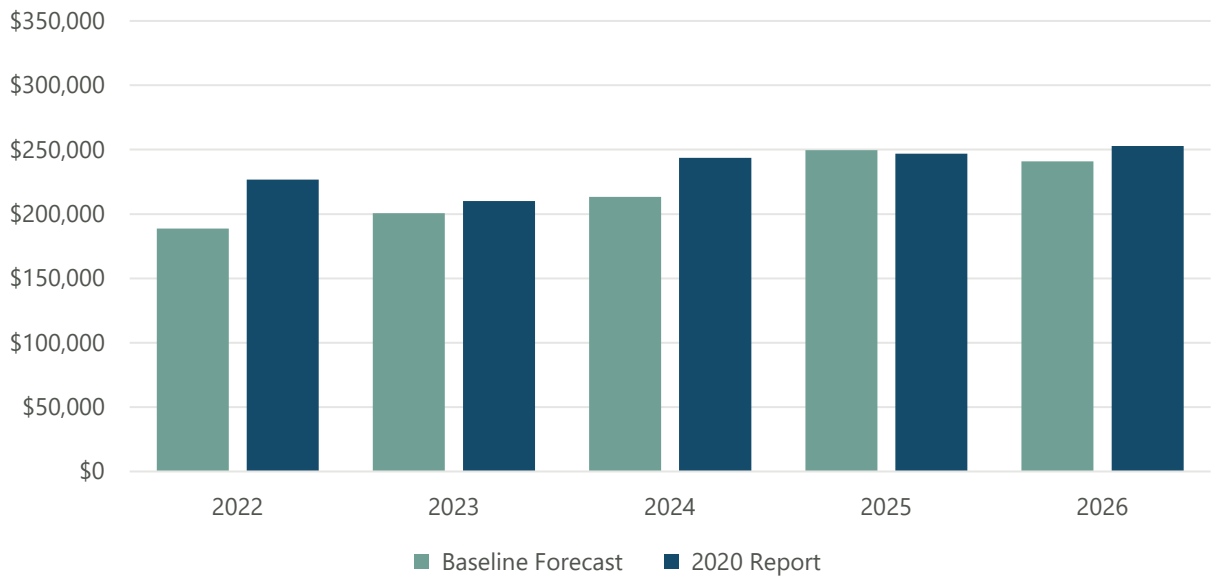
Airline Revenues required under the Baseline Forecast range from $188.6 million in FY 2022 to $240.8 million in FY 2026. **Exhibit 9** summarizes the annual Airline Revenues required under the Baseline Forecast based on the underlying assumptions contained in this updated analysis and compares this with the projected revenues in the 2020 Report. As shown, Airline Revenues required under the Baseline Forecast are lower than the projected revenues required in the 2020 Report for each fiscal year except for FY 2025, which is slightly higher. The decreases are primarily attributable to the Airport making additional reductions in operating expenses and the availability of additional Federal COVID-19 Grants during the Projection Period.

Rentals and fees remain reasonable under the Baseline Forecast. **Exhibit 10** presents the projected landing fee rate under the Baseline Forecast and the projected rate in the 2020 Report.

---

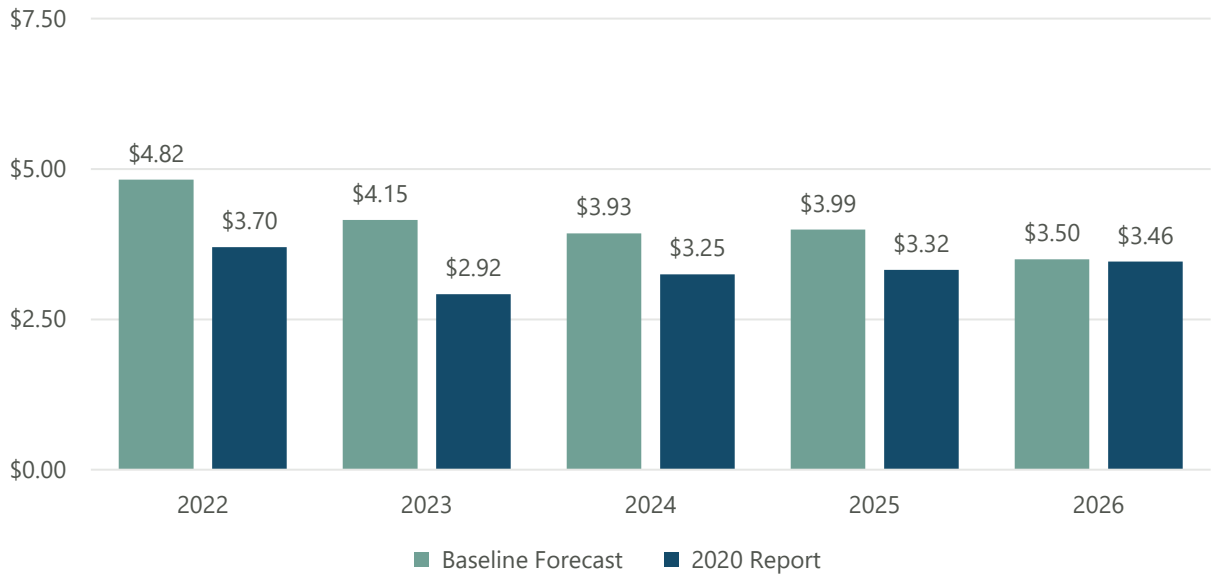
[15] The 2021 Report does not include potential savings from future refunding opportunities available during the Projection Period.

EXHIBIT 9 NET AIRLINE REVENUES REQUIRED



SOURCE: AVK Consulting, Inc., June 2021.

EXHIBIT 10 LANDING FEE RATES (PER 1,000-POUND UNIT OF LANDED WEIGHT)



SOURCE: AVK Consulting, Inc., June 2021.

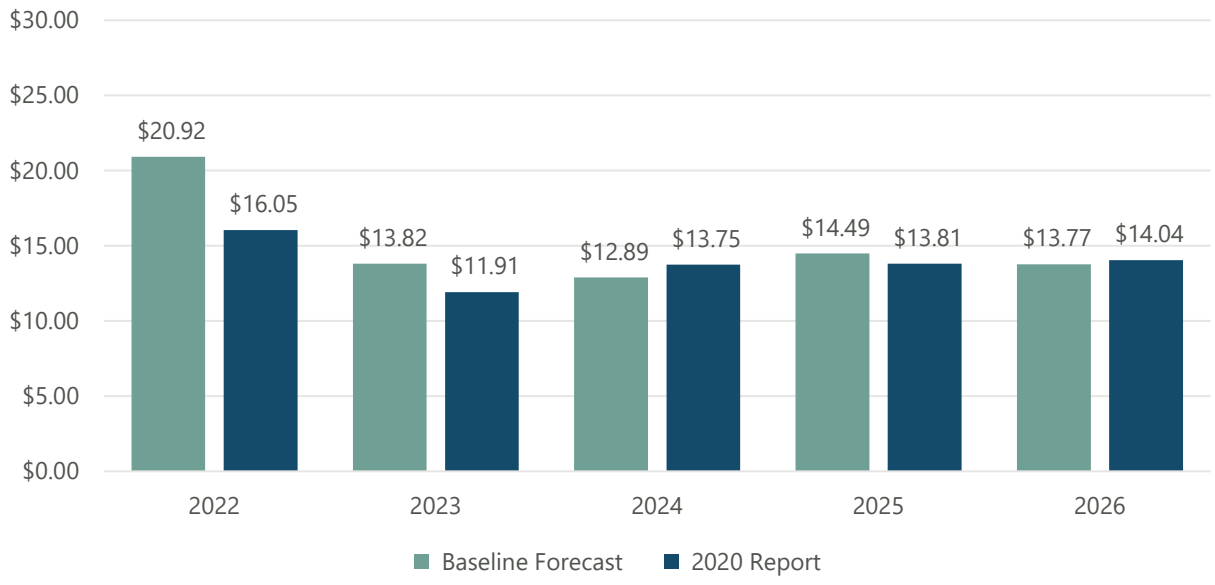
Reasonableness of Updated Airport Rates and Charges

Updated Airline Cost Projection (Cost per Enplanement)

Cost per enplaned passenger (CPE) allows for the assessment of cost to the airlines on a metric basis. As the COVID-19 pandemic impacted air traffic and enplaned passengers decreased, airport costs to the airlines did not fluctuate proportionately due to fixed costs and impacts to revenues. Therefore, CPEs values typical became much higher in the near term, even with a concerted effort to reduce airport costs, which is evident in the projected CPE.

The Airport sought to reduce overall Airline Revenue requirement in order to mitigate cost impacts to the airlines. In FY 2021, the first full year of the pandemic's impact to airport operations, the Airport reduced the Airline Revenue Required by 19.8 percent, from $232.7 million in FY 2020 to $186.6 million in FY 2021. The budget FY 2022 Airline Revenue Required is projected to be similar to FY 2021; an increase of 1.1 percent, from $186.6 million in FY 2021 to $188.6 million in FY. With the application of Federal COVID-19 Grants and the pledging of additional PFC Revenues, the CPE for budget FY 2022 is projected to be $20.92. While this represents an increase from the projected FY 2022 CPE in the 2020 Report of $16.05, it still remains reasonable in light of the non-airline revenue loss and reduced passenger activity acting as a divisor. As shown on **Exhibit 11**, the CPE is projected to decrease from $20.92 in FY 2022 to $13.77 in FY 2026 under the Baseline Forecast.

EXHIBIT 11 PROJECTED COST PER ENPLANEMENT

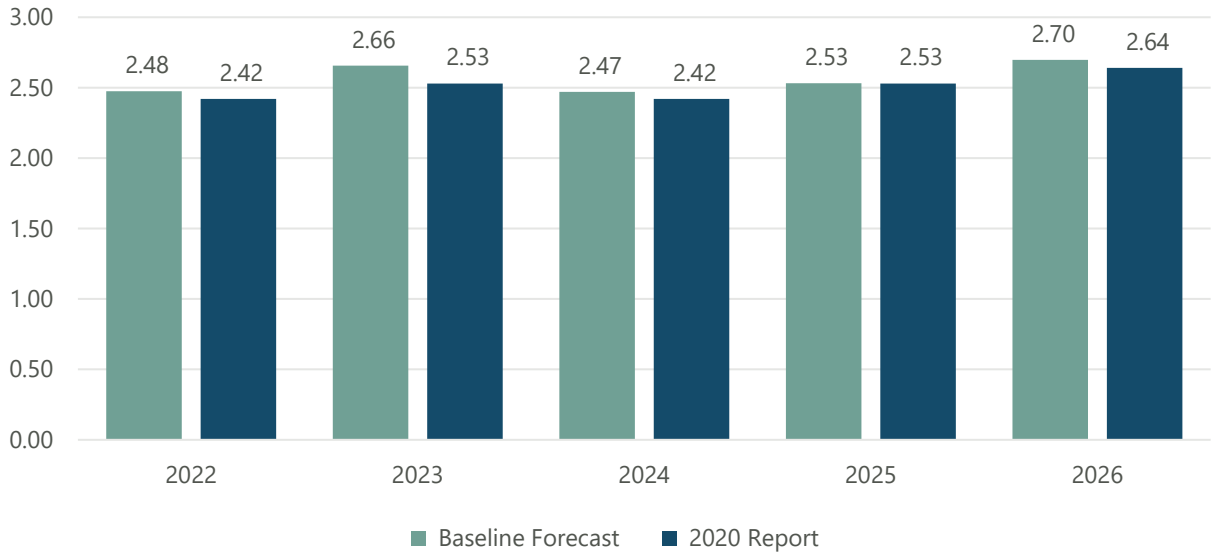


SOURCE: AVK Consulting, Inc., June 2021.

Updated Debt Service Coverage

Table 1-10 presents the updated debt service coverage under the Baseline Forecast. Debt service coverage is projected to exceed the minimum requirement of 1.50x and 1.00x for the Rate Covenant in all instances for both Test 1 and Test 2. **Exhibit 12** compares the projected debt service coverage under Test 2 for the Baseline Forecast and the 2020 Report. As shown, debt service coverage under the Baseline Forecast is well above the minimum requirement of 1.00x. Debt service coverage under the Baseline Forecast is slightly higher or the same in each fiscal year than in the 2020 Report.

EXHIBIT 12 PROJECTED DEBT SERVICE COVERAGE – TEST 2



SOURCE: AVK Consulting, Inc., June 2021.

Confirmation of 2020 Report Findings

On the basis of the updated analysis set forth in this 2021 Report, the Consultants reaffirm their opinion and are of the opinion that the Pledged Amounts (as defined in Section 4.02 of the General Ordinance) projected to be generated and available during each year of the Project Period (FY 2022-FY 2026) are sufficient to comply with the Rate Covenant established in Section 5.01 of the General Ordinance and that the resulting projected airline costs should remain reasonable. As required under Section 5.04 of the General Ordinance, this 2021 Report demonstrates that the Rate Covenant (i) was met for the Fiscal Year immediately preceding the date of the 2021 Report, and (ii) it is projected to be met for each of the five (5) Fiscal Years immediately following the issuance of the 2021 Bonds. This 2021 Report also documents that no deficiency exists in the Sinking Fund Reserve Account. These requirements of Section 5.04 of the General Ordinance are referred to as the Additional Bonds Test.

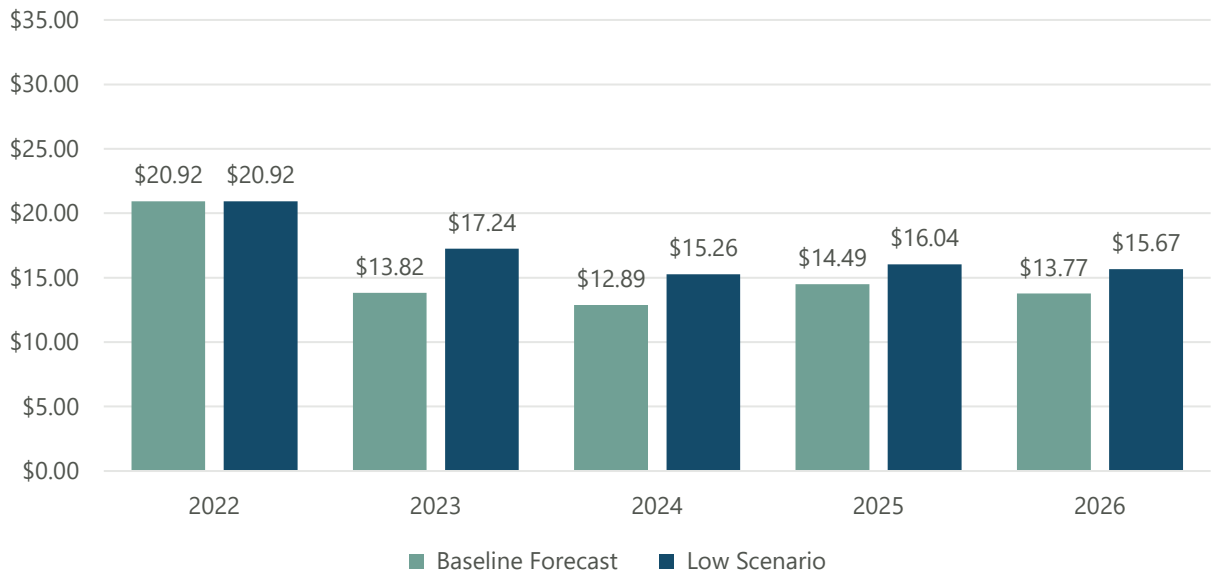
Sensitivity Analysis

The following section describes a sensitivity scenario (the Low Scenario) that was prepared to address the uncertainty surrounding the duration of the air traffic downturn resulting from the COVID-19 pandemic. Assumptions included for Operating Expenses, Debt Service Requirements, and the portions of the CDP to be advanced during the Projection Period remain unchanged from the Baseline Forecast. Non-airline revenues decrease in relation to the decrease in activity under the Low Scenario.

The financial results are materially different in Fiscal Year 2023 and to a lesser degree during the remainder of the Projection Period.

Exhibit 13 presents the results for the airline CPE for the Baseline Forecast and the Low Scenario. Under the Baseline Forecast, the CPE is projected to be $13.82 in 2023 compared to $17.24 in the Low Scenario. This Low Scenario CPE does not include any additional expense cuts. Between 2024 and 2026, the projected CPE ranges from a high of $16.04 in 2025 to a low of $15.26 in 2024 under the Low Scenario. While higher than the CPE under the Baseline Forecast, the CPE remains reasonable in 2023 through 2026 under the Low Scenario.

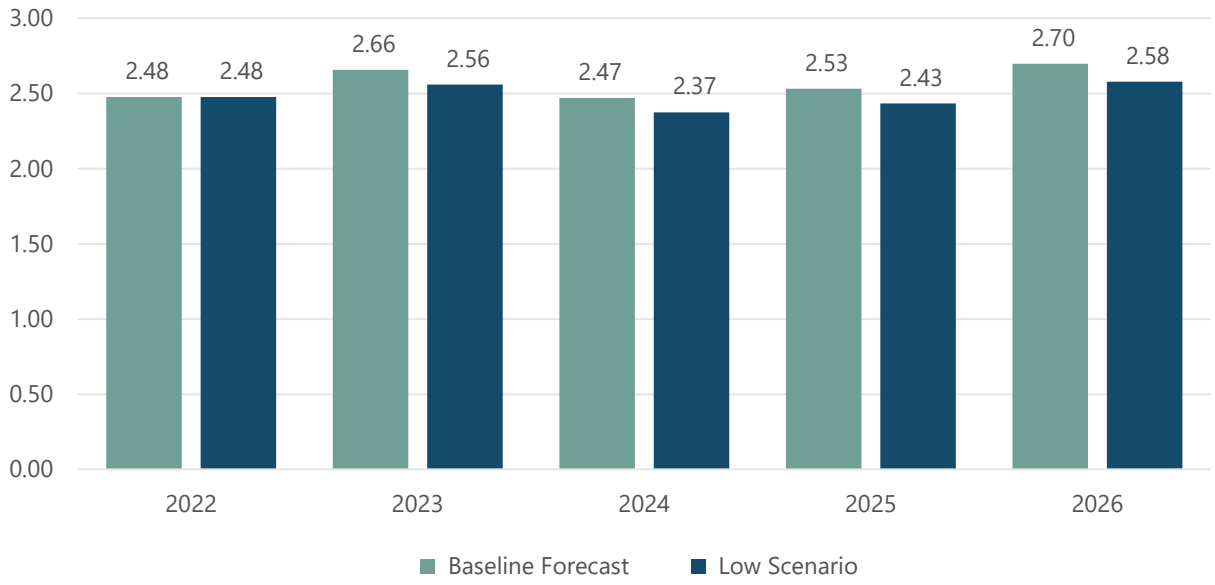
EXHIBIT 13 CPE COMPARISON



SOURCE: AVK Consulting, Inc., June 2021.

Exhibit 14 presents the debt service coverage Test 2 for both the Baseline Forecast and the Low Scenario. As shown on Table 1-11, under both the Baseline Forecast and the Low Scenario coverage is sufficient under both Test 1 and Test 2 to meet the minimum requirement of 1.50 and 1.00, respectively. Debt service coverage for the Low Scenario ranges from a high of 2.58 in 2026 to a low of 2.37x in 2024 for Test 2.

EXHIBIT 14 TEST 2 COVERAGE COMPARISON



SOURCE: AVK Consulting, Inc., June 2021.

Sincerely,

RICONDO & ASSOCIATES, INC.

AVK CONSULTING, INC.

ATTACHMENT 1

Financial Projection Tables

TABLE 1-1 OPERATING EXPENSES

(For Fiscal Years Ending June 30)

	ACTUAL [1]		ESTIMATED [2]	BUDGET [2]	PROJECTED [3]				COMPOUNDED ANNUAL
	2019	2020	2021	2022	2023	2024	2025	2026	GROWTH RATE (2022 - 2026)
Net Operating Expenses									
Personal services	$52,418,534	$55,630,393	$45,715,000	$46,000,000	$46,920,000	$48,328,000	$49,778,000	$51,271,000	2.7%
Contractual services	97,730,903	86,388,525	78,000,000	76,772,000	81,378,000	86,261,000	89,280,000	91,066,000	4.4%
Materials and supplies	4,878,709	3,031,731	4,500,000	4,806,000	4,902,000	5,000,000	5,100,000	5,202,000	2.0%
Equipment	2,282,518	1,866,489	1,400,000	1,920,000	1,958,000	1,997,000	2,037,000	2,078,000	2.0%
Taxes	4,116,441	4,184,108	4,292,000	4,292,000	4,317,000	4,342,000	4,367,000	4,392,000	0.6%
Other	(266,270)	637,562	-	-	-	-	-	-	0.0%
Payment to Renewal Fund	-	-	-	-	-	-	-	-	0.0%
TOTAL NET OPERATING EXPENSES	**$161,160,835**	**$151,738,808**	**$133,907,000**	**$133,790,000**	**$139,475,000**	**$145,928,000**	**$150,562,000**	**$154,009,000**	**3.6%**
Interdepartmental Charges									
Police	$17,556,827	$18,238,586	$16,100,000	$15,875,000	$16,312,000	$16,883,000	$17,474,000	$18,086,000	3.3%
Fire	8,787,324	9,542,806	8,800,000	9,145,000	9,396,000	9,725,000	10,065,000	10,417,000	3.3%
Utilities	17,205,738	16,064,859	17,000,000	17,000,000	17,425,000	17,861,000	18,308,000	18,766,000	2.5%
Insurance	2,672,376	2,613,705	3,000,000	3,100,000	3,147,000	3,194,000	3,242,000	3,291,000	1.5%
Services of others	2,336,537	2,522,656	2,126,000	2,500,000	2,550,000	2,627,000	2,719,000	2,814,000	3.0%
Legal services	1,613,108	1,613,018	1,300,000	1,336,000	1,363,000	1,404,000	1,453,000	1,504,000	3.0%
Fringe benefits	62,923,741	65,091,943	66,500,000	56,855,000	59,345,000	61,297,000	62,675,000	64,179,000	3.1%
Fleet Management	3,310,868	2,998,478	3,360,000	3,427,000	3,496,000	3,601,000	3,727,000	3,857,000	3.0%
Vehicle Purchases	2,991,000	2,991,000	500,000	500,000	1,000,000	2,000,000	2,000,000	2,000,000	41.4%
Indeminities	1,656,596	1,340,409	1,200,000	1,500,000	1,525,000	1,550,000	1,575,000	1,600,000	1.6%
TOTAL NET OPERATING EXPENSES	**$121,054,115**	**$123,017,460**	**$119,886,000**	**$111,238,000**	**$115,559,000**	**$120,142,000**	**$123,238,000**	**$126,514,000**	**3.3%**
OPERATING EXPENSES	**$282,214,950**	**$274,756,268**	**$253,793,000**	**$245,028,000**	**$255,034,000**	**$266,070,000**	**$273,800,000**	**$280,523,000**	**2.0%**
Allocation by Project Cost Centers									
Terminal Area	$164,206,057	$159,964,195	$145,402,000	$141,597,000	$146,849,000	$153,029,000	$157,431,000	$161,250,000	
Ramp Area	-	-	-	-	-	-	-	-	
Airfield Area	49,641,928	57,039,981	58,861,000	60,768,000	63,245,000	66,027,000	67,891,000	69,591,000	
Other Buildings and Areas	18,825,404	13,382,614	12,182,000	10,630,000	10,028,000	10,412,000	10,632,000	10,826,000	
Northeast Philadelphia Airport	6,454,405	6,755,459	6,996,000	6,815,000	7,000,000	7,302,000	7,493,000	7,682,000	
Outside Terminal Area	43,037,962	37,581,772	30,352,000	25,218,000	27,912,000	29,300,000	30,353,000	31,174,000	
Airport Services	49,194	32,247	-	-	-	-	-	-	
	$282,214,950	**$274,756,268**	**$253,793,000**	**$245,028,000**	**$255,034,000**	**$266,070,000**	**$273,800,000**	**$280,523,000**	
Percent Annual Increase		**-2.6%**	**-7.6%**	**-3.5%**	**4.1%**	**4.3%**	**2.9%**	**2.5%**	

NOTES:

1 City of Philadelphia records.

2 City 2022 Preliminary Rates and Charges Budget, which includes estimates for FY 2021.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-2 PROJECT REVENUES

(For Fiscal Years Ending June 30)

	ACTUAL [1]		ESTIMATED [2]	BUDGET [2]	PROJECTED [3]				COMPOUNDED ANNUAL
	2019	2020	2021	2022	2023	2024	2025	2026	GROWTH RATE (2021 - 2026)
PROJECT REVENUES									
Airline Revenues [4]									
Terminal Area rentals	$148,694,210	$109,333,245	$143,025,000	$134,841,000	$115,968,000	$128,989,000	$161,153,000	$162,208,000	2.5%
Ramp Area rentals	307,105	(13,275)	482,000	489,000	304,000	1,431,000	1,188,000	1,187,000	19.8%
Landing fees [5]	83,890,439	55,080,341	85,304,000	80,770,000	84,437,000	92,101,000	98,766,000	87,988,000	0.6%
AIRLINE REVENUES	**$232,891,754**	**$164,400,311**	**$228,811,000**	**$216,100,000**	**$200,709,000**	**$222,521,000**	**$261,107,000**	**$251,383,000**	**1.9%**
Non-Airline Revenues									
Concessions									
Restaurants and Retail	$38,725,617	$30,613,093	$9,069,000	$22,234,000	$32,252,000	$37,400,000	$39,792,000	$41,157,000	35.3%
Automobile Parking	38,494,403	36,199,481	512,000	6,623,000	30,220,000	33,690,000	36,959,000	38,353,000	137.1%
Rental Car	18,479,564	14,297,564	10,579,000	12,254,000	16,742,000	19,036,000	19,161,000	19,144,000	12.6%
Ground Transportation	9,864,713	8,401,014	2,858,000	4,548,000	7,258,000	8,968,000	9,654,000	10,067,000	28.6%
Other Concessions	11,496,835	10,343,905	4,510,000	5,868,000	9,311,000	9,992,000	10,356,000	10,556,000	18.5%
	$117,061,132	**$99,855,057**	**$27,528,000**	**$51,527,000**	**$95,783,000**	**$109,086,000**	**$115,922,000**	**$119,277,000**	**34.1%**
Other Non-Airline Revenues									
Building and Ground Rentals [6]	$25,304,668	$23,153,218	$24,677,000	$22,759,000	$24,266,000	$24,677,000	$25,055,000	$25,460,000	0.6%
Hangar and Cargo Rentals	2,438,140	2,521,383	2,571,000	1,741,000	2,596,000	2,634,000	2,667,000	2,702,000	1.0%
Sales of Utilities	2,541,699	2,565,036	2,322,000	1,812,000	2,593,000	2,612,000	2,631,000	2,650,000	2.7%
Other Landing and Fuel Flowage Fees	2,633,343	2,761,459	2,659,000	2,750,000	2,851,000	2,948,000	3,048,000	3,161,000	3.5%
Miscellaneous	10,572,339	16,061,531	6,550,000	6,713,000	9,125,000	8,239,000	8,293,000	8,321,000	4.9%
Federal COVID-19 Grants	-	78,849,832	37,586,000	28,914,000	31,856,000	31,856,000	-	-	-100.0%
Airport Services	49,194	32,247	-	-	-	-	-	-	0.0%
	$43,539,383	**$125,944,706**	**$76,365,000**	**$64,689,000**	**$73,287,000**	**$72,966,000**	**$41,694,000**	**$42,294,000**	**-11.1%**
NON-AIRLINE REVENUES	**$160,600,515**	**$225,799,763**	**$103,893,000**	**$116,216,000**	**$169,070,000**	**$182,052,000**	**$157,616,000**	**$161,571,000**	**9.2%**
TOTAL PROJECT REVENUES	**$393,492,269**	**$390,200,074**	**$332,704,000**	**$332,316,000**	**$369,779,000**	**$404,573,000**	**$418,723,000**	**$412,954,000**	**4.4%**
Percent Annual Increase		**-0.8%**	**-14.7%**	**-0.1%**	**11.3%**	**9.4%**	**3.5%**	**-1.4%**	

NOTES:

1 City of Philadelphia records.

2 City 2022 Preliminary Rates and Charges Budget, which includes estimates for FY 2021.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Includes Airline Revenues carried forward from prior years and excludes Airline Revenues to be credited to subsequent year.

5 Includes Airlines' share of OTA net revenue from prior year.

6 Includes International Plaza revenues net of payments made to pay down commercial paper notes.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-3 ANNUAL DEBT SERVICE REQUIREMENTS

(For Fiscal Years Ending June 30)

	ACTUAL [1]		ESTIMATED [2]	BUDGET [2]	PROJECTED [3]			
	2019	2020	2021	2022	2023	2024	2025	2026
DEBT SERVICE REQUIREMENTS								
Outstanding Bonds and Short-Term Borrowing								
Series 2005C	$ 15,917,502	$ 14,692,457	$ 16,298,000	$ 16,264,000	$ 16,192,000	$ 16,170,000	$ 16,142,000	$ -
Series 2010A	18,668,212	18,666,463	-	-	-	-	-	-
Series 2010D	26,390,700	26,387,200	-	-	-	-	-	-
Series 2011A	15,343,906	15,363,656	15,387,000	-	-	-	-	-
Series 2011B	2,587,769	2,592,319	2,590,000	-	-	-	-	-
Series 2015A	7,667,950	7,668,450	7,665,000	7,664,000	7,668,000	7,667,000	7,665,000	7,663,000
Series 2017A	9,260,954	10,364,040	10,484,000	10,485,000	10,487,000	10,488,000	10,477,000	10,488,000
Series 2017B	21,254,209	24,968,465	41,345,000	41,342,000	41,345,000	41,345,000	41,348,000	41,348,000
Series 2020A	-	-	6,148,000	8,416,000	8,416,000	15,776,000	15,778,000	15,776,000
Series 2020B	-	-	1,181,000	1,614,000	1,615,000	2,479,000	2,476,000	2,480,000
Series 2020C	-	-	19,249,000	19,643,000	19,642,000	29,318,000	29,311,000	4,230,000
Direct Purchase Taxable Loan [4]	4,895,408	5,778,987	5,807,000	5,837,000	5,869,000	5,903,000	5,939,000	5,972,000
LOC Fees and other CP expense and fees	5,020,653	4,428,050	2,096,000	2,096,000	1,921,000	2,861,000	3,127,000	2,831,000
	$ 127,007,263	**$ 130,910,086**	**$ 128,250,000**	**$ 113,361,000**	**$ 113,155,000**	**$ 132,007,000**	**$ 132,263,000**	**$ 90,788,000**
Proposed Debt								
Series 2021 [5]	$ -	$ -	$ -	$ 5,903,000	$ 10,222,000	$ 23,176,000	$ 30,794,000	$ 56,872,000
Series 2025 [6]	-	-	-	-	-	-	-	11,350,000
	$ -	**$ -**	**$ -**	**$ 5,903,000**	**$ 10,222,000**	**$ 23,176,000**	**$ 30,794,000**	**$ 68,222,000**
Less: Interest Income [7]	(1,000,000)	(3,000,000)	(3,000,000)	(1,000,000)	(1,489,000)	(1,985,000)	(2,623,000)	(2,978,000)
TOTAL DEBT SERVICE REQUIREMENTS	**$ 126,007,263**	**$ 127,910,086**	**$ 125,250,000**	**$ 118,264,000**	**$ 121,888,000**	**$ 153,198,000**	**$ 160,434,000**	**$ 156,032,000**
Less: Existing Pledged PFC Revenues [8]	(31,188,782)	(31,199,992)	(62,618,000)	(31,976,000)	(18,674,000)	(31,239,000)	(31,247,000)	(17,193,000)
Less: Future Pledged PFC Revenues [9]	-	-	-	-	(15,000,000)	(15,000,000)	(15,000,000)	(34,029,000)
DEBT SERVICE REQUIREMENTS NET OF PLEDGED PFC REVENUES	**$ 94,818,481**	**$ 96,710,094**	**$ 62,632,000**	**$ 86,288,000**	**$ 88,214,000**	**$ 106,959,000**	**$ 114,187,000**	**$ 104,810,000**

NOTES:

1 City of Philadelphia records.

2 City 2022 Final Rates and Charges Budget, which includes estimates for FY 2021.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Assumes that the Airport renews the current direct loan with either commercial paper or another direct loan.

5 Represents the projected Debt Service on bonds to be issued to fund $200 million of CPD projects and to refund the Series 2011A and Series 2011B Bonds.

6 Represents Debt Service on the additional bonds to be issued to fund the CDP during the Projection Period.

7 Represents excess cash balances in the Sinking Fund Reserves available to pay Debt Service.

8 Represents pledged PFC Revenues for eligible Debt Service on the Series 2011A, the Series 2020C Bonds, and the Series 2021 Bonds.

9 Represents the projected pledged PFC Revenues for eligible Debt Service on existing and future debt.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-4 FUND DEPOSIT REQUIREMENTS

(For Fiscal Years Ending June 30)

	ACTUAL [1]		ESTIMATED [2]	BUDGET [2]	PROJECTED [3]			
	2019	2020	2021	2022	2023	2024	2025	2026
O&M Account	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
Bond R&I Account	-	(144,648)	-	-	-	577,000	1,612,000	(2,614,000)
TOTAL FUND DEPOSIT REQUIRMENTS	**$ 1,000,000**	**$ 855,352**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,577,000**	**$ 2,612,000**	**$ (1,614,000)**
Fund Deposit Requirements by Cost Center								
Terminal Area	$ 581,948	$ 546,000	$ 572,000	$ 578,000	$ 577,000	$ 995,000	$ 1,772,000	$ (1,455,000)
Ramp Area	-	(13,000)	-	-	-	5,000	12,000	(20,000)
Airfield Area	175,932	115,000	232,000	248,000	248,000	362,000	544,000	(132,000)
Other Buildings and Areas	66,718	49,000	48,000	43,000	39,000	73,000	129,000	(113,000)
PNE	22,875	23,000	28,000	28,000	27,000	29,000	34,000	15,000
Outside Terminal Area	152,527	136,000	120,000	103,000	109,000	113,000	121,000	91,000
FUND DEPOSIT REQUIREMENTS BY COST CENTER	**$ 1,000,000**	**$ 856,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,000,000**	**$ 1,577,000**	**$ 2,612,000**	**$ (1,614,000)**

NOTES:

1 City of Philadelphia records.

2 City 2022 Final Rates and Charges Budget, which includes estimates for FY 2021.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

SOURCES: City of Philadelphia, Division of Aviation, (2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-5 NET AIRLINE REVENUES REQUIRED

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]			
	2022	2023	2024	2025	2026
Operating Expenses	$ 245,028,000	$ 255,034,000	$ 266,070,000	$ 273,800,000	$ 280,523,000
Debt Service Requirements net of pledged PFC Revenues	86,288,000	88,214,000	106,959,000	114,187,000	104,810,000
Fund Deposit Requirements	1,000,000	1,000,000	1,577,000	2,612,000	(1,614,000)
TOTAL EXPENSES, NET DEBT SERVICE, AND FUND DEPOSITS	**$ 332,316,000**	**$ 344,248,000**	**$ 374,606,000**	**$ 390,599,000**	**$ 383,719,000**
Less:					
Non-Airline Revenue	$ 116,216,000	$ 169,070,000	$ 182,052,000	$ 157,616,000	$ 161,571,000
Airline Revenue Allocation [3]	4,139,000	-	9,265,000	11,483,000	10,562,000
OTA net revenues	-	(25,531,000)	(29,967,000)	(28,124,000)	(29,235,000)
Prior year carry-forwards	23,346,000	-	-	-	-
	$ 143,701,000	**$ 143,539,000**	**$ 161,350,000**	**$ 140,975,000**	**$ 142,898,000**
NET AIRLINE REVENUE REQUIRED [4]	**$ 188,615,000**	**$ 200,709,000**	**$ 213,256,000**	**$ 249,624,000**	**$ 240,821,000**

NOTES:

1 City 2022 Final Rate and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Represents Airlines' share of prior fiscal year OTA net revenues.

4 Shown net of Airline Revenues carried forward from prior years and Airline Revenue Allocation to be credited to subsequent year.

SOURCES: City of Philadelphia, Division of Aviation, (2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-6 AIRLINE RENTS AND FEES

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]			
	2022	2023	2024	2025	2026
Terminal Area Rental Rates [3]					
Signatory Rental Rates					
Type 1	$194.18	$164.90	$180.39	$224.31	$226.22
Type 2	145.64	123.67	135.29	168.23	169.66
Type 3	97.09	82.45	90.20	112.15	113.11
Type 4	48.55	41.22	45.10	56.08	56.55
Non-Signatory Rental Rates					
Type 1	$223.31	$189.63	$207.45	$257.95	$260.15
Type 2	167.48	142.22	155.59	193.47	195.11
Type 3	111.65	94.82	103.73	128.98	130.08
Type 4	55.83	47.41	51.86	64.49	65.04
Ramp Area Rental Rate [4]	$22.29	$16.33	$76.87	$63.81	$63.76
Landing Fee Rate [5]					
Signatory Landing Fee Rate	$4.82	$4.15	$3.93	$3.99	$3.50
Non-Signatory Landing Fee Rate	5.55	4.77	4.52	4.59	4.02

NOTES:

1 City 2022 Final Rate and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Per square foot.

4 Per linear foot.

5 Per thousand pound unit.

SOURCES: City of Philadelphia, Division of Aviation, (2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-7 AIRLINE REVENUES

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]			
	2022	2023	2024	2025	2026
Terminal Area Rentals	$ 107,222,000	$ 91,052,000	$ 99,608,000	$ 123,857,000	$ 124,913,000
International Common Use Charges	9,348,000	24,990,000	27,606,000	34,183,000	34,471,000
Terminal Area Rentals and International Common Use Charges	**$ 116,570,000**	**$ 116,042,000**	**$ 127,214,000**	**$ 158,040,000**	**$ 159,384,000**
Ramp Area Rentals	314,000	230,000	1,083,000	899,000	898,000
Landing Fee Revenue	71,731,000	84,437,000	84,959,000	90,685,000	80,539,000
NET AIRLINE REVENUE REQUIRED [3]	**$ 188,615,000**	**$ 200,709,000**	**$ 213,256,000**	**$ 249,624,000**	**$ 240,821,000**

NOTES:

1 City 2022 Final Rates and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Shown net of Airline Revenues carried forward and Airline Revenue Allocation available from prior year.

SOURCES: City of Philadelphia, Division of Aviation, (2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-8 AIRLINE COST PER ENPLANED PASSENGER

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]			
	2022	2023	2024	2025	2026
Net Airline Revenues Required	$ 188,615,000	$ 200,709,000	$ 213,256,000	$ 249,624,000	$ 240,821,000
Less: Projected Cargo Landing Fees	(16,305,000)	(14,262,000)	(13,720,000)	(14,165,000)	(12,588,000)
PASSENGER AIRLINE REVENUES	**$ 172,310,000**	**$ 186,447,000**	**$ 199,536,000**	**$ 235,459,000**	**$ 228,233,000**
Projected Enplaned Passengers [3]	8,236,000	13,492,000	15,479,000	16,254,000	16,578,000
Passenger Airline Cost per Enplaned Passenger					
Current Dollars	**$20.92**	**$13.82**	**$12.89**	**$14.49**	**$13.77**
2021 Dollars [4]	20.51	13.28	12.15	13.38	12.47

NOTES:

1 City 2022 Final Rates and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Enplaned passengers shown for FY 2022 reflect the projected enlaned passengers used in the final airline rates and charges budget.

4 Inflation rate assumed at 2.0 percent.

SOURCES: City of Philadelphia, Division of Aviation, (2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-9 APPLICATION OF PROJECT REVENUES

(For Fiscal Years Ending June 30)

	ACTUAL [1]		ESTIMATED [2]	BUDGET [2]	PROJECTED [3]			
	2019	2020	2021	2022	2023	2024	2025	2026
Airline Revenues [4]	$ 232,891,754	$ 164,400,311	$ 228,811,000	$ 216,100,000	$ 200,709,000	$ 222,521,000	$ 261,107,000	$ 251,383,000
Non-Airline Revenues	160,600,515	225,799,763	103,893,000	116,216,000	169,070,000	182,052,000	157,616,000	161,571,000
TOTAL PROJECT REVENUES	**$ 393,492,269**	**$ 390,200,074**	**$ 332,704,000**	**$ 332,316,000**	**$ 369,779,000**	**$ 404,573,000**	**$ 418,723,000**	**$ 412,954,000**
APPLICATION OF PROJECT REVENUES								
Net Operating Expenses	$ 161,160,835	$ 151,738,808	$ 133,907,000	$ 133,790,000	$ 139,475,000	$ 145,928,000	$ 150,562,000	$ 154,009,000
Sinking Fund [5]	94,818,481	96,710,094	62,632,000	86,288,000	88,214,000	106,959,000	114,187,000	104,810,000
Interdepartmental Charges	121,054,115	123,017,460	119,886,000	111,238,000	115,559,000	120,142,000	123,238,000	126,514,000
Bond R&I Account	-	(144,648)	-	-	-	577,000	1,612,000	(2,614,000)
O&M Account	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Airline Revenue Allocation	4,132,000	5,423,000	4,139,000	-	9,265,000	11,483,000	10,562,000	11,117,000
Deposit to the Airport Discretionary Account	11,326,838	12,455,360	11,140,000	-	16,266,000	18,484,000	17,562,000	18,118,000
TOTAL APPLICATION OF REVENUES	**$ 393,492,269**	**$ 390,200,074**	**$ 332,704,000**	**$ 332,316,000**	**$ 369,779,000**	**$ 404,573,000**	**$ 418,723,000**	**$ 412,954,000**

NOTES:

1 City of Philadelphia records.

2 City 2022 Final Rates and Charges Budget, which includes estimates for FY 2021.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the second of two one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Includes Airline Revenues carried forward and Airline Revenue Allocation available from prior year.

5 Sinking Fund shown net of existing and projected Pledged PFC Revenues.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-10 DEBT SERVICE COVERAGE

(For Fiscal Years Ending June 30)

		ACTUAL [1]		ESTIMATED [2]	BUDGET [2]	PROJECTED [3]			
		2019	2020	2021	2022	2023	2024	2025	2026
PLEDGED AMOUNTS AVAILABLE FOR DEBT SERVICE									
Airline Revenues [4]		$ 232,891,754	$ 164,400,311	$ 228,811,000	$ 216,100,000	$ 200,709,000	$ 222,521,000	$ 261,107,000	$ 251,383,000
Non-Airline Revenues		160,600,515	225,799,763	103,893,000	116,216,000	169,070,000	182,052,000	157,616,000	161,571,000
Existing Pledged PFC Revenues [5]		31,188,782	31,199,992	62,618,000	31,976,000	18,674,000	31,239,000	31,247,000	17,193,000
Future Pledged PFC Revenues [6]		-	-	-	-	15,000,000	15,000,000	15,000,000	34,029,000
Other amounts available for Debt Service [7]		126,824,322	144,218,000	160,843,000	173,522,000	175,390,000	193,533,000	215,045,000	237,369,000
TOTAL AMOUNTS AVAILABLE FOR DEBT SERVICE	**[A]**	**$ 551,505,373**	**$ 565,618,066**	**$ 556,165,000**	**$ 537,814,000**	**$ 578,843,000**	**$ 644,345,000**	**$ 680,015,000**	**$ 701,545,000**
OPERATING EXPENSES									
Net Operating Expenses	**[B]**	$ 161,160,835	$ 151,738,808	$ 133,907,000	$ 133,790,000	$ 139,475,000	$ 145,928,000	$ 150,562,000	$ 154,009,000
Interdepartmental Charges		121,054,115	123,017,460	119,886,000	111,238,000	115,559,000	120,142,000	123,238,000	126,514,000
	[C]	**$ 282,214,950**	**$ 274,756,268**	**$ 253,793,000**	**$ 245,028,000**	**$ 255,034,000**	**$ 266,070,000**	**$ 273,800,000**	**$ 280,523,000**
FUNDS AVAILABLE FOR REVENUE BOND DEBT SERVICE COVERAGE									
Test 1	**[A - B = D]**	$ 390,344,538	$ 413,879,258	$ 422,258,000	$ 404,024,000	$ 439,368,000	$ 498,417,000	$ 529,453,000	$ 547,536,000
Test 2	**[A - C = E]**	269,290,423	290,861,798	302,372,000	292,786,000	323,809,000	378,275,000	406,215,000	421,022,000
DEBT SERVICE REQUIREMENTS	**[F]**	126,007,263	127,910,086	125,250,000	118,264,000	121,888,000	153,198,000	160,434,000	156,032,000
REVENUE BOND DEBT SERVICE COVERAGE									
Test 1	**[D ÷ F]**	3.10	3.24	3.37	3.42	3.60	3.25	3.30	3.51
Coverage Requirement		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Test 2	**[E ÷ F]**	2.14	2.27	2.41	2.48	2.66	2.47	2.53	2.70
Coverage Requirement		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

NOTES:

1 City of Philadelphia records.

2 City 2022 Final Rates and Charges Budget, which includes estimates for FY 2021.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of second one-year renewals, which will expire on June 30, 2022. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Includes required revenue for Terminal Area rentals, International and Common Use Fees, Ramp Area rentals, Airline Landing Fees, and any Airline Revenue Allocation or prior-year carry forwards.

5 Represents pledged PFC Revenues for eligible Debt Service on the Series 2011A, the Series 2020C, and the Series 2021A Bonds.

6 Represents the projected pledged PFC Revenues for eligible Debt Service on the existing and future debt.

7 Per Section 5.01(a) of the General Ordinance, that portion of Aviation Operating Fund balance available for use as Amounts Available for Debt Service.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

TABLE 1-11 SENSITIVITY ANALYSIS

(For Fiscal Years Ending June 30)

	PROJECTED				
BASELINE FORECAST	2022	2023	2024	2025	2026
Projected Enplaned Passengers	8,236,000	13,492,000	15,479,000	16,254,000	16,578,000
Cost per Enplaned Passenger	$20.92	$13.82	$12.89	$14.49	$13.77
Debt Service Coverage					
Test 1	3.42	3.60	3.25	3.30	3.51
Test 2	2.48	2.66	2.47	2.53	2.70
Operating Expenses	$245,028,000	$255,034,000	$266,070,000	$273,800,000	$280,523,000
Non-Airline Revenue	$116,216,000	$169,070,000	$182,052,000	$157,616,000	$161,571,000
Airline Revenues Required	$188,615,000	$200,709,000	$213,256,000	$249,624,000	$240,821,000
Debt Service Requirements Net of PFC Revenues	$86,288,000	$88,214,000	$106,959,000	$114,187,000	$104,810,000
Terminal Area Rental Rate - Type 1	$194.18	$164.90	$180.39	$224.31	$226.22
Ramp Area Rental Rate	$22.29	$16.33	$76.87	$63.81	$63.76
Landing Fee Rate	$4.82	$4.15	$3.93	$3.99	$3.50
	PROJECTED				
LOW SCENARIO	2022	2023	2024	2025	2026
Projected Enplaned Passengers	8,236,000	11,244,000	13,762,000	15,138,000	15,289,000
Cost per Enplaned Passenger	$20.92	$17.24	$15.26	$16.04	$15.67
Debt Service Coverage					
Test 1	3.42	3.51	3.16	3.20	3.39
Test 2	2.48	2.56	2.37	2.43	2.58
Operating Expenses	$245,028,000	$255,034,000	$266,070,000	$273,800,000	$280,523,000
Non-Airline Revenue	$116,216,000	$147,538,000	$167,478,000	$148,147,000	$150,587,000
Airline Revenues Required	$188,619,000	$210,300,000	$225,185,000	$257,766,000	$253,066,000
Debt Service Requirements Net of PFC Revenues	$86,288,000	$88,214,000	$106,959,000	$114,187,000	$108,792,000
Terminal Area Rental Rate - Type 1	$194.18	$178.00	$191.58	$233.31	$240.35
Ramp Area Rental Rate	$22.29	$16.33	$76.87	$63.81	$64.13
Landing Fee Rate	$4.82	$4.78	$4.34	$4.19	$3.75

SOURCES: City of Philadelphia, Division of Aviation, (2022); AVK Consulting, Inc. (2023-2026).

PREPARED BY: AVK Consulting, Inc., June 2021.

THIS PAGE INTENTIONALLY LEFT BLANK

ATTACHMENT 2

2020 Report

RICONDO®

September 16, 2020

Ms. Rochelle Cameron
Chief Executive Officer
The City of Philadelphia, Department of Commerce
Division of Aviation Executive Offices
3rd Floor, Terminal D/E
Philadelphia, Pennsylvania 19153

RE: The City of Philadelphia, Pennsylvania
Airport Revenue Refunding Bonds, Series 2020A (Non-AMT/Private Activity)
Airport Revenue Bonds, Series 2020B (Non-AMT/Governmental)
Airport Revenue and Refunding Bonds, Series 2020C (AMT/Private Activity)

Dear Ms. Cameron:

This Letter of the Airport Consultant (the 2020 Report) serves to reaffirm the findings from the Report of the Airport Consultant, dated December 6, 2017 (the 2017 Report), with consideration of information made available since the 2017 Report. The 2017 Report was prepared in connection with the issuance of the City of Philadelphia, Pennsylvania (the City) Airport Revenue and Refunding Bonds, Series 2017A (Non-AMT) and the City Airport Revenue and Refunding Bonds, Series 2017B (AMT), collectively referred to as the 2017 Bonds.

The 2017 Report set forth the findings, assumptions, and projections related to the air traffic and financial analyses developed by Ricondo & Associates, Inc. (Ricondo) and AVK Consulting, Inc. (AVK) (Ricondo and AVK are collectively referred to herein as the "Consultants") in conjunction with the issuance of the 2017 Bonds by the City of Philadelphia, which owns and operates Philadelphia International Airport and Northeast Philadelphia Airport. This 2020 Report, based on the findings of the 2017 Report and the updated information in connection with the City's planned issuance of its Airport Revenue Refunding Bonds, Series 2020A (Non-AMT/Private Activity); Airport Revenue Bonds, Series 2020B (Non-AMT/Governmental); Airport Revenue and Refunding Bonds, Series 2020C (AMT/Private Activity) (collectively the 2020 Bonds) serves to reaffirm the overall conclusions the Consultants made in the 2017 Report regarding the City's ability to comply with the Rate Covenants established in the General Ordinance (hereinafter defined), and the reasonableness of the resulting projected airline costs. Unless otherwise defined herein, all capitalized terms in this 2020 Report are used as defined in the Official Statements for the 2020 Bonds and/or the General Ordinance. U.S. Bank National Association (the Fiscal Agent) is serving as the Fiscal Agent and Sinking Fund Depository for the 2020 Bonds. Pursuant to Section 5.04 of the General Ordinance, the 2020 Report was prepared by nationally recognized independent consultants having broad experience in the operation of the airport systems of the magnitude and scope of the Airport System (Philadelphia International Airport and Northeast Philadelphia Airport).

2020 Report

The 2020 Bonds

The 2020 Bonds are to be issued pursuant to The First Class City Revenue Bond Act of the Commonwealth of Pennsylvania, as well as, by the City's Amended and Restated General Revenue Bond Ordinance, approved by the Mayor on June 16, 1995, as amended and supplemented (the Original Ordinance) including by the Eighteenth Supplemental Ordinance, approved by the Mayor on June 26, 2019 (the Eighteenth Supplemental Ordinance). The Original Ordinance together with the Eighteenth Supplemental Ordinance are collectively referred to as the General Ordinance.

2020 REVENUE AND REFUNDING BONDS

The City is expected to use the proceeds from the sale of the 2020 Revenue and Refunding Bonds, together with other available funds, to:

(i) refinance, on a current basis, certain outstanding commercial paper notes;
(ii) refund, on a current basis, the Series 2010A and Series 2010D; and
(iii) pay costs and expenses relating to the issuance of the 2020 Bonds.

The Series 2020A Bonds are being issued to refund, on a current basis all or a portion of the outstanding Series 2010A Bonds.

The Series 2020B Bonds are being issued to refinance certain commercial paper notes which financed capital projects.

The Series 2020C Bonds are being issued to: (i) refund, on a current basis, all or a portion of the outstanding Series 2010D Bonds, and (ii) refinance certain commercial paper notes which financed capital projects.

Pursuant to the terms of the General Ordinance, the 2020 Bonds will be secured by a pledge of Pledged Amounts, meaning generally all amounts received or receivable, directly or indirectly, by the City for the use and operation of the Airport System on a parity with the City's Outstanding Airport Revenue Bonds.

Table 1 presents a summary of each series of the 2020 Bonds.

TABLE 1 SUMMARY OF THE 2020 REFUNDING BONDS

	SERIES 2020A	SERIES 2020B	SERIES 2020C
Use	Revenue and Refunding	Revenue	Revenue and Refunding
Security	Pledged Amounts	Pledged Amounts	Pledged Amounts [1]
Status	Tax-exempt; Non-AMT/Private Activity	Tax- exempt; Non-AMT	Tax-Exempt AMT/Private Activity

NOTE:
1 Includes certain Passenger Facility Charge (PFC) Revenues
SOURCE: City of Philadelphia, Division of Aviation, September 2020.

2020 Report

The General Ordinance debt service coverage covenants, flow of funds, and additional bond requirements remain as summarized in Section 1.2 of the 2017 Report.

Purpose of This Letter of the Airport Consultant

The Consultants prepared the 2017 Report for the stated purposes as expressly set forth in the 2017 Report and for the sole use of the City and its intended recipients. The techniques and methodologies used in preparing the 2017 Report were consistent with industry practices at the time of preparation and the 2017 Report should be read in its entirety for an understanding of the analysis, assumptions, and opinions presented. The 2017 Report was included as Appendix I in each of the Official Statements for the issuance of the 2017 Bonds. It is attached to this 2020 Report for reference as **Attachment 2**. The 2017 Report incorporated projections of debt service associated with the 2017 Bonds and future General Airport Revenue Bonds (GARBs) anticipated by the City to be issued through Fiscal Year (FY) 2023.[1]

This 2020 Report provides a summary of relevant information available since the 2017 Report was prepared, including information regarding the 2020 Bonds, and updated data regarding ongoing and future Airport capital projects, the economic base for air transportation at the Airport, air traffic at the Airport, and Airport financial operations including actual 2017 Bonds debt service and anticipated debt service on the 2020 Revenue and Refunding Bonds.

On the basis of the updated analysis set forth in this 2020 Report, the Consultants reaffirm their opinion and are currently of the opinion that all Project Revenues generated and other amounts available for debt service, which are payable from amounts that may be withdrawn from the Aviation Fund (including the Parity Sinking Fund Reserve Account) created under the General Ordinance, as described in the 2020 Report and hereinafter referred to as Pledged Amounts projected to be generated and available each year of the Projection Period (FY 2022-2026) are expected to be sufficient to comply with the Rate Covenant established in Section 5.01 of the General Ordinance and that the resulting projected airline costs should remain reasonable. The industry has experienced significant changes as a result of the impacts from the Coronavirus Disease 2019 (COVID-19) pandemic. Impacts, as they are related to the 2020 Bonds, are included within the Updated Information Regarding Air Traffic section of this 2020 Report.

Table 2 summarizes key updates and findings by subject matter since the 2017 Report that support this conclusion.

2020 Report

[1] Fiscal Year ending June 30.

TABLE 2 SUMMARY OF KEY CHANGES SINCE 2017 REPORT WAS PREPARED

VARIABLE	CHANGES SINCE 2017 REPORT	KEY FINDINGS
Airport Capital Program	The Airport's Capital Development Program (CDP) remains the same since the 2017 Report. The Airport has deferred $702 million of the CDP beyond the Projection Period and will be advancing $738 million of projects during the Projection Period.	CDP projects can be further deferred or advanced as needed based on recovery to pre-COVID-19 pandemic activity levels.
Economic Base for Air Transportation	National and local unemployment rates have increased and are expected to remain elevated, due to the impacts of the COVID-19 pandemic. Current long-term projections of gross regional product and gross domestic product growth rates are comparable to the projections available at the time the 2017 Report was prepared.	Material change in near-term economic factors, but long term-economic base anticipated to return to growth rates experienced prior to the COVID-19 pandemic.
Air Traffic Projections	The COVID-19 pandemic and related economic impacts have significantly impacted demand for air travel, resulting in lower projections of activity in 2020, 2021 and 2022.	Material change in the near-term activity but long-term demand for air travel is expected to grow in line with gross regional product.
Operating Expenses	Budget 2021 Operating Expenses have been reduced by 10 percent from budget 2020 in response to the COVID-19 pandemic. Operating expenses are projected to increase with activity but are not anticipated to exceed the amounts included in the 2017 Report.	Projected Operating Expenses include negotiated increase in personnel costs for union labor and reduced contractual services based on reduced activity levels. The projections do not include additional cuts the Airport could make if the recovery from the COVID-19 pandemic falls short of current projections.
Non-Airline Revenues	Non-airline revenues are significantly lower in FY 2021 as a result of a decrease in air traffic activity from the COVID-19 pandemic. Prior to the onset of the pandemic, non-airline revenues were tracking much higher than in the 2017 Report (2019 actual non-airline revenues exceeded projected FY 2023 figures from the 2017 Report by over $13.8 million).	Non-airline revenues are assumed to increase with increases in activity and are projected to return to pre-COVID-19 pandemic levels by FY 2023.
Debt Service	Debt service is lower than the 2017 Report due to the deferral of portions of the CDP and the issuance of future debt needed to fund these projects.	Additional borrowing is significantly less given the Airport's approach to advancing capital projects. Depending on the timing of recovery from the COVID-19 pandemic, the Airport could accelerate or further defer capital projects.
Projected CPE	Projected CPE is significantly higher in FY 2021 due to the reduction in activity caused by the COVID-19 pandemic. The percentage increase in CPE is less than the projected percentage decrease in activity due to the use of CARES Act funds, operating expense cuts, and the use of additional pledged Passenger Facility Charge (PFC) Revenues.	Projected CPE is higher in FY 2021, but still reasonable in relation to the effect of the COVID-19 pandemic. CPE remains reasonable in relation to pre-COVID-19 pandemic levels during the remainder of the Projection Period.
Projected Debt Service Coverage Ratio	Debt service coverage under the Baseline Forecast exceeds projected coverage in the 2017 Report.	Debt service coverage exceeds the minimum requirements during each year of the Projection Period.

SOURCES: AVK Consulting, Inc., September 2020; Ricondo & Associates, Inc., September 2020.

2020 Report

This 2020 Report, along with the 2017 Report, is intended for inclusion as Appendix I in the Official Statement for the issuance of the 2020 Bonds. The approach and assumptions used in preparing this 2020 Report are consistent with industry practices for similar reports prepared in connection with the sale of airport revenue and refunding bonds. While the Consultants believe the approach and assumptions are reasonable, some assumptions regarding future trends and events set forth in this 2020 Report including, but not limited to, enplaned passenger projections, may not materialize. Achievement of the projections presented in this 2020 Report, therefore, is dependent on the occurrence of future events, which cannot be assured, and the variations may be material.

Airport Capital Development Program Update

Under the Airline Agreement, the Signatory Airlines have approved approximately $2.4 billion in capital development projects to date, of which approximately $963 million have been completed, $702 million have been deferred, and $738 million are being advanced through FY 2026, the end of the Projection Period. The Capital Development Program (CDP) is comprised of numerous projects that focus on renewal and rehabilitation work of the terminals, airfield pavement, security and information technology enhancements, and support facilities at Philadelphia International Airport and airfield pavement improvements at the Northeast Philadelphia Airport.

As a result of the COVID-19 pandemic, the City modified the CDP to defer major projects comprising approximately $702 million, including the construction of air traffic control tower ($197 million); widebody aircraft gate design ($30 million); construction of support facilities ($56 million) and a ground transportation center ($312 million). These deferred projects may be commenced after the Projection Period or may be resumed in near-term spending if the Airport's traffic recovers sooner than currently anticipated. Given that projects advancing, in the aggregate amount of approximately $738 million, focus on renewal and rehabilitation, the City could make adjustments to delay portions of such projects or smaller scale projects in light of the ongoing COVID-19 pandemic and associated economic and financial impact.

Table 3 presents the updated estimated sources and uses of funds for the portion of the CDP that is advancing during the Projection Period.

2020 Report

TABLE 3 ESTIMATED SOURCES AND USES OF FUNDS FOR APPROVED CDP COSTS

(Dollars in millions)

PROJECTS	TOTAL APPROVED COST
Airfield and Aprons	$201.4
Terminal and Landside	481.5
Security and Technology	46.3
PNE Airfield and Taxiways	9.3
TOTAL CAPITAL PROJECTS ADVANCING DURING PROJECTION PERIOD	**$738.5**

FUNDING SOURCES	TOTAL ESTIMATED FUNDING SOURCES
Existing Debt	$246.8
Pay-as-you-go PFCs/Grants	204.1
Operating revenues	4.3
Future Debt	283.4
TOTAL FUNDING SOURCES	**$738.5**

SOURCE: City of Philadelphia, Division of Aviation, September 2020.

2020 Report

Updated Information Regarding the Economic Base for Air Transportation

The Consultants conducted a review of certain socioeconomic information made available since the date of the 2017 Report. The information suggests that the 2017 Report's findings regarding the Airport's Air Trade Area (the Philadelphia Metropolitan Statistical Area [MSA])[2] (ATA) and economic base for air transportation remain valid over the Projection Period. In the near-term ([1-3 years]), however, the ATA and US economies will reflect a recovery from the impacts of the COVID-19 pandemic. Therefore, projected near-term economic performance for the ATA and the US is now lower than reflected in the 2017 Report.

The economic base of the Air Trade Area remains capable of supporting increases in demand for air transportation at the Airport during the Projection Period. The following subsection provides an overview of recent economic and demographic data and forecasts, including updated Woods & Poole Economics, Inc. (Woods & Poole) projections for the US and the ATA through 2026; near-term (2020 and 2021) forecasts from the National Association for Business Economics (NABE) and International Monetary Fund (IMF) for the US and the world; and a discussion of recent developments impacting the local, national, and world economies. Comparisons are made between the data and projections available at the time of the 2017 Report and the data and projections available at the time of this 2020 Report. Because the ATA is significantly impacted by overall economic conditions in the US, data for the US is considered a proxy for

[2] The Demographic and Economic Analysis of the Air Trade Area is provided in Chapter 3 of the 2017 Report.

ATA data in instances where recent (Q1 and Q2 2020) data and/or near-term (2020 and 2021) forecasts for the ATA are not available.

Gross Domestic Product

Until Q1 2020, economic activity in the US continued to expand at a moderate pace. The 2017 Report contained the most current (September 2017) forecast published by the NABE from survey data of business economists, which indicated a median forecast for real US gross domestic product (GDP) growth of 2.2 percent in 2017 and 2.4 percent in 2018.[3] Actual real US GDP growth in in 2017 was 2.3 percent, while actual real US GDP growth in 2018 was 2.9 percent, both above the September 2017 NABE forecast, and actual real US GDP growth in 2019 rate was 2.3 percent. 4,[5]

COVID-19 was first identified in December 2019 and was declared a pandemic by the World Health Organization in March 2020. In Q1 2020, the economic impacts of the COVID-19 pandemic are first visible in US GDP data. The current US Department of Commerce, Bureau of Economic Analysis estimate of real US GDP growth for Q1 2020 is -5.0 percent and -32.9 percent for Q2 2020.[6] The decline in US GDP in Q1 2020, which accelerated in Q2 2020, is due to the significant, but still largely unknown (at the time of this 2020 Report) economic effects of the COVID-19 pandemic. The most recently published NABE outlook survey (June 2020) forecast the GDP will grow in Q3 2020 and Q4 2020, with a median forecast for real GDP growth of 9.1 and 6.8 percent, respectively.[7] The IMF's most recently-published projections (June 2020) forecast real US GDP to contract by 8.0 percent overall in 2020 but growing by 4.8 percent in 2021.[8] The IMF projects the global economy to fare better than the US, with global economic output projected to decrease by 4.9 percent in 2020 and grow by 5.4 percent in 2021.

As presented in the 2017 Report, Woods & Poole projected the Air Trade Area's gross regional product (GRP) would increase at a compound annual growth rate (CAGR) of 1.9 percent through the Projection Period, from $369.2 billion in 2016 to $419.9 billion[9] in 2023. During the same period, Woods and Poole projected the US GDP to increase at a CAGR of 2.1 percent, from $16,924.0 billion in 2016 to $19,622.5 billion in 2023. The Woods & Poole projections updated in 2020 forecast a slightly lower growth rate for the ATA compared to the 2017 forecast, with a projected CAGR of 1.8 percent for the Air Trade Area's GRP during the new Projection Period (increasing from $395.7 billion in 2019 to $447.2 billion in 2026). In spite of the COVID-19 pandemic, the US GDP is still projected by Woods & Poole to increase at a CAGR of 2.1

2020 Report

---

3 National Association for Business Economics, *NABE Outlook*, September 2017.

4 US Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product, Fourth Quarter and Annual 2017 (Third Estimate), March 28, 2018.

5 US Department of Commerce, Bureau of Economic Analysis, *Gross Domestic Product: Fourth Quarter and Annual 2019 (Third Estimate)*, March 26, 2020.

6 US Department of Commerce, Bureau of Economic Analysis, Gross Domestic Product: Second Quarter 2020 (Advance Estimate) and Annual Update, July 30, 2020.

7 National Association for Business Economics, *NABE Outlook*, June 2020.

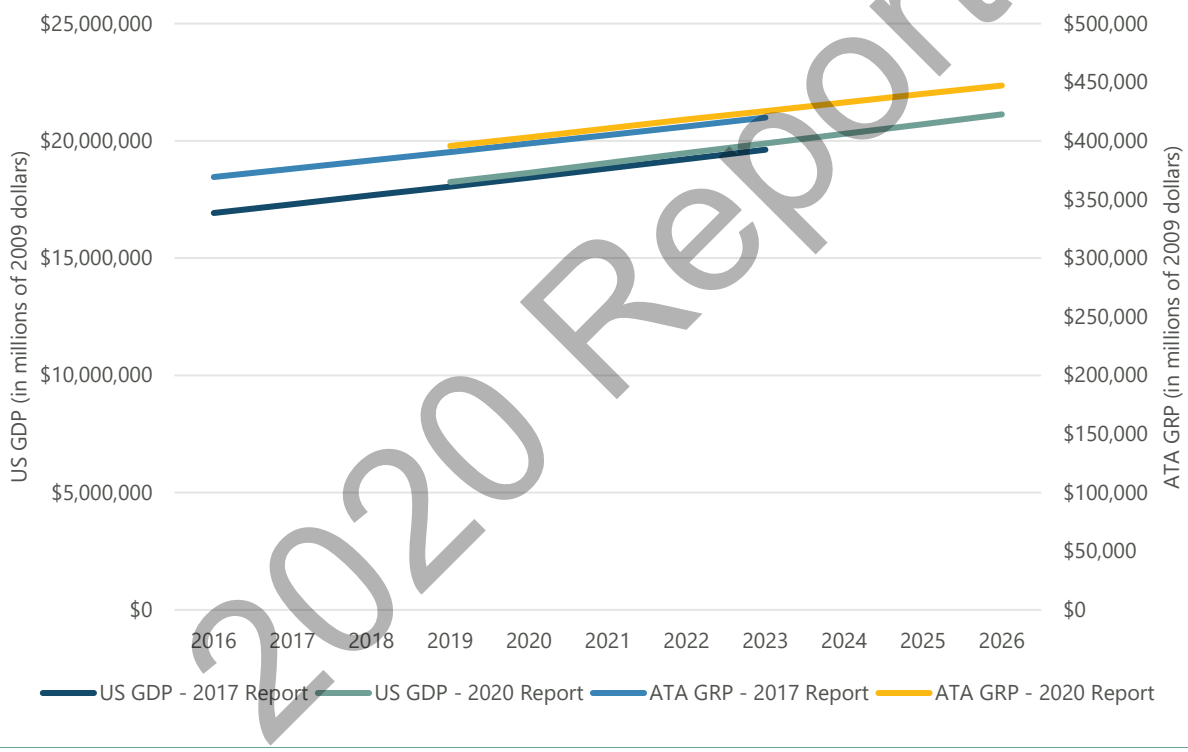
8 International Monetary Fund, World Economic Outlook, April 2020.

9 In order to remain consistent with the GRP and GDP data provided in the 2017 Report, all GRP and GDP data in this 2020 Report is presented in 2009 dollars.

percent over the same period (increasing from $18,245.7 billion in 2019 to $21,129.5 billion in 2026). However, the long-term impacts from the COVID-19 pandemic are largely unknown and GDP and GRP could be materially different than what was projected by Woods & Poole.[10]

Exhibit 1 shows a comparison of the GDP forecast from the 2017 Report and the updated GDP forecast for both the ATA and the US.

EXHIBIT 1 AIR TRADE AREA AND UNITED STATES GROSS DOMESTIC PRODUCT FORECASTS



2020 Report

NOTES:
ATA = Air Trade Area
GDP = Gross Domestic Product
GRP = Gross Regional Product
SOURCES: Woods & Poole Economics, Inc., 2017 Complete Economic and Demographic Data Source (CEDDS), April 2017; Woods & Poole Economics, Inc., 2020 Complete Economic and Demographic Data Source (CEDDS), June 2020.

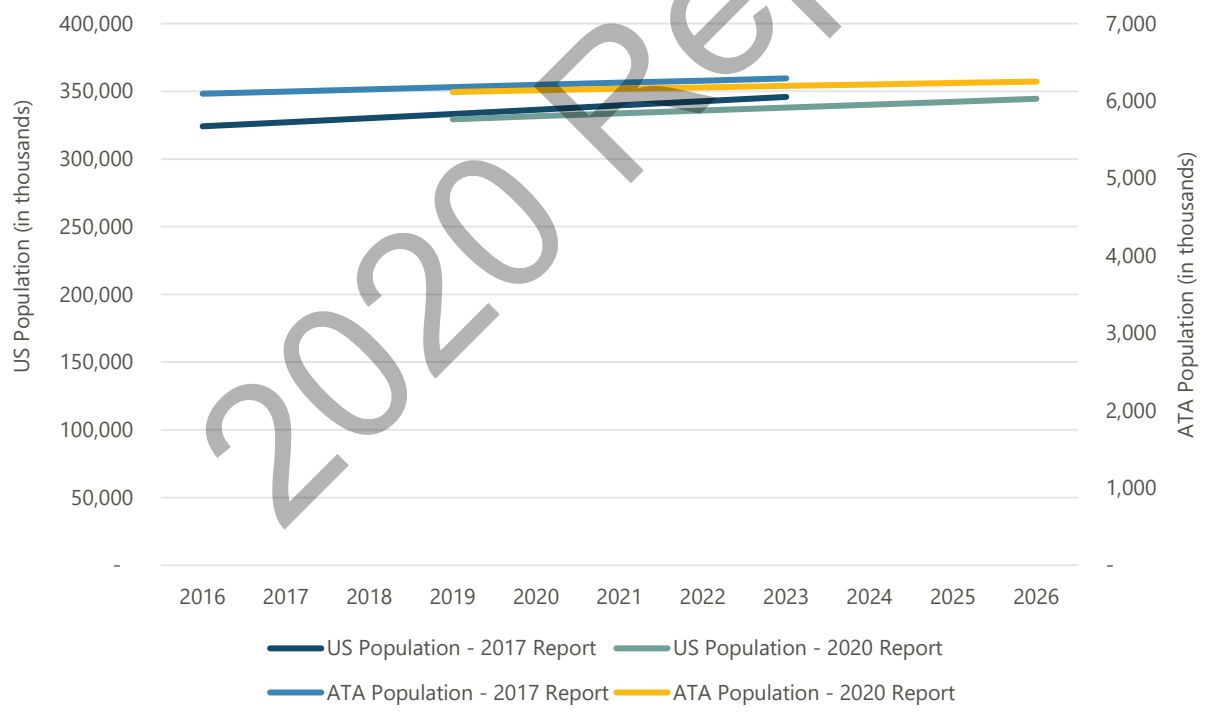
[10] Woods & Poole did not incorporate the immediate impact of the COVID-19 pandemic into its updated projections released in June 2020, noting in its technical description that "the data were unclear about what the estimate should be and because the long-term impact of an estimate could not be made reliably". With respect to the long-term economic impact of COVID-19, Woods & Poole takes the position that "despite significant 2020 impact, COVID-19 itself does not appear to have made a quantifiable long-term economic impact that would affect forecasts: productive land area in the U.S. is still usable, productive capital (i.e. factories) are still in place, and the size of labor force has not been reduced significantly".

Population

As presented in the 2017 Report, Woods & Poole projected the ATA's population to increase at a CAGR of 0.5 percent through the Projection Period, from approximately 6.1 million in 2016 to approximately 6.3 million in 2023. During the same period, Woods & Poole projected the US population to increase at a CAGR of 0.9 percent, from approximately 324.2 million in 2016 to approximately 345.9 million in 2023. The updated Woods & Poole projections show a lower growth rate for both the ATA and the US as a whole: 0.3 percent CAGR for the ATA during the Projection Period (from 6.1 million in 2019 to 6.3 million in 2026), and a CAGR of 0.6 percent for the US (increasing from 329.3 million in 2019 to 344.5 million in 2026).

Exhibit 2 compares the Woods & Poole population forecasts from the 2017 Report with the updated forecasts, for both the ATA and the US.

EXHIBIT 2 AIR TRADE AREA AND UNITED STATES POPULATION FORECASTS



2020 Report

NOTE: ATA = Air Trade Area
SOURCES: Woods & Poole Economics, Inc., 2017 Complete Economic and Demographic Data Source (CEDDS), April 2017; Woods & Poole Economics, Inc., 2020 Complete Economic and Demographic Data Source (CEDDS), June 2020.

Unemployment Rate

The 2017 Report referenced a NABE survey that estimated the average annual US unemployment rate would be 4.4 percent in 2017 and 4.2 percent in 2018. The actual annual US unemployment rate was 4.4 percent in 2017 and 3.9 percent in 2018. The annual US unemployment rate lowered further to 3.7 percent in 2019. Due to the effects on the US economy of the COVID-19 pandemic beginning in March 2020 the non-seasonally adjusted monthly unemployment rates for both the US and ATA increased compared to the unemployment rates for the same months in the previous year.

The latest data available (July 2020 for the ATA and August 2020 for the US) show the significant effects of the COVID-19 pandemic on unemployment. The July 2020 ATA non-seasonally adjusted unemployment rate was 14.1 percent, a decrease from a high of 14.8 percent in April 2020.[11] In August, the nationwide non-seasonally adjusted unemployment rate was 8.5 percent, representing a decrease from 10.5 percent the month before and a high of 14.4 percent in April 2020. NABE now forecasts a decrease in subsequent quarters, with the national unemployment rate reaching 7.1 percent by Q4 2021. While this would represent a significant decline in unemployment from what is forecast for Q2 2020, 7.1 percent unemployment is still substantially higher that the 3.8 percent unemployment rate in February 2020, the last month before impacts from COVID-19 were felt in the US. The IMF projects a US annual unemployment rate of 10.4 percent in 2020 and 9.1 percent in 2021.[12]

Employment

Nonagricultural employment in the US added an average of 182,000 jobs per month in 2017, higher than the average 2017 year-to-date US employment growth reported in the 2017 Report (169,000 jobs per month between January and October 2017).[13] US employment increased at an average of 223,000 jobs per month in 2018, higher than the 160,000 per month NABE survey prediction cited in the 2017 Report. In 2019, US employment growth slowed, increasing at an average of 178,000 jobs per month.[14] In Q1 2020, US employment lost an average of 303,000 jobs per month; the US added jobs in both January and February of this year, but these gains were offset by a sharp decline in March, when US employment fell by approximately 1,373,000.[15,16] Preliminary employment data shows the US lost 20,787,000 jobs in April 2020, which is almost entirely attributable to the COVID-19 pandemic.[17] May 2020, June 2020, preliminary July 2020, and preliminary August 2020 employment data, however, reflect a limited resumption of economic activity and an increase of 2,725,000, 4,781,000, 1,734,000, and 1,371,000 jobs, respectively.[18] Based on the

2020 Report

---

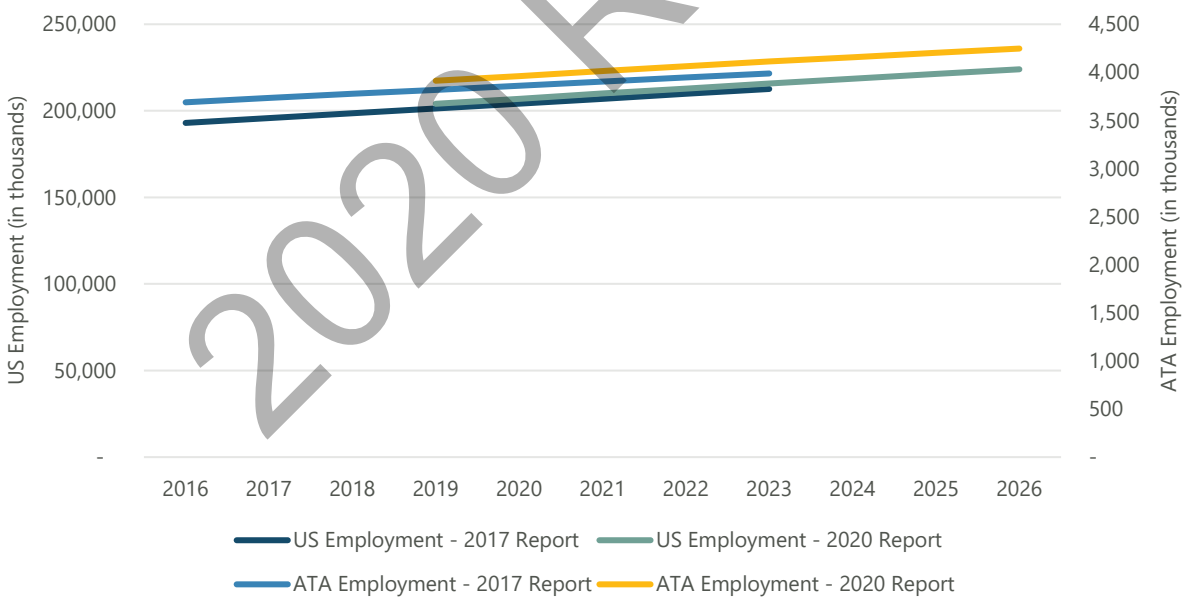
11 Preliminary data, US Department of Commerce, Bureau of Labor Statistics, September 2020.
12 International Monetary Fund, World Economic Outlook, April 2020.
13 U.S. Department of Commerce, Bureau of Labor Statistics, Current Employment Statistics Highlights – October 2017, https://www.bls.gov/web/empsit/ceshighlights.pdf (accessed November 28, 2017).
14 US Department of Commerce, Bureau of Labor Statistics, The Employment Situation – February 2020, March 6, 2020.
15 US Department of Commerce, Bureau of Labor Statistics, The Employment Situation – March 2020, April 3, 2020.
16 US Department of Commerce, Bureau of Labor Statistics, Current Employment Statistics Highlights (May 2020), June 5, 2020.
17 Ibid.
18 US Department of Commerce, Bureau of Labor Statistics, The Employment Situation – August 2020, September 4, 2020.

NABE survey, the US is expected to gain jobs in Q3 2020, although US employment is not forecast to recover to pre-Q1 2020 levels during NABE's forecast period (through 2021).

As presented in the 2017 Report, data from Woods & Poole projected the Air Trade Area's employment to increase at a CAGR of 1.1 percent through the Projection Period, from approximately 3.7 million in 2016 to approximately 4.0 million in 2023. During the same period, data from Woods and Poole projected the US employment to increase at a CAGR of 1.4 percent, from approximately 193.0 million in 2016 to approximately 212.6 million in 2023. The updated Woods & Poole projections call for a 1.2 percent CAGR for the ATA during the Projection Period (increasing from approximately 3.9 million in 2019 to approximately 4.2 million in 2026). Woods & Poole now forecasts US employment to increase at a CAGR of 1.3 percent over the same period (increasing from approximately 204.1 million in 2019 to approximately 223.9 million in 2026).

Exhibit 3 compares the Woods & Poole employment forecast from the 2017 Report with the updated employment forecast for both the ATA and the US.

EXHIBIT 3 AIR TRADE AREA AND UNITED STATES EMPLOYMENT FORECASTS



NOTE: ATA = Air Trade Area
SOURCES: Woods & Poole Economics, Inc., 2017 Complete Economic and Demographic Data Source (CEDDS), April 2017; Woods & Poole Economics, Inc., 2020 Complete Economic and Demographic Data Source (CEDDS), June 2020.

Based on the analysis described in Chapter 3 of the 2017 Report, as well as the most recent unemployment data and economic forecast information described above, and despite assumed short-term significant negative economic impacts of the COVID-19 pandemic, the Consultants' opinion is unchanged: the ATA's

2020 Report

economic base remains strong and will continue to support long-term growth in demand for air transportation services at the Airport. The Consultants' review of the most recent economic data and information suggests that the economic projections used to develop the traffic forecast presented in the 2017 Report remain valid.

Updated Information Regarding Air Traffic

Overview of Airport 2018 and 2019 Activity and Air Service Developments

The Airport handled 15.2 million enplaned passengers in FY 2018, which represented a 3.0 percent increase over FY 2017 and was in line with the 15.2 million enplaned passengers projected for FY 2018 in the 2017 Report. American Airlines (American) drove over half of the total growth, launching new service to six domestic destinations, including Des Moines International Airport (DSM), John F. Kennedy International Airport (JFK), and San Antonio International Airport (SAT). In FY 2018 American initiated new international service from the Airport to Budapest Ferenc Liszt International Airport in Budapest, Hungary (BUD) and Vaclav Havel Airport Prague in Prague, Czech Republic (PRG). Frontier Airlines (Frontier) and Spirit Airlines (Spirit) represented the second and third largest airlines in terms of growth in enplaned passengers in FY 2018. Aer Lingus began serving the Airport in FY 2018 with service to Dublin Airport in Dublin, Ireland (DUB).

Enplaned passengers increased to 16.1 million in FY 2019, which represented a 5.5 percent increase compared to FY 2018 and it was 4.7 percent higher in FY 2019 than the 15.4 million enplaned passengers that had been projected for that year in the 2017 Report. American again represented the largest driver of total growth. American's new domestic destinations from the Airport in FY 2019 included Asheville Regional Airport in Asheville (AVL), Chattanooga Metropolitan Airport (CHA) and Worcester Regional Airport (ORH). American continued to expand its transatlantic gateway at the Airport with new international service to Berlin Tegel Airport in Berlin, Germany (TXL), Bologna Guglielmo Marconi Airport in Bologna, Italy (BLQ) and Dubrovnik Airport in Dubrovnik, Croatia (DBV). Frontier and Spirit continued to grow service to new and existing destinations from the Airport and again represented the next largest airlines in terms of growth after American. Sun Country Airlines began serving the Airport in FY 2019 with service to Minneapolis – Saint Paul International Airport (MSP).

COVID-19 Pandemic Impact on Air Traffic

The outbreak and spread of COVID-19 have depressed demand for air travel globally. The impact to air travel began in East Asia in early 2020 and rapidly accelerated to other regions in March and April. Airlines have responded by parking aircraft and drastically reducing capacity across their networks. By May 2020, which represented the low point in terms of passenger airline capacity reductions, scheduled departing seats represented 24 percent of May 2019 for all US airports and 21 percent of May 2019 capacity for the Airport. Airline capacity started to recover in June with US airport scheduled departing seat capacity increasing to 31 percent of June 2019 capacity. For the Airport June 2020 departing seats represented 23.4

2020 Report

percent of June 2019 departing seats. By August, total departing seats represented 52.2 percent of prior year departing seats for the total US and 51.7 percent for the Airport.

Table 4 presents the 2019 and 2020 departing seat capacity by month for January through August for the US and the Airport.

TABLE 4 DEPARTING SEAT CAPACITY (MILLIONS OF DEPARTING SEATS)

UNITED STATES	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	JANUARY TO AUGUST
2019	91.0	83.0	98.2	95.2	99.1	99.6	103.4	102.7	772.3
2020	93.9	88.1	97.5	43.1	23.9	31.3	49.8	53.5	481.1
2020 % of 2019	103.2%	106.2%	99.3%	45.3%	24.1%	31.4%	48.1%	52.0%	62.3%
PHL	**JANUARY**	**FEBRUARY**	**MARCH**	**APRIL**	**MAY**	**JUNE**	**JULY**	**AUGUST**	**JANUARY TO JUNE**
2019	1.5	1.4	1.6	1.6	1.8	1.8	1.8	1.9	13.4
2020	1.5	1.4	1.6	0.8	0.4	0.4	0.9	1.0	7.8
2020 % of 2019	98.2%	101.2%	96.4%	48.4%	20.9%	23.4%	47.1%	51.5%	58.4%

SOURCE: Innovata (published airline schedules), September 2020.

2020 Report

Passenger volumes have decreased at a faster rate than seat capacity systemwide. Through the majority of April 2020, which represented the low point in terms of passenger activity, the Transportation Security Administration (TSA) reported daily airport screening throughput for all US airports was approximately five percent of the volume on the equivalent same day in 2019. For the Airport, April 2020 enplaned passengers represented 4.5 percent of April 2019 enplaned passengers. By June 2020 the Airport's percentage of prior year enplaned passengers had increased to 16.9 percent. **Table 5** presents the Airport's actual enplaned passengers, passenger airline operations, and total landed weight for the Airport for January through June 2019 and 2020.

Many countries, including the US, have provided financial assistance to airlines in the form of grants and guaranteed loans. In the US, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was passed by Congress March 27, 2020. It requires airlines to maintain minimum service levels on a nationwide basis, with some exceptions, and maintain at least 90 percent of their pre-COVID-19 pandemic employment levels through September 30, 2020 as a condition for receiving this financial assistance. Airlines that receive the aid must also refrain from issuing or paying dividends, issuing stock buybacks, furloughs, or salary reductions for a specified period, and executives are subject to compensation limits.

TABLE 5 PHL ENPLANED PASSENGERS, PASSENGER OPERATIONS AND TOTAL LANDED WEIGHT (JANUARY – JUNE 2019 AND 2020)

ENPLANED PASSENGERS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JANUARY TO JUNE
2019	1,096,999	1,042,346	1,342,132	1,369,908	1,509,279	1,547,766	7,908,430
2020	1,122,169	1,083,133	588,060	62,294	148,546	260,864	3,265,066
2020 % of 2019	102.3%	103.9%	43.8%	4.5%	9.8%	16.9%	41.3%
OPERATIONS	**JANUARY**	**FEBRUARY**	**MARCH**	**APRIL**	**MAY**	**JUNE**	**JANUARY TO JUNE**
2019	29,323	26,763	31,814	32,244	34,932	34,091	189,167
2020	29,464	28,083	26,396	11,487	9,899	10,861	116,190
2020 % of 2019	100.5%	104.9%	83.0%	35.6%	28.3%	31.9%	61.4%
LANDED WEIGHT	**JANUARY**	**FEBRUARY**	**MARCH**	**APRIL**	**MAY**	**JUNE**	**JANUARY TO JUNE**
2019	1,685,344	1,534,360	1,805,254	1,817,551	1,985,026	1,922,858	10,750,393
2020	1,712,668	1,618,518	1,492,717	676,985	587,280	629171	6,717,339
2020 % of 2019	101.6%	105.5%	82.7%	37.2%	29.6%	32.7%	62.5%

NOTE: Landed weight represents millions of thousand pound units.
SOURCE: Philadelphia International Airport, September 2020.

2020 Report

While airline capacity and passenger activity have begun to recover from the low points in April and May of 2020, demand for air travel remains unstable and airlines will likely extend capacity reductions if a meaningful recovery in demand does not occur. Furthermore, published schedules do not necessarily reflect all capacity changes, as airlines may push near-term flight cancellations through operational dispatch procedures rather than filing new schedules.

Considerations for Evaluating Short and Long-Term Impact to Aviation Activity and Patterns

The development of a projected recovery scenario for air travel—globally, nationally and for the Airport—takes into consideration the following factors:

- The severity and duration of the downturn in the demand for air travel, as well as the pace and length of the recovery, are unknown at this time. The development and distribution of a vaccine or treatment for COVID-19 would affect the timing and magnitude of economic recovery, and positively impact air traffic demand far more substantially than the modest recent increase in passenger activity described above. A full recovery to pre-COVID-19 levels of activity will likely require development and widescale deployment of a vaccine to prevent COVID-19. The timing of both of these medical events is unknown.
- A prolonged contraction of demand for air travel increases the likelihood of structural changes to the airline industry as compared to a "return to normal" recovery. These structural changes may include airline bankruptcies and failures, consolidation, hub closures and other network changes.

- Airlines have announced the retirement of certain aircraft types from their operating fleets, which in some cases represent an accelerated timeline for retiring older aircraft that airlines were already planning to retire in the next few years. Changes in fleet mix and average aircraft size could change the number of operations required to accommodate passenger demand.
- Governments have imposed short-term regulatory changes, including requiring airlines to maintain service to certain destinations and bans on cross-border travel. Extending these temporary changes as well as potentially imposing additional regulatory changes, such as government coordinated scheduling and ticket pricing, would impact demand for air travel and patterns of activity.
- The Airport has represented a critical component of the American Airlines route network. In the year ending December 2019 the Airport was American's fifth largest hub and largest transatlantic gateway. As presented in **Table 6**, the Airport's share of the total American systemwide scheduled departing capacity has increased marginally in the fourth quarter of 2020 as compared to full year 2019. The Airport is expected to remain a critical connecting hub for American and continue to serve a large local O&D market during and after the recovery. American recently announced a partnership with JetBlue that includes codeshare cooperation that will support connectivity between the two airlines at John F. Kennedy International Airport in New York (JFK) and Boston Logan International Airport (BOS). While the partnership will support growth at American's hub at JFK, it is expected that this growth will be incremental to American's network and that the Airport will retain its position as American's primary transatlantic gateway.

TABLE 6 PHL SHARE OF AMERICAN AIRLINES SYSTEM DEPARTING SEAT CAPACITY

REGION	FULL YEAR 2019	Q1 2020	Q2 2020	Q3 2020	Q4 2020
Domestic	4.8%	4.4%	4.7%	5.0%	5.3%
International	9.4%	6.6%	3.2%	2.1%	5.4%
Total	**5.2%**	**4.6%**	**4.7%**	**4.9%**	**5.3%**

SOURCE: Innovata (published airline schedules), September 2020

2020 Report

Updated Forecast of Passengers and Operations

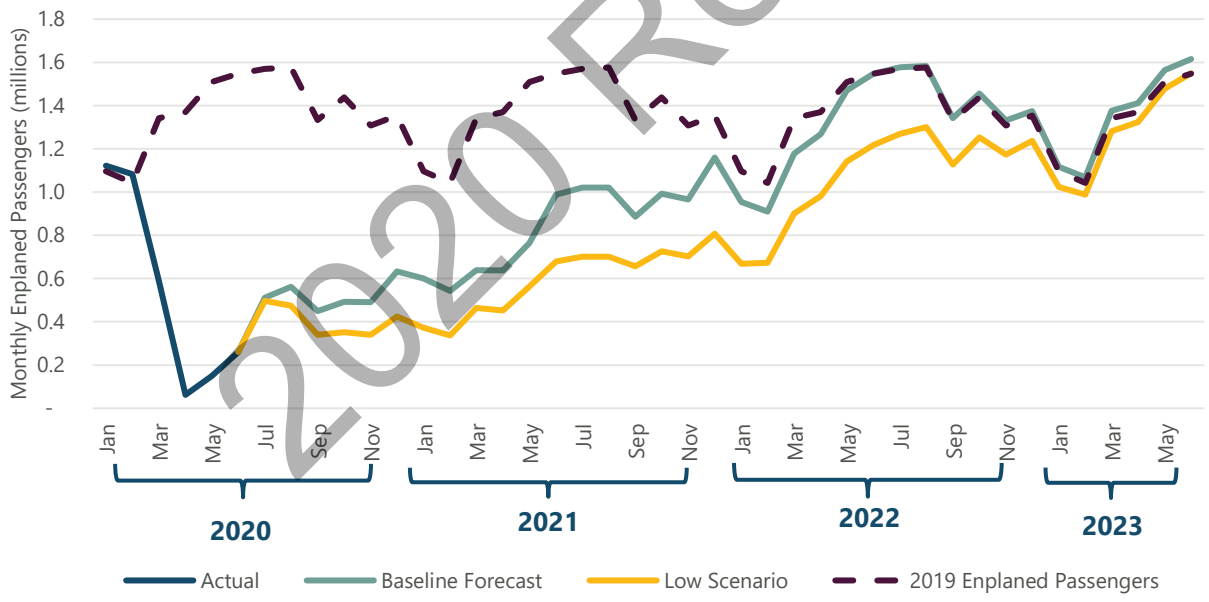
The updated forecast, referred herein as the Baseline Forecast, is based on an evaluation of actual activity for 2017, 2018, 2019 and January through June 2020. Projected activity for July and August 2020 is based on published airline schedules, estimates of the percentage of scheduled flights that will be operated, and passenger load factors. Published airline schedules were not used after August 2020 because airlines are expected to file updated schedules closer to the departure dates. The forecast of departing seat capacity was based on an estimate of departures and average seats per departure by month and airline for the remainder of the short-term forecast (September 2020 through December 2021). Projected departing seats were multiplied by estimated load factors to derive the forecast for enplaned passengers. Gradual increases in capacity and load factor represent the recovery in demand, which takes into consideration seasonal

patterns in passenger activity. The Baseline Forecast of activity, used for the financial analysis described in the following sections, and included in Appendix 1, assumes total passenger activity returns to 2019 levels in June 2022.

Due to the uncertainty of the timing and pattern of recovery for air travel, a sensitivity analysis was developed based on a scenario forecast. The Low Scenario assumes a delay in the development and deployment of an effective vaccine to prevent COVID-19 slows the recovery to 2019 levels of activity. Other factors, including extended economic impacts of the pandemic, may also contribute to a prolonged contraction in demand for air travel.

Exhibit 4 presents the monthly enplaned passengers through June 2023 for the Baseline Forecast and the Low Scenario to demonstrate the trajectory of the projected recovery to 2019 levels of activity under different assumptions.

EXHIBIT 4 MONTHLY ENPLANED PASSENGERS DURING THE RECOVERY



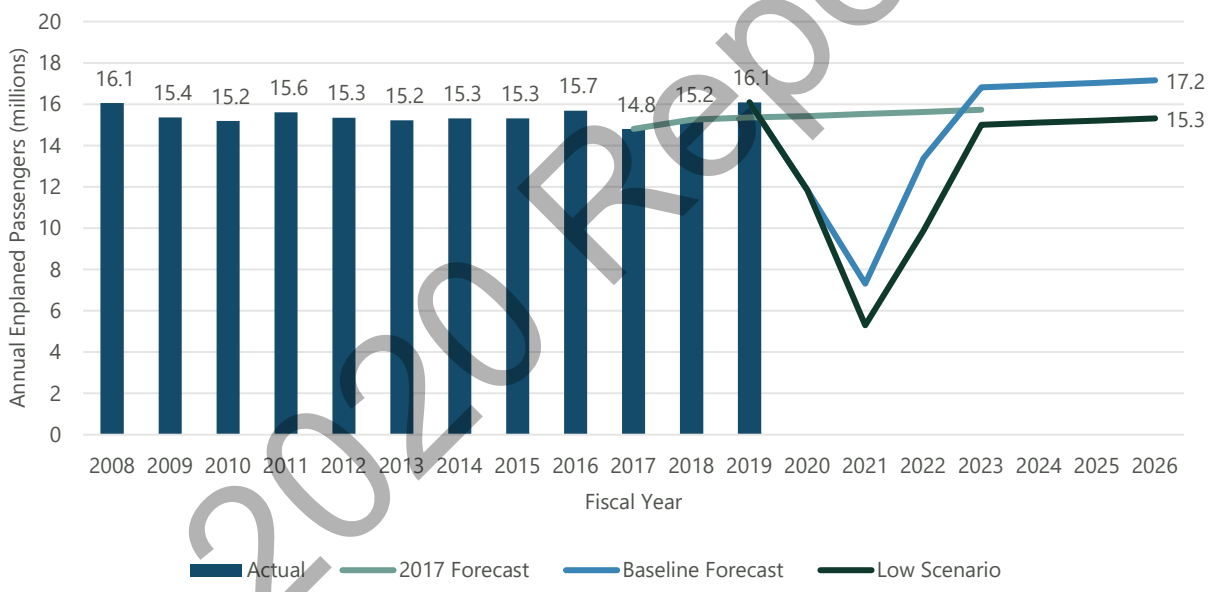
SOURCES: Philadelphia International Airport (historical activity), June 2020; Ricondo & Associates, Inc. (forecast), September 2020.

2020 Report

Neither the Baseline Forecast nor the Low Scenario assume that major structural changes, such as closure of the American Airlines hub, will occur during the Projection Period. As major airlines have decreased capacity across their system in response to reduced demand, hubs play a critical role in linking destinations and enabling connectivity across their route networks. American has been more aggressive than its peers United and Delta in adding back capacity during the early stages of the recovery, pursuing a strategy of maximizing connectivity and growing market share.

Exhibit 5 presents the historical and forecast total enplaned passengers by fiscal year for the 2017 forecast, 2020 Baseline Forecast and Low Scenario.

EXHIBIT 5 HISTORICAL AND FORECAST ENPLANED PASSENGERS



2020 Report

SOURCES: Philadelphia International Airport (historical activity), June 2020; Ricondo & Associates, Inc. (forecast), September 2020.

Table 7 presents the historical enplaned passengers from fiscal year 2008 through fiscal year 2019.

Table 8 presents the projected enplaned passengers for the Baseline Forecast and Low Scenario. In the Baseline Forecast enplaned passengers increase from 16.1 million in 2019 to 17.2 million in 2026, which represents a CAGR of 0.9 percent. In the Low Scenario enplaned passengers decrease to 15.3 million in 2026, which represents a -0.7 percent CAGR.

The passenger operations forecast was based on the enplaned passenger forecast and estimated load factors and average seats per departure. The operations forecast served as the basis for the landed weight forecast. **Table 9** presents the Airport's historical and projected passenger airline operations and total landed weight, inclusive of all-cargo operations, for the Baseline Forecast and Low Scenario.

TABLE 7 HISTORICAL ENPLANED PASSENGERS

FISCAL YEAR	DOMESTIC	INTERNATIONAL	TOTAL
2008	14,187,734	1,865,239	16,052,973
2009	13,536,340	1,826,403	15,362,743
2010	13,334,229	1,859,512	15,193,741
2011	13,635,784	1,975,799	15,611,583
2012	13,368,218	1,975,908	15,344,126
2013	13,246,485	1,969,400	15,215,885
2014	13,273,937	2,042,116	15,316,053
2015	13,272,717	2,040,021	15,312,738
2016	13,695,700	1,987,858	15,683,558
2017	12,967,584	1,839,298	14,806,882
2018	13,372,943	1,872,510	15,245,453
2019	14,046,663	2,041,761	16,088,424
Compound Annual Growth Rate			
2008 to 2014	-1.1%	1.5%	-0.8%
2014 to 2019	1.1%	0.0%	1.0%
2008 to 2019	-0.1%	0.8%	0.0%

SOURCE: Philadelphia International Airport, September 2020

TABLE 8 FORECAST ENPLANED PASSENGERS

BASELINE FORECAST				
FISCAL YEAR	DOMESTIC	INTERNATIONAL	TOTAL	TOTAL PERCENT OF 2019
2019 (Actual)	14,046,663	2,041,761	16,088,424	NA
2020	10,507,159	1,337,574	11,844,733	73.6%
2021	6,970,743	341,108	7,311,851	45.4%
2022	12,118,926	1,257,400	13,376,327	83.1%
2023	14,989,537	1,824,393	16,813,930	104.5%
2024	15,088,849	1,836,480	16,925,329	105.2%
2025	15,191,072	1,848,922	17,039,994	105.9%
2026	15,295,681	1,861,654	17,157,335	106.6%
2019 to 2026 Compound Annual Growth Rate	1.2%	-1.3%	0.9%	

LOW SCENARIO				
FISCAL YEAR	DOMESTIC	INTERNATIONAL	TOTAL	TOTAL PERCENT OF 2019
2019 (Actual)	14,046,663	2,041,761	16,088,424	NA
2020	10,507,159	1,337,574	11,844,733	73.6%
2021	5,184,384	113,834	5,298,218	32.9%
2022	9,238,431	643,531	9,881,962	61.4%
2023	13,510,881	1,496,935	15,007,817	93.3%
2024	13,600,396	1,506,853	15,107,249	93.9%
2025	13,692,535	1,517,061	15,209,597	94.5%
2026	13,786,825	1,527,508	15,314,334	95.2%
2019 to 2026 Compound Annual Growth Rate	-0.3%	-4.1%	-0.7%	

SOURCES: Philadelphia International Airport (historical activity), June 2020; Ricondo & Associates, Inc. (forecast), September 2020.

2020 Report

TABLE 9 FORECAST PASSENGER OPERATIONS AND TOTAL LANDED WEIGHT

BASELINE FORECAST				
FISCAL YEAR	PASSENGER OPERATIONS	OPERATIONS PERCENT OF 2019	TOTAL LANDED WEIGHT	LANDED WEIGHT PERCENT OF 2019
2019 (Actual)	333,715	NA	21,963,532	NA
2020	266,283	79.8%	18,230,881	83.0%
2021	199,288	59.7%	14,796,545	67.4%
2022	294,210	88.2%	21,003,213	95.6%
2023	355,446	106.5%	24,843,380	113.1%
2024	355,456	106.5%	24,893,231	113.3%
2025	355,542	106.5%	24,947,595	113.6%
2026	355,694	106.6%	25,002,929	113.8%
2019 to 2026 Compound Annual Growth Rate	0.9%		1.9%	
LOW SCENARIO				
FISCAL YEAR	PASSENGER OPERATIONS	OPERATIONS PERCENT OF 2019	TOTAL LANDED WEIGHT	LANDED WEIGHT PERCENT OF 2019
2019 (Actual)	333,715	NA	21,963,532	NA
2020	266,283	79.8%	18,230,881	83.0%
2021	160,756	48.2%	12,444,037	56.7%
2022	217,880	65.3%	16,396,674	74.7%
2023	314,749	94.3%	22,502,292	102.5%
2024	314,742	94.3%	21,720,788	98.9%
2025	314,804	94.3%	21,773,535	99.1%
2026	314,926	94.4%	21,826,722	99.4%
2019 to 2026 Compound Annual Growth Rate	-0.8%		-0.1%	

SOURCES: Philadelphia International Airport (historical activity), June 2020; Ricondo & Associates, Inc. (forecast), September 2020.

2020 Report

Updated Financial Analysis

Airport-Airline Use and Lease Agreement Update

The Airport-Airline Use and Lease Agreement (the Airline Agreement) is a five-year agreement with two additional one-year renewals. Since the 2017 Report, the initial term of the Airline Agreement expired on June 30, 2020 and the Airport and Signatory Airlines have executed the first of the two additional one-year renewals. For the financial analysis included in this report, it was assumed that the provisions of the Airline Agreement regarding the setting of rentals, fee, and charges, including the definition of Airport Cost Centers, Airline Cost Centers; and MII approval requirements, will remain in effect through the Projection Period ending FY 2026 and that the second one-year renewal will be executed. The 2017 Report provides specifics as to the cost center residual rate-setting methodology and the revenue sharing provisions for net revenues generated in the Outside Terminal Area (OTA).

Updated Operating Expenses Projections

Historical Operating Expenses

Operating Expenses for FY 2017 through FY 2019, as presented each year in the City's Financial Report of the Airport System filed with the Fiscal Agent, pursuant to Section 5.05 of the General Ordinance are presented in **Table 10**. Operating Expenses increased at a compound annual growth rate of 5.5 percent, from approximately $253.5 million in FY 2017 to approximately $282.2 in FY 2019. This increase in Operating Expenses can be primarily attributed to increasing contractual service costs and personnel and fringe benefits costs.

TABLE 10 HISTORICAL OPERATING EXPENSES

OPERATING EXPENSES	2017	2018	2019	COMPOUND ANNUAL GROWTH RATE
Total Operating Expenses (thousands)	$253,501	$267,721	$282,215	5.5%
Operating Expenses annual growth rate		5.6%	5.4%	
Enplaned Passengers (thousands)	14,807	15,245	16,088	4.2%
Enplaned Passengers growth rate		3.0%	5.5%	
Total Operating Expenses per Enplaned Passenger	$17.12	$17.56	$17.54	1.2%

SOURCE: City of Philadelphia, Division of Aviation, September 2020

2020 Report

Budgeted and Projected Operating Expenses

The Airport's FY 2021 airline rates and charges budget was finalized in June 2020 and included the following cost reduction initiatives and additional costs:

- Implementation of a hiring freeze on non-critical positions
- Significant restrictions on overtime for all Airport personnel, including police and fire
- Executive pay cuts ranging from 2.0 to 7.0 percent
- Negotiated pay increases for all City union employees ranging from 2.0 to 2.5 percent
- A 16 percent reduction in budget FY 2020 contractual services and suspension of contractual labor rate increases
- Reductions in budgeted materials and supplies and equipment purchases averaging over 37 percent
- Additional costs for pandemic recovery requirements
- Significantly reduced and limited vehicle allowance

Projected Operating Expenses

Updated Operating Expense projections include the following assumptions:

- A 2.0 percent increase in Division of Aviation union employee expenses in FY 2022 and FY 2023, and a 3.0 percent annual increase through the remainder of the Projection Period
- A 2.5 percent increases in police and fire personnel costs in FY 2022 and FY 2023, and a 3.5 percent annual increase through the remainder of the Projection Period
- No additional reductions in personnel, although the City is evaluating possible reductions in personnel contingent upon a prolonged recovery
- A 6.0 percent increase in contractual services in FY 2022 and FY 2023 to reflect the need to add back services cut during the FY 2021 budget process as the Airport begins to recover
- An average increase of 2.8 percent in contractual services after FY 2023
- Increases ranging from 2.0 to 3.5 percent for other operating costs, including utilities, taxes, insurance, materials and supplies, and equipment
- Operating expense growth is the same under all traffic forecast scenarios

Updated Non-Airline Revenues

Prior to the onset of the COVID-19 pandemic, fiscal year to date 2020 non-airline revenues were tracking ahead of FY 2019. **Table 11** summarizes historical growth in concession revenues, which make up the majority of non-airline revenues, between FY 2017 and FY 2019. As shown, concession revenues increased between FY 2017 and FY 2019 at a compound annual growth rate of 9.0 percent, more than double the growth in enplaned passengers during this same period. This increase in concession revenues is primarily attributable to terminal concessions and a new pouring rights agreement and the continued growth in transportation network company (TNC) revenues.

TABLE 11 HISTORICAL CONCESSION REVENUES

CONCESSION REVENUES	2017	2018	2019	COMPOUND ANNUAL GROWTH RATE
Automobile Parking	$32,556	$32,527	$35,764	4.8%
Rental Cars	19,037	18,040	18,480	-1.5%
Restaurants and Retail	29,845	31,082	38,726	13.9%
Ground Transportation	6,851	10,145	12,595	35.6%
Other	10,299	10,717	11,497	5.7%
TOTAL CONCESSION REVENUES	**$98,588**	**$102,511**	**$117,061**	**9.0%**
Total Concession Revenues Annual Growth Rate		4.0%	14.2%	
Enplaned Passengers (thousands)	14,807	15,245	16,088	4.2%
Enplaned Passengers Growth Rate		3.0%	5.5%	
Concession Revenues per Enplaned Passenger	**$6.66**	**$6.72**	**$7.28**	4.6%

SOURCE: City of Philadelphia, Division of Aviation, September 2020.

2020 Report

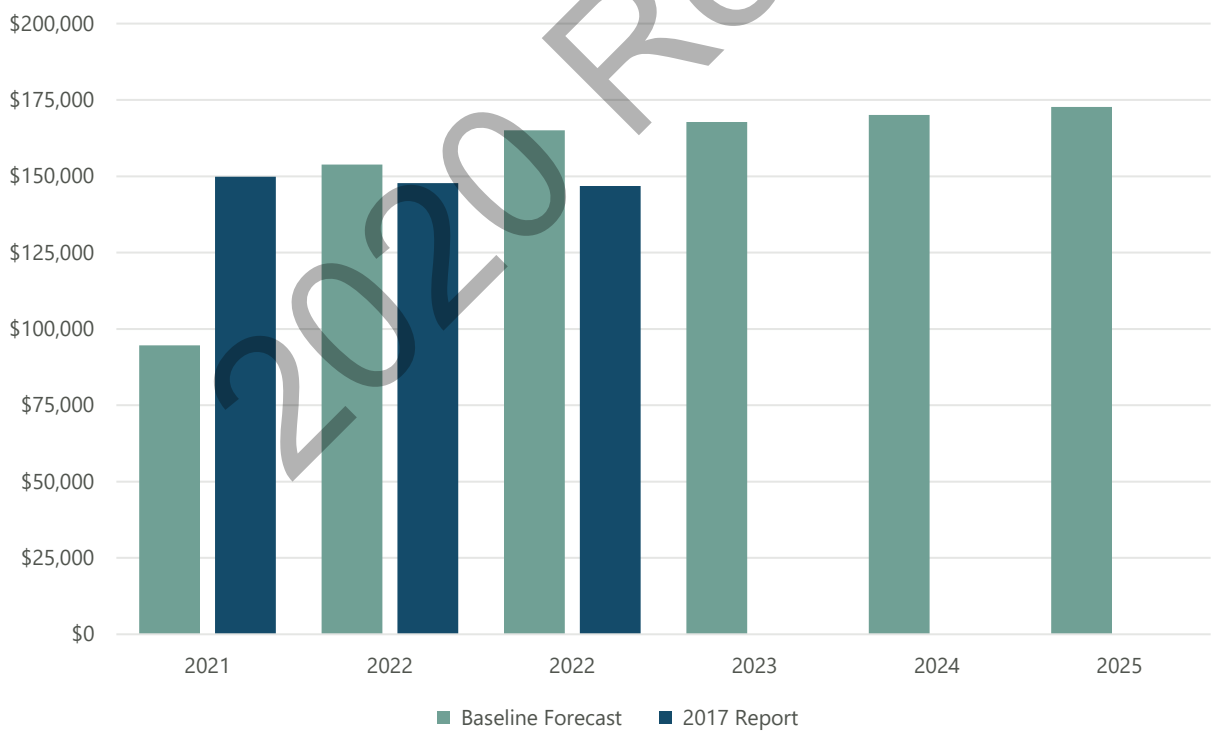
Projected Non-Airline Revenues

Updated projected non-airline revenues included the following assumptions:

- Concession minimum annual guarantees, which are currently waived, which the city intends to be reinstated when enplaned passengers reach 70 percent of FY 2019 levels
- Increases in ground transportation fees for off-Airport parking and TNCs based on negotiated fees and regulation rates
- Annual consumer price index adjustments or negotiated rent increases to ground, land, and buildings rents, where applicable

Growth for concession revenues equal to growth in enplaned passengers and inflation **Exhibit 6** shows the updated projected non-airline revenue and the projection from the 2017 Report.

EXHIBIT 6 UPDATED PROJECTED NON-AIRLINE REVENUES (IN MILLIONS)



2020 Report

SOURCES: City of Philadelphia, Divisions of Aviation (2021), September 2020; AVK Consulting, Inc. (2022-2026), September 2020.

Updated Other Amounts Available for Debt Service

Passenger Facility Charge Revenue

During the Projection Period, the PFC Revenues assume the current collection rate of $4.50 per qualifying enplaned passenger, net of a $0.11 per passenger administrative fee to be retained by the airlines. Prior to the COVID-19 pandemic, the Airport collected in approximately $60 million per year in PFC Revenues. The projected PFC Revenues are in line with the growth of enplaned passenger activity. As of July 1, 2020, the Airport's PFC fund balance is $118.7 million. Currently, the entire PFC fund balance is available to pledge as other Amounts Available for Debt Service. During the Projection Period, is it assumed that the Airport would submit additional PFC applications that will result in an increase to the annual amount pledged.

Exhibit 7 summarizes projected PFC Revenues collections under the Baseline Forecast. As shown, annual collections range from a low of $28.3 million and a high of $66.2 million between FY 2021 and FY 2026. The reduction of PFC Revenues relative to the 2017 Report in the near term reflect the reduced air traffic activity.

EXHIBIT 7 PROJECTED PFC ANNUAL REVENUE COLLECTIONS

SOURCES: City of Philadelphia, Division of Aviation (2021), September 2020; AVK Consulting, Inc. (2022-2026), September 2020.

Currently, the Airport pledges approximately $32 million annually to GARB debt service. For FY 2021, given the Airport's PFC fund balance and in an effort to reduce airline costs, the Airport expects to pledge approximately $62 million in PFC Revenues as Other Amounts Available for Debt Service.

As stated previously, the Airport intends to submit additional PFC applications both to leverage debt service and to fund CDP projects during the Projection Period. Since the 2017 Report, the Airport has revised its general guidelines as to the use of PFC Revenues. They are, as follows:

2020 Report

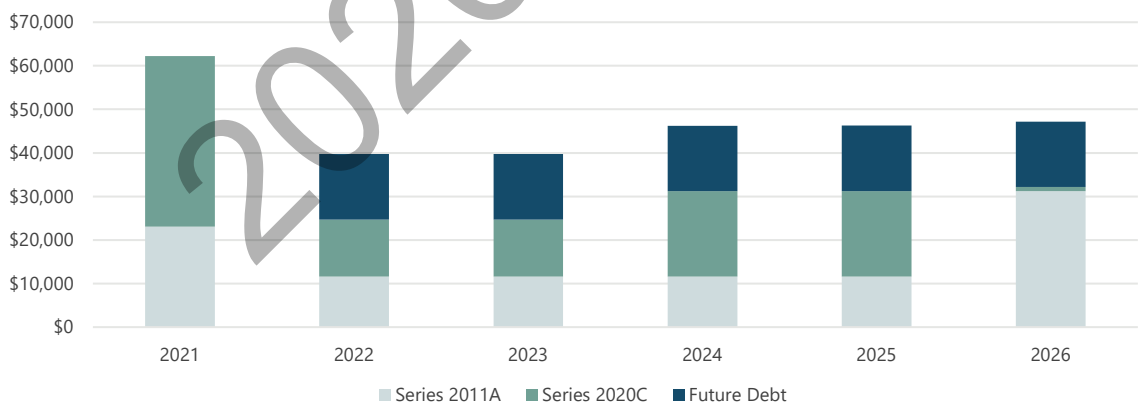
- Leveraged PFCs will be no more than 80 percent of annual PFC collections
- An amount equal to half of the annual PFC-eligible debt service will be reserved within the PFC fund balance
- Additional PFC Revenues available after the reserve is met, may be used on a pay-as-you-go basis to fund capital projects

Table 12 summarizes the amount of PFC Revenues to be pledged by series of bonds under the Baseline Forecast. Pledged PFC Revenues range from a low of $39.7 million in FY 2022 to a high of $62.2 million in FY 2021.

TABLE 12 PROJECTED PFC REVENUES PLEDGED

(Dollars in Thousands for Fiscal Years Ending June 30)

PLEDGED PFC REVENUES BY SERIES	2021	2022	2023	2024	2025	2026
Outstanding Bonds						
Series 2011A	$23,068	$11,583	$11,592	$11,598	$11,613	$31,230
Proposed Bonds						
Series 2020C	39,149	13,133	13,130	19,643	19,638	965
Other Existing / Future Debt	0	15,000	15,000	15,000	15,000	15,000
TOTAL PROJECTED PLEDGED PFC REVENUES	**$62,217**	**$39,716**	**$39,722**	**$46,241**	**$46,251**	**$47,195**



SOURCE: City of Philadelphia, Division of Aviation. September 2020; AVK Consulting, Inc. (2022-2026), September 2020

2020 Report

Updated Operating Fund Balances and Funds Available for Debt Service

As of June 30, 2020, the Division of Aviation had $302.3 million of Aviation Operating Fund balances. **Table 13** presents the estimated annual Operating fund balances through the Projection Period assuming annual revenues, expenses, and deposits occur as projected in this 2020 Report. Operating fund balances are estimated to increase from $242.5 million in FY 2021 to $320.8 million in FY 2026.

TABLE 13 ESTIMATED AVIATION OPERATING FUND BALANCES

(Dollars in Thousands as of June 30th)

OPERATING FUNDS	2021	2022	2023	2024	2025	2026
O&M Account	$22,079	$23,300	$24,591	$25,960	$27,414	$28,962
Bond R&I Account	25,395	29,479	23,460	22,034	27,012	27,219
Aviation Operating Fund balance[1]	195,031	195,554	216,367	257,450	271,040	264,615
TOTAL OPERATING FUNDS	**$242,505**	**$248,333**	**$264,419**	**$305,445**	**$325,466**	**$320,796**

NOTE:
1 Aviation Operating Fund balance includes amounts in the Discretionary Account.
SOURCE: City of Philadelphia, Division of Aviation (2021 fund balance) September 2020; AVK Consulting, Inc. (2022 – 2026) September 2020.

A portion of the Aviation Operating Fund balances represent other Amounts Available for Debt Service, which includes the amounts in the Airport's Discretionary, O&M, and Bond Redemption and Improvement (Bond R&I) Accounts. As of July 1, 2019, the combined balance in these accounts was $144.2 million. As stated previously, this analysis assumes the same business terms throughout the Projection Period as the current Airline Agreement. Deposits (withdrawals) to (from) these accounts are assumed to be equal to the following:

- Discretionary Account – equal to the Airport's share of annual Outside Terminal Area (OTA) net revenues
- O&M Account – equal to $1 million annually
- Bond Redemption and Improvement Account – deposits or withdrawals equal to maintaining a balance of 25 percent of annual net Debt Service Requirements

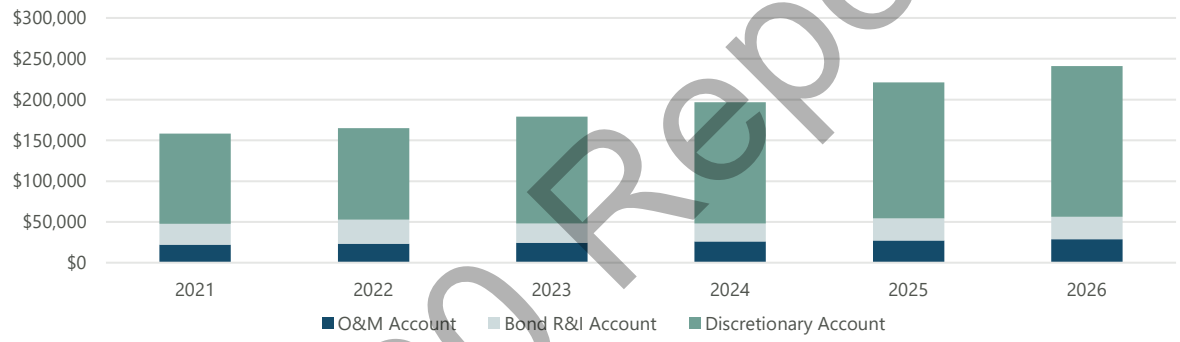
Table 14 presents the projected other amounts available for Debt Service annually under the Baseline Forecast. Currently, the Airport does not plan to forego any of its annual deposits to help offset Airline Revenue required. Should the recovery from the COVID-19 pandemic extend longer than that forecast, the Airport may reevaluate foregoing some of these deposits.

2020 Report

TABLE 14 PROJECTED AVIATION OPERATING FUNDS AVAILABLE FOR DEBT SERVICE

(Dollars in Thousands for Fiscal Years Ending June 30)

OPERATING FUNDS AVAILABLE FOR DEBT SERVICE	2021	2022	2023	2024	2025	2026
O&M Account	$22,079	$23,300	$24,591	$25,960	$27,414	$28,962
Bond R&I Account	25,395	29,479	23,460	22,034	27,012	27,219
Discretionary Account	110,941	112,107	131,125	148,832	166,532	184,643
TOTAL OPERATING FUNDS AVAILABLE FOR DEBT SERVICE	**$158,415**	**$164,886**	**$179,176**	**$196,826**	**$220,958**	**$240,824**



SOURCE: City of Philadelphia, Division of Aviation (2021 fund balance), September2020; AVK Consulting, Inc. (2022 – 2026) September 2020.

2020 Report

Updated Debt Service Requirements

Updates to projected annual Debt Service Requirements, net of capitalized interest, interest earnings on Sinking Fund Reserves, and Pledged PFC Revenues, on all current outstanding Bonds and projected future Bonds are discussed in this section. Updated projected Debt Service is provided in Table 1-3 in **Attachment 1** of this 2020 Report.

2020 Bond Debt Service

The 2020 Bonds includes the current refunding of the Series 2010A and the Series 2010D Bonds and the takeout of $100 million of commercial paper notes. A significant portion of the expected savings from the refunding portion of 2020 Bonds will be used to reduce annual Debt Service in FY 2022 and FY 2023. The remaining savings are expected to result in an average annual decrease in Debt Service thereafter of approximately $2.1 million. Debt Service Requirements are projected to increase from approximately $127.2 million in FY 2020 to approximately $143.7 million in FY 2021, attributable to the first full year of debt service on the Series 2017 Bonds. Thereafter, Debt Service Requirements are projected to increase from $147.7 million in FY 2022 to $183.5 million in FY 2025, reflecting the projected financing needs for the Airport's

Capital Development Program. Debt Service Requirements decrease to $174.7 million in FY 2026 as the Series 2005C Bonds and a portion of the Series 2020C Bonds mature in FY 2025.

The 2020 Bonds are assumed to have a term of 30 years, and for the purposes of this analysis, interest on the 2020 Bonds is assumed at current market interest rates as of July 2020 plus 50 basis points.

Future Airport Revenue Bond Debt Service Requirements

The Airport expects to incur on average $125 million of capital expenditures annually to fund priority CDP projects throughout the Projection Period. The project expenditures will be funded with a combination of pay-as-you-go PFCs, grants, and commercial paper note proceeds. As mentioned previously, the financial analysis includes Debt Service Requirements on future Bonds to be issued to fund the Airport's CDP and includes the takeout of commercial paper notes in FY 2022, FY 2024, and FY 2026.[19] Debt Service Requirements on these Bonds are allocated to Cost Centers based on the type of capital projects funded Debt Service Requirements on these future Bonds is projected to be approximately $15.3 million in FY 2022 and increasing to approximately $40.7 million in FY 2026.

In August 2020, pursuant to the Lease Agreement and the Parking Services Contract with Philadelphia Parking Authority (PPA), the City exercised its option to purchase the airport parking facilities and improvements. Upon satisfaction of certain conditions as set forth in the Lease Agreement and Parking Services Contract, including the repayment of all debt associated with the airport parking operation, the title of the financed airport parking facilities and improvements could be transferred from the PPA to the City. Any potential improvement of revenue, net of expenses and debt, resulting from the airport's direct oversight and ownership of the parking operation have not been incorporated into the financial analysis.

Debt Service Requirements

As shown on Table 1-3, Debt Service Requirements in the updated financial analysis present Debt Service, net of capitalized interest, interest earnings on Sinking Fund Reserves, and pledged PFC Revenues. Net Debt Service Requirements are projected to range from $81.5 million in FY 2021 to $132.6 million in FY 2026.

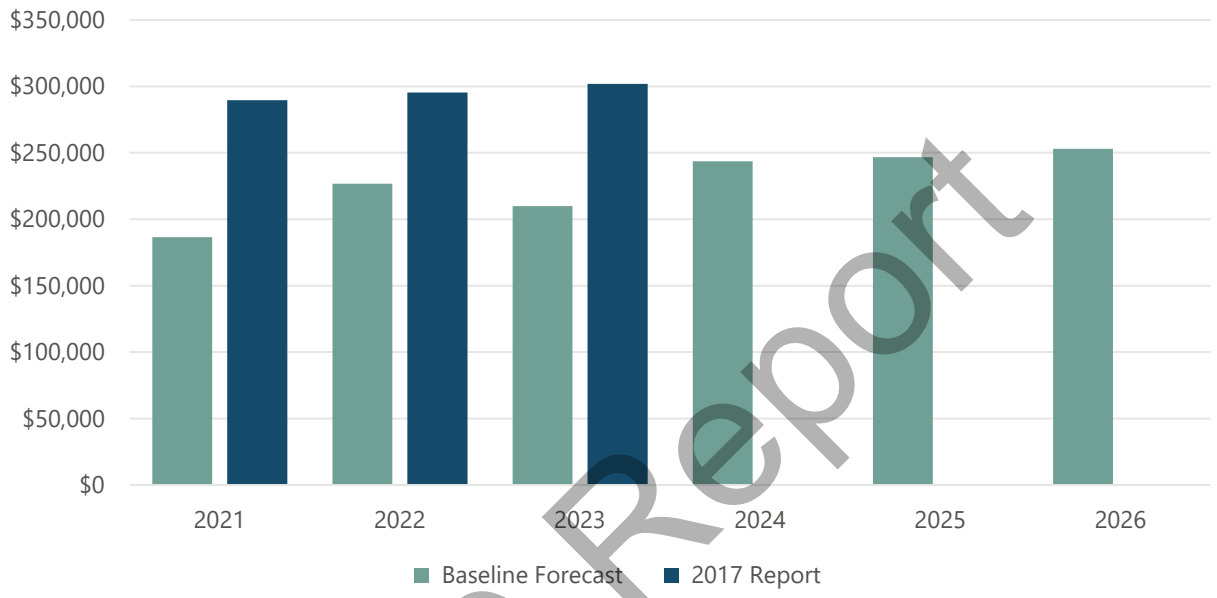
Updated Net Airline Revenues Required and Rates and Fees

Airline Revenues required under the Baseline Forecast range from $186.6 million in FY 2021 to $267.8 in FY 2026. **Exhibit 8** summarizes the annual Airline Revenues required under the Baseline Forecast based on the underlying assumptions contained in this updated analysis and compares this with the projected revenues in the 2017 Report. As shown, Airline Revenues required under the Baseline Forecast are lower than the revenue required projected in the 2017 Report. This is primarily attributable is the Airport requiring less debt funding because of less than anticipated spending on capital projects resulting.

2020 Report

[19] The 2020 Report does not include potential savings from future refunding opportunities available during the Projection Period.

EXHIBIT 8 NET AIRLINE REVENUES REQUIRED



SOURCE: AVK Consulting, Inc., September 2020.

2020 Report

As discussed previously, based on funding from the CARES Act, additional pledging of PFC Revenues, and operating budget reductions, Airline Revenues required is less than projected in the 2017 Report. As a result of traffic growth between FY 2017 and FY 2019 and less than anticipated annual spending on capital projects, projected Airline Revenue required in FY 2026 under the Baseline Forecast is less than the projected revenues required for FY 2023 in the 2017 Report.

Rentals and fees remain reasonable under the Baseline Forecast. **Exhibit 9** presents the projected landing fee rate under the Baseline Forecast and the projected rate in the 2017 Report.

EXHIBIT 9 LANDING FEE RATES (PER 1,000-POUND UNIT OF LANDED WEIGHT)

SOURCE: AVK Consulting, Inc., September 2020.

2020 Report

Reasonableness of Updated Airport Rates and Charges

Updated Airline Cost Projection (Cost per Enplanement)

With the application of CARES Act funds and the pledging of additional PFC Revenues, the cost per enplanement (CPE) for budget FY 2021 is projected to be $23.38. While this represents a significant increase from the actual FY 2019 CPE[20] of $14.34 and the estimated FY 2020 CPE of $16.45, it still remains reasonable in light of the significant non-airline revenue loss and reduced passenger activity acting as a divisor. As shown on **Exhibit 10**, the CPE is projected to decrease from $23.38 in FY 2021 to $14.04 in FY 2026 under the Baseline Forecast.

[20] Based on Airline Revenues net of amounts carried forward from prior years and amounts to be credited in subsequent years.

EXHIBIT 10 PROJECTED COST PER ENPLANEMENT

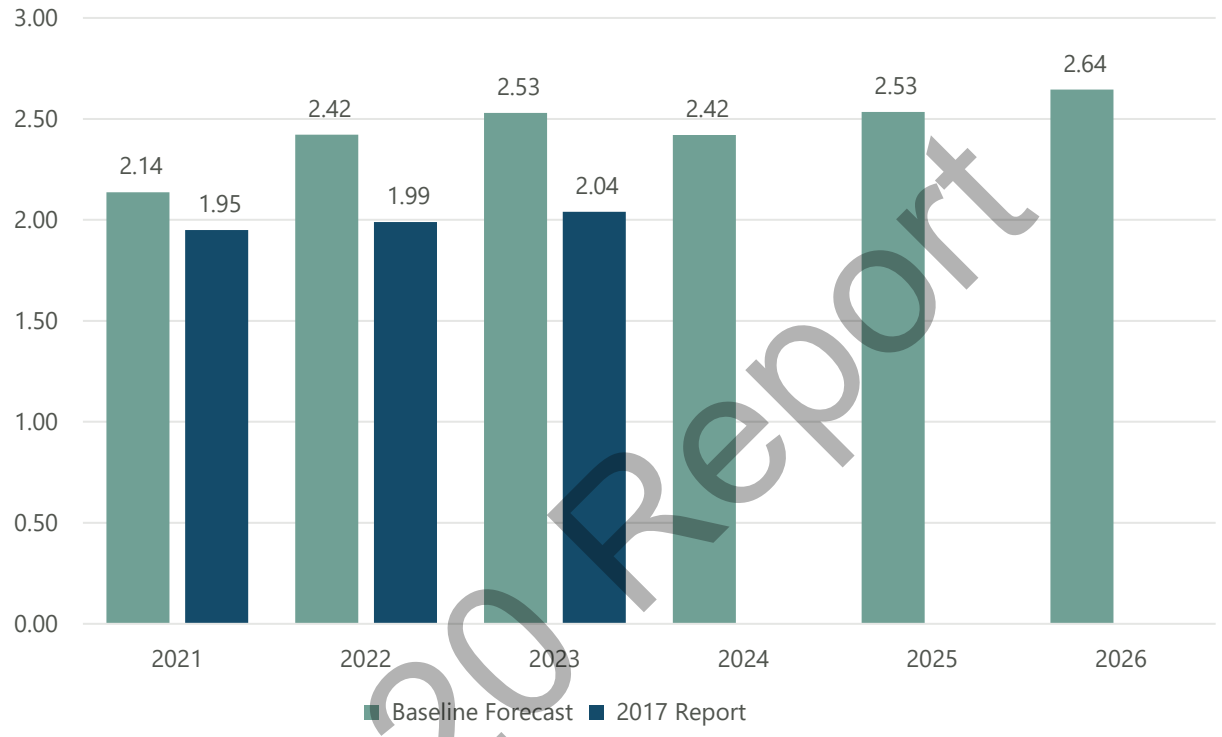
SOURCE: AVK Consulting, Inc., September 2020.

2020 Report

Updated Debt Service Coverage

Table 1-10 presents the updated debt service coverage under the Baseline Forecast. Debt service coverage is projected to exceed the minimum requirement of 1.50x and 1.00x for the Rate Covenant in all instances for both Test 1 and Test 2. **Exhibit 11** compares the projected debt service coverage under Test 2 for the Baseline Forecast and the 2017 Report. As shown, debt service coverage under the Baseline Forecast is well above the minimum requirement of 1.00x. In addition, debt service coverage under the Baseline Forecast is greater in 2021 through 2023 than in the 2017 Report, primarily attributable to greater than projected other amounts available for debt service.

EXHIBIT 11 PROJECTED DEBT SERVICE COVERAGE – TEST 2



SOURCE: AVK Consulting, Inc., September 2020.

2020 Report

Confirmation of 2017 Report Findings

Based on the assumptions and analyses described in the 2017 Report and the 2020 Report, and the Consultants' experience in preparing financial projections for airport operators, it is the Consultants' opinion that, for each fiscal year of the Projection Period, the debt service coverage ratio will meet the minimum requirements under both Test 1 and Test 2 (the Rate Covenant in Section 5.01 of the General Ordinance) and the airline CPE is reasonable in relation to its historical level and the Airport's geographic location as an O&D market, connecting hub and transatlantic gateway.

Sensitivity Analysis

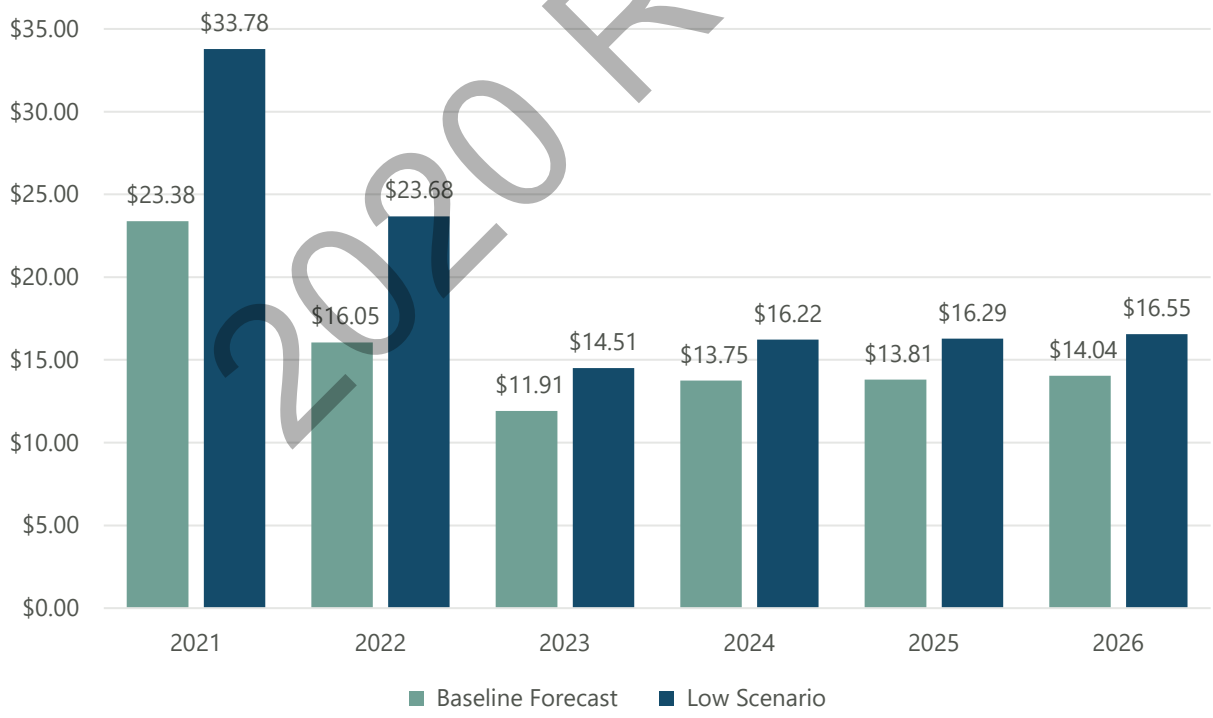
The following section describes a sensitivity scenario (the Low Scenario) that was prepared to address the uncertainty surrounding the duration of the air traffic downturn resulting from the COVID-19 pandemic. Assumptions included for Operating Expenses and the portions of the CDP to be advanced during the

Projection Period remain unchanged from the Baseline Forecast. Debt Service Requirements increase based on the decrease in PFC Revenues available for capitals projects on a pay-as-you-go basis. Non-airline revenues decrease in relation to the decrease in activity under the Low Scenario.

The financial results are materially different in Fiscal Years 2021 and 2022 and to a lesser degree during the remainder of the Projection Period.

Exhibit 12 presents the results for the airline CPE for the Baseline Forecast and the Low Scenario. Under the Baseline Forecast, the CPE is projected to be $23.38 in 2021 compared to $33.78 in the Low Scenario. This Low Scenario CPE does not include any additional expense cuts or application of remaining CARES Act funds the Airport could be used to offset additional non-airline revenue loss in 2021. Between 2023 and 2026, the projected CPE ranges from a high of $16.55 in 2026 to a low of $14.51 in 2023 under the Low Scenario. While higher than the CPE under the Baseline Forecast, the CPE remains reasonable in 2023 through 2026 under the Low Scenario.

EXHIBIT 12 CPE COMPARISON

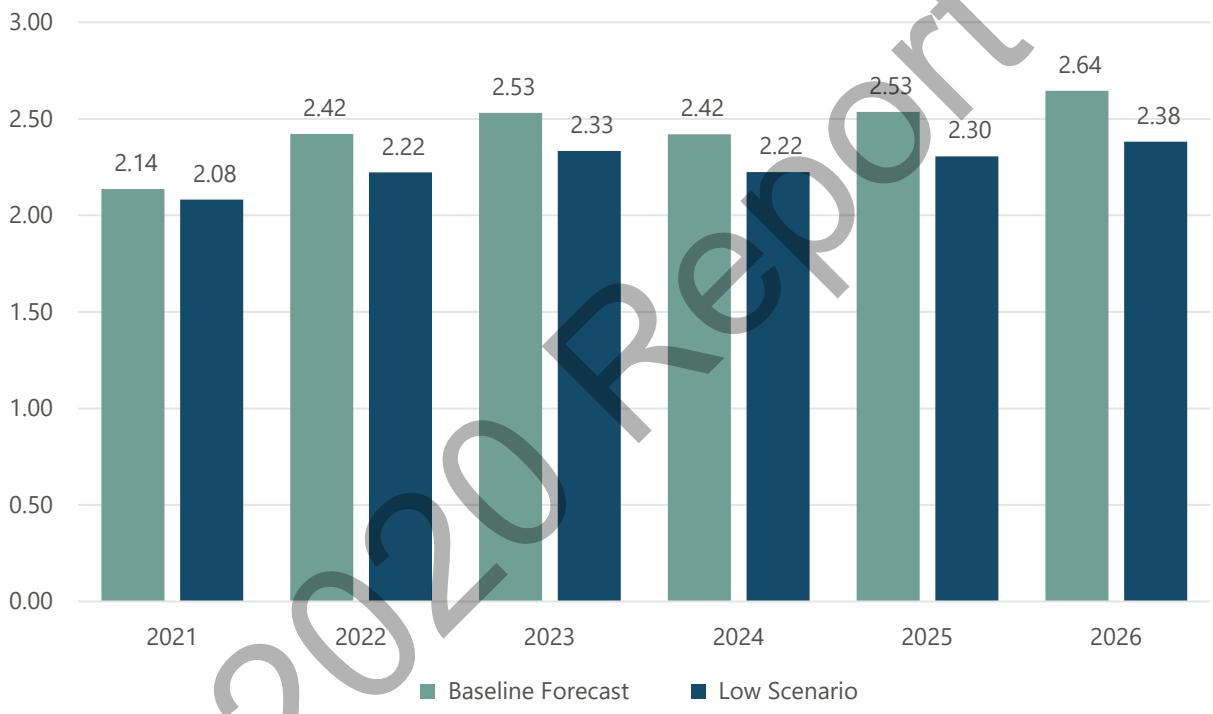


SOURCE: AVK Consulting, Inc., September 2020.

2020 Report

Exhibit 13 presents the debt service coverage Test 2 for both the Baseline Forecast and the Low Scenario. As shown on Table 1-11, under both the Baseline Forecast and the Low Scenario coverage is sufficient under both Test 1 and Test 2 to meet the minimum requirement of 1.50 and 1.00, respectively. Debt service coverage for the Low Scenario ranges from a high of 2.38x in 2026 to a low of 2.08x in 2021 for Test 2.

EXHIBIT 13 TEST 2 COVERAGE COMPARISON



2020 Report

SOURCE: AVK Consulting, Inc., September 2020.

Sincerely,

Ricondo & Associates, Inc.

RICONDO & ASSOCIATES, INC.

AVK Consulting

AVK CONSULTING, INC.

THIS PAGE INTENTIONALLY LEFT BLANK

2020 Report

ATTACHMENT 1

Financial Projection Tables

2020 Report

2020 Report

TABLE 1-1 OPERATING EXPENSES

(For Fiscal Years Ending June 30)

	ACTUAL [1]	ESTIMATED [2]	BUDGET [2]	PROJECTED [3]					COMPOUNDED ANNUAL
	2019	2020	2021	2022	2023	2024	2025	2026	GROWTH RATE (2021 - 2026)
Net Operating Expenses									
Personal services	$52,418,534	$55,500,000	$45,666,000	$47,493,000	$48,443,000	$49,412,000	$50,894,000	$52,421,000	2.8%
Contractual services	97,730,903	76,000,000	81,702,000	84,562,000	89,636,000	95,014,000	98,339,000	101,781,000	4.5%
Materials and supplies	4,878,709	5,100,000	4,500,000	4,590,000	4,682,000	4,776,000	4,872,000	4,969,000	2.0%
Equipment	2,282,518	2,108,000	1,420,000	1,448,000	1,477,000	1,507,000	1,537,000	1,568,000	2.0%
Taxes	4,116,441	4,184,000	4,292,000	4,317,000	4,342,000	4,367,000	4,392,000	4,417,000	0.6%
Other	(266,270)	-	-	-	-	-	-	-	0.0%
Payment to Renewal Fund	-	-	-	-	-	-	-	-	0.0%
TOTAL NET OPERATING EXPENSES	**$161,160,835**	**$142,892,000**	**$137,580,000**	**$142,410,000**	**$148,580,000**	**$155,076,000**	**$160,034,000**	**$165,156,000**	**3.7%**
Interdepartmental Charges									
Police	$17,556,827	$18,147,000	$16,192,000	$16,759,000	$17,178,000	$17,607,000	$18,223,000	$18,861,000	3.1%
Fire	8,787,324	9,548,000	8,607,000	8,908,000	9,131,000	9,359,000	9,687,000	10,026,000	3.1%
Utilities	17,205,738	18,498,000	18,498,000	18,960,000	19,434,000	19,920,000	20,418,000	20,928,000	2.5%
Insurance	2,672,376	2,614,000	2,801,000	2,843,000	2,886,000	2,929,000	2,973,000	3,018,000	1.5%
Services of others	2,336,537	2,126,000	2,126,000	2,200,000	2,277,000	2,357,000	2,439,000	2,524,000	3.5%
Legal services	1,613,108	1,652,000	1,535,000	1,589,000	1,645,000	1,703,000	1,763,000	1,825,000	3.5%
Fringe benefits	62,923,741	63,700,000	64,293,000	66,543,000	68,207,000	69,912,000	72,359,000	74,892,000	3.1%
Fleet Management	3,310,868	3,240,000	3,112,000	3,221,000	3,334,000	3,451,000	3,572,000	3,697,000	3.5%
Vehicle Purchases	2,991,000	2,991,000	500,000	500,000	1,000,000	1,000,000	2,000,000	2,000,000	32.0%
Indemnities	1,656,596	1,500,000	1,500,000	1,525,000	1,550,000	1,575,000	1,600,000	1,625,000	1.6%
TOTAL NET OPERATING EXPENSES	**$121,054,115**	**$124,016,000**	**$119,164,000**	**$123,048,000**	**$126,642,000**	**$129,813,000**	**$135,034,000**	**$139,396,000**	**3.2%**
OPERATING EXPENSES	**$282,214,950**	**$266,908,000**	**$256,744,000**	**$265,458,000**	**$275,222,000**	**$284,889,000**	**$295,068,000**	**$304,552,000**	**3.5%**
Allocation by Project Cost Centers									
Terminal Area	$164,206,057	$154,318,000	$152,201,000	$156,616,000	$161,836,000	$167,514,000	$173,240,000	$178,832,000	3.3%
Ramp Area	-	-	-	-	-	-	-	-	0.0%
Airfield Area	49,641,928	59,334,000	55,373,000	54,633,000	56,447,000	58,093,000	60,397,000	62,306,000	2.4%
Other Buildings and Areas	18,825,404	10,604,000	10,336,000	8,828,000	8,898,000	9,208,000	9,551,000	9,792,000	-1.1%
Northeast Philadelphia Airport	6,454,405	6,953,000	6,907,000	6,799,000	6,990,000	7,199,000	7,503,000	7,731,000	2.3%
Outside Terminal Area	43,037,962	35,699,000	31,927,000	38,582,000	41,051,000	42,875,000	44,377,000	45,891,000	7.5%
Airport Services	49,194	-	-	-	-	-	-	-	0.0%
	$282,214,950	**$266,908,000**	**$256,744,000**	**$265,458,000**	**$275,222,000**	**$284,889,000**	**$295,068,000**	**$304,552,000**	**3.5%**
Percent Annual Increase		**-5.4%**	**-3.8%**	**3.4%**	**3.7%**	**3.5%**	**3.6%**	**3.2%**	

NOTES:

1 City of Philadelphia records.

2 City 2021 Final Rates and Charges Budget, which includes estimates for FY 2020.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-2 PROJECT REVENUES

(For Fiscal Years Ending June 30)

	ACTUAL [1]	ESTIMATED [2]	BUDGET [2]	PROJECTED [3]					COMPOUNDED ANNUAL
	2019	2020	2021	2022	2023	2024	2025	2026	GROWTH RATE (2021 - 2026)
PROJECT REVENUES									
Airline Revenues [4]									
Terminal Area rentals	$148,694,210	$113,488,000	$164,081,000	$147,750,000	$140,836,000	$164,313,000	$165,062,000	$166,478,000	0.3%
Ramp Area rentals	307,105	74,000	507,000	310,000	326,000	394,000	385,000	1,529,000	24.7%
Landing fees [5]	83,890,439	54,437,000	83,937,000	78,772,000	79,456,000	87,730,000	89,454,000	92,716,000	2.0%
AIRLINE REVENUES	**$232,891,754**	**$167,999,000**	**$248,525,000**	**$226,832,000**	**$220,618,000**	**$252,437,000**	**$254,901,000**	**$260,723,000**	**1.0%**
Non-Airline Revenues									
Concessions									
Restaurants and Retail	$38,725,617	$30,386,000	$17,652,000	$33,192,000	$39,966,000	$41,002,000	$42,072,000	$43,174,000	19.6%
Automobile Parking	35,763,883	32,268,000	5,310,000	27,739,000	41,380,000	41,587,000	41,803,000	42,027,000	51.2%
Rental Car	18,479,564	13,829,000	8,424,000	17,728,000	22,284,000	22,432,000	22,582,000	22,739,000	22.0%
Ground Transportation	12,595,233	10,556,000	5,707,000	7,702,000	10,281,000	11,007,000	11,316,000	11,643,000	15.3%
Other Concessions	11,496,835	8,896,000	5,238,000	9,120,000	10,964,000	11,077,000	11,191,000	11,356,000	16.7%
	$117,061,132	**$95,935,000**	**$42,331,000**	**$95,481,000**	**$124,875,000**	**$127,105,000**	**$128,964,000**	**$130,939,000**	**25.3%**
Other Non-Airline Revenues									
Building and Ground Rentals [6]	$25,304,668	$24,944,000	$24,390,000	$23,592,000	$24,502,000	$24,823,000	$25,186,000	$25,637,000	1.0%
Hangar and Cargo Rentals	2,438,140	2,761,000	2,720,000	2,598,000	2,639,000	2,696,000	2,743,000	2,782,000	0.5%
Sales of Utilities	2,541,699	2,076,000	1,147,000	2,579,000	2,603,000	2,627,000	2,651,000	2,676,000	18.5%
Other Landing and Fuel Flowage Fees	2,633,343	2,521,000	1,145,000	1,996,000	2,035,000	2,069,000	2,103,000	2,145,000	13.4%
Miscellaneous	10,572,339	5,329,000	4,727,000	8,164,000	8,380,000	8,420,000	8,463,000	8,507,000	12.5%
CARES Act funds	-	78,850,000	18,157,000	19,430,000	-	-	-	-	-100.0%
Airport Services	49,194	-	-	-	-	-	-	-	
	$43,539,383	**$116,481,000**	**$52,286,000**	**$58,359,000**	**$40,159,000**	**$40,635,000**	**$41,146,000**	**$41,747,000**	**-4.4%**
NON-AIRLINE REVENUES	**$160,600,515**	**$212,416,000**	**$94,617,000**	**$153,840,000**	**$165,034,000**	**$167,740,000**	**$170,110,000**	**$172,686,000**	**12.8%**
TOTAL PROJECT REVENUES	**$393,492,269**	**$380,415,000**	**$343,142,000**	**$380,672,000**	**$385,652,000**	**$420,177,000**	**$425,011,000**	**$433,409,000**	**4.8%**
Percent Annual Increase		**-3.3%**	**-9.8%**	**10.9%**	**1.3%**	**9.0%**	**1.2%**	**2.0%**	

2020 Report

NOTES:

1 City of Philadelphia records.

2 City 2021 Final Rates and Charges Budget, which includes estimates for FY 2020.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Includes Airline Revenues carried forward from prior years and excludes Airline Revenues to be credited to subsequent year.

5 Includes Airlines' share of OTA net revenue from prior year.

6 Includes International Plaza revenues. Net of commercial paper note payments.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

TABLE 1-3 ANNUAL DEBT SERVICE REQUIREMENTS

(For Fiscal Years Ending June 30)

	ACTUAL [1]	ESTIMATED [2]	BUDGET [2]	PROJECTED [3]				
	2019	2020	2021	2022	2023	2024	2025	2026
DEBT SERVICE REQUIREMENTS								
Outstanding Bonds and Short-Term Borrowing								
Series 2005C	$ 15,917,502	$ 16,313,000	$ 16,298,000	$ 16,264,000	$ 16,229,000	$ 16,198,000	$ 16,154,000	$ -
Series 2010A	18,668,212	18,665,000	-	-	-	-	-	-
Series 2010D	26,390,700	26,387,000	-	-	-	-	-	-
Series 2011A	15,343,906	15,364,000	15,388,000	15,401,000	15,412,000	15,420,000	15,439,000	41,517,000
Series 2011B	2,587,769	2,592,000	2,590,000	2,593,000	2,590,000	2,591,000	2,591,000	2,591,000
Series 2015A	7,667,950	7,668,000	7,665,000	7,664,000	7,668,000	7,667,000	7,665,000	7,663,000
Series 2017A	9,260,954	10,365,000	10,483,000	10,484,000	10,487,000	10,488,000	10,477,000	10,488,000
Series 2017B	21,254,209	24,969,000	41,343,000	41,341,000	41,345,000	41,345,000	41,348,000	41,348,000
Direct Purchase Taxable Loan [4]	4,895,408	5,779,000	5,807,000	5,837,000	5,869,000	5,903,000	5,939,000	5,972,000
LOC Fees and other CP expense and fees [5]	5,020,653	2,096,000	1,566,000	3,126,000	3,751,000	4,376,000	5,001,000	5,626,000
	$ 127,007,263	**$ 130,198,000**	**$ 101,140,000**	**$ 102,710,000**	**$ 103,351,000**	**$ 103,988,000**	**$ 104,614,000**	**$ 115,205,000**
Proposed Debt [6]								
Series 2020A	$ -	$ -	$ 16,107,000	$ 9,080,000	$ 9,080,000	$ 16,110,000	$ 16,109,000	$ 16,110,000
Series 2020B	-	-	1,474,000	2,015,000	2,015,000	2,745,000	2,743,000	2,745,000
Series 2020C	-	-	28,008,000	19,858,000	19,855,000	29,406,000	29,400,000	4,316,000
	$ -	**$ -**	**$ 45,589,000**	**$ 30,953,000**	**$ 30,950,000**	**$ 48,261,000**	**$ 48,252,000**	**$ 23,171,000**
Future debt [7]	-	-	-	-	-	8,583,000	8,583,000	24,321,000
	$ -	**$ -**	**$ 45,589,000**	**$ 30,953,000**	**$ 30,950,000**	**$ 56,844,000**	**$ 56,835,000**	**$ 47,492,000**
Less: Interest Income [8]	(1,000,000)	(3,000,000)	(3,000,000)	(1,578,000)	(1,735,000)	(1,972,000)	(2,367,000)	(2,761,000)
TOTAL DEBT SERVICE REQUIREMENTS	**$ 126,007,263**	**$ 127,198,000**	**$ 143,729,000**	**$ 132,085,000**	**$ 132,566,000**	**$ 158,860,000**	**$ 159,082,000**	**$ 159,936,000**
Less: Existing Pledged PFC Revenues [9]	(31,188,782)	(31,200,000)	(62,218,000)	(24,716,000)	(24,722,000)	(31,241,000)	(31,251,000)	(32,195,000)
Less: Future Pledged PFC Revenues [10]	-	-	-	(15,000,000)	(21,115,000)	(21,115,000)	(21,115,000)	(21,115,000)
DEBT SERVICE REQUIREMENTS NET OF PLEDGED PFC REVENUES	**$ 94,818,481**	**$ 95,998,000**	**$ 81,511,000**	**$ 92,369,000**	**$ 86,729,000**	**$ 106,504,000**	**$ 106,716,000**	**$ 106,626,000**

2020 Report

NOTES:

1 City of Philadelphia records.

2 City 2021 Final Rates and Charges Budget, which includes estimates for FY 2020.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Assumes that the Airport renews the current direct loan with either commercial paper or another direct loan.

5 Assumes interest expense based on an outstanding CP balance of $250 million annually.

6 Represents the projected Debt Service on bonds to be issued to fund takeout $100 million of commercial paper notes and to refund the Series 2010A and Series 2010D.

7 Represents Debt Service on the additional bonds to be issued to fund the CDP during the Projection Period.

8 Represents excess cash balances in the Sinking Fund Reserves available to pay Debt Service.

9 Represents pledged PFC Revenues for eligible Debt Service on the Series 2010D, the Series 2011A, and the Series 2020C Bonds.

10 Represents the projected pledged PFC Revenues for eligible Debt Service on existing and future debt.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

TABLE 1-4 FUND DEPOSIT REQUIREMENTS

(For Fiscal Years Ending June 30)

	ACTUAL [1]	ESTIMATED [2]	BUDGET [2]	PROJECTED [3]				
	2019	2020	2021	2022	2023	2024	2025	2026
O&M Account	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000
Bond R&I Account	-	-	3,830,000	(6,387,000)	(1,778,000)	4,592,000	(333,000)	(562,000)
TOTAL FUND DEPOSIT REQUIREMENTS	**$ 1,000,000**	**$ 1,000,000**	**$ 4,830,000**	**$ (5,387,000)**	**$ (778,000)**	**$ 5,592,000**	**$ 667,000**	**$ 438,000**
Fund Deposit Requirements by Cost Center								
Terminal Area	$ 581,948	$ 589,000	$ 2,832,000	$ (4,079,000)	$ (709,000)	$ 3,988,000	$ 343,000	$ 180,000
Ramp Area	-	-	23,000	(16,000)	(4,000)	11,000	(1,000)	(5,000)
Airfield Area	175,932	219,000	1,350,000	(1,040,000)	(144,000)	1,085,000	141,000	90,000
Other Buildings and Areas	66,718	38,000	410,000	(375,000)	(82,000)	286,000	13,000	3,000
PNE	22,875	25,000	36,000	4,000	19,000	43,000	23,000	23,000
Outside Terminal Area	152,527	129,000	179,000	119,000	142,000	179,000	148,000	147,000
FUND DEPOSIT REQUIREMENTS BY COST CENTER	**$ 1,000,000**	**$ 1,000,000**	**$ 4,830,000**	**$ (5,387,000)**	**$ (778,000)**	**$ 5,592,000**	**$ 667,000**	**$ 438,000**

NOTES:

1 City of Philadelphia records.

2 City 2021 Final Rates and Charges Budget, which includes estimates for FY 2020.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-5 NET AIRLINE REVENUES REQUIRED

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]				
	2021	2022	2023	2024	2025	2026
Operating Expenses	$ 256,744,000	$ 265,458,000	$ 275,222,000	$ 284,889,000	$ 295,068,000	$ 304,552,000
Debt Service Requirements net of pledged PFC Revenues	81,511,000	92,369,000	86,729,000	106,504,000	106,716,000	106,626,000
Fund Deposit Requirements	4,830,000	(5,387,000)	(778,000)	5,592,000	667,000	438,000
TOTAL EXPENSES, NET DEBT SERVICE, AND FUND DEPOSITS	**$ 343,085,000**	**$ 352,440,000**	**$ 361,173,000**	**$ 396,985,000**	**$ 402,451,000**	**$ 411,616,000**
Less:						
Non-Airline Revenue	$ 94,617,000	$ 153,840,000	$ 165,034,000	$ 167,740,000	$ 170,110,000	$ 172,686,000
Airline Revenue Allocation [3]	4,754,000	-	10,616,000	8,739,000	8,096,000	7,780,000
OTA net revenues	(57,000)	(28,232,000)	(24,479,000)	(23,192,000)	(22,560,000)	(21,793,000)
Prior year carry-forwards	57,138,000	-	-	-	-	-
	$ 156,452,000	**$ 125,608,000**	**$ 151,171,000**	**$ 153,287,000**	**$ 155,646,000**	**$ 158,673,000**
NET AIRLINE REVENUE REQUIRED [4]	**$ 186,633,000**	**$ 226,832,000**	**$ 210,002,000**	**$ 243,698,000**	**$ 246,805,000**	**$ 252,943,000**

NOTES:

1 City 2021 Final Rate and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Represents Airlines' share of prior fiscal year OTA net revenues.

4 Shown net of Airline Revenues carried forward from prior years and Airline Revenue Allocation to be credited to subsequent year.

SOURCES: City of Philadelphia, Division of Aviation, (2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-6 AIRLINE RENTS AND FEES

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]				
	2021	2022	2023	2024	2025	2026
Terminal Area Rental Rates [3]						
Signatory Rental Rates						
Type 1	$196.44	$236.19	$193.64	$229.40	$230.96	$232.85
Type 2	147.33	177.15	145.23	172.05	173.22	174.64
Type 3	98.22	118.10	96.82	114.70	115.48	116.43
Type 4	49.11	59.05	48.41	57.35	57.74	58.21
Non-Signatory Rental Rates						
Type 1	$225.91	$271.62	$222.68	$263.81	$265.60	$267.78
Type 2	169.43	203.72	167.01	197.86	199.20	200.83
Type 3	112.95	135.81	111.34	131.91	132.80	133.89
Type 4	56.48	67.91	55.67	65.95	66.40	66.94
Ramp Area Rental Rate [4]	$10.10	$16.65	$17.51	$21.16	$20.68	$82.13
Landing Fee Rate [5]						
Signatory Landing Fee Rate	$5.04	$3.70	$2.92	$3.25	$3.32	$3.46
Non-Signatory Landing Fee Rate	5.80	4.25	3.36	3.74	3.82	3.98

NOTES:

1 City 2021 Final Rate and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Per square foot.

4 Per linear foot.

5 Per thousand pound unit.

SOURCES: City of Philadelphia, Division of Aviation, (2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-7 AIRLINE REVENUES

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]				
	2021	2022	2023	2024	2025	2026
Terminal Area Rentals	$ 108,469,000	$ 130,420,000	$ 106,921,000	$ 126,671,000	$ 127,530,000	$ 128,575,000
International Common Use Charges	14,460,000	17,405,000	29,338,000	34,760,000	34,993,000	35,557,000
Terminal Area Rentals and International Common Use Charges	**$ 122,929,000**	**$ 147,825,000**	**$ 136,259,000**	**$ 161,431,000**	**$ 162,523,000**	**$ 164,132,000**
Ramp Area Rentals	142,000	235,000	247,000	298,000	291,000	1,157,000
Landing Fee Revenue	63,562,000	78,772,000	73,496,000	81,969,000	83,991,000	87,654,000
NET AIRLINE REVENUE REQUIRED [3]	**$ 186,633,000**	**$ 226,832,000**	**$ 210,002,000**	**$ 243,698,000**	**$ 246,805,000**	**$ 252,943,000**

NOTES:

1 City 2021 Final Rates and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Shown net of Airline Revenues carried forward and Airline Revenue Allocation available from prior year.

SOURCES: City of Philadelphia, Division of Aviation, (2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-8 AIRLINE COST PER ENPLANED PASSENGER

(For Fiscal Years Ending June 30)

	BUDGET [1]	PROJECTED [2]				
	2021	2022	2023	2024	2025	2026
Net Airline Revenues Required	$ 186,633,000	$ 226,832,000	$ 210,002,000	$ 243,698,000	$ 246,805,000	$ 252,943,000
Less: Projected Cargo Landing Fees	(11,323,000)	(12,106,000)	(9,726,000)	(10,999,000)	(11,424,000)	(12,070,000)
PASSENGER AIRLINE REVENUES	**$ 175,310,000**	**$ 214,726,000**	**$ 200,276,000**	**$ 232,699,000**	**$ 235,381,000**	**$ 240,873,000**
Projected Enplaned Passengers [3]	7,497,000	13,376,000	16,814,000	16,925,000	17,040,000	17,158,000
Passenger Airline Cost per Enplaned Passenger						
Current Dollars	**$23.38**	**$16.05**	**$11.91**	**$13.75**	**$13.81**	**$14.04**
2021 Dollars [4]	23.38	15.74	11.45	12.96	12.76	12.72

NOTES:

1 City 2021 Final Rates and Charges Budget.

2 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

3 Enplaned passengers shown for FY 2021 reflect the projected enplaned passengers used in the final airline rates and charges budget.

4 Inflation rate assumed at 2.0 percent.

SOURCES: City of Philadelphia, Division of Aviation, (2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-9 APPLICATION OF PROJECT REVENUES

(For Fiscal Years Ending June 30)

	ACTUAL [1]	ESTIMATED [2]	BUDGET [2]	PROJECTED [3]				
	2019	2020	2021	2022	2023	2024	2025	2026
Airline Revenues [4]	$ 232,891,754	$ 167,999,000	$ 248,525,000	$ 226,832,000	$ 220,618,000	$ 252,437,000	$ 254,901,000	$ 260,723,000
Non-Airline Revenues	160,600,515	212,416,000	94,617,000	153,840,000	165,034,000	167,740,000	170,110,000	172,686,000
TOTAL PROJECT REVENUES	**$ 393,492,269**	**$ 380,415,000**	**$ 343,142,000**	**$ 380,672,000**	**$ 385,652,000**	**$ 420,177,000**	**$ 425,011,000**	**$ 433,409,000**
APPLICATION OF PROJECT REVENUES								
Net Operating Expenses	$ 161,160,835	$ 142,892,000	$ 137,580,000	$ 142,410,000	$ 148,580,000	$ 155,076,000	$ 160,034,000	$ 165,156,000
Sinking Fund [5]	94,818,481	95,998,000	81,511,000	92,369,000	86,729,000	106,504,000	106,716,000	106,626,000
Interdepartmental Charges	121,054,115	124,016,000	119,164,000	123,048,000	126,642,000	129,813,000	135,034,000	139,396,000
Bond R&I Account	-	-	3,830,000	(6,387,000)	(1,778,000)	4,592,000	(333,000)	(562,000)
O&M Account	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
Airline Revenue Allocation	4,132,000	4,754,000	-	10,616,000	8,739,000	8,096,000	7,780,000	7,396,000
Deposit to the Airport Discretionary Account	11,326,838	11,755,000	57,000	17,616,000	15,740,000	15,096,000	14,780,000	14,397,000
TOTAL APPLICATION OF REVENUES	**$ 393,492,269**	**$ 380,415,000**	**$ 343,142,000**	**$ 380,672,000**	**$ 385,652,000**	**$ 420,177,000**	**$ 425,011,000**	**$ 433,409,000**

NOTES:

1 City of Philadelphia records.

2 City 2021 Final Rates and Charges Budget, which includes estimates for FY 2020.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Includes Airline Revenues carried forward and Airline Revenue Allocation available from prior year.

5 Sinking Fund shown net of existing and projected Pledged PFC Revenues.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-10 DEBT SERVICE COVERAGE

(For Fiscal Years Ending June 30)

		ACTUAL [1]	ESTIMATED [2]	BUDGET [2]	PROJECTED [3]				
		2019	2020	2021	2022	2023	2024	2025	2026
PLEDGED AMOUNTS AVAILABLE FOR DEBT SERVICE									
Airline Revenues [4]		$ 232,891,754	$ 167,999,000	$ 248,525,000	$ 226,832,000	$ 220,618,000	$ 252,437,000	$ 254,901,000	$ 260,723,000
Non-Airline Revenues		160,600,515	212,416,000	94,617,000	153,840,000	165,034,000	167,740,000	170,110,000	172,686,000
Existing Pledged PFC Revenues [5]		31,188,782	31,200,000	62,218,000	24,716,000	24,722,000	31,241,000	31,251,000	32,195,000
Future Pledged PFC Revenues [6]		-	-	-	15,000,000	21,115,000	21,115,000	21,115,000	21,115,000
Other amounts available for Debt Service [7]		126,824,322	144,218,000	158,415,000	164,886,000	179,176,000	196,826,000	220,958,000	240,824,000
TOTAL AMOUNTS AVAILABLE FOR DEBT SERVICE	**[A]**	**$ 551,505,373**	**$ 555,833,000**	**$ 563,775,000**	**$ 585,274,000**	**$ 610,665,000**	**$ 669,359,000**	**$ 698,335,000**	**$ 727,543,000**
OPERATING EXPENSES									
Net Operating Expenses	**[B]**	$ 161,160,835	$ 142,892,000	$ 137,580,000	$ 142,410,000	$ 148,580,000	$ 155,076,000	$ 160,034,000	$ 165,156,000
Interdepartmental Charges		121,054,115	124,016,000	119,164,000	123,048,000	126,642,000	129,813,000	135,034,000	139,396,000
	[C]	**$ 282,214,950**	**$ 266,908,000**	**$ 256,744,000**	**$ 265,458,000**	**$ 275,222,000**	**$ 284,889,000**	**$ 295,068,000**	**$ 304,552,000**
FUNDS AVAILABLE FOR REVENUE BOND DEBT SERVICE COVERAGE									
Test 1	**[A - B = D]**	$ 390,344,538	$ 412,941,000	$ 426,195,000	$ 442,864,000	$ 462,085,000	$ 514,283,000	$ 538,301,000	$ 562,387,000
Test 2	**[A - C = E]**	269,290,423	288,925,000	307,031,000	319,816,000	335,443,000	384,470,000	403,267,000	422,991,000
DEBT SERVICE REQUIREMENTS	**[F]**	126,007,263	127,198,000	143,729,000	132,085,000	132,566,000	158,860,000	159,082,000	159,936,000
REVENUE BOND DEBT SERVICE COVERAGE									
Test 1	**[D ÷ F]**	3.10	3.25	2.97	3.35	3.49	3.24	3.38	3.52
Coverage Requirement		1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Test 2	**[E ÷ F]**	2.14	2.27	2.14	2.42	2.53	2.42	2.53	2.64
Coverage Requirement		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

NOTES:

1 City of Philadelphia records.

2 City 2021 Final Rates and Charges Budget, which includes estimates for FY 2020.

3 The current Airport-Airline Use and Lease Agreement expired on June 30, 2020 and the Airport and the Airlines have executed the first of two one-year renewals, which will expire on June 30, 2021. For the purpose of this analysis, the financial projections presented herein assume a continuation of the current rate-making methodology through FY 2026.

4 Includes required revenue for Terminal Area rentals, International and Common Use Fees, Ramp Area rentals, Airline Landing Fees, and any Airline Revenue Allocation or prior-year carry forwards.

5 Represents pledged PFC Revenues for eligible Debt Service on the Series 2010D and the Series 2011A Bonds.

6 Represents the projected pledged PFC Revenues for eligible Debt Service on the Series 2017 Bonds and future debt.

7 Per Section 5.01(a) of the General Ordinance, that portion of Aviation Operating Fund balance available for use as Amounts Available for Debt Service.

SOURCES: City of Philadelphia, Division of Aviation, (2019-2021); AVK Consulting, Inc. (2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

TABLE 1-11 SENSITIVITY ANALYSIS

(For Fiscal Years Ending June 30)

	PROJECTED					
BASELINE FORECAST	2021	2022	2023	2024	2025	2026
Projected Enplaned Passengers	7,312,000	13,376,000	16,814,000	16,925,000	17,040,000	17,158,000
Cost per Enplaned Passenger	$23.38	$16.05	$11.91	$13.75	$13.81	$14.04
Debt Service Coverage						
Test 1	2.97	3.35	3.49	3.24	3.38	3.52
Test 2	2.14	2.42	2.53	2.42	2.53	2.64
Operating Expenses	$256,744,000	$265,458,000	$275,222,000	$284,889,000	$295,068,000	$304,552,000
Non-Airline Revenue	$94,617,000	$153,840,000	$165,034,000	$167,740,000	$170,110,000	$172,686,000
Airline Revenues Required	$186,633,000	$226,832,000	$210,002,000	$243,698,000	$246,805,000	$252,943,000
Debt Service Requirements Net of PFC Revenues	$81,511,000	$92,369,000	$86,729,000	$106,504,000	$106,716,000	$106,626,000
Terminal Area Rental Rate - Type 1	$196.44	$236.19	$193.64	$229.40	$230.96	$232.85
Ramp Area Rental Rate	$10.10	$16.65	$17.51	$21.16	$20.68	$82.13
Landing Fee Rate	$5.04	$3.70	$2.92	$3.25	$3.32	$3.46
	PROJECTED					
LOW SCENARIO	2021	2022	2023	2024	2025	2026
Projected Enplaned Passengers	5,298,000	9,882,000	15,008,000	15,107,000	15,210,000	15,315,000
Cost per Enplaned Passenger	$33.78	$23.68	$14.51	$16.22	$16.29	$16.55
Debt Service Coverage						
Test 1	2.91	3.15	3.29	3.04	3.15	3.25
Test 2	2.08	2.22	2.33	2.22	2.30	2.38
Operating Expenses	$256,744,000	$265,458,000	$275,222,000	$284,889,000	$295,068,000	$304,552,000
Non-Airline Revenue	$82,994,000	$112,575,000	$148,781,000	$151,241,000	$153,383,000	$155,718,000
Airline Revenues Required	$190,312,000	$249,684,000	$229,386,000	$258,091,000	$261,389,000	$267,712,000
Debt Service Requirements Net of PFC Revenues	$81,511,000	$92,369,000	$89,520,000	$109,295,000	$109,507,000	$109,417,000
Terminal Area Rental Rate - Type 1	$203.18	$270.93	$213.11	$245.93	$247.18	$249.39
Ramp Area Rental Rate	$10.10	$16.65	$17.62	$21.16	$20.68	$82.08
Landing Fee Rate	$5.00	$4.78	$3.47	$3.85	$3.94	$4.10

SOURCES: City of Philadelphia, Division of Aviation, (2021 Baseline Scenario); AVK Consulting, Inc. (2021 Low Scenario, 2022-2026).

PREPARED BY: AVK Consulting, Inc., September 2020.

2020 Report

THIS PAGE INTENTIONALLY LEFT BLANK

2020 Report

APPENDIX II
FINANCIAL STATEMENTS OF THE DIVISION OF AVIATION
FISCAL YEAR ENDED JUNE 30, 2020

(This Page Intentionally Left Blank)

PHL PHILADELPHIA INTERNATIONAL AIRPORT

CITY OF PHILADELPHIA
Philadelphia Airport System

Municipal Securities Disclosure
Annual Financial Information
Fiscal Year Ended June 30, 2020

Intentionally Left Blank

PHL PHILADELPHIA INTERNATIONAL AIRPORT

Municipal Securities Disclosure Report
Annual Financial Report
For the Fiscal Year Ended June 30, 2020

TABLE OF CONTENTS

I. FINANCIAL SECTION

Introduction 1

Management's Discussion and Analysis (Unaudited) 2-24

Basic Financial Statements
- Statements of Net Position 25
- Statements of Revenues, Expenses and Changes in Fund Net Position 26
- Statements of Cash Flows 27

Notes to Financial Statements 28-83

Required Supplementary Information (Unaudited)
- Reconciliation of Fund Balance (Legally Enacted Basis) to Net Position (GAAP Basis) 84
- Budgetary Comparison Schedule 85

Disclosure Requirements

Table 1 Recent Trends in Enplaned Passengers – Fiscal Years 2018 – 2020 87

Table 2 Airline Market Shares of Enplaned Passengers – Fiscal Year 2020 88

Table 3 Airline Market Shared of Landed Weight – Fiscal Year 2020 89

Table 4 Summary of Historical Project Revenues and Expenses of the Airport System – Fiscal Years 2016 – 2020 90

Table 5 History of Application to Use PFC Revenues 91

Table 6 Historical PFC Revenues 92

Table 7 Historical Enplaned Passengers 93

II. STATISTICAL SECTION

Exhibit S-1	Airport Information	94
Exhibit S-2	Population Trends	95
Exhibit S-3	Employment by Industry	96
Exhibit S-4	City of Philadelphia Airport Employees	97
Exhibit S-5	Commercial Flights and Available Seats	98
Exhibit S-6	Passenger Load Factors	99
Exhibit S-7	Commercial Passenger Enplanements	100
Exhibit S-8	Airline Market Share by Passenger Enplanements	102
Exhibit S-9	Aircraft Operations by Airport	104
Exhibit S-10	Cargo Tonnage	105
Exhibit S-11	Annual Revenues, Expenses and Changes in Fund Net Position	107
Exhibit S-12	Operating Revenues by Source	108
Exhibit S-13	Scheduled Rates and Charges	111
Exhibit S-14	Ratios of Outstanding Debt	112
Exhibit S-15	Pledged Debt Service Coverage	113
Exhibit S-16	Airport Debt Service by Year	114
Exhibit S-17	Current Top 30 Passenger Origin and Destination Markets	115
Exhibit S-18	Historical Domestic Top 10 Passenger Origin and Destination Markets	116
Exhibit S-19	Historical International Top 10 Passenger Destination Markets	117
Exhibit S-20	Airline Market Share by Landed Weight	118
Exhibit S-21	Passenger Facility Charges	120

INTRODUCTION

Philadelphia International Airport ("PHL", or the "Airport") and Northeast Philadelphia Airport ("PNE") are owned by the City of Philadelphia (the "City") and operated by the Division of Aviation (the "Division"). The following discussion and analysis of the financial performance and activity of the Division is to provide an introduction and understanding of the basic financial statements of the City's Aviation Fund (Aviation Fund) for the fiscal year ended June 30, 2020 with selected comparative information for the fiscal year ended June 30, 2019.

This discussion has been prepared by management and should be read in conjunction with the financial statements and the notes thereto that follow this section. The financial statements presented are for the Aviation Fund only and are not intended to present fairly the financial position of the City as a whole or the results of its operations and cash flows. The Comprehensive Annual Financial Report of the City provides complete financial information as to the City and its component units. Complete financial information for the City and its component units can be found at: https://www.phila.gov/INVESTOR/Pages/reports.aspx.

The accounting policies of the City of Philadelphia, as reflected in the accompanying Aviation Fund financial statements, conform to accounting principles generally accepted in the United States of America for local government units as prescribed by the Governmental Accounting Standards Board. Accounting principles generally accepted in the United States of America for proprietary funds, such as the Aviation Fund, require that both earnings and expenses be recorded as they accrue, and that depreciation of fixed assets be recorded as an expense. The financial statements for fiscal year 2020 are presented in accordance with accounting principles generally accepted in the United States of America.

The financial statements contained in the Financial Section of this document are reconcilable with the Basic Financial Statements contained in the City's Comprehensive Annual Financial Report for fiscal year 2020, which are audited by the Office of the Controller of the City of Philadelphia.

For purposes of calculating Scheduled Airline rentals, fees and charges, and demonstrating compliance with the Rate Covenant, Aviation Fund accounts are maintained on the accrual basis of accounting adjusted to meet the particular requirements of the General Airport Revenue Bond Ordinance of the City. Using this basis of accounting, revenues are recorded as they are earned, and operating expenses are recorded as they are incurred. In addition, principal payments on debt are recorded as an element of expense in lieu of depreciation, and equipment purchases and other capital outlays funded from operations are charged to expense in the year of acquisition.

For purposes of budgeting, Aviation Fund accounts are maintained on the modified accrual basis of accounting also referred to as the "legally enacted basis." Under this basis, revenues are recorded in the year received. Obligations are recognized and recorded as expenses at the time they are paid or encumbered. A reserve is maintained for encumbrances at the close of the fiscal year, intended to be sufficient to liquidate the estimated related obligations.

BACKGROUND INFORMATION ON THE AVIATION FUND

The Aviation Fund is an enterprise fund of the City. Enterprise funds are established by governmental units to account for services that are provided to the general public based on user charges, and they are operated in a manner similar to business-type activities. The Aviation Fund was created and authorized as part of the fiscal year 1974 Operating Budget Ordinance approved by City Council on June 7, 1973 and made effective July 1, 1973.

The Aviation Fund is self-supporting, using aircraft landing fees, terminal building rentals, concession revenue and other facility charges to fund annual expenses. The Airport's capital program is funded by airport revenue bonds issued by the City, commercial paper ("CP"), federal and state grants, passenger facility charges ("PFCs"), customer facility charges ("CFCs"), and operating revenues.

DESCRIPTION OF PHILADELPHIA AIRPORT SYSTEM

PHL is classified by the Federal Aviation Administration ("FAA") as a large air traffic hub (enplaning 1.0% or more of the total passengers enplaned in the U.S.). According to data reported for calendar year 2019 by Airports Council International – North America, PHL was ranked the twentieth busiest airport in the United States, serving 33.0 million passengers; nineteenth busiest in the nation for aircraft operations; and fifteenth busiest in the nation for cargo tonnage.

The Airport serves residents and visitors from a broad geographic area that includes eleven counties within four states: Pennsylvania, New Jersey, Delaware, and Maryland. The Airport System consists of the following:

Philadelphia International Airport

PHL has approximately 2,598 acres located partly in the southwestern section of the City and partly in the northeastern section of Delaware County, about 7.2 miles from Center City Philadelphia. The Airport's runway system consists of parallel Runways 9L-27R and 9R-27L, crosswind Runway 17-35, commuter Runway 8-26, and interconnecting taxiways. PHL's terminal facilities consist of seven terminal units totaling approximately 3.3 million square feet and include ticketing areas, passenger and baggage screening areas, passenger hold rooms and other amenities, baggage claim areas, a variety of food, retail and service establishments, and other support areas.

Outside of the PHL terminal area, PHL also has the following: six active cargo facilities; various support buildings; training areas; an air traffic control tower; a fixed-base operator; corporate hangars; a fueling supply facility; two American Airlines aircraft maintenance hangars; a first-class office complex; a 14-story hotel; seven rental car facilities; a cell-phone lot; employee parking lots; and five public parking garages.

Northeast Philadelphia Airport

PNE is located on approximately 1,118 acres situated within the City limits, ten miles northeast of Center City Philadelphia. PNE serves as a reliever airport for PHL and provides for general

aviation, air taxi, corporate, and occasional military use. The airport currently has no scheduled commercial service. There are presently 85 T-hangars, ten corporate hangars and six open hangars for general aviation activities.

THE AIRLINE INDUSTRY

Impact of COVID-19 on the Airport System

The outbreak of a novel strain of coronavirus ("COVID-19") was declared a worldwide pandemic by the World Health Organization on March 11, 2020. The COVID-19 pandemic and resulting restrictions have severely disrupted and continue to disrupt the airline industry. Airports across the United States, including PHL, have been acutely affected by interruptions in domestic and international travel, reductions in passenger volumes and flights, as well as by the broader economic slowdown resulting from the COVID-19 pandemic. In response, airlines have reduced flights and personnel to match capacity to reduced demand for air travel. The pandemic and resultant restrictions have also adversely affected PHL's concessionaires, parking operators, ground transportation companies, rental car companies and other service concessionaires located in and around the Airport resulting in reduced revenues to the Airport from such activities.

Summary of Actions Taken in Response to COVID-19

The Division recognized that the COVID-19 pandemic would have a significant impact on the overall operations and financial performance of the Airport System. To reduce operating expenses and mitigate the effects of COVID-19, the Division implemented the following actions throughout 2020, among others, which remain in effect: (1) a reduction of operating expenses, including contractual services, personnel and other expenses, and (2) temporary closures of portions of terminal facilities. Additionally, the Division continues to evaluate other temporary facility closures and/or reductions in personnel to match evolving operational demands.

Most of the Airport's retail, food and beverage leases are structured for the Airport to receive a percentage of gross revenues or a minimum annual guarantee ("MAG"), whichever is higher. However, to assist tenants, the Airport temporarily modified tenant concession agreements to generally suspend the MAG for all concessionaires and provide for an allowance of only agreed-upon percentages of gross revenues be paid until airline traffic levels return to 70% of the traffic levels, that were reported, prior to the pandemic. The Airport also offered deferrals of payments for concessionaires as well as deferrals of landing fees and terminal rental rates for airlines, for up to three months, between the months of February and July 2020. Full repayment of these deferrals occurred between September 1, 2020 through December 31, 2020.

PHL launched its COVID-19 Air Service Recovery and Incentive Program ("CASRIP"), an innovative program designed to recover capacity, retain airlines and afford economic stability for the Philadelphia region. This program, the first in the United States, incentivizes airlines to return to service by offering operational and marketing support to airlines for domestic, international and

cargo-only routes. Information on CASRIP can be found on the Airport's website at: https://www.phl.org/newsroom/casrip2020.

Federal Aid Related to COVID-19

The United States government passed legislative and regulatory actions as well as implemented measures to mitigate the broad disruptive effects of the COVID-19 pandemic. The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"), approved by the United States Congress and signed by the President on March 27, 2020 is one such legislative measure to address the crisis created by the COVID-19 pandemic and includes direct aid, in the form of grants, for airports as well as direct aid, loans and loan guarantees for passenger and cargo airlines. Provisions of the CARES Act provided $10 billion in grant assistance to airports in calendar year 2020.

The Division was awarded CARES Act funds in the amount of $116,281,943 for the Airport and $157,000 for Northeast Philadelphia Airport in Fiscal Year 2020. These funds are being used to pay debt service and operating expenses.

A second round of emergency relief funding, known as the Coronavirus Response and Relief Supplemental Appropriation Act ("CRRSA"), was approved by the United States Congress and signed by the President on December 27, 2020 as an additional legislative measure to mitigate the effects of the COVID-19 pandemic and includes nearly $2 billion in funds to be awarded to eligible U.S. airports and eligible concessionaires. The Division expects to be awarded approximately $28.9 million in March of 2021.

AIRPORT STATISTICS AND HIGHLIGHTS

✈Financial Position

In fiscal year 2020, the Aviation Fund strengthened its financial position with total revenues, including capital contributions, exceeding total expenses by $33.0 million, while assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $1,017.7 million, a 2.4% increase over the fiscal year 2019 total of $993.5 million. Unrestricted net position also increased $19.1 million, or 22.6%, in fiscal year 2020.

✈Air Service Highlights

Prior to the onset of the pandemic, air service was continuing to grow for PHL. At fiscal year-end 2020, PHL offered 133 non-stop destinations, 97 domestic and 36 international. Due to the pandemic, however, seat capacity in fiscal year 2020 decreased by 3.5 million or 17.8% over fiscal year 2019, bringing the fiscal year 2020 total seat capacity to 16.2 million. Domestic seats decreased 2.7 million or 15.6%, while international seats decreased 837 thousand or 32.0%.

In calendar year 2020, PHL had four new routes and regained eleven routes, that had stopped operations due to the pandemic, as well as gaining one new passenger carrier, Eastern Airlines, which began operating flights to the Dominican Republic. Spirit began their first international

flight from PHL to Cancun, Mexico in 2020 and American Airlines announced Cozumel, Mexico and Palm Springs, California. Both British Airways and Qatar resumed service in September after stopping operations in March. In addition, American Airlines started cargo-only flights from PHL, for the first time since 1984, with seven destinations on a regularly scheduled basis. In July 2020, PHL also gained a new cargo-only operator, Amerijet, who started with one daily operation and added a second daily operation in November 2020.

✈Passenger Activity

The total number of passengers served by the Airport in fiscal year 2020 was approximately 23.8 million, which is a decrease of 26% from fiscal year 2019 passengers of 32.2 million. During the first half of fiscal year 2020, enplanements were increasing approximately 5% over fiscal year 2019 due to the continued growth in the economy and additional air service competition provided by low-cost airlines. However, during the third and fourth quarters of fiscal year 2020, enplanements and operations decreased abruptly due to the COVID-19 pandemic. Enplanements decreased approximately 59% in the second half of fiscal year 2020 and flight operations dropped almost 39% as passenger demand decreased at a greater rate than the number of reductions in airline flights. Overall, PHL saw a 26.4% decrease in total enplanements and 17.8% decrease in flight operations for fiscal year 2020.

Additional information about the Airport and its passenger activity can be found at: https://www.phl.org/annualreport2020.

Enplanements and Operations Activity at PHL

	Fiscal Year 2020	Fiscal Year 2019	Increase (Decrease)	Percentage Increase (Decrease)
Domestic Enplanements (Outbound passengers):	10,531,456	14,046,663	(3,515,207)	(25.0)%
International Enplanements (Outbound passengers):	1,315,951	2,041,761	(725,810)	(35.5)%
Total Enplanements (Outbound passengers):	11,847,407	16,088,424	(4,241,017)	(26.4)%
Operations (Takeoffs & landings):	317,344	386,112	(68,768)	(17.8)%
Landed Weight (1,000-pound units):	18,318,544	21,963,531	(3,644,987)	(16.6)%

PHL continues to serve as a major hub for American Airlines, which, together with its regional airline affiliates, accounted for approximately 8.0 million enplaned passengers, or 67.8% of the Airport's enplaned passengers, in fiscal year 2020.

✈Cargo Activity

Cargo tonnage carried in the bellies of passenger carrier flights decreased approximately 39 thousand tons, or 37.3%, from fiscal year 2019 to fiscal year 2020 due to decreased air service as

a result of COVID-19. However, this was offset by an increase in cargo activity by PHL's cargo carriers as the demand for online goods increased during the COVID-19 pandemic. For the first half of fiscal year 2020, PHL was up approximately 11% in total cargo tonnage and ended the year with a 6.5% increase over fiscal year 2019.

Cargo being handled by PHL's passenger carriers accounted for 10.7% of total cargo tonnage in fiscal year 2020. UPS accounted for 66.2% of total cargo tonnage for fiscal year 2020.

Cargo Activity at PHL
(amounts expressed in tons)

	Fiscal Year 2020	Fiscal Year 2019	Increase (Decrease)	Percentage Increase (Decrease)
Domestic Freight:	440,407	395,038	45,369	11.5%
International Freight:	133,092	159,568	(26,476)	(16.6)%
Sub-Total Freight:	573,499	554,606	18,893	3.4%
Domestic Mail:	40,020	20,847	19,173	92.0%
International Mail:	320	817	(497)	(60.8)%
Sub-Total Mail:	40,340	21,664	18,676	86.2%
Total Cargo (Freight and Mail):	613,839	576,270	37,569	6.5%

✈Airport-Airline Use and Lease Agreement

Beginning July 1, 2015, the City and the principal airlines serving the Airport operated under the terms of an Airport-Airline Use and Lease Agreement ("Airline Agreement") that, similar to prior agreements, established procedures for the annual review and adjustment of airline rentals, fees, and charges so that the Airport System yielded Amounts Available for Debt Service at least sufficient to comply with the Rate Covenant established in its General Airport Revenue Bond Ordinance. The Airline Agreement has a five-year term through June 30, 2020, with options for two one-year extensions. Both extensions have been executed, so the Airline Agreement's expiration date is June 30, 2022.

PHL has executed the Airline Agreement with the fifteen airlines at the Airport: Aer Lingus, Air Canada, Alaska Airlines, American Airlines, British Airways, Delta Air Lines, FedEx, Frontier Airlines, JetBlue Airways, Lufthansa, Qatar Airways, Southwest Airlines, Spirit Airlines, United Airlines and UPS.

✈Grant Funding

In fiscal year 2020, PHL and PNE were awarded the following grants:

- $116.3 million for PHL and $157 thousand for PNE from the CARES Act to assist the two airports during the COVID-19 pandemic

- $42.7 million for PHL for Taxiway K reconstruction and $9.1 million for PNE for rehabilitation of Runway 6-24 from the FAA's Airport Improvement Program (AIP)
- $1.04 million for PHL for electronic ground support equipment from the FAA through their Voluntary Airport Low Emissions (VALE) Program
- $1.4 million for PHL from the Pennsylvania Commonwealth Financing Authority to assist with the relocation of Tinicum Island Road
- $1.2 million for PHL from the Transportation Security Administration (TSA) for Law Enforcement Officer (LEO) coverage at security check points
- $555 thousand for PHL from the TSA for canine team expenses

✈Awards and Recognition

Most Admired CEO: In December 2019, PHL CEO Rochelle "Chellie" Cameron was honored as a recipient of the Most Admired CEO award by the Philadelphia *Business Journal*. The *Business Journal* received nearly 100 nominations from a broad range of industries, and an editorial team selected a group of 25 local executives. According to the *Business Journal*, "Honorees are established leaders with a strong record of innovation in their field, outstanding financial performance, and a commitment to quality, a strong vision, a commitment to diversity in the workplace and contributions to Greater Philadelphia."

Airport Health Accreditation: In February 2021, PHL achieved the Airport Health Accreditation (AHA) from Airports Council International – North America (ACI). The AHA program requires airports to have rigorous and documented standards for cleaning, disinfecting, social distancing, and ventilation across its entire physical footprint, from check-in counters to security checkpoints to boarding gates to concessions, baggage claim and more.

PHL/PNE Anniversaries: The Division celebrated two anniversaries during fiscal year 2020 - PHL's 80th on June 20, 2020 and PNE's 75th on June 26, 2020.

✈Environmental Stewardship

Throughout fiscal year 2020, the Airport continued implementing the Airport Sustainability Action Plan, which is a strategy to execute recommendations from the both the Energy and Emissions Plan as well as the Waste and Recycling Plan. The purpose is to advance water conservation, wetlands mitigation, as well as industrial wastewater and stormwater management efforts. In addition, the Airport conducted a Climate Vulnerability Assessment ("CVA") to better understand and prepare for the impacts of climate change on PHL's employees, visitors, services, facilities, and assets. The CVA approach involved researching climate trends and projections for the Philadelphia region, identifying and assessing key vulnerabilities at PHL, and recommending priority action areas to address projected climate change impacts to the Airport. More information on the Airport's various sustainability initiatives can be found on the Airport's website at: https://www.phl.org/newsroom.

✈Outreach

During fiscal year 2020 and beyond, the Airport initiated several efforts to support minority and women owned businesses during the pandemic and leading to recovery. PHL held several webinars to raise awareness about pandemic relief programs for diverse businesses and connect these firms to options that can help them persevere and thrive when recovery arrives. Additional outreach initiatives undertaken by the Airport included: the regions first ever Transgender Job Fair, in partnership with TransWork, which focused on helping transgender, non-binary, and gender variant individuals find employment at the Airport; working with the US Department of Transportation ("DOT") to revise Disadvantage Business Enterprise ("DBE") Program procedures to better support disadvantaged businesses during the pandemic; and instituting the Hidden Disabilities Lanyard Program that is designed to help focus on travelers who might benefit from support, but whose needs are not visible. Additional information regarding the Airport's outreach efforts and diversity initiatives can be found on the Airport's website at: https://www.phl.org/newsroom.

✈Guest Experience

In 2020, PHL transformed our approach to guest experience to re-build trust and meet the rapidly evolving needs of our guests. The initiatives prioritized guests' safety and health and gave guests more control over their travel journey. In June 2020, PHL launched a new Guest Experience Stakeholder Council, with participants from over 35 organizations across the airport community, which was instrumental in coordinating a nimble response to COVID-19 safety requirements for employees and customers. In October 2020, PHL became the first U.S. airport to launch an integrated food and beverage contactless ordering and delivery service through our OrderatPHL program, powered by servy and AtYourGate, allowing passengers and employees a safe, contactless way to have food and retail items delivered to them anywhere in the airport. PHL also implemented the following initiatives in 2020 to help restore customer confidence: development of an online airport map highlighting touchless health amenities to help guests navigate their way through the terminals to their gates; acquisition and implementation of Clorox Total 360 electrostatic sprayers into cleaning procedures; and the addition of antimicrobial TSA bins for use airport-wide. In December 2020, PHL partnered with Jefferson Health to launch an on-site COVID-19 testing program, offering both rapid antigen and PCR tests. The testing site served more than 3,000 passengers in its first two months. Details on several other PHL guest experience programs can be found on the Airport's website at: https://www.phl.org/newsroom.

FINANCIAL STATEMENTS OVERVIEW

The basic financial statements of the Aviation Fund are designed to provide the reader with a broad overview of the organization's finances. The financial statements are prepared in accordance with Generally Accepted Accounting Principles (GAAP) promulgated by the Governmental Accounting Standards Board (GASB).

The financial statements of the Aviation Fund are presented on an accrual basis, and accordingly, income is recorded as earned and expenses as incurred. Operating revenues are comprised of airline and non-airline revenues. Airline revenues are those paid by PHL's agreement carriers and include rents, landing fees, and passenger fees. Non-airline revenues are all other operating revenues that do not qualify as airline revenue. These consist of parking, rental car, ground transportation, concessions, advertising, utilities, and other operating revenue. Operating expenses include salaries and employee benefits; purchased services; materials and supplies; and depreciation/amortization. Non-operating revenue and expense items include interest income, interest expense, rental car-related CFCs, airfare-related PFCs, and operating grants.

Aviation Fund financial activity is presented in three financial statements:

The *Statement of Net Position* presents information on all Aviation Fund assets, deferred outflows of resources, liabilities, and deferred inflows of resources as of the fiscal year-end; assets and liabilities are classified as either current or non-current. The difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources is reported as net position. Net Position is segregated into four components: net investment in capital assets; restricted for capital projects; restricted for debt service; and unrestricted net position.

The *Statement of Revenues, Expenses and Changes in Fund Net Position* presents revenue and expense activity for the current year. The difference between revenue and expense will either increase or decrease total net position. The ending balance of net position resulting from this increase or decrease is reflected on the Statement of Net Position.

The *Statement of Cash Flows* presents the actual inflow and outflow of cash by category during the year. The difference between the inflow and outflow of cash increases or decreases the total cash balance. The resulting ending cash balance is reflected on the Statement of Net Position.

The Aviation Fund financial statements can be found after the Management's Discussion and Analysis. The Notes follow and provide additional information that is essential to a full understanding of the data provided in the Aviation Fund financial statements. In addition to the basic financial statements and accompanying notes, government accounting standards require presentation of *Required Supplementary Information* ("RSI").

FINANCIAL HIGHLIGHTS

Net Position Summary

The following table summarizes the Airport's assets, deferred outflows, liabilities, deferred inflows and net position at June 30, 2020 and June 30, 2019:

City of Philadelphia – Aviation Fund
Statements of Net Position
($000)

	Fiscal Year 2020	Fiscal Year 2019	Dollar Increase (Decrease)	Percentage Increase (Decrease)
Current assets	$ 291,624	$ 268,815	$ 22,809	8.5%
Non-current assets	739,009	777,697	(38,688)	(5.0)%
Capital assets, net	2,147,207	2,132,537	14,671	0.7%
Total assets	3,177,841	3,179,049	(1,208)	(0.0)%
Deferred outflows	27,948	21,193	6,754	31.9%
Current liabilities	365,029	320,263	44,765	14.0%
Non-current liabilities	1,815,503	1,878,857	(63,354)	(3.4)%
Total liabilities	2,180,532	2,199,120	(18,588)	(0.8)%
Deferred inflows	7,533	7,579	(44)	0.6%
Net position:				
Net investment in capital assets	836,970	788,050	48,920	6.2%
Restricted for capital projects	97,242	89,274	7,970	8.9%
Restricted for debt service	187,092	200,728	(13,636)	(6.8)%
Unrestricted	(103,581)	(84,509)	(19,073)	(22.6)%
Total net position	$ 1,017,724	$ 993,543	$ 24,181	2.4%

Total net position serves as an indicator of the Airport's financial condition. At June 30, 2020, the Aviation Fund's assets and deferred outflows exceeded liabilities and deferred inflows by $1,017.7 million. Between fiscal year 2019 and fiscal year 2020, total net position increased by $24.1 million. Changes in total net position are summarized below.

Assets

Current assets increased $22.8 million as a result of a $20.9 million increase in accounts receivable mainly related to a tenant relief program offered by the Airport in response to the COVID-19 pandemic, which allowed concessionaires and airlines to defer terminal rents and landing fees, for up to three months between February and July 2020, with payments occurring from September through December 2020.

Non-current assets decreased $38.7 million due to a $301.2 million increase in investments offset by the following: a $313.4 million decrease in restricted cash and cash equivalents; a $13.6 million decrease in sinking fund reserves; and decreases of $8.3 million and $1.8 million in restricted receivables related to the decline of passenger facility charges and customer facility charges, respectively, due to the COVID-19 pandemic.

Capital assets increased $14.7 million due to $195 million increase in infrastructure offset by a $121 million decrease in construction in progress and a $95.8 million increase in accumulated depreciation.

Deferred outflows of resources

Deferred outflows of resources increased by a net of $6.8 million primarily from a $5 million increase in pension plan liabilities.

Liabilities

Current liabilities increased $44.8 million as compared to fiscal year end 2019, primarily due to a $36.4 increase in unearned revenue; a $15 million increase in commercial paper notes; and a $4.4 million increase in current maturities of long-term bond debt. These increases were partially offset by a net decrease of $8.2 million in accounts and vouchers payable and a net decrease of $4.0 million in construction contracts payable.

Non-current liabilities decreased $63.4 million as compared to fiscal year 2019, primarily due to a $68.7 million decrease in revenue bonds, net of current maturities; a $10.6 million decrease in unamortized bond premiums; and a $2.4 million decrease in long-term taxable airport revenue notes. These decreases were partially offset by the following increases: $5.1 million increase to the net pension liability; $4.4 million increase in other post-employment benefits liability; and $8.6 million increase in other non-current liabilities.

Deferred inflows of resources

Deferred inflows of resources decreased $44 thousand in fiscal year 2020. This includes a $1.0 million increase in deferred gain on refunding debt and a $1.1 million decrease in deferred inflows related to other post-employment benefits, and a net increase of $44 thousand in deferred pension revenue.

Net investment in capital assets

Net investment in capital assets increased by $48.9 million, primarily due to a $14.7 million net increase in capital assets, and an increase of $51.6 million in debt, which was offset by a $30.4 million decrease in unspent capital debt proceeds. In addition, there was a net increase of $9.0 million in unamortized bond premiums and a $4.0 million increase in construction contracts payable.

Restricted for capital projects

Restricted for capital projects represents funds available but restricted for construction of capital assets, reduced by debt payable on those funds. The increase of $8.0 million in fiscal year 2020 is a result of a $16.3 million increase in the PFC balance reserved for "pay as you go" construction partially offset by a decrease of $8.2 million in restricted assets used for construction purposes.

Restricted for debt service

The restricted for debt service balance decreased by $13.6 million. This decrease was primarily attributable to a $1.5 million reduction in the sinking fund account for fiscal year 2020, and a $58.9 thousand decrease of sinking fund reserves. In addition, there was a $116.5 thousand decrease in restricted assets used for debt service.

Unrestricted net position

Unrestricted net position decreased by $19.1 million. The unrestricted portion is comprised of the net position less the net investment in capital assets and restricted assets. In fiscal year 2020, this amount is comprised of a $48.9 decrease in total net investment in capital assets, net of related debt and an $8.0 million decrease in total restricted assets used for capital projects. These decreases were offset by a $24.2 million increase in net position and a $13.6 million increase in restricted assets used for debt service.

Summary of Revenues, Expenses and Changes in Net Position

The following table compares the changes in revenues, expenses and fund net position between June 30, 2020 and June 30, 2019:

City of Philadelphia – Aviation Fund
Statements of Revenues, Expenses and Changes in Fund Net Position
($000)

	Fiscal Year 2020	Fiscal Year 2019	Dollar Increase (Decrease)	Percentage Increase (Decrease)
Operating revenues	$ 295,405	$ 391,072	$ (95,667)	(24.5)%
Less: Operating expenses	(377,501)	(373,698)	(3,804)	1.0%
Operating gain (loss)	(82,096)	17,374	(99,471)	(572.5)%
Non-operating revenue, net	94,720	65,653	29,066	44.3%
Income before capital contributions	12,624	83,028	(70,405)	(84.8)%
Capital contributions	20,328	22,239	(1,911)	(8.6)%
Changes in net position	32,952	105,266	(72,314)	(68.7)%
Net position beginning of year	993,543	888,277	105,266	11.9%
Prior period adjustments	(8,771)	-	(8,771)	-
Net position end of year	$ 1,017,724	$ 993,543	$ 24,181	2.4%

Airport income before capital contributions is composed of operating and non-operating revenues, net of expenses. Capital contributions represent federal and state grants for approved capital projects.

The change in net position represents the results of operations and is a useful indicator of whether the overall financial condition of the Airport has improved or declined during the year. In fiscal year 2020, net position increased by $33.0 million from the prior year.

Revenues

For fiscal year 2020, approximately 66% of all revenue came from operating sources. Operating revenue consists of non-airline revenue and airline revenue, which comprised 44% and 56% respectively in fiscal year 2020, and 41% and 59% in fiscal year 2019. Additional information on Airport revenues can be found in Exhibit S-12 in the Statistical Section.

Operating Revenues

Operating revenues, which are comprised of airline and non-airline revenues, decreased by $95.7 million or 24.5% in fiscal year 2020. The following table presents a comparative summary of operating revenues by source for fiscal year 2020 and fiscal year 2019, followed by explanations of changes in these categories between years.

Operating Revenues
($000)

	Fiscal Year 2020	Fiscal Year 2019	Dollar Increase (Decrease)	Percentage Increase (Decrease)
Operating revenues				
Rents	$ 92,060	$ 112,438	$ (20,377)	(18.1)%
Landing fees	52,352	81,041	(28,689)	(35.4)%
Passenger fees	19,556	37,249	(17,693)	(47.5)%
Total airline revenues	163,969	230,727	(66,759)	(28.9)%
Parking	35,024	37,152	(2,128)	(5.7)%
Food/Beverage/Retail	30,613	38,726	(8,113)	(20.9)%
Rental cars	15,473	19,822	(4,349)	(21.9)%
Ground transportation	8,410	9,906	(1,496)	(15.1)%
Other operating	41,917	54,739	(12,822)	(23.4)%
Total non-airline revenues	131,437	160,344	(28,907)	(18.0)%
Total operating revenue	$ 295,406	$ 391,072	$ (95,666)	(24.5)%

Airline Revenues

- Rents derived from PHL's signatory airlines decreased by $20.4 million or 18.1% from fiscal year 2019 to fiscal year 2020 due to decreases in various terminal rental rates in fiscal year 2020 caused by projected increases in non-airline terminal concession revenues which are used to offset the rents charges to the airlines.
- Landing fees derived from PHL's signatory airlines decreased by $28.7 million or 35.4% from fiscal year 2019 to fiscal year 2020 primarily due to a decrease in flight activity as a result of the COVID-19 pandemic.
- Passenger fees derived from PHL's signatory airlines decreased by $17.7 million or 47.5% in fiscal year 2020 due to a decrease in the fees charged for international common use gates and a decrease in passengers as a result of travel restrictions and COVID-19.

Non-airline Revenues

- Parking revenue in fiscal year 2020 decreased by $2.1 million or 5.7% from fiscal year 2019 due to a decrease in originating enplanements caused by decreases in demand due to COVID-19.
- Food/Beverage/Retail revenue decreased $8.1 million or 20.9% due to a decrease in passenger activity attributable to the COVID-19 pandemic.

- Rental car revenue decreased $4.4 million or 21.9% in fiscal year 2020 due to a decrease in passengers caused by COVID-19.
- Ground transportation revenue decreased $1.5 million or 15.1% due mainly to Transportation Network Company (TNC) revenue declining as a result of COVID-19.
- Other operating revenue, which consists of office space rental income, domestic gate turn fees, advertising, catering, hotel, fuel flowage, utilities and other miscellaneous revenue, decreased $12.8 million or 23.4% due primarily to reduced domestic gate turn fees as well as reduced use of those gates due to the impacts of COVID-19. Additionally, net rental income from office space was reduced due to increases in office building maintenance costs in fiscal year 2020.

Non-Operating Revenues

- Non-operating revenues, which consist of PFCs, CFCs, interest income, and federal, state and local grants for non-capital purposes, increased by $31.7 million or 25.8% in fiscal year 2020. The following table presents a comparative summary of non-operating revenues by source for fiscal year 2020 and fiscal year 2019, followed by explanations of changes in these categories between years.

Non-operating Revenues
($000)

	Fiscal Year 2020	Fiscal Year 2019	Dollar Increase (Decrease)	Percentage Increase (Decrease)
Non-operating revenue				
Passenger facility charges	$ 46,749	$ 64,032	$ (17,282)	(27.0)%
Customer facility charges	24,636	31,080	(6,445)	(20.7)%
Interest Income	25,343	23,582	1,761	7.5%
Operating grants	57,639	1,463	56,176	3839.2%
Other non-operating	-	2,529	(2,529)	(100.0)%
Total non-operating revenue	$ 154,367	$ 122,685	$ 31,682	25.8%

- PFCs decreased by $17.3 million or 27.0% due to a decrease in enplanements and the related travel restrictions created by COVID-19.
- CFCs decreased by $6.4 million or 20.7% due to a decrease in demand for car rentals as a result of travel restrictions from COVID-19.
- Interest income increased by $1.8 million or 7.5% in fiscal year 2020 due to investment activity in operating, capital and sinking fund reserve accounts totaling approximately $4.5 million. In addition, there was a change in market value allowance resulting in a $2.8 million decrease in interest income.

- Grants from other governments for non-capital purposes (operating grants) increased by $56.2 million or 3839.2% in fiscal year 2020, due to draws of $53.8 million of the $116.3 million in CARES grant funding awarded by the federal government to PHL and PNE to assist with the impacts of COVID-19.

Expenses

Total Airport expenses result from a wide range of services both operating and non-operating. Operating expenses include wages, benefits, purchased services, materials and supplies, and other operating expenses, which account for 63% of total expenses; and depreciation and amortization, which account for 23% of total expenses. Non-operating expenses make up the remaining 14%, which includes debt service interest and other non-operating expenses.

The table below presents the major components of expense for fiscal year 2020 and fiscal year 2019, followed by an explanation of changes in these components.

Expenses
($000)

	Fiscal Year 2020	Fiscal Year 2019	Dollar Increase (Decrease)	Percentage Increase (Decrease)
Operating expenses				
Personnel services	$ 86,386	$ 81,053	$ 5,333	6.6%
Employee benefits	66,410	64,804	1,606	2.5%
Purchase of services	107,925	113,187	(5,263)	(4.6)%
Materials & supplies/equipment	8,863	8,202	659	8.0%
Other operating	5,525	5,773	(249)	(4.3)%
Depreciation	102,393	100,679	1,714	1.7%
Total operating expenses	377,501	373,698	3,803	1.0%
Non-operating expenses				
Debt service interest	59,290	57,033	2,257	4.0%
Other non-operating	357	-	357	-
Total non-operating expenses	59,647	57,033	2,614	4.6%
Total expenses	$ 437,149	$ 430,732	$ 6,417	1.5%

Operating expenses

Operating expenses increased by $3.8 million or 1.0% in fiscal year 2020 and are comprised of the following:

- Personnel services and employee benefits increased by a net total of $6.9 million or 4.8% in fiscal year 2020 due to wage increases and increases in the Airport's pension costs.

- Purchase of services decreased by $5.3 million or 4.6% in fiscal year 2020 mainly due to a decrease in contractual disbursements as part of the Airport's efforts to decrease operating expenses in response to the COVID-19 pandemic.
- Materials and supplies/equipment increased $659 thousand or 8.0% due to an increase in vehicle and equipment purchases.
- Other operating expenses decreased by $249 thousand or 4.3% in fiscal year 2020 due to a decrease in indemnities and taxes.

Non-operating expenses

- Non-operating expenses, which includes debt service interest and other non-operating expenses, increased $2.6 million or 4.6% in fiscal year 2020 mainly attributable to a change in amortization of bond premium and capitalization of interest expense.

CAPITAL ASSETS AND CONSTRUCTION

The Airport's investment in capital assets, net of accumulated depreciation, amounted to approximately $2.1 billion at the end of fiscal year 2020. Most of the capital asset balance is in runways, taxiways, and terminal buildings. Additional information regarding the Airport's capital assets is found in in the Footnotes Section under Footnote 3.

Capital Development

The Division of Aviation maintains an on-going Capital Development Program ("CDP") that addresses airport development needs, as well as repair and maintenance of existing facilities. The following sections describe the Division's capital plans at the Airport which address Airfield, Terminal, and Outside Terminal Area.

Under the Airline Agreement, the airlines have approved approximately $2.4 billion in capital development projects, of which approximately $1.0 billion has been spent to-date. The CDP includes approximately $1.4 billion of airline approved projects remaining to be completed, which incorporate long-term development projects and on-going rehabilitation and repair projects that generally address the Airport's capital needs. The primary focus of the CDP is for terminal development and rehabilitation, airfield improvements and pavement rehabilitation, apron improvements, land acquisition, ground transportation projects, security and information technology enhancements, support facilities, and improvements at PNE. The Airport continues to work with the airlines to evaluate operational needs and assess the timing and scope of projects. The CDP will continue to evolve as needs and priorities change.

The Airport is updating its Airport Master Plan in 2021 and 2022 to better guide future development and to establish airfield, terminal, and landside triggers, planning timelines and schedules to support long-term initiatives.

Below are highlights of major capital projects underway and recently completed. Additional information about the Airport's capital development program can be found on the Airport's website at: https://www.phl.org/about/cdp.

Major Capital Projects Underway

The following are some of the major capital projects currently underway and in various phases of construction.

HVAC COVID Enhancements: PHL is committed to ensuring the health and safety of our guests and employees. To this end, we are implementing several measures to help mitigate the transmission and spread of COVID-19. Bi-polar ionization technology creates charged particles that attach to and deactivate micro-organisms and viruses, rendering them harmless to building occupants resulting in a cleaner, healthier facility. This project is estimated to cost $7 million.

T/W 'K' Repair / Concrete - Package 1: This is one of our most important east-west taxiways, and key to airfield efficiency during taxiing operations. Based on the pavement condition survey findings and due to the increase of aircraft operations, this taxiway requires reconstruction. Package one is underway with package two expected to start in 2022. The combined project cost of $82.4 million is offset by federal and state funding of $55.8 million.

Apron: There has been a growing need for additional parking for overnight passenger and cargo aircraft to allow for gate space to be utilized by other active aircraft. The addition of this $40 million apron(s) creates eight (8) passenger aircraft parking locations.

PNE Runway 6-24 Phase Three: This 7,000-foot-long primary runway rehabilitation project at PNE consists of three phases of full depth reconstruction and associated electrical work. Runway 6-24 has received FAA funding totaling $19.64 million to date which has offset the multi-phased project cost of $37 million.

Loading Bridge Replacement Program Phase 2: Twelve loading bridges are being replaced to enhance passenger safety, security, and convenience during enplanement and deplanement. Phase two costs are expected to be $26.5 million.

Restroom Renovations: As part of our guest experience, the Airport has an ongoing restroom renovation program. This phase four of the program will reconstruct five restroom sets in Terminals D, E, and F at an estimated project cost of $15.5 million.

Video Surveillance System Phase 1: This $12 million phase addresses surveillance coverage within the Customs Border Protection area to meet security & operational requirements.

Improvements to Mechanical Systems Concourse B and C: This $11 million project enhances airflow to apron level office spaces in concourse B, C, and D.

Terminal D/E Curtainwall & Vestibule Upgrade Phases 2 & 3: These phases replace entrance door portals along the Departures Road at Terminal B, C, D & E. This $13 million multi- phased project is expected to be completed mid-2022.

Other Infrastructure Rehabilitation Projects: Numerous other repair and rehabilitation projects are in the planning, design and pre-construction phases, such as mechanical and electrical systems, elevator and escalator rehabilitation, roof repairs, IT and security enhancements, and roadway improvements.

Recently Completed Capital Projects and Acquisitions

Significant acquisitions, design and construction projects completed during fiscal year 2020 include the following:

East Airfield Rehabilitation: This $30 million project involved multiple pavement areas across the airfield including the north and south aprons and multiple taxiways. PHL received FAA and state funding of $19 million for this project.

Upgrade A-West Sector 3 Electronic Detection System: The Electronic Detection System (EDS) and Checked Baggage Reconciliation Area received technology upgrades consisting of new units to comply with TSA's Planning Guideline Design Standards. This improved 3D imaging technology, enhancing the analysis of details and specific structures of suspected threats, allowing for more efficient security decision-making on checked baggage. This project was completed in the spring of 2020 for $31.0 million, which included $13.3 million in TSA grant funds.

PNE Runway 6-24 Phase Two: Phase two of the 7,000-foot long and primary runway rehabilitation project was completed in 2020. It included full depth reconstruction and associated electrical work for 2,000 linear feet of runway. PHL received $8.8 million in FAA funding for this phase of the project. The estimated cost of all three phases is $37 million.

Pedestrian Enhancements and Arrivals Roadway Rehabilitation: This $6 million project installed an In-Roadway Warning Light System at the pedestrian crosswalks on the arrivals roadway and at north commercial road.

DEBT ADMINISTRATION

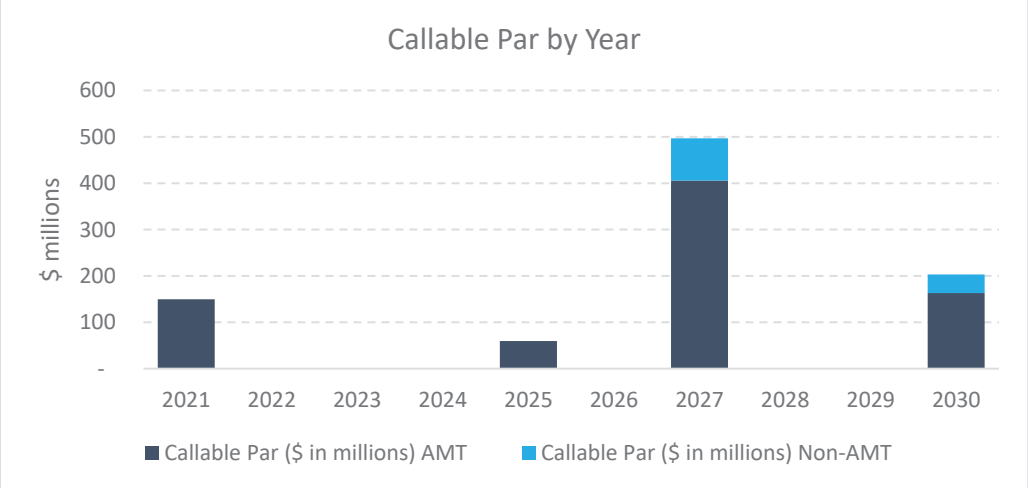
As of June 30, 2020, the Airport's total outstanding debt was $1.625 billion, a $51.6 million or 3.1% reduction over fiscal year-end 2019 due to bond principal repayments. Additional information about the Airport's debt is found in Exhibits S-14 through S-16 in the Statistical Section and in the Footnotes Section under Footnote 8.

City of Philadelphia – Aviation Fund
Changes in Borrowing
($000)

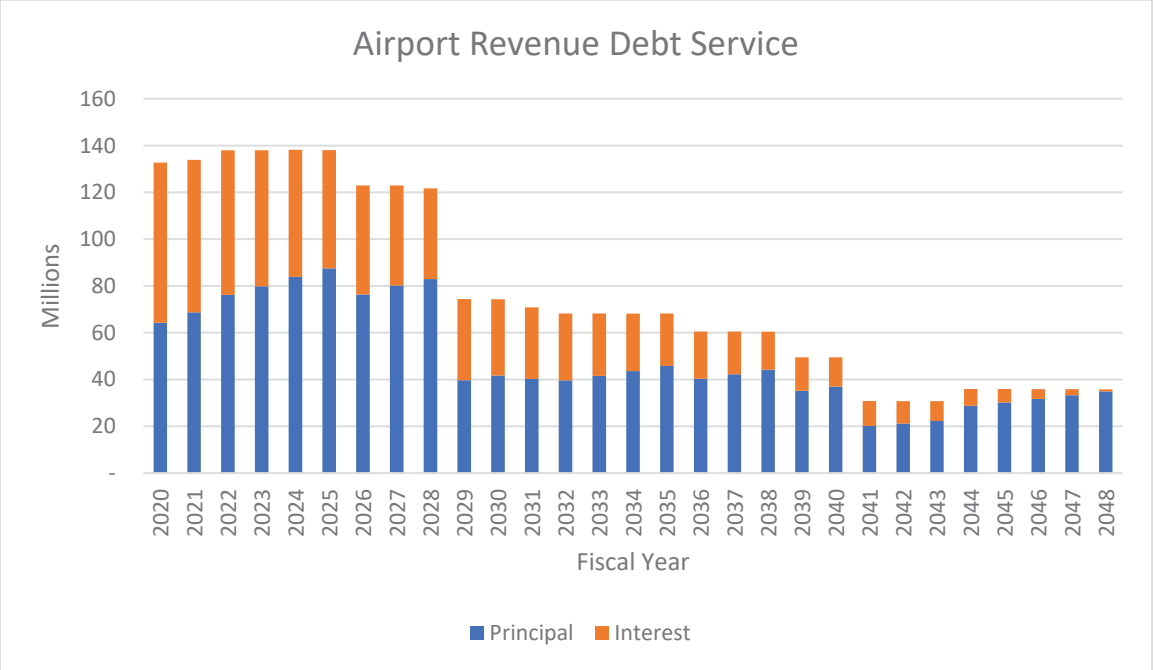
	Fiscal Year 2019	Additions	Retirements/ Repayments	Fiscal Year 2020	Dollar Increase (Decrease)	Percentage Increase (Decrease)
Airport Revenue Bonds	$ 1,413,620	$ -	$ (64,285)	$ 1,349,335	$ (64,285)	-4.50%
Commerial Paper	140,262	598,786	(583,786)	155,262	15,000	10.70%
Taxable Airport Revenue Bond	122,770	-	(2,320)	120,450	(2,320)	-1.90%
Total Borrowing	$ 1,676,652	$ 598,786	$ (650,391)	$ 1,625,047	$ (51,605)	-3.10%

Airport Revenue Bonds

The Airport's long-term debt is fixed rate or synthetic fixed rate (the $99.3 million 2005C issue of the outstanding revenue bonds is coupled with an interest rate swap). With the exception of the 2005C issue, all series include a 10-year call provision. The chart below presents the timing of the Airport's callable outstanding bonds for the 2010 series forward.



As a matter of practice, the Airport employs level debt service. The table below presents the principal and interest components of the debt service on the Airport's Revenue Bonds through the longest maturity.



Subsequent to fiscal year 2020, the Division issued $389.2 million Philadelphia International Airport Refunding Bonds in October 2020, Series 2020A, B, & C. The 2020A Bonds were issued for the purpose of providing funds, together with other available moneys, to: (i) refund all of the outstanding Series 2010A Airport Revenue Bonds, and (ii) pay the cost of issuance of the 2020A Bonds. The 2020B Bonds were issued for the purpose of providing funds to (i) refinance certain outstanding Commercial Paper Notes, and (ii) pay the cost of issuance of the 2020B Bonds. The 2020C Bonds were issued for the purpose of providing funds to (i) refund all of the outstanding Series 2010D Airport Revenue Bonds, (ii) refinance certain outstanding Commercial Paper Notes, and (iii) pay the cost of issuance of the 2020C Bonds. These bonds were assigned an 'A2' rating by Moody's with a stable outlook, and an 'A' rating by Fitch with a negative outlook.

Credit Ratings: As of June 30, 2020, the Airport revenue bonds were rated "A" by Fitch with a negative outlook, "A2" by Moody's with a stable outlook and "A" by Standard & Poor's with a negative outlook. The negative outlook by some of the rating agencies was in response to air traffic disruptions caused by COVID-19. Subsequent to fiscal year 2020, S&P downgraded the Airport to "A-" with a negative outlook.

Commercial Paper (CP) Program

The Airport has a $350 million CP program to provide funding for capital projects approved by PHL's signatory airlines. CP is a short-term financing tool with a maximum maturity of 270 days. The Airport's CP Program enables capital projects to be financed on an as-needed basis; lower the Airport's cost of borrowing, as amounts drawn can be closely matched to capital cash flow requirements; and limit negative arbitrage during the construction period for projects. CP notes will continue to be "rolled over" until long-term bonds are issued to refund outstanding CP. As of June 30, 2020, the Airport had drawn $155.3 million of CP.

Direct Purchase Federally Taxable Loan

In April 2017, the Airport issued $125.0 million of Airport Revenue Bond Series 2017 (Direct Purchase Federally Taxable Loan), which was purchased by PNC Bank, NA, for the purpose of providing funds which, together with other available moneys, were used for some or all of the following: (i) to refund a portion of commercial paper notes issued by the City; (ii) the acquisition of land for the Airport System; (iii) other capital financing needs of the Airport System; and (iv) paying the costs of issuing the Taxable Bond. This loan is subject to optional tender in full on April 26, 2022.

Rate Covenant

The table below - "Summary of Project Revenues and Expenses," presents the calculation of Airport Revenue Bond debt service coverage ("Rate Covenant Test 1") and total debt service coverage ("Rate Covenant Test 2") in accordance with Section 5.01 of the Amended and Restated General Revenue Bond Ordinance ("GARBO").

Rate Coverage Test 1 requires the Airport to maintain debt service coverage of not less than 1.50x and Rate Covenant Test 2 requires debt service coverage of not less than 1.0x. Debt service coverage is calculated based on a formula in GARBO. Historically, the Airport has maintained a coverage ratio significantly higher than its requirement. During fiscal year 2020, the Airport's debt service coverage for Test 1 was 3.24x and Test 2 was 2.27x.

City of Philadelphia - Aviation Fund
Summary of Project Revenues and Expenses of the Airport System
(amounts expressed in thousands)

Amounts Available for Debt Service	**Fiscal Year 2020**	**Fiscal Year 2019**
1. Space rentals	$ 85,717	$ 116,966
2. Landing fees	55,080	83,890
3. Ramp Area rentals	(13)	212
4. International Terminal revenues	23,616	31,823
5. Subtotal, Airline Rentals, Fees and Charges	164,400	232,891
6. Non-airline Revenues	221,893	157,420
7. Interest income and Contribution for carrier incentive program	3,874	3,132
8. Total Project Revenues	390,167	393,443
9. Passenger Facility Charges (PFCs) Available for Debt Service	31,200	31,189
10. Portion of Fund Balance Attributable to Amounts Available for Debt Service	144,218	126,824
11. Total Amounts Available for Debt Service	565,585	551,456
Expenses		
12. Net Operating Expenses	151,739	161,161
13. Required Renewal Fund Deposit	0	0
14. Revenue Bond Debt Service	127,910	126,007
15. Interdepartmental Charges	123,017	121,054
16. Total Expenses	402,666	408,222
17. Net Revenue	$ 162,919	$ 143,234
Rate Covenant Tests of the Original General Airport Revenue Bond Ordinance		
18. Test 1 (Line 11- Line 12- Line 13) / (Line 14)	3.24	3.10
19. Test 2 (Line 11- Line 12- Line 13- Line 15) / (Line 14)	2.27	2.14

RATES AND CHARGES

The annual budget for the Airport is prepared in compliance with the requirements of the Airline Agreement and GARBO. This budget is prepared on a non-GAAP basis and excludes depreciation and certain non-operating revenues, which are specifically not included in the Agreement and GARBO.

In addition to the budgeting of operating expenses and non-airline revenues, the Airport annually establishes airline terminal rentals and landing fees each fiscal year based on the rate-setting methodology set forth in the Airline Agreement. The airlines are consulted with regard to the rates to be established no later than thirty (30) days prior to the beginning of a fiscal year. The following table presents a comparison of actual to budget airline rates for fiscal year 2020.

	Actual Fiscal Year 2020	Budget Fiscal Year 2020	Percent Increase (Decrease)
Average Terminal Rental Rate per Square Foot	$ 64.14	$ 107.41	(40.3)%
Ramp Area Rental Rate per Linear Foot	(2.37)	25.33	(109.4)%
Landing Fee Rate per 1,000 Pounds	2.86	4.10	(30.2)%

Actual rates for FY 2020 would have been expected to increase given the reduction in passengers and operations as a result of the impacts on of COVID-19 that started at the end of the third quarter FY 2020. However, the expected increases in rates were offset by the following: better than expected non-airline revenues and airline activity prior to the start of the pandemic; use of a portion of the CARES Act grant that was provided by the federal government as described earlier; and reductions to Airport operating expenses to mitigate the reductions to Airport revenues from the pandemic as described earlier.

Additional information about the Airport's rates is found on Exhibit S-13 in the Statistical Section.

REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of Philadelphia International Airport's finances and to demonstrate the City's accountability for the funds it receives and disburses. For additional information concerning this report, please contact: Chief Financial Officer, Philadelphia International Airport, Executive Offices, Terminal D, 3rd Floor, Philadelphia, PA 19153.

CITY OF PHILADELPHIA

AVIATION FUND

Statements of Net Position (Unaudited)

	Fiscal Year 2020	Fiscal Year 2019	Percentage Increase (Decrease)
Assets			
Current assets:			
Cash and cash equivalents	$ 14,815,043	$ 7,224,574	105.1%
Investments	228,573,665	235,255,228	(2.8)%
Accounts receivable	43,214,063	22,300,024	93.8%
Allowance for doubtful accounts	(1,427,177)	(826,906)	72.6%
Inventories	5,511,105	3,866,048	42.6%
Due from other governmental units	937,643	996,260	(5.9)%
Total current assets	291,624,342	268,815,228	8.5%
Non-current assets:			
Restricted:			
Cash and cash equivalents	45,365,866	358,797,546	(87.4)%
Cash held by fiscal agent	-	-	-
Investments	518,529,337	217,307,283	138.6%
Sinking funds and reserves held by fiscal agents	157,760,664	171,343,214	(7.9)%
Grants from other governments for capital purposes	12,343,217	14,993,055	(17.7)%
Receivables	5,009,937	15,255,684	(67.2)%
Total restricted assets	739,009,021	777,696,782	(5.0)%
Capital assets:			
Land and other non-depreciable assets	230,642,915	230,349,955	0.1%
Infrastructure	1,293,702,285	1,098,328,900	17.8%
Construction in progress	268,146,399	389,395,118	(31.1)%
Buildings and equipment	2,517,079,856	2,481,050,035	1.5%
Less: accumulated depreciation and amortization	(2,162,363,960)	(2,066,587,141)	4.6%
Property, plant and equipment, net	2,147,207,495	2,132,536,867	0.7%
Total noncurrent assets	2,886,216,516	2,910,233,649	(0.8)%
Total assets	3,177,840,858	3,179,048,877	0.0%
Deferred outflows of resources			
Accumulated decrease in fair value of hedging derivatives	5,240,126	4,678,770	12.0%
Deferred outflows related to other post-employment benefits	6,945,000	5,147,000	34.9%
Deferred outflows related to pensions	13,371,483	8,413,958	58.9%
Refunding in defeasance of debt	2,391,386	2,953,074	(19.0)%
Total deferred outflow of resources	27,947,995	21,192,802	31.9%
Liabilities			
Current liabilities			
Accounts and vouchers payable	14,454,564	22,689,289	-36.3%
Salaries and wages payable	4,123,547	3,683,968	11.9%
Construction contracts payable	24,595,685	28,622,124	(14.1)%
Due to component units	-	131,011	(100.0)%
Accrued expenses	2,009,413	1,046,319	92.0%
Accrued interest payable	18,333,472	18,454,549	(0.7)%
Unearned revenue	75,149,973	38,769,077	93.8%
Commercial paper notes	155,262,000	140,262,000	10.7%
Current maturities of long-term bonded debt	68,690,000	64,285,000	6.9%
Current portion of taxable airport revenue note	2,410,000	2,320,000	3.9%
Total current liabilities	365,028,654	320,263,337	14.0%
Non-current liabilities			
Taxable airport revenue note, long-term	118,040,000	120,450,000	(2.0)%
Revenue bonds, net of current maturities	1,280,645,000	1,349,335,000	(5.1)%
Unamortized bond premiums	104,127,105	114,735,631	(9.2)%
Derivative instrument liability	5,240,126	4,678,770	12.0%
Net pension liability	216,184,469	211,066,884	2.4%
Other post-employment benefits liability	68,481,000	64,425,000	6.3%
Other non-current liabilities	22,785,152	14,165,282	60.9%
Total non-current liabilities	1,815,502,852	1,878,856,567	(3.4)%
Total liabilities	2,180,531,506	2,199,119,904	(0.8)%
Deferred inflows of resources			
Deferred gain on refunding debt	1,189,547	132,211	799.7%
Deferred inflows related to other post-employment benefits	6,025,000	7,172,000	(16.0)%
Deferred inflows related to pensions	318,848	274,396	16.2%
Total deferred inflows of resources	7,533,395	7,578,607	(0.6)%
Net position			
Net investment in capital assets	836,970,353	788,050,246	6.2%
Prior period adjustments	-	-	-
Restricted for:			
Capital projects	97,243,466	89,273,955	8.9%
Debt service	187,091,529	200,727,501	(6.8)%
Prior period adjustments	-	-	-
Unrestricted	(103,581,396)	(84,508,534)	22.6%
Prior period adjustments	-	-	-
Total net position	$ 1,017,723,952	$ 993,543,168	2.4%

See notes to the financial statements.

CITY OF PHILADELPHIA

AVIATION FUND

Statements of Revenues, Expenses and Changes in Fund Net Position (Unaudited)

	Fiscal Year 2020	Fiscal Year 2019	Percentage Increase (Decrease)
Operating revenues			
Airline revenues			
Rents	$ 92,060,092	$ 112,437,578	(18.1)%
Landing fees	52,351,021	81,040,660	(35.4)%
International arrival fees	19,556,454	37,249,170	(47.5)%
Total airline revenues	163,967,567	230,727,408	(28.9)%
Nonairline revenues			
Concessions	100,956,130	118,380,431	(14.7)%
Other rents	22,686,419	34,128,018	(33.5)%
Utilities and other fees	2,566,366	2,542,899	0.9%
Other operating revenues	5,228,340	5,292,986	(1.2)%
Total nonairline revenues	131,437,255	160,344,334	(18.0)%
Total operating revenues	295,404,822	391,071,742	(24.5)%
Operating expenses			
Personal services	86,385,831	81,052,522	6.6%
Purchase of services	107,925,323	113,187,323	(4.6)%
Materials and supplies	8,862,639	8,202,311	8.1%
Employee benefits	66,409,686	64,803,539	2.5%
Indemnities and taxes	5,524,518	5,773,036	(4.3)%
Depreciation and amortization	102,393,319	100,679,051	1.7%
Total operating expenses	377,501,316	373,697,782	1.0%
Operating income	(82,096,494)	17,373,960	(572.5)%
Non-operating revenues (expenses)			
Federal, state and local grants	57,639,261	1,463,277	3,839.1%
Interest income	25,343,078	23,582,264	7.5%
Interest expense	(59,289,830)	(57,032,860)	4.0%
Passenger facility charges	46,749,088	64,031,965	(27.0)%
Customer facility charges	24,636,032	31,080,128	(20.7)%
Gain/(Loss) on disposal of capital assets	(307,101)	51,887	(691.9)%
Other revenue/(expense)	(50,338)	2,476,639	(102.0)%
Total non-operating revenues (expenses)	94,720,190	65,653,300	44.3%
Income before capital contributions	12,623,696	83,027,260	(84.8)%
Capital contributions			
Federal, state and local grants	20,327,935	22,238,626	(8.6)%
Total capital contributions	20,327,935	22,238,626	(8.6)%
Transfers			
Transfers out	-	-	-
Total transfers	-	-	-
Change in net position	32,951,631	105,265,886	(68.7)%
Net position beginning of period, as restated	984,772,321	888,277,282	10.9%
Net position end of period	$ 1,017,723,952	$ 993,543,168	2.4%

See notes to the financial statements.

CITY OF PHILADELPHIA

AVIATION FUND

Statements of Cash Flows

	Fiscal Year 2020	Fiscal Year 2019	Percentage Increase (Decrease)
Cash flows from operating activities			
Receipts from customers	$ 310,196,620	$ 408,684,789	(24.1)%
Receipts from interfund services	1,203,615	1,241,842	(3.1)%
Payments to suppliers	(123,374,369)	(117,488,016)	5.0%
Payments to employees	(150,022,417)	(143,785,168)	4.3%
Internal activity-payments to other funds	(7,539,796)	(7,363,442)	2.4%
Net cash provided by operating activities	30,463,653	141,290,005	(78.4)%
Cash flows from non-capital financing activities			
Grant proceeds not specifically restricted for capital purposes	56,082,878	1,060,781	5,186.9%
Cash flows from capital and related financing activities			
Proceeds from issuance of debt	598,786,000	628,386,000	(4.7)%
Capital grants and contributions received	22,927,435	21,910,433	4.6%
Purchase of capital assets	(114,284,465)	(109,842,378)	4.0%
Proceeds from sales of capital assets	1,029,605	123,416	734.3%
Principal paid on debt instruments	(650,391,000)	(690,066,000)	(5.7)%
Interest paid on capital debt	(76,543,036)	(81,669,345)	(6.3)%
Passenger & customer facility charges	81,995,653	94,516,721	(13.2)%
Net cash provided by (used) in capital and related financing activities	(136,479,808)	(136,641,153)	(0.1)%
Cash flows from investing activities			
Interest and dividends	25,050,007	22,925,250	9.3%
Receipts from sinking funds and reserves	13,582,550	14,755,018	(7.9)%
Net cash provided by investing activities	38,632,557	37,680,268	2.5%
Net increase in cash	(11,300,720)	43,389,901	(126.0)%
Balance beginning of year	818,584,631	775,194,730	5.6%
Balance end of year	$ 807,283,911	$ 818,584,631	(1.4)%
Reconciliation of operating income/(loss) to net cash provided by operating activities			
Operating income	$ (82,096,494)	$ 17,373,960	(572.5)%
Adjustments to reconcile operating income to net cash provided by operating activities:			
Depreciation and amortization	102,393,319	100,679,051	1.7%
Change in assets and liabilities:			
Receivables, net	(20,385,483)	6,512,687	(413.0)%
Inventories	(30,057)	(382,526)	(92.1)%
Accounts and other payables	(5,798,528)	4,764,631	(221.7)%
Unearned revenue	36,380,896	12,342,202	194.8%
Net cash provided by operating activities	$ 30,463,653	$ 141,290,005	(78.4)%

See notes to the financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Operations

The Aviation Fund is a proprietary fund of the City of Philadelphia (the "City"). It was created and authorized as part of the Fiscal 1974 Operating Budget Ordinance approved by City Council on June 7, 1973, with an effective date of July 1, 1973. This fund was established to facilitate administrative and financial operations necessary to maintain, improve, repair, and operate Philadelphia International Airport "(PHL", or the "Airport") and Northeast Philadelphia Airport ("PNE"). The financial statements presented are for the Aviation Fund only and are not intended to present fairly the financial position of the City of Philadelphia as a whole or the results of its operations and cash flows. The comprehensive annual financial report of the City of Philadelphia provides complete financial information as to the City and its component units.

Basis of Accounting

The accompanying financial statements have been prepared on the accrual basis of accounting. Under this method, revenues are recognized in the accounting period in which they are earned and expenses are recognized at the time obligations are incurred.

Private sector standards of accounting and financial reporting issued prior to December 1, 1989, generally are followed in both the government wide and the proprietary fund financial statements to the extent that they do not conflict or contradict guidance of the Governmental Accounting Standards Board ("GASB"). Governments also have the option of following subsequent private sector guidance for their business type activities and enterprise funds. The City has elected not to follow subsequent private sector guidelines.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's ongoing operations. The principal operating revenue of the Aviation Fund is charges for the use of the airport. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Recently Issued GASB Statements

In January 2017, GASB issued Statement No. 84, *Fiduciary Activities*. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Per GASB Statement No. 95, implementation of GSB Statement No. 84 has been postponed by one year, making the effective date for reporting periods after December 15, 2019. The City has not completed the process of evaluating the impact of adopting this Statement.

In June 2017, GASB issued Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Per GASB Statement No. 95, implementation of GASB 87 has been postponed by 18 months, making the effective date the reporting periods beginning after June 15, 2021. The City has not completed the process of evaluating the impact of adopting this Statement.

In March 2018, GASB issued Statement No. 88, *Certain Disclosures Related to Debt, Including Direct Borrowings and Direct Placements*. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligation is established. This Statement requires that additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. For notes to financial statements related to debt, this Statement also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. The City's adoption of Statement No. 88 resulted in additional disclosures related to direct borrowings, direct placements, and lines of credit.

In June 2018, GASB issued Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*. The objectives of this Statement are 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 interest costs incurred before the end of a construction period. This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. Such interest

cost includes all interest that previously was accounted for in accordance with the requirements of paragraph 5-22 of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which are superseded by this Statement. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources management focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. This Statement also reiterates that in financial statements prepared using the current financial resources management focus, interest costs incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Per GASB Statement No. 95, implementation of GASB Statement 89 has been postponed by one year, making the effective date for reporting periods beginning after December 15, 2020. The City has not completed the process of evaluating the impact of adopting this Statement.

In August 2018, GASB issued Statement No. 90, *Majority Equity Interest – An Amendment of GASB Statements No. 14 and No. 61*. The primary objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. It defines a majority equity interest and specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value. For all other holdings of a majority equity interest in a legally separate organization, a government should report the legally separate organization as a component unit, and the government or fund that holds the equity interest should report an asset related to the majority equity interest using the equity method. This Statement establishes that ownership of a majority equity interest in a legally separate organization results in the government being financially accountable for the legally separate organization and, therefore, the government should report that organization as a component unit. This Statement also requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. Transactions presented in flows statements of the component unit in that circumstance should include only transactions that occurred subsequent to the acquisition. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018. Per

GASB Statement No. 95, implementation of GASB Statement No. 90 has been postponed by one year, making the effective date for reporting periods beginning after December 15, 2019. The City has not completed the process of evaluating the impact of adopting this Statement.

In May 2019, GASB issued Statement No. 91, *Condit Debt Obligations*. The primary objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. This Statement achieves those objectives by clarifying the existing definition of a conduit debt obligation; establishing that a conduit debt obligation is not a liability of the issuer; establishing standards for accounting and financial reporting of additional commitments and voluntary commitments extended by issuers and arrangements associated with conduit debt obligations; and improving required note disclosures. This Statement also addresses arrangements—often characterized as leases—that are associated with conduit debt obligations. In those arrangements, capital assets are constructed or acquired with the proceeds of a conduit debt obligation and used by third-party obligors in the course of their activities. Payments from third-party obligors are intended to cover and coincide with debt service payments. During those arrangements, issuers retain the titles to the capital assets. Those titles may or may not pass to the obligors at the end of the arrangements. This Statement requires issuers to disclose general information about their conduit debt obligations, organized by type of commitment, including the aggregate outstanding principal amount of the issuers' conduit debt obligations and a description of each type of commitment. Issuers that recognize liabilities related to supporting the debt service of conduit debt obligations also should disclose information about the amount recognized and how the liabilities changed during the reporting period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. Per GASB Statement 95, implementation of GASB Statement No. 91 has been postponed by one year, making the effective date for reporting periods beginning after December 15, 2021. The City has not completed the process of evaluating the impact of adopting this Statement.

In January 2020, GASB issued Statement No. 92, *Omnibus 2020*. This statement addresses eight unrelated practice issues and technical inconsistencies in authoritative literature. The standard addresses leases, intra-entity transfers of assets, postemployment benefits, government acquisitions, risk financing and insurance-related activities of public entity risk pools, fair value measurements, and derivative instruments. The standard has various effective dates. The City has not completed the process of evaluating the impact of adopting the Statement.

In March 2020, GASB issued Statement No. 93, *Replacement of Interbank Offered Rates*. The objective of this Statement is to address accounting and financial reporting implications that result from the replacement of an IBOR. The removal of LIBOR/IBOR as an appropriate benchmark interest rate is effective for reporting periods ending after

December 31, 2021. All other requirements of this Statement are effective for reporting periods beginning after June 15, 2020. The City has not completed the process of evaluating the impact of adopting this Statement.

In March 2020, GASB issued Statement No. 94, *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The primary objective of this Statement is to improve financial reporting by addressing issues related to public-private and public-public partnership arrangements ("PPPs"). The requirements of this Statement are effective for fiscal years beginning after June 15, 2022. The City has not completed the process of evaluating the impact of adopting this Statement.

In May 2020, GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*. The primary objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. That objective is accomplished by postponing the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for periods beginning after June 15, 2018, and later.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements ("SBITA") for government end users (governments). This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. The requirements of this Statement are effective for fiscal years beginning after June 15, 2022. The City has not completed the process of evaluating the impact of adopting this Statement.

In June 2020, GASB issued Statement No. 97, *Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans—an amendment of GASB Statements No. 14 and No. 84, and a supersession of GASB Statement No. 32.* The primary objectives of this Statement are to (1) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (2) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit ("OPEB") plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (3) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code ("IRC") Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. The requirements of this Statement are effective for fiscal years beginning after June

15, 2021. The City has not completed the process of evaluating the impact of adopting this Statement.

Cash and Investments

The Aviation Fund's cash and investments are held in segregated operating and capital accounts and by an outside fiscal agent. Sinking funds and reserves are maintained in segregated investment accounts to comply with reserve and other requirements of the bond covenants. No Aviation Fund accounts are comingled with other City funds.

Investments are recorded at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the last reported sales price. Investments which do not have an established market are reported at estimated fair value.

For purposes of the Statement of Cash Flows, all cash and investments held by the City Treasurer are considered cash equivalents because those funds are available on demand.

Statutes authorize the City to invest in obligations of the Treasury, agencies, and instruments of the United States, repurchase agreements, collateralized certificates of deposit, bank acceptance or mortgage obligations, certain corporate bonds, and money market funds. Management is not aware of any violations of statutory authority or contractual provisions for investments for the years ended June 30, 2020 and 2019.

Accounts Receivable

Accounts receivable included in current assets consists of billed and unbilled rentals and fees, which have been earned but not collected as of June 30, 2020 and 2019. Credit balance receivables have been included in unearned revenue in the Statements of Net Position. The allowance for doubtful accounts is management's estimate of the amount of accounts receivable which will be deemed to be uncollectible and is based upon specific identification. Unpaid accounts are referred to the City's Law Department if deemed uncollectible. Accounts are written-off when recommended by the Law Department.

Inventories

Inventories consist of materials and supplies and are carried at amounts determined on a moving-average cost basis.

Restricted Assets

Restricted assets represent amounts that have been legally restricted by contracts or outside parties and are not available for payment of operating fund expenditures. The following represent restricted assets of the Aviation Fund:

- Funds available for construction, including grants due from other governments for capital purposes.

- Sinking funds and reserves held by the Airport's fiscal agent are reserved for debt service and construction, pursuant to revenue bond indentures.

- Passenger Facility Charges ("PFCs") represent fees remitted by airlines based on passenger ticket sales for flights boarding at Philadelphia International Airport. The fees are reserved for funding certain Federal Aviation Administration ("FAA") approved capital projects and debt service payments. Collection of PFCs began in the fall of 1992. All unexpended PFC funds, including accumulated interest, are classified as restricted assets.

- Customer Facility Charges ("CFCs") represent fees collected by rental car operators from customers renting motor vehicles at Philadelphia International Airport. CFCs are not to exceed $8 per rental day. Effective September 1, 2020, the Airport implemented a reduced CFC from $8 per rental day to $4 per rental day. The proceeds are to be used for the planning, development, financing, construction, and operation of a consolidated rental car facility. Collections of CFCs began in May 2014. All unexpended CFC funds, including accumulated interest, are classified as restricted assets.

Capital Assets

Capital assets are defined by the GASB as including "land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, works of art and historical treasures, infrastructure, and all other tangible or intangible assets that are used in operations that have initial useful lives extending beyond a single reporting period."

- Land is always treated separately from any related capital asset associated with it (i.e.: a building on the land, a runway on the land, etc.). The cost of the land includes its acquisition price and the cost of preparing the land for its intended use. Included in preparation costs are commissions, professional fees, permanent landscaping, demolition of existing buildings, and other costs incurred in acquiring the land.

- Intangible capital assets lack physical substance and can be expected in many cases to provide benefit indefinitely. An example of an intangible capital asset is software that was developed in-house.

- Buildings and Building Improvements are permanent structures included in the category of buildings. Building improvements increase the value of the building and/or materially extends the useful life of the building. If the improvement does not meet these conditions, those costs are expensed in the period incurred. Repairs and maintenance are examples of items expensed because they help to retain value and do not increase the value of the asset.

  Costs to be included in the capitalized cost of buildings include purchase price, expenses related to making the building ready for use, environmental compliance costs, professional fees, taxes paid at the time of purchase, and other costs required to place the asset into operation.

Constructed buildings include, but are not limited to, project costs for interest accrued during construction; cost of excavation, grading or filling; expenses incurred for the plan preparation; specification; blueprints; permits and professional fees; and costs of temporary buildings used during construction. Costs are expensed if a decision is made to not proceed with the construction of a building.

Building improvements may include conversion of unused space into usable space, original installation or upgrading of heating and cooling systems, wall or flooring coverings, windows and doors, closets, restrooms, phone and closed circuit television systems, security systems, wiring required for building equipment (that will remain in the building), renovations of outside building surfaces (including roofs, installation or replacement of plumbing and electrical wiring), permanently attached fixtures, machinery, building additions, and costs associated with the above improvements.

Building repairs and maintenance that do not increase the value of the building or extend its useful life are to be expensed. Examples of such costs may include plumbing or electrical repairs, maintenance such as pest control and cleaning, interior and exterior decorations, repainting and repairing of interior and exterior portions of buildings, and any other repairs and maintenance costs that do not increase the value or extend the useful life of the asset.

- Vehicles and equipment are defined as movable tangible assets used in operations. This includes general-use, firefighting, and snow removal vehicles and related equipment, computer equipment, furniture and fixtures, and other moveable equipment.
- Infrastructure assets are long-lived capital assets that are normally stationary and can be preserved for a significantly greater number of years than most capital assets. Infrastructure includes, but is not limited to: runways, taxiways, aprons, ramps, roads, sidewalks, signage, drainage systems, water and sewer systems, and lighting systems.
- Construction-in-progress includes costs incurred to construct a capital asset before it is substantially ready to be placed in service. At the time of being placed in service, the asset will be reclassified into the appropriate asset category and be subject to depreciation.
- The following Depreciation Guidelines were used in the Aviation Fund's fiscal year 2020 financial statements:

  Capital assets that are not depreciated because they have indefinite useful lives are land, works of art, historical treasures, and intangibles.

  If a capital asset has a determinable and significant salvage value, that value is not included in the depreciable value to be depreciated over the useful life of the asset.

  All depreciable capital assets are expensed using the straight-line method over the following useful lives of the assets and if these thresholds are met.

Asset Category	Life of Asset	Threshold
Land	Not Depreciated	None
Intangibles	Not Depreciated	None
Buildings	20 - 50 Years	$100,000
Building Improvements	10 - 25 Years	$100,000
Equipment	5 - 15 Years	$10,000
Vehicles	5 - 10 Years	$10,000
Infrastructure	20 - 50 Years	$100,000

It is the policy of the Airport that a half year of depreciation is recorded in the year that the asset is acquired or placed in service.

Unearned Revenue

Unearned revenue relates primarily to excess billings to signatory airlines and advance payments received from air carriers. Such deferrals are ultimately included in income when earned, usually during the following fiscal year.

Revenues

Operating revenues consist of the following:

- Airline revenue – airline revenues are those paid by PHL's signatory carriers and include rents, landing fees, and per passenger fees.
- Non-airline revenue – non-airline revenues are all other operating revenues that do not qualify as airline revenue. These consist of concession fees, other rents, utilities, and other operating revenue.

Non-operating revenues consist primarily of the following:

- Grants from other governments for non-capital purposes.
- Interest income.
- PFCs – revenue from PFCs is reserved for the funding of certain capital expenditures and debt service payments, as approved by the FAA.
- CFCs – revenue from CFCs is reserved for the funding of certain capital expenditures and will be used to plan, design, and construct a facility to be used by vehicle rental companies on Airport property.

Capital contributions consist of the following:

- Grants from other governments for capital purposes.

Operating Expenses

Operating expenses consist primarily of personnel and administrative services, purchase of goods and services and depreciation and amortization expense.

Bonds and Related Premiums, Discounts, Issuance Costs and Loss on Refunding

Bond premiums and discounts are deferred and amortized on the straight-line method over the life of the bonds using the effective interest method. Bonds payable are reported net of applicable premium or discount. Bond issuance costs are expensed as incurred. The loss on refunding of bonds is amortized on the straight-line method over the lesser of the life of the old debt or the new debt issued.

Compensated Absences

It is the City's policy to allow employees to accumulate earned but unused vacation and sick leave benefits. Vacation is accrued when earned in the government-wide financial statements and in the proprietary and fiduciary fund financial statements. Sick leave is accrued in the government-wide financial statements and in the proprietary and fiduciary-fund financial statements based on an estimate of future payouts.

Claims and Judgments

Pending claims and judgments are recorded as expenses in the government wide financial statements and in the proprietary and fiduciary fund financial statements when the City Solicitor has deemed that a probable loss to the City has occurred. Claims and judgements are recorded as expenditures in the government fund financial statements when paid or when judgements have been rendered against the City.

Management's Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

2. DEPOSITS AND INVESTMENTS

For the fiscal years ended June 30, 2020 and 2019, cash and cash equivalents, and investments (deposits) are included in the financial statements in current and restricted cash and cash equivalents, and investments (deposits), in sinking funds and reserves held by fiscal agents, and in cash held by fiscal agent.

Deposits

State statutes require banks to collateralize City deposits at amounts equal to or in excess of the City's balance. Such collateral is to be held by the Federal Reserve Bank or the trust

department of a commercial bank other than the pledging bank. All collateralized securities were held in the City's name.

Investments

The City has established a comprehensive investment policy to minimize custodial credit risk for its investments. In so doing, the City has selected custodian banks that are members of the Federal Reserve System to hold its investments. Delivery of the applicable investment documents to the City's custodian is required for all investments.

As of June 30, 2020, the fair value of the Aviation Fund's holdings consisted of the following:

	Fair Value	% of Total
Short-Term Investment Pools	$ 49,545,730	5.07%
U.S. Government Securities	500,925,007	51.27%
U.S. Government Agency Securities	154,822,612	15.85%
Municipal and Other Debt Securities	-	0.00%
Commercial Paper	101,872,793	10.43%
Corporate Bonds	169,919,166	17.39%
	$ 977,085,308	100.0%

As of June 30, 2019, the fair value of the Aviation Fund's holdings consisted of the following:

	Fair Value	% of Total
Short-Term Investment Pools	$ 382,301,956	38.10%
U.S. Government Securities	312,138,071	31.11%
U.S. Government Agency Securities	74,426,612	7.42%
Municipal and Other Debt Securities	8,165,509	0.81%
Commercial Paper	121,413,587	12.10%
Corporate Bonds	105,010,462	10.46%
	$ 1,003,456,197	100.0%

Interest Rate Risk: The City's investment portfolio is managed to accomplish preservation of principal, maintenance of liquidity, and to maximize the return on the investments. To limit its exposure to fair value losses from rising interest rates, the City's investment policy limits fixed income investments to maturities of no longer than two years, except in Sinking Fund Reserve Portfolios.

As of June 30, 2020, the maturities of holdings were as follows:

	Less Than 1 Year	1 - 3 Years
Short-Term Investment Pools	$ 49,545,730	$ -
U.S. Government Securities	345,427,445	155,497,562
U.S. Government Agency Securities	100,646,958	54,175,654
Municipal and Other Debt Securities	8,933,560	7,728,523
Commercial Paper	101,872,793	-
Corporate Bonds	147,626,123	22,293,042
	$ 754,052,609	$ 239,694,781

As of June 30, 2019, the maturities of holdings were as follows:

	Less Than 1 Year	1 - 3 Years
Short-Term Investment Pools	$ 382,301,956	$ -
U.S. Government Securities	242,936,074	69,201,997
U.S. Government Agency Securities	74,426,612	-
Municipal and Other Febt Securities	2,811,024	5,354,485
Commercial Paper	121,413,587	-
Corporate Bonds	56,451,071	48,559,391
	$ 880,340,324	$ 123,115,873

Credit Risk: The City's policy is to limit credit risk by limiting the type of allowable investment, as well as the maximum percent of the portfolio for each type of investment.

The City's investment in U.S. Government securities (51.27%) or U.S. Government Agency obligations (15.85%) are allowable investments up to 100% of the portfolio. The U.S. Government Agency obligations must be rated AAA by Standard & Poor's Corp. ("S&P") or Aaa by Moody's Investor Services ("Moody's"). All U.S. Government Securities meet the criteria.

The City's investment in Commercial Paper (10.43%) is limited to 25% of the portfolio and must be rated A1 by S&P or P1 by Moody's Investor's Services, Inc and the senior long-term debt of the issuer must not be rated lower than A by S&P or Aa2 by Moody's. All commercial paper investments meet the criteria.

The City's investment in corporate bonds (17.39%) is limited to 25% of the portfolio and had an S&P rating of AAA to AA or Moody's rating of Aa2 or better. All corporate investments meet the criteria

Short-term investment pools are rated AAA by S&P and Aaa by Moody's. The short-term investment pools' amortized cost-based net asset value per share/unit is the same as the

value of the pool shares. Cash accounts are swept nightly and idle cash invested in money market funds (short-term investment pools).

The City limits its foreign currency risk by investing in certificates of deposit and banker's acceptances issued or endorsed by non-domestic banks that are denominated in U.S. dollars providing that the banking institution has assets of not less than $100 million and has a Thompson's Bank Watch Service "Peer Group Rating" not lower than II. At the end of the fiscal year, the City did not have any investments of that nature.

Fair Value Measurement: The City measures and records its investments using fair value measurement guidelines established by generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy, as follows:

- Level 1: Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets
- Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability
- Level 3: Unobservable inputs for assets or liabilities

The Airport has the following recurring fair value measurements as of June 30, 2020:

- U.S. Treasury securities of $500.9 million are valued using quoted prices from active markets (Level 1).
- U.S. Agency securities of $154.8 million are valued using quoted prices for identical securities traded in active markets when sufficient activity exists (Level 2).
- Commercial Paper securities of $101.9 million are valued using quoted prices for identical securities in markets that are not active and via matrix pricing models (Level 2).
- Corporate bond securities of $169.9 million are valued using quoted prices for similar securities in active markets and via matrix pricing models (Level 2).
- Short-term investment pools of $49.5 million are valued at the published amortized cost-based net asset value per share/unit. There are no limitations or restrictions on withdrawals.

3. CAPITAL ASSET ACTIVITY

Capital Assets, which include property, plant, equipment, and infrastructure assets, are defined by the Airport as assets with an initial individual cost of more than $10,000 for personal property and $100,000 for fixed assets, as well as an estimated useful life in excess of three years. Capital assets are recorded at cost. Costs recorded do not include interest

incurred as a result of financing asset acquisition or construction. General maintenance and repair costs are charged to operations.

The Airport transfers Construction in Process to one or more of the major asset classes: (1) when project expenditures are "substantially complete"; (2) when the expenditures are for existing facilities; or (3) when they relate to specific identifiable items completed during the year which were part of a larger project. A portion of bond interest expense net of related interest income on unexpended funds is capitalized during the construction phase of the projects funded by the bonds. Net interest capitalized to construction-in-progress was $8,142,627 and $13,523,667 for the fiscal years ending June 30, 2020 and 2019, respectively.

Depreciation on the capital assets is provided on the straight-line method over their estimated useful lives. Depreciation and amortization expense were $102,393,320 and $100,679,051 for the fiscal years ending June 30, 2020 and 2019, respectively.

The following tables present the changes in capital assets for fiscal year 2020 and fiscal year 2019.

	Balance FYE 06/30/2019	Additions	Deletions	Balance FYE 06/30/2020
Non-depreciable assets				
Land and intangibles	$ 230,349,956	$ 292,960	$ -	$ 230,642,916
Construction-in-progress	389,395,118	109,807,889	(231,056,608)	268,146,399
Total non-depreciable assets	619,745,074	110,100,849	(231,056,608)	498,789,315
Depreciable assets				
Buildings & improvements	2,017,358,026	3,462,472	-	2,020,820,498
Infrastructure	1,098,328,900	195,373,385	-	1,293,702,285
Other improvements	402,854,108	31,927,793	-	434,781,901
Equipment	60,837,900	8,592,761	(7,953,206)	61,477,455
Total depreciable assets	3,579,378,934	239,356,411	(7,953,206)	3,810,782,139
Accumulated depreciation				
Buildings & improvements	(1,019,356,683)	(53,243,725)	-	(1,072,600,408)
Infrastructure	(769,653,958)	(26,595,792)	-	(796,249,750)
Other improvements	(230,667,024)	(17,837,373)	-	(248,504,397)
Equipment	(46,909,476)	(4,716,430)	6,616,500	(45,009,406)
Total accumulated depreciation	(2,066,587,141)	(102,393,320)	6,616,500	(2,162,363,961)
Net depreciable assets	1,512,791,793	136,963,091	(1,336,706)	1,648,418,178
Total capital assets	$ 2,132,536,867	$ 247,063,940	$ (232,393,314)	$ 2,147,207,493

	FYE 06/30/2018	Additions	Deletions	FYE 06/30/2019
Non-depreciable assets				
Land and intangibles	$ 220,626,924	$ 9,723,032	$ -	$ 230,349,956
Construction-in-progress	507,330,662	118,489,823	(236,425,367)	389,395,118
Total non-depreciable assets	727,957,586	128,212,855	(236,425,367)	619,745,074
Depreciable assets				
Buildings & improvements	1,876,836,152	140,521,874	-	2,017,358,026
Infrastructure	1,039,127,390	59,201,510	-	1,098,328,900
Other improvements	375,875,156	26,978,952	-	402,854,108
Equipment	57,435,649	3,841,508	(439,256)	60,837,901
Total depreciable assets	3,349,274,347	230,543,844	(439,256)	3,579,378,935
Accumulated depreciation				
Buildings & improvements	(968,444,065)	(50,912,618)	-	(1,019,356,683)
Infrastructure	(743,032,652)	(26,621,307)	-	(769,653,959)
Other improvements	(211,762,565)	(18,904,459)	-	(230,667,024)
Equipment	(43,036,536)	(4,240,667)	367,727	(46,909,475)
Total accumulated depreciation	(1,966,275,818)	(100,679,051)	367,727	(2,066,587,141)
Net depreciable assets	1,382,998,529	129,864,793	(71,529)	1,512,791,794
Total capital assets	$ 2,110,956,115	$ 258,077,648	$ (236,496,896)	$ 2,132,536,868

4. UNEARNED REVENUE

Unearned revenue was $75,149,973 and $38,769,077 for the fiscal years ending June 30, 2020 and 2019, respectively and includes revenues received in advance, excess billing to the scheduled airlines, and credit balance receivables.

5. ARBITRAGE REBATE

The Aviation Fund has several series of revenue bonds subject to federal arbitrage requirements. Federal tax legislation requires that the accumulated net excess of interest income on the proceeds of these issues over interest expense paid on the bonds be paid to the federal government at the end of a five-year period. The Airport's arbitrage rebate liability was $0 as of June 30, 2020 and 2019.

6. DERIVATIVE INSTRUMENTS AND INTEREST RATE SWAP

Beginning in fiscal year 2010, the City adopted the provisions of GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*. The fair value balances and notional amounts of derivative instruments outstanding for the Aviation Fund as of June 30, 2020 and June 30, 2019 are as follows:

Type	Cash Flow Hedge - pay fixed interest rate swap
Change in Fair Value of Deferred Outflow at June 30, 2020	($561,356)
Outflow at June 30, 2019	$906,921
Fair value at June 30, 2020	($5,240,126)
Fair value at June 30, 2019	($4,678,770)
Objective	Hedge changes in cash flow on the 2005 Series bonds
Notional amount at June 30, 2020	$74,100,000
Notional amount at June 30, 2019	$87,100,000
Effective date	06/15/2005
Maturity date	06/15/2025
Terms	Airport pays multiple fixed swap rates; receives SIFMA Municipal Swap Index
Counterparty credit rating	
at June 30, 2020	Aa2/A+
at June 30, 2019	Aa2/A+

Objective: In April 2002, the City entered into a swaption that provided the City's Aviation Division with an up-front payment of $6.5 million. As a synthetic refunding of its 1995 Bonds, this payment approximated the present-value savings as of April 2002, of refunding on June 15, 2005, based upon interest rates in effect at the time. The swaption gave JP Morgan Chase Bank, N.A. the option to enter into an interest rate swap with the Airport whereby JP Morgan would receive fixed amounts and pay variable amounts.

Terms: JP Morgan exercised its option to enter into a swap on June 15, 2005, and the swap commenced on that date. Under the swap, the Airport pays multiple fixed swap rates (starting at 6.466% and decreasing over the life of the swap to 1.654%). The payments are based on an amortizing notional schedule (with an initial notional amount of $189.5 million) and when added to an assumption for remarketing, liquidity costs and cost of issuance were expected to approximate the debt service of the refunded bonds at the time the swaption was entered into. The swap's variable payments are based on the Securities Industry and Financial Markets Association ("SIFMA") Municipal Swap Index. If the rolling 180-day average of the SIFMA Municipal Swap Index exceeds 7.00%, JP Morgan Chase has the option to terminate the swap.

As of June 30, 2020, and June 30, 2019, the swap had a notional amount of $74.1 million and $87.1 million, respectively, and the associated variable-rate bonds had a $74.1 million and $87.1 million principal amount, respectively. The bonds' variable-rate coupons are not based on an index but on remarketing performance. The bonds mature on June 15, 2025. The swap will terminate on June 15, 2025 if not previously terminated by JP Morgan Chase.

Fair Value: As of June 30, 2020, and June 30, 2019, the swap had a negative fair value of ($5.2) million and ($4.7) million, respectively. This means that if the swap terminated today, the Airport would have to pay this amount to JP Morgan Chase. The fair value reflects the effect of non-performance risk, which includes credit risk. The fair value of the swap was measured using the income approach and is categorized within Level 2 of the fair value hierarchy.

Risk: As of June 30, 2020, the Airport was not exposed to credit risk because the swap had a negative fair value. Should interest rates change and the fair value of the swap become positive, the Airport would be exposed to credit risk in the amount of the swap's fair value. In addition, the Airport is subject to basis risk should the relationship between SIFMA and the bonds change; if SIFMA resets at a rate below the variable bond rate, the synthetic interest rate will be greater than anticipated. The swap includes an additional termination event based on downgrades in credit ratings. The swap may be terminated by the Airport if JP Morgan's ratings fall below A- or A3, or by JP Morgan Chase if the Airport's ratings fall below BBB or Baa2. No termination event based on the Airport's ratings can occur as long as National Public Finance Guarantee Corporation (Formerly MBIA) is rated at least A- or A3.

As of June 30, 2020, and June 30, 2019, the rates were:

Interest Rate Swap	Terms	June 30, 2020	June 30, 2019
Fixed payment to JPMorgan Chase	Fixed-declining	3.23199%	3.59720%
Variable rate payment from JPMorgan Chase	SIFMA	(0.13000)%	(1.90000)%
Net interest rate swap payments		3.10199%	1.69720%
Variable rate bond coupon payments	Weekly resets	0.16000%	1.90500%
Synthetic interest rate on bonds		3.26199%	3.60220%

Swap payments and associated debt: As of June 30, 2020, debt service requirements of the variable-rate debt and net swap payments for their term, assuming current interest rates remain the same, were as follows:

Fiscal Years Ending June 30	Variable Rate Bonds Principal	Variable Rate Bonds Interest	Interest Rate Swaps Net	Total Interest
2021	13,700,000	118,560	2,064,936	2,183,496
2022	14,300,000	96,640	1,529,306	1,625,946
2023	14,900,000	73,760	997,026	1,070,786
2024	15,400,000	49,920	570,350	620,270
2025	15,800,000	25,280	240,750	266,030
Totals	$ 74,100,000	$ 364,160	$ 5,402,368	$ 5,766,528

7. COMMERCIAL PAPER NOTES

The Aviation Fund established a commercial paper ("CP") program, which closed on August 22, 2019, in the amount of $350 million to provide funding for capital projects approved by the Airport's signatory airlines. CP is a short-term financing tool with a maximum maturity of 270 days. The Airport's CP Program enables capital projects to be financed on an as-needed basis, which lowers the Airport's cost of borrowing, as amounts drawn can be closely matched to capital cash flow requirements; and limits negative arbitrage during project construction periods. CP Notes will continue to be "rolled over" until long-term bonds are issued to refund the outstanding commercial paper. As of June 30, 2020, the Aviation Fund had outstanding letters of credit of $155.3 million and unused letters of credit equal to $194.7 million related to the CP program.

As of June 30, 2020, the total outstanding balance of CP notes was $155,262,000.

Balance as of July 1, 2019	$ 140,262,000
Commercial Paper Notes Issued	598,786,000
Commercial Paper Notes Refunded	(583,786,000)
Balance as of July 1, 2020	$ 155,262,000

8. BONDS PAYABLE

In June 2005, Airport Revenue Refunding Bonds, Series 2005C in the amount of $189.5 million were issued. The proceeds of Series 2005C were used to refund $183.9 million of the 1995A Series Airport Revenue Bonds, maturing from 2006 through 2025, and to pay issuance and insurance costs on the bonds. The cash flow required by the new bonds was the same as the cash flow required by the refunded bonds at the time of the sale. JPMorgan entered into a swaption agreement with the Airport on the 1995A bonds in 2002, which was exercised June 15, 2005. In December 2008, the outstanding balance of $178.6 million of Airport Revenue Refunding Bonds, Series 2005C was remarketed under an irrevocable direct pay letter of credit ("LOC") from TD Bank . The LOC replaces a bond insurance

policy from MBIA Insurance Corporation and a liquidity facility for the 2005C bonds provided by JP Morgan Chase Bank, N.A., pursuant to a standby bond purchase agreement, issued simultaneously with the issuance of the 2005C bonds in June 2005, and the surety policy for the sinking fund reserve account for the 2005C bonds. The LOC constitutes both a credit facility and liquidity facility under the Ordinance and the Variable Rate Securities Agreement, and the TD Bank will be the credit provider and liquidity provider under the Ordinance and the Variable Rate Securities Agreement for the 2005C bonds. The bonds will have a weekly interest rate and maturity date in 2025.

In November 2010, Airport Revenue Bonds, Series 2010 were issued in the amount of $624.7 million:

- Airport Revenue Bonds, Series 2010A (non-AMT) were issued as serial and term bonds in the amount of $273.1 million. Insured serial bonds were issued in the amount of $16.5 million with interest rates ranging from 3% to 4.5% and a maturity in 2035 and uninsured serial bonds in the amount of $113.0 million with a maturity of 2030. Insured term bonds were issued in the amount of $25 million and $48 million with an interest rate of 5% and maturities in 2035 and 2040. Uninsured term bonds were issued in the amounts of $37.8 million and $32.8 million with an interest rate of 5% and maturities in 2035 and 2040. The proceeds of Series 2010A were used to finance certain capital improvements to the airport system; fund the deposits into the sinking funds; finance capitalized interest; and pay costs of issuance relating to the bonds.

- Airport Revenue Refunding Bonds, Series 2010B (non-AMT) were issued as uninsured serial bonds in the amount of $24.4 million with interest ranging from 2.0% to 5% and maturing in 2015. The proceeds of these bonds were used to refund the City's Airport Revenue Bonds, Series 1997A; fund the deposit into the sinking fund reserve; and pay costs of issuance relating to the bonds.

- Airport Revenue Refunding Bonds, Series 2010C were issued as uninsured serial bonds in the amount of $54.7 million with interest ranging from 2.0% to 5% and maturing in 2018. The proceeds of these bonds were used to partially refund the City's Airport Revenue Bonds, Series 1998A; fund the deposit into the sinking fund reserve; and pay costs of issuance relating to the bonds.

- Airport Revenue Refunding Bonds, Series 2010D were issued in the amount of $272.5 million. Insured serial bonds were issued in the amount of $1.9 million with interest ranging from 4.0% to 4.5% and maturing in 2024. Uninsured serial bonds were issued in the amount of $270.7 million with interest ranging from 2.0% to 5.25% and maturing in 2028. The proceeds of these bonds were used to partially refund the City's Airport Revenue Bonds Series 1998B; fund the deposit into the sinking fund reserve; and pay costs of issuance relating to the bonds.

In December 2011, Airport Revenue Refunding Bonds, Series 2011 were issued in the amount of $233.8 million. The Series 2011A bonds (AMT) were issued as serial bonds in the amount of $199.0 million with interest rates ranging from 2% to 5% and maturing in 2028. The Series 2011B bonds were issued as serial bonds in the amount of $34.8 million, with interest rates ranging from 2% to 5% and maturing in 2031. The proceeds of these bonds were used to: (i) refund a portion of the International Terminal Bonds; (ii) refund all of the City's outstanding Airport Revenue Bonds, Series 2001B; and (iii) pay the issuance costs of the bonds. The proceeds from the 2011A bonds were used to refund the entire principal amount of $149.3 million for the Airport Revenue Bonds, Series 2001A. In addition, the 2011B bonds were used to refund a portion of the Airport Revenue Bond Series 1998B (outstanding aggregate principal amount of $57.1 million).

In August 2015, Airport Revenue Refunding Bonds, Series 2015A were issued in the amount of $97.8 million. The proceeds of Series 2015A were used to refund Revenue Bonds, Series 2005A and pay the costs of issuance of the Bonds. The refunding structure of the 2015A bonds realized a net present value savings of approximately $9.3 million or 8.75% of the principal amount of the refunded bonds.

In December 2017, Airport Revenue and Refunding Bonds, Series 2017 were issued in the amount of $692.5 million. The Series 2017A bonds (Non-AMT), totaling $138.6 million, were issued as serial bonds in the amount of $97.6 million with interest rates ranging from 3.125% to 5%, maturing in 2037, and term bonds in the amounts of $16.0 million and $25.1 million with interest rates of 5% and maturing in 2042 and 2047, respectively. The Series 2017B bonds, totaling $553.9 million, were issued as serial bonds in the amount of $334.9 million, with interest rates of 5% and maturing in 2037, and term bonds in the amounts of $85.2 million and $133.8 million with interest rates of 5% and maturing in 2042 and 2047, respectively. The proceeds of these bonds were used to: (i) currently refund certain outstanding commercial paper notes, (ii) pay for a portion of the costs of the 2017 Capital Project, (iii) currently refund all of the City's outstanding Airport Revenue Bonds, Series 2007A, and all of the City's outstanding Airport Revenue Refunding Bonds, Series 2007B, and a portion of the 2017B Bonds proceeds will be used to currently refund all of the City's outstanding Airport Revenue Refunding Bonds, Series 2009A, (iv) provide for capitalized interest on a portion of the 2017 Bonds, (v) fund a deposit to the Parity Sinking Fund Reserve Account, and (vi) pay the costs of issuance of the 2017 Bonds.

The amount of debt service payable for revenue bonds to maturity is as follows:

Fiscal Years Ending June 30	Principal	Interest	Total Debt Service
2021	68,690,000	65,180,948	$ 133,870,948
2022	76,170,000	61,787,315	137,957,315
2023	79,885,000	58,099,880	137,984,880
2024	83,685,000	54,346,844	138,031,844
2025	87,550,000	50,522,247	138,072,247
2026-2030	320,910,000	195,420,581	516,330,581
2031-2035	210,910,000	132,754,869	343,664,869
2036-2040	199,055,000	81,364,703	280,419,703
2041-2045	122,550,000	41,680,500	164,230,500
2046-2048	99,930,000	7,657,500	107,587,500
Totals	$ 1,349,335,000	$ 748,815,387	$ 2,098,150,387

The early extinguishment of debt can result in a loss on refunding, representing the difference between the reacquisition price, plus or minus unamortized premium or discount, and the amount of debt extinguished. The resulting loss is amortized annually over the life of the refunded bonds and reflected in the Deferred Outflows section on the Statements of Net Position.

Total interest costs for fiscal year 2020 were $68.4 million, of which $8.1 million was capitalized and $60.3 million was recorded as non-operating expense. Total interest costs for fiscal year 2019 were nearly $72.5 million, of which $13.5 million was capitalized and $59 million was recorded as non-operating expense.

Type of Debt	Authorized and Issued	Included in Current Liabilities	Porton Due After 30-Jun-20	Total Outsanding Bonded Debt	Final Maturity	Interest Percentage Rate
Airport Revenue Bonds - Series 2005C	$ 189,500,000	13,700,000	60,400,000	74,100,000	2025	Variable Rate
Airport Revenue Bonds - Series 2010A	$ 273,065,000	7,005,000	225,230,000	232,235,000	2040	2.00-5.25%
Airport Revenue Bonds - Series 2010D	$ 272,475,000	19,475,000	113,230,000	132,705,000	2028	2.00-5.25%
Airport Revenue Bonds - Series 2011A	$ 199,040,000	8,540,000	129,535,000	138,075,000	2028	2.00-5.00%
Airport Revenue Bonds - Series 2011B	$ 34,790,000	1,615,000	20,300,000	21,915,000	2031	2.00-5.05%
Airport Revenue Bonds - Series 2015A	$ 97,780,000	3,735,000	76,585,000	80,320,000	2035	4.00-5.00%
Airport Revenue Bonds - Series 2017A	$ 138,630,000	4,270,000	127,885,000	132,155,000	2047	3.125-5.00%
Airport Revenue Bonds - Series 2017B	$ 533,900,000	10,350,000	527,830,000	537,830,000	2047	5.00%
	$ 1,739,180,000	$ 68,690,000	$ 1,280,995,000	$ 1,349,335,000		

	Authorized and Unissued
Airport General Obligation Bonds	$ 6,250,000

Changes in Long-Term Debt

	Beginning Balance	Additions (Deletions)	Retirements/ Repayments	Ending Balance	Due Within One Year
Revenue Bonds Payable	$ 1,413,620,000	$ -	$ (64,285,000)	$ 1,349,335,000	$ 68,690,000
Taxable Airport Revenue Note	122,770,000	-	(2,320,000)	120,450,000	2,410,000
Unamortized Premium/(Discount)	114,735,631	-	(10,608,526)	104,127,105	-
Total Revenue Bonds Payable	$ 1,651,125,631	$ -	$ (77,213,526)	$ 1,573,912,105	$ 71,100,000

9. DIRECT PURCHASE FEDERALLY TAXABLE LOAN

In April 2017, the Airport issued $125.0 million of Airport Revenue Bond Series 2017 (Direct Purchase Federally Taxable Loan), which was purchased by PNC Bank, NA, for the purpose of providing funds which, together with other available moneys, were used for some or all of the following: (i) to refund a portion of commercial paper notes issued by the City; (ii) the acquisition of land for the Airport System; (iii) other capital financing needs of the Airport System; and (iv) paying the costs of issuing the Taxable Loan. This loan is subject to optional tender in full on April 26, 2022.

Fiscal Years Ending June 30	Principal	Interest	Total Debt Service
2021	2,410,000	3,307,196	5,717,196
2022	118,040,000	2,932,154	120,972,154
Totals	$ 120,450,000	$ 6,239,350	$ 126,689,350

10. FUND BALANCES

The following is a description of the restrictions for all net position categories of the Airport:

- *Net Investment in Capital Assets* reflects the investment in fixed assets net of accumulated depreciation and reduced by outstanding debt related to expended bond proceeds.
- *Restricted for Capital Projects* reflects the unexpended funds from bond and CP proceeds, CFCs and PFCs, which are reserved for construction of capital projects, offset by outstanding debt related to unexpended bond proceeds.
- *Restricted for Debt Service* reflects the unexpended funds from bond proceeds and PFCs, which are reserved for repayment of debt.
- *Unrestricted* reflects net position available for current and future operations.

11. DEFERRED COMPENSATION PLAN

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code section 457. As required by the Code and Pennsylvania laws in effect at June 30, 2014, the assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. In accordance with GASB Statement No. 32, *Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans,* the Airport does not include the assets or activity of the plan in its financial statements.

12. OPERATING LEASES

The Airport as a Lessor

In June 2015, the City Council of Philadelphia approved a five-year Airport-Airline Use and Lease Agreement (Airline Agreement) between PHL and the airlines. The Airline Agreement began July 1, 2015 and includes options for two one-year extensions. In 2020, the first one-year extension was exercised and subsequently the second one-year extension was exercised through June 30, 2022.

The Airport's other operating leases consist primarily of leases of airport facilities for retail or other aviation related matters. Most assets constructed by lessees revert to the City at the end of the lease term as per the lease. Those assets are recorded at fair value, as determined by an appraisal of the property.

The Airport's most significant non-airline lease is with MarketPlace PHL, LLC, an entity responsible for the development and management of the food and retail program throughout Philadelphia International Airport. This award-winning food and retail program consist of approximately 176 shops, restaurants, retail carts and passenger services throughout Terminals A-West through F. The lease agreement provides for MarketPlace PHL, LLC to remit rents to the City in the form of total gross concession revenues, net of

the concession management fee of nine and seventy-five hundredths percent (9.75%). Typically, the monthly Minimum Annual Guarantee (MAG) rental payment is due before the fifth (5th) day of each month and the remaining rental payment, the excess rents collected during the month greater than the MAG, is due on or before the last day of each month. However, due to COVID-19, PHL has agreed to suspend the MAG for all concessionaires and allow only agreed upon percentages of gross revenues to be paid until such time as airline traffic levels return to 70% of pre-COVID traffic levels.

Cash basis rental income from operating leases for fiscal year 2020 was as follows:

Minimum rentals	$ 40,519,418
Additional rentals	173,580,821
Total rental income	$ 214,100,239

Cash basis rental income from operating leases for fiscal year 2019 was as follows:

Minimum rentals	$ 41,923,765
Additional rentals	220,099,764
Total rental income	$ 262,023,529

As of the end of fiscal year 2020, future minimum rentals receivable under non-cancelable operating leases are as follows:

Fiscal Years Ending June 30	Amount
2021	$ 44,358,360
2022	30,893,725
2023	18,249,101
2024	6,094,428
2025	6,094,428
2026-2030	27,268,370
2031-2035	22,874,954
2036-2040	17,723,754
2041-2045	17,704,560
Total	$ 191,261,680

The separate cost and carrying amount of property held for leasing is not available.

The Airport as a Lessee

The Airport leases office space, land, and both office and operations equipment on a short-term and long-term basis. Rental expense for operating leases for fiscal year 2020 was as follows:

Minimum rentals	$ 1,587,286
Additional rentals	17,797,822
Total rental expense	$ 19,385,108

Rental expense for operating leases for fiscal year 2019 was as follows:

Minimum rentals	$ 1,087,281
Additional rentals	12,369,911
Total rental expense	$ 13,457,192

As of year-end, future minimum rental commitments for operating leases having initial or remaining non-cancelable lease terms of more than one year are as follows:

Fiscal Years Ending June 30	Amount
2021	392,888
2022	392,888
2023	392,888
2024	392,888
2025	392,888
2026-2030	1,964,440
2031-2035	1,964,440
2036-2040	1,964,440
2041-2045	1,964,440
Total	$ 9,822,200

13. CONCENTRATION OF CREDIT RISK

American Airlines is the principal airline serving Philadelphia International Airport. The airline, together with its American Eagle affiliates, accounted for approximately 67.2% and 69.7% of passengers enplaned at the airport in fiscal years 2020 and 2019, respectively. Operating revenues from American Airlines and its affiliates totaled approximately $148.3 million and $182.2 million in fiscal years 2020 and 2019, respectively, which represented approximately 44.0% and 46.7% of total Airport operating revenues in fiscal years 2020 and 2019, respectively.

14. PRIOR PERIOD ADJUSTMENTS AND CUMULATIVE EFFECT OF CHANGE IN ACCOUNTING PRINCIPLE

A prior period adjustment was made to correct an error for an understatement of the City's liability for accumulated sick leave at June 30, 2019. The correction of the error represents a change in applying generally accepted accounting principles for compensated absences with reported amounts now reflecting a liability for accumulated unpaid sick leave. The Aviation Fund's Net Position decreased by $8.8 million as a result of recording a liability

for the Aviation Fund's share of the City's June 30, 2019 accumulated unpaid sick leave in the amount of $8.8 million.

The effect of the adjustment is reflected in the Aviation Fund's Net Position as of July 1, 2019 in the June 30, 2020 Statement of Revenues, Expenses and Changes in Net Position. The following table shows the changes to the beginning net position as of July 1, 2019.

	Amounts ($000)
Net Position as of June 30, 2019, as reported	$ 993,543
Liability for Accumulated Unpaid Sick Leave at June 30, 2019	(8,771)
Net Position as of June 30, 2019, as restated	$ 984,772

15. PENSION PLANS

The Airport contributes to the Municipal Pension Plan (City Plan) of the City of Philadelphia. The City maintains two single-employer defined benefit plans for its employees and several of its component units. The two plans maintained by the City are the City Plan and the Philadelphia Gas Works (PGW) Plan. In addition to the City, the three other quasi-governmental agencies that participate in the City Plan are the Philadelphia Parking Authority (PPA), the Philadelphia Municipal Authority (PMA), and the Philadelphia Housing Development Corporation (PHDC). Information for the City Plan as a whole is available in the Comprehensive Annual Financial Report (CAFR) of the City of Philadelphia for the year ended June 30, 2020.

Effective with fiscal year 2015, the City implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27*. This Statement revised existing standards for measuring and reporting pension liabilities for pension plans. GASB Statement No. 68 defines a single employer as the primary government and its component units. All three quasi-governmental agencies that participate in the City Plan were determined to be component units of the City. Therefore, the City Plan meets the definition of a single-employer plan.

The note disclosures and Required Supplementary Information required by GASB Statement No. 67, *Financial Reporting for Pension Plans – an amendment of GASB Statement No. 25,* are presented in the separately issued audited financial statements of the City Plan and PGW Plan. Copies of these financial statements may be obtained by contacting the Director of Finance of the City of Philadelphia.

Pension Fund Description

Plan Administration

The Philadelphia Board of Pensions (the Pension Board) administers the City of Philadelphia Municipal Pension Fund (the Fund), a single-employer defined benefit

pension plan with a small but increasing defined contribution component, which provides pensions for all officers and employees of the City of Philadelphia (the City), as well as those of three quasi-governmental agencies (per applicable enabling legislation and contractual agreements). The Pension Board was established by section 2-308 of the 1952 Philadelphia Home Rule Charter. Its actions in administering the Retirement System are governed by Title 22 of the Philadelphia Code.

The Board consists of nine voting members – four elected by the active members within civil service, and the City's Controller, Solicitor, Managing Director, Personnel Director, and Director of Finance, who serves as the Chair.

Plan Membership

At July 1, 2019, the date of the most recent actuarial valuation, pension plan membership for the City as a whole consisted of the following:

Active Members	28,596
Terminated Vested	965
Disabled	3,883
Retirees	22,241
Beneficiaries	8,574
DROP Members	2,069
Total City Members	66,328
Annual Salaries	$1,842,554,883
Average Salary per Active Member	$64,434
Annual Retirement Allowances	$774,067,324
Average Retirement Allowance	$22,309

Contributions

Per Title 22 of the Philadelphia Code, members contribute to the Fund at various rates based on bargaining unit, uniform/non-uniform/elected/exempt status, and entry date into the Fund. Beginning July 1, 2019, members contributed at one of the following rates:

Employee Contribution Rates For the Plan Year Beginning July 1, 2019 to June 30, 2020				
	Municipal (1)	**Elected (2)**	**Police**	**Fire**
Plan 67	7.00%	N/A	6.00%	6.00%
Plan 87	3.49%	10.75%	6.84%	6.84%
Plan 87 - 50% of Aggregate Normal Cost (3)	4.15%	N/A	N/A	N/A
Plan 87 - Accelerated Vesting (4)	4.25%	12.78%	N/A	N/A
Plan 87 Prime (5)	4.49%	11.75%	7.84%	7.84%
Plan '10	2.33%	N/A	7.34%	7.34%
Plan '10 - Accelerated Vesting	2.75%	N/A	N/A	N/A
Plan '16 (6)	4.04%	N/A	N/A	N/A
Plan '16 - Accelerated Vesting (7)	4.53%	N/A	N/A	N/A

1 - For the Municipal Plan 67 members who participate in the Social Security System, employee contributions are 4.75% of compensation up to the social security wage base and 7% above it.

2 - The employee contribution rate is based upon the normal cost of $532,080 under Plan 87 Elected, normal cost of $308,735 under Plan 87 Municipal and current annual payroll of $3,298,255.

3 - This represents 50% of aggregate Normal Cost for all members in Plan Y and applies to Deputy Sheriffs hired between 1/1/2012 and 6/20/2018.

4 - Member rates for Municipal Plan 87 (Y5) members eligible to vest in 5 years and Elected Officials (L8) eligible to be vested in 8 years instead of 10.

5 - Plan 87 Prime refers to new hires who have the option to elect Plan '10 but have elected to stay in Plan '87. New hires after 7/1/2017 in Police and Fire Plan 87 Prime pay 8.50% and are not reflected bove.

6 - All Municipal groups (except elected officials) hired after January 1, 2019 participate in Plan '16.

7 - Member rate for Municipal Plan 16 members eligible to vest in 7 years instead of 10 years.

Employer contributions are made by the City throughout each fiscal year (which ends June 30) and by three (3) quasi-governmental agencies on a quarterly basis. These contributions, determined by an annual actuarial valuation report (AVR), when combined with plan member contributions, are expected to finance the costs of benefits earned by plan members during the year, with an additional amount to finance any unfunded accrued liability.

Within the AVR, three contribution amounts are determined based upon three different sets of rules for determining the way the unfunded actuarial liability is funded.

The first method is defined in accordance with Act 205 and defines the Minimum Municipal Obligation (MMO), which is the City's minimum required contribution under Pennsylvania state law.

The second method is in accordance with the City's Funding Policy, which predates the Act 205 rules and calls for contributions that are greater than the MMO until the initial unfunded liability determined in 1984 is fully funded.

The third method currently followed by the City, the Revenue Recognition Policy (RRP), calls for additional revenue to be contributed each year to the fund in excess of the MMO. There are three sources of additional revenue that will be received by the Fund: 1) a portion of the sales tax according to the State Legislation, 2) additional tiered member contributions

based on salary level for all municipal employees, and 3) additional member contributions from the current and future uniform members in Plan 87.

Under all funding methods, there are two components: the normal cost and the amortized unfunded actuarial liability. The actuarial unfunded liability is the amount of the unfunded actuarial liability that is paid each year based upon the given or defined amortization periods. The amortization periods are the same under the MMO and RRP, but different under the City's Funding Policy.

City's Funding Policy

The initial July 1, 1985 unfunded actuarial liability (UAL) is amortized over 34 years ending June 30, 2020 with payments increasing at 3.3% per year, the assumed payroll growth. Other changes in the actuarial liability are amortized in level-dollar payments as follows:

- Actuarial gains and losses – 20 years beginning July 1, 2009. Prior gains and losses were amortized over 15 years.
- Assumptions changes – 15 years beginning July 1, 2010. Prior to July 1, 2010, assumption changes were amortized over 20 years.
- Plan changes for active members – 10 years.
- Plan changes for inactive members – 1 year.
- Plan changes mandated by the State – 20 years.

In fiscal year 2020, the City and other employers' contributions of $768.7 million were less than the actuarially determined employer contribution (ADEC) of $839.7 million. In the event that the City contributes less than the funding policy, an experience loss will be created that will be amortized in accordance with the funding policy over a closed 20-year period.

The Schedule of Employer Contributions (based on the City's Funding Policy) is included as Required Supplemental Information (in the City's CAFR) and provides a 10-year presentation of the employer contributions.

Minimum Municipal Obligation (MMO)

For the purposes of the MMO under Act 205 reflecting the fresh start amortization schedule, the July 1, 2009 UAL was "fresh started" to be amortized over 30 years ending June 30, 2039. This is a level dollar amortization of the UAL. All future amortization periods will follow the City's Funding Policies as outlined above.

In fiscal year 2020, the City and other employers' contributions of $768.7 million exceeded the Minimum Municipal Obligation of $675.8 million.

The Schedule of Employer Contributions (based on the MMO Funding Policy) is included as Required Supplemental Information (in the City's CAFR) and provides a 10-year presentation of employer contributions.

Revenue Recognition Policy (RRP)

Revenue Recognition Policy is similar to the MMO except that assets used to determine the unfunded liability do not include a portion of sales tax revenue, tiered member contributions from the municipal employees, and additional uniform members' contributions. These sources of income are contributed over and above the City's contribution of the MMO and will be in addition to the MMO. Therefore, under this funding method, the additional revenue amounts are separately tracked and accumulated in a notional account, which is then subtracted from the assets before calculating the contribution amounts due under the Minimum Municipal Obligation methodology. The fund accumulates these amounts in a notional account and deducts them from the Actuarial Asset Value return rates to preserve the new funding methodology objective.

In fiscal year 2020, the City and other employers' contributions of $768.7 million exceeded the contribution under the Revenue Recognition Policy of $704.6 million.

The Schedule of Employer Contributions (based on the RRP Funding Policy) is included as Required Supplemental Information (in the City's CAFR) and provides a 10-year presentation of employer contributions.

Benefits

The Fund provides retirement, disability, and death benefits according to the provisions of Title 22 of the Philadelphia Code. These provisions prescribe retirement benefit calculations, vesting thresholds, and minimum retirement ages that vary based on bargaining unit, uniform/non-uniform status, and entry date into the System.

Non-uniform employees may retire at either age 55 with up to 80% of average final compensation (AFC) or age 60 with up to 100% or 25% of AFC, depending on entry date into the Fund. Uniform employees may retire at either age 45 with up to 100% of AFC or age 50 with up to either 100% or 35% of AFC, depending on entry date into the Fund. Survivorship selections may result in an actuarial reduction to the calculated benefit.

Members may qualify for service-connected disability benefits regardless of length of service. Service-connected disability benefits are equal to 70% of a member's final rate of pay, and are payable immediately without an actuarial reduction. These applications require approval by the Board. Eligibility to apply for non-service-connected disability benefits varies by bargaining unit and uniform/non-uniform status. Non-service-connected disability benefits are determined in the same manner as retirement benefits, and are payable immediately.

Service-connected death benefits are payable to:

1) surviving spouse/life partner at 60% of final rate of pay plus up to 2 children under age 18 at 10% each of final rate of pay (maximum payout: 80%);

2) if no surviving spouse/life partner, up to 3 children under age 18 at 25% each of final rate of pay (maximum payout 75%); or

3) if no surviving spouse/life partner or children under age 18, up to 2 surviving parents at 15% each of final rate of pay (maximum payout 30%).

Non-service-connected deaths are payable as a lump sum payment, unless the deceased was either vested or had reached minimum retirement age for their plan, in which case the beneficiary(ies) may instead select a lifetime monthly benefit, payable immediately with an actuarial reduction.

A Pension Adjustment Fund (PAF) is funded with 50% of the excess earnings that are between 1% and 6% above the actuarial assumed earnings rate. Each year, within sixty days of the end of the fiscal year, by majority vote of its members, the Board of Directors of the Fund (the Board) shall consider whether sufficient funds have accumulated in the PAF to support an enhanced benefit distribution (which may include, but is not limited to, a lump sum bonus payment, monthly pension payment increases, ad hoc cost-of-living adjustments, continuous cost-of-living adjustments, or some other form of increase in benefits as determined by the Board) to retirees, their beneficiaries, and their survivors. As of July 1, 2019, the date of the most recent actuarial valuation, there was $1,225,114 in the PAF and the Board voted to make PAF distributions of $0 during the fiscal year ended June 30, 2020.

The Fund includes a Deferred Retirement Option Plan (DROP Plan). The DROP Plan allows a participant to declare that they will retire within 4 years. During the 4-year period, the City will make no further contributions for the participant. The participant would continue to work and to receive their salary; however, any increases would not be counted towards their pension benefit. During the 4-year period the individual participates in the DROP Plan, their pension benefits will be paid into an escrow account in the participant's name. After the 4-year period, the participant would begin to receive their pension benefits and the amount that has been accumulated in the escrow account in a lump sum payment. The balance in the DROP Plan as of June 30, 2020 is $156.0 million.

Investments

The Pension Board's Investment Policy Statement provides, in part:

The overall investment objectives and goals should be achieved by use of a diversified portfolio, with safety of principal a primary emphasis. The portfolio policy should employ flexibility by prudent diversification into various asset classes based upon the relative expected risk-reward relationship of the asset classes and the expected correlation of their returns.

The Fund seeks an annual total rate of return of not less than 7.55% over a full market cycle. It is anticipated that this return standard should enable the Fund to meet its current actuarially assumed earnings projection 7.55% over a market cycle. There was no change in investment return assumption from the prior fiscal year. The Fund's investment program will pursue its aforestated total rate of return by a combination of income and appreciation, relying upon neither exclusively in evaluating a prospective investment for the Fund.

All investments are made only upon recommendation of the Fund's Investment Committee and approval by a majority of the Pension Board. In order to document and communicate the objectives, restrictions, and guidelines for the Fund's investment staff and investments, a continuously updated Investment Policy Statement is maintained. The Investment Policy Statement is updated (and reaffirmed) each year at the January Board meeting.

The following was the Board's approved asset allocation policy as of June 30, 2020:

Asset Class	Target Allocation
U.S. Large-Cap Core	20.0%
Broad Fixed Income	13.0%
Private Equity	12.0%
Global Low Volatility	10.0%
International Developed Large Cap Equity	10.0%
Core Real Estate	10.0%
Global Infrastructure	5.0%
U.S. Mid-Cap Core	4.0%
U.S. Small-Cap Core	4.0%
International Small Cap Equity	3.0%
Emerging Market Equity	3.0%
Emerging Market Debt	2.0%
HighYield	1.0%
Global Aggregate	1.0%
Public REITs	1.0%
Real Estate - Opportunistic	1.0%
Total	100.0%

Money-Weighted Rate of Return

For the fiscal year ended June 30, 2020, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 1.89%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for changing amounts actually invested.

Summary of Significant Accounting Policies

Basis of Presentation

Financial statements of the Fund are prepared using the accrual basis of accounting. Member contributions are recognized in the period in which the contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds of contributions are recognized when due and payable in accordance with the terms of the Fund.

Methods Used to Value Investments

The Fund's investments are reported at fair value. Fair value is the amount that the Fund can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. Fixed income securities and common and preferred stocks are generally valued based on published market prices and quotations from national security exchanges or securities pricing services. Securities which are not traded on a national security exchange are valued by the respective fund manager or other third parties based on similar sales.

For private market investments which include private equity, private debt, venture capital, hedge funds and equity real estate investments where no readily ascertainable market value exists, management, in consultation with the general partner and investment advisors, has determined the fair values for the individual investments based upon the partnership's most recent available financial information. Some of the investment values provided in the report are estimates due to a lag in reporting for private market investments.

Futures contracts, foreign exchange contracts, and options are marked-to-market daily with changes in market value recognized as part of net appreciation/depreciation in the fair value of investments. Initial margin requirements for such financial instruments are provided by investment securities pledged as collateral or by cash.

Investment expenses consist of investment manager fees and investment consultant fees related to the traditional investments only, and not those fees related to the alternative investments. Unsettled investment sales are reported as Accrued Interest and Other Receivables, and unsettled investment purchases are included in Accrued Expenses and Other Liabilities.

Dividend income is recorded on the ex-dividend date. Interest income is recorded as earned on an accrual basis.

Income Taxes

The Fund qualifies under Section 401(a) of the Internal Revenue Code (IRC) and is exempt from income taxation as allowed by Section 501(a) of the IRC.

Related Parties

The City's Department of Finance provides cash receipt and cash disbursement services to the Fund. The City Solicitor's Office provides legal services to the Fund. Other administrative services are also provided by the City.

Use of Estimates in Preparing Financial Statements

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Risks and Uncertainties

The Fund invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect the amounts reported in the Statement of Fiduciary Net Position.

Contributions are calculated based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimation and assumption process, it is at least reasonably possible that changes in these statements and assumptions in the near term would be material to the financial statements.

Administrative Expenses

Administrative expenses of the Fund are paid for by the Fund.

Cash Deposits, Investments and Securities Lending

Legal Provisions

The Fund is authorized to invest in "prudent investments," including obligations of the U.S. Treasury, agencies and instrumentalities of the United States, investment grade corporate bonds, common stock, real estate, private market, etc. City ordinances contain provisions which preclude the Fund from investing in organizations that conduct business in certain countries and also impose limitations on the amounts invested in certain types of securities.

Custodial Credit Risk

Custodial credit risk for Deposits is the risk that in the event of a bank failure, the Fund's deposits may not be returned to them. The Fund's cash deposits are held in two banks as of June 30, 2020. Amounts are insured up to $250,000 per bank by the Federal Deposit Insurance Corporation (FDIC). Deposits in excess of the FDIC limit are collateralized with securities held by the pledging financial institution's trust department or agent in the Fund's name. The Fund classifies Money Market funds held by custodian institution, JPMorgan,

N.A., as cash equivalents. The Fund also classifies Treasury Bills as cash equivalent if the date of maturity is three months or less from the acquisition date. Custodial credit risk for Investments is the risk that in the event of counter-party failure, the Fund may not be able to recover the value of its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities held by the counterparty or counterparty's trust department are uninsured and are not registered in the name of the Fund. The Fund requires that all investments be clearly marked as to ownership, and to the extent possible, be registered in the name of the Fund. Certain investments may be held by the managers in the Fund's name.

Interest Rate Risk

Interest rate risk is the largest risk faced by an investor in the fixed income market. The price of a fixed income security generally moves in the opposite direction of the change in interest rates. Securities with long maturities are highly sensitive to interest rate changes.

Duration is a measure of the approximate sensitivity of a bond's value to interest rate changes. The higher the duration, the greater the changes in fair value when interest rates change. The Fund measures interest rate risk using segmented time distribution, which shows the total fair value of investments maturing during a given period.

Concentration of Credit Risk

Concentration of credit risk is the risk of substantial loss if investments are concentrated in one issuer. As of June 30, 2020, the Fund has no single issuer that exceeds 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments are excluded.

Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligation. The Fund is subject to credit risk on $881.8 million of directly owned fixed income. The Fund's directly owned rated debt investments as of June 30, 2020 were rated by Standard & Poor's, a nationally recognized statistical rating agency.

Foreign Currency Risk

The Fund's exposure to foreign currency risk derives from its position in foreign currency-denominated cash and investments in fixed income, equities, and derivatives. The foreign currency investment in equity securities is 38.5% of the total investment in equities.

Derivatives

The Fund may invest in derivatives as permitted by guidelines established by the Pension Board. Pursuant to such authority, the Fund may invest in foreign currency forward contracts, options, futures (S&P Fund) and swaps. No derivatives were purchased with borrowed funds.

Derivatives are generally used to provide market exposure in the equity portfolio and to hedge against foreign currency risk and changes in interest rates, improve yield and adjust the duration of the Fund's fixed income portfolio. These securities are subject to changes in value due to changes in interest rates or currency valuations. Credit risk for derivatives results from the same considerations as other counterparty risk assumed by the Fund, which is the risk that the counterparty might be unable to meet its obligations.

Derivative instruments such as swaps, options, futures and forwards are often complex financial arrangements used by governments to manage specific risks or to make investments. By entering into these arrangements, governments receive and make payments based on market prices without actually entering into the related financial or commodity transactions. Derivative instruments associated with changing financial and commodity prices result in changing cash flows and fair values that can be used as effective risk management or investment tools. However, derivative instruments can also expose governments to significant risks and liabilities.

The Fund enters into a variety of financial contracts, which include options, futures, forwards and swap agreements to gain exposure to certain sectors of the equity and fixed income markets; collateralized mortgage obligations (CMOs); other forward contracts, and U.S. treasury strips. The contracts are used primarily to enhance performance and reduce the volatility of the portfolio. The Fund is exposed to credit risk in the event of non-performance by counterparties to financial instruments. The Fund generally enters into transactions only with high quality institutions. Legal risk is mitigated through selection of executing brokers and review of all documentation. The Fund is exposed to market risk, the risk that future changes in market conditions may make an instrument less valuable. Exposure to market risk is managed in accordance with risk limits set by senior management, through buying or selling instruments or entering into offsetting positions. The notional or contractual amounts of derivatives indicate the extent of the Fund's involvement in the various types and uses of derivative financial instruments and do not measure the Fund's exposure to credit or market risks and do not necessarily represent amounts exchanged by the parties. The amounts exchanged are determined by reference to the notional amounts and the other terms of the derivatives.

Derivative Instruments

The following table summarizes the aggregate notional or contractual amounts for the Fund's derivative financial instruments at June 30, 2020 in addition to the fair value and the change in the fair value of derivatives.

List of Derivatives Aggregated by Investment Type

Classification	Change in Fair Value		Fair Value at June 30, 2020		Notional
Investment Derivatives					
Forward Currency Contracts	Net appreciation / (depreciation) in investments	$ (271,167)	Investments	$ 143,489	$ 355,664,602
Futures	Net appreciation / (depreciation) in investments	$ (382,194)	Investments	$ 18,578	$ 176
	Grand Totals	$ (653,361)		$ 162,067	$ 355,664,778

A Derivatives Policy Statement identifies and allows common derivative investments and strategies which are consistent with the Investment Policy Statement of the City of Philadelphia Municipal Pension Fund. The guidelines identify transaction-level and portfolio-level risk control procedures and documentation requirements. Managers are required to measure and monitor exposure to counterparty credit risk. All counterparties must have credit ratings available from nationally recognized rating institutions such as Moody's, Fitch, and S&P. The details of other risks and financial instruments in which the Fund is involved are described below.

Credit Risk

The Fund is exposed to credit risk on hedging derivative instruments that are in asset positions. To minimize its exposure to loss related to credit risk, it is the Fund's policy to require counterparty collateral posting provisions in its non-exchange-traded hedging derivative instruments. These terms require full collateralization of the fair value of hedging derivative instruments in asset positions (net of the effect of applicable netting arrangements) should the counterparty's credit rating fall below AA as issued by Fitch Ratings and Standard & Poor's or Aa as issued by Moody's Investors Service. Collateral posted is to be in the form of U.S. Treasury securities held by a third-party custodian. The City has never failed to access collateral when required.

It is the Fund's policy to enter into netting arrangements whenever it has entered into more than one derivative instrument transaction with counterparty. Under the terms of these arrangements, should one party become insolvent or otherwise default on its obligations, close-out netting provisions permit the non-defaulting party to accelerate and terminate all outstanding transactions and net the transactions' fair values so that a single sum will be owed by, or owed to, the non-defaulting party.

Swap Agreements

These derivative instruments provide for periodic payments at predetermined future dates between parties based on the change in value of underlying securities, indexes or interest rates. Under fixed interest rate type swap arrangements, the Fund receives the fixed interest

rate on certain equity or debt securities or indexes in exchange for a fixed charge. There were not any total receive fixed interest swaps during 2020. On its pay-variable, receive-fixed interest rate swap, as LIBOR increases, the Fund's net payment on the swap increases. Alternatively, on its pay-fixed, receive-variable interest rate swap, as LIBOR or the SIFMA swap index decreases, the Fund's net payment on the swap increases.

Futures Contracts

These derivative instruments are types of contracts in which the buyer agrees to purchase and the seller agrees to make delivery of a specific financial instrument at a predetermined date and price. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not involve an actual transfer of the specific instrument. Futures contracts are standardized and are traded on exchanges. The exchange assumes the risk that counterparty will not pay and generally requires margin payments to minimize such risk. In addition, the Fund enters into short sales, sales of securities it does not presently own, to neutralize the market risk of certain equity positions. Initial margin requirements on futures contracts and collateral for short sales are provided by investment securities pledged as collateral and by cash held by various brokers. Although the Fund has the right to access individual pledged securities, it must maintain the amount pledged by substituting other securities for those accessed. The realized gain from futures contracts was $132,253.

Forward Contracts

The Fund is exposed to basis risk on its forward contracts because of possible mismatch between the price of the asset being hedged and the price at which the forward contract is expected to settle. The realized loss from forward contracts was ($6,784,985).

Termination Risk

The Fund or its counterparties may terminate a derivative instrument if the other party fails to perform under the terms of the contract. In addition, the Fund is exposed to termination risk on its receive-fixed interest rate swap. The Fund is exposed to termination risk on its rate cap because the counterparty has the option to terminate the contract if the SIFMA swap index exceeds 12 percent. If at the time of termination, a hedging derivative instrument is in a liability position, the City would be liable to the counterparty for a payment equal to the liability, subject to netting arrangements.

Rollover Risk

The Fund is exposed to rollover risk on hedging derivative instruments that are hedges of debt that mature or may be terminated prior to the maturity of the hedged debt. When these hedging derivative instruments terminate, or in the case of a termination option, if the counterparty exercises its option, the Fund will be re-exposed to the risks being hedged by the hedging derivative instrument.

Fair Value Measurement

See the City's CAFR to view the Municipal Pension Fund's recurring fair value measurement as of June 30, 2020.

Equity securities classified in Level 1 of the fair value hierarchy are valued using quoted market prices. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Equities in Level 3 are valued using discounted cash flow techniques.

Derivative instruments classified in Level 1 of the fair value hierarchy are valued using quoted market prices. Derivative instruments classified in Level 2 are valued using a market approach that considers benchmark for foreign exchange rates.

1. Credit distressed hedge funds: These Funds seek to identify and exploit event driven opportunities both on the long and short side in the stressed and distressed corporate debt markets. Investments are generally driven by fundamental, value-oriented analysis and specific credit events. The Funds maintain the flexibility to invest globally and across capital structures of stressed and distressed companies. Investments generally target secondary U.S. credit opportunities across all tranches of a company's debt capital structure. The Funds may also invest opportunistically in certain equities, long and short. The fair values of the investments in this type have been determined using the net asset value (NAV) per share (or its equivalent) of the investments. Investments can be redeemed with a 90 days' notice.

2. Equity long/short hedge funds: These Fund will typically hold 0-50 long positions and 10-15 short positions in U.S. common stocks. Management can shift investments from value to growth strategies, from small to large capitalization stocks, and from a net long position to a net short position. The Fund mitigates market risk by utilizing short positions. In periods of extreme volatility, the Fund may hold a significant portion of its assets in cash. The fair values of the investments in this type have been determined using the NAV per share of the investments. Investments can be redeemed with a 90 days' notice.

3. Real estate funds: This type includes funds that invest in U.S. and non-U.S. commercial and residential real estate. The fair values of the investments in this type have been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. These investments can never be redeemed with the funds. Distributions from each fund will be received as the underlying investments of the funds are liquidated. However, the individual investments that will be sold have not yet been determined. Because it is not probable that any individual investment will be sold, the fair value of each individual investment has been determined using the NAV per share (or its equivalent) of the Plan's ownership interest in partners' capital. Once it has been determined which investments will be sold and whether those investments will be sold individually or in a group, the investments will be sold in an auction process. The investee fund's management is required to approve of the buyer before

the sale of the investments can be completed. It is expected that the underlying assets of the funds will be liquidated over the next seven to ten years.

4. Private equity funds: The primary goal of these Funds is to generate returns for investors that exceed private equity industry benchmarks and are commensurate with asset class risk through the construction of a portfolio of opportunistic, highly performing private equity investments. Investments that these funds may undertake include early-stage venture capital, later-stage growth financings, leveraged buyouts of medium and large-sized companies, mezzanine investments, private investments in public equity (PIPES) and investments in companies that are being taken private. These investments can never be redeemed with the funds. Instead, the nature of the investments in this type is that distributions are received through the liquidation of the underlying assets of the fund. If these investments were held, it is expected that the underlying assets of the fund would be liquidated over five to ten years. The fair values of the investments in this type have been determined using recent observable transaction information for similar investments and nonbinding bids received from potential buyers of the investments. Once a buyer has been identified, the investee fund's management is required to approve of the buyer before the sale of the investments can be completed.

5. Fixed income hedge funds: The primary goal of these Funds is to create alpha by sourcing proprietary opportunities, avoiding capital loss, buying securities below their intrinsic value and selling securities above their intrinsic value. Firms look for opportunities that are currently mispriced, based on fundamentals or potentially an event that may improve the price of the holding. Investments are generally driven by fundamental, value-oriented analysis, and specific credit events. The fair values of the investments in this type have been determined using NAV per share (or its equivalent) of the investments. Investments can be redeemed with 90-120 days' notice.

Securities Lending Program

The Fund, pursuant to a Securities Lending Authorization Agreement (SLAA), has authorized J.P. Morgan Bank and Trust Company (J.P. Morgan) to act as the Fund's agent in lending the Fund's securities to approved borrowers. J.P. Morgan, as agent, enters into Securities Loan Agreements with borrowers.

During the fiscal year, J.P. Morgan lent, on behalf of the Fund, certain securities of the Fund held by J.P. Morgan Chase Bank, N.A. as custodian and received cash or other collateral including securities issued or guaranteed by the United States, U.K., and Eurozone governments. J.P. Morgan does not have the ability to pledge or sell collateral securities delivered, absent a borrower default. Borrowers were required to deliver collateral for each loan equal to at least 102% or 105% of the market value of the loaned securities.

Pursuant to the SLAA, J.P. Morgan had an obligation to indemnify the Fund in the event of default by a borrower. There were no failures by any borrowers to return loaned

securities or pay distributions thereon during the fiscal year that resulted in a declaration or notice of default of the borrower.

During the fiscal year, the Fund and the borrowers maintained the right to terminate securities lending transactions upon notice. The cash collateral received on each loan was invested in a separately managed account based upon the investment guidelines established by the Fund. As of June 30, 2020, the weighted average maturity was 48 days and the final maturity was 351 days. Because the securities lending transactions were terminable at will, their duration did not generally match the duration of the investments made with the cash collateral received from the borrower.

On June 30, 2020, the Fund had no credit risk exposure to borrowers because all borrowers were required to deliver collateral for the loan.

As of June 30, 2020, the fair value of securities on loan was $378.1 million. Associated collateral totaling $391.2 million was comprised of cash which was invested in a separately managed account based upon the investment guidelines established by the Pension Fund. As of June 30, 2020, the invested cash collateral was $391.2 million and is valued at amortized cost.

Investments Advisors

The Fund utilizes investment advisors to manage long-term debt, real estate, private market, and equity portfolios. To be eligible for consideration, investments must meet criteria set forth in governing laws and regulations.

Net Pension Liability

The components of the net pension liability as of June 30, 2020 were as follows:

Total Pension Liability	$ 11,983,391,471
Plan Fiduciary Net Position	5,782,890,966
Collective Net Pension Liability	$ 6,200,500,505

Plan Fiduciary Net Position as a Percentage of the Total Pension Liability: 48.3%

Actuarial Assumptions

The total pension liability was determined by an actuarial valuation as of June 30, 2019 and was rolled forward to June 30, 2020. The June 30, 2019 valuation used the following actuarial assumptions, applied to all periods, including the measurement period:

Actuarial Cost Method:	Entry Age Normal
Investment Rate of Return:	7.55% compounded annually, net of expenses
Salary Increases:	Age-based table

* The investment return assumption remained unchanged at 7.55% for the current year valuation.

* To recognize the expense of the benefits payable under the Pension Adjustment Fund, the actuarial liabilities have been increased by 0.54%. This estimate is based on the statistical average expected value of benefits.

* Mortality Rates: For Municipal and Elected Officials, 127% and 119% for males and females, respectively, of the RP-2014 Healthy Annuitant Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017. For Uniform, 115% of the RP-2014 Blue Collar Healthy Annuitant Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017.

The measurement date for the net pension liability (NPL) is June 30, 2020. Measurements are based on the fair value of assets as of June 30, 2020 and the total pension liability (TPL) as of the valuation date, July 1, 2019, updated to June 30, 2020. The roll-forward procedure included the addition of service cost and interest cost offset by actual benefit payments. During the measurement year, the collective NPL increased by approximately $115 million. The service cost and interest cost increased the collective NPL by approximately $1.06 billion while contributions plus investment income offset by administrative expenses decreased the collective NPL by approximately $957 million.

Additionally, there was an actuarial experience loss during the year of approximately $9 million primarily due to mortality experience and from participants in transition from active to non-active status.

Long-term Expected Rate of Return

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan 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.

Discount Rate

The discount rate used to measure the total pension liability was 7.55%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and the participating governmental entity contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. 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 plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods on projected benefit payment to determine the total pension liability.

Sensitivity of the Net Pension Liability

The following table presents the NPL of the Fund, calculated using the discount rate of 7.55%, as well as what the Fund's net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

	1% Decrease 6.55%	Discount Rate 7.55%	1% Increase 8.55%
Total Pension Liability	$13,209,508,185	$11,983,391,471	$10,939,076,304
Plan Fiduciary Net Position	$5,782,890,966	$5,782,890,966	$5,782,890,966
Collective Net Position Liability	$7,426,617,219	$6,200,500,505	$5,156,185,338
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	43.8%	48.3%	52.9%

Guarantee of Benefits

Benefits under the Fund are guaranteed by statute. In the event that employee contributions do not equal required benefits, the City's General Fund must provide any shortfall.

Participation in the Pension Fund

The trustees for the Fund are also members of the Fund and as such, are subject to the provisions of the Fund as described in the notes to these financial statements.

Reporting Information for Participating Employers

Changes in Collective Net Pension Liability

The following table shows the changes in TPL, the plan fiduciary net position (i.e., fair value of the System assets) (FNP), and the NPL during the measurement period ending on June 30, 2020.

Change in Collective Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balances at June 30, 2019	$ 11,774,268,695	$ 5,688,383,351	$ 6,085,885,344
Changes for the year:			
Service cost	190,456,944	-	190,456,944
Interest	871,381,015	-	871,381,015
Changes in benefits	-	-	-
Differences between expected and actual experience	9,482,477	-	9,482,477
Changes of assumptions	-	-	-
Contributions - employer	-	768,720,687	(768,720,687)
Contributions - member	-	111,824,994	(111,824,994)
Net investment income	-	87,150,696	(87,150,696)
Benefit payments	(862,197,660)	(862,197,660)	-
Administrative expense	-	(10,991,102)	10,991,102
Net Changes	209,122,776	94,507,615	114,615,161
Balances at June 30, 2020	$ 11,983,391,471	$ 5,782,890,966	$ 6,200,500,505

Employer's Proportionate Share

GASB Statement No. 68 requires that the proportionate share for each employer be determined based upon the "employer's projected long-term contribution effort to the pension … as compared to the total long-term contribution effort to all employers." In addition to the City, three governmental agencies currently participate in the System, PHDC, PMA, and PPA. The method of allocation is based on the ratio of quasi-agency contributions in proportion to total contributions by plan.

See the City's CAFR for further details on the Plan's financials.

16. ACCUMULATED UNPAID SICK LEAVE

The Airport follows City policies regarding the accumulation of sick leave. City and certain component unit employees are credited with varying amounts of sick leave according to type of employee and/or length of service. City employees may accumulate unused sick leave to predetermined balances. Non-uniformed employees (upon retirement only) and uniformed employees (upon retirement or in case of death while on active duty) are paid varying amounts ranging from 25% to 60% of unused sick time, not to exceed predetermined amounts. Employees, who separate for any reason other than indicated above, forfeit their entire sick leave.

17. OTHER POSTEMPLOYMENT BENEFITS (OPEB)

The following information is provided for the City as a whole because discrete information is not available for the Airport. Please see the CAFR of the City of Philadelphia for required supplemental information.

Plan Description

The City of Philadelphia self-administers a single-employer, defined benefit plan that provides OPEB for all eligible retirees. No assets are accumulated in a trust that meets the criteria in paragraph 4 of GASB Statement No. 75.

Benefits Provided

The City of Philadelphia subsidizes health care for five years from the time of coverage election for eligible retirees. Certain union represented employees may defer their coverage until a later date but the amount that the City pays for their health care is limited to the amount that the City would have paid at the date of their retirement. The City also provides lifetime insurance coverage for all eligible retirees. Firefighters are entitled to $7,500 coverage and all other employees receive $6,000 in coverage. The plan does not issue stand-alone financial statements, and the accounting for the plan is reported within the financial statements of the City of Philadelphia.

Funding Policy

The City's funding policy is to pay the net expected benefits for the current retirees. To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by union contracts and is self-insured for non-union employees. For fiscal years 2020 and 2019, the City's contributions were estimated to be $104.6 million and $96.9 million, respectively.

Employees Covered by Benefit Terms

At July 1, 2018, the following employees were covered by the benefit terms:

Medical Coverage		
Active employees		28,845
Inactive employees or beneficiaries currently receiving medical coverage		3,572
DROPs with medical coverage		1,944
Inactive employees entitled to, but not yet receiving medical coverage		444
	Total	34,805

Life Insurance Coverage		
Active employees		28,845
Inactive employees or beneficiaries currently receiving life insurance coverage		27,798
	Total	56,643

Total OPEB Liability

The City's total OPEB liability of $1.94 billion was measured as of June 30, 2019 and was determined by an actuarial valuation as of June 30, 2018.

Actuarial Assumptions and Other Inputs

The total OPEB liability in the June 30, 2019 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified.

Measurement Dates

The measurement dates were June 30, 2018 and June 30, 2019 for reporting dates June 30, 2019 and June 30, 2020, respectively.

Discount Rates

The discount rate was 3.50% per annum for the valuation measured as of June 30, 2019 and 3.87% per annum for the valuation measured as of June 30, 2018.

Per Person Cost Trends

The trend rates represent the annual rate of increase in employer claim payments, employer premiums (including those paid to union-sponsored plans), and retiree contributions.

See the City's CAFR for further details on these trends.

Retirees Share of Benefit-related Costs

Participation rates for medical coverage:

* 85% of future retirees from non-represented groups are assumed to elect post-retirement medical coverage.

* 100% of future retirees from represented groups (DC 33, DC 47, Fire, and Police) are assumed to elect post-retirement medical coverage.

* 100% of DROP participants are assumed to continue in DROP for the remainder of their DROP period (maximum four years) and then retire with a medical benefit.

Participation rates for life insurance coverage:

* 95% of current and future retired firefighters who participated in the pension plan are assumed to be covered by City-provided life insurance.

* 87% of all other current and future retired pension plan participants are assumed to be covered by City-provided life insurance.

Mortality Rates

It is assumed that deaths of active municipal and elected members, 110% and 115%, for males and females, respectively, follows the RP-2014 Employee Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017.

It is assumed that deaths of active uniformed members follow 85% of the RP-2014 Blue Collar Employee Table projected from base year of 2006 to 2021 using mortality improvement scale MP-2017.

For municipal and elected members, 127% and 119% for males and females, respectively, the rate of post-retirement and post-disability mortality follow RP-2014 Healthy Annuitant Table projected from base year 2006-2021 using mortality improvement scale MP-2017.

For uniformed members, the rate of post-retirement and post-disability mortality follow 115% of the RP-2014 Blue Collar Healthy Annuitant Table projected from base year 2006 to 2021 using mortality improvement scale MP-2017.

For municipal and elected members, the rate of post-disability mortality follows 95% of the RP-2014 Disabled Retiree Table projected from base year 2006-2021 using mortality improvement scale MP-2017.

For uniformed members, the rate of post-disability mortality follows 80% of the RP-2014 Disabled Retiree Table projected from base year 2006-2021 using mortality improvement scale MP-2017.

Change in the Total OPEB Liability

The table below shows the changes in the Total OPEB Liability (TOL), the plan fiduciary net position (i.e. the fair value of Plan assets) (FNP), and the Net OPEB Liability (NOL) during the measurement period ending on July 30, 2019.

Change in Net OPEB Liability

	Increase (Decrease)		
	Total OPEB Liability	Plan Fiduciary Net Position	Net OPEB Liability
Balances at June 30, 2018	$ 1,823,900,000	$ -	$ 1,823,900,000
Changes for the year:			
Service cost	82,400,000	-	82,400,000
Interest	71,900,000	-	71,900,000
Changes in benefits	-	-	-
Differences between expected and actual experience	-	-	-
Changes of assumptions	54,000,000	-	54,000,000
Contributions - employer	-	96,900,000	(96,900,000)
Contributions - non-employer	-	-	-
Contributions - member	-	-	-
Net investment income	-	-	-
Benefit payments	(96,900,000)	(96,900,000)	-
Administrative expense	-	-	-
Net Changes	111,400,000	-	111,400,000
Balances at June 30, 2019	$ 1,935,300,000	$ -	$ 1,935,300,000

During the measurement year, the NOL increased by approximately $111.4 million. The service cost and interest cost increased the NOL by approximately $154.3 million while contributions decreased the NOL by approximately $96.9 million. The employer contribution of $96.9 million is based on a blend of actual contributions provided by the City of Philadelphia and estimated contributions based on the prior report. Because a portion of the contribution is estimated, this was reviewed by the City for reasonability.

There were no material changes in benefits during the year. Because the beginning and ending values are based on the same valuation and there were no significant events, there were no liability gains or losses during the year due to experience.

There was an assumption change due to the change in the 20-year bond buyer index rate. The discount rate changed from 3.87% to 3.50% as of June 30, 2019, increasing the liability by $54.0 million.

There were no benefit changes during the measurement period.

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following represents the Total OPEB Liability (TOL) of the City, as well as what the City's total liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.50%) or 1-percentage-point higher (4.50%) than the current discount rate.

Changes in the discount rate affect the measurement of the TOL. Lower discount rates produce a higher TOL and higher discount rates produce a lower TOL. The table below shows the sensitivity of the NOL to the discount rate.

	1% Decrease 2.50%	Discount Rate 3.50%	1% Increase 4.50%
Total OPEB Liability	$2,091,100,000	$1,935,300,000	$1,793,400,000
Plan Fiduciary Net Position	$0	$0	$0
Net OPEB Liability	$2,091,100,000	$1,935,300,000	$1,793,400,000
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0.0%	0.0%	0.0%

A one percent decrease in the discount rate increases the TOL and NOL by approximately 8%. A one percent increase in the discount rate decreases the TOL and NOL by approximately 7%.

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following represents the Total OPEB Liability of the City, as well as what the City's total liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current discount rate.

Changes in healthcare trends affect the measurement of the TOL. Lower healthcare trends produce a lower TOL and higher healthcare trends produce a higher TOL. The table below shows the sensitivity of the NOL to healthcare trends.

	1% Decrease	Healthcare Trend	1% Increase
Total OPEB Liability	$1,744,800,000	$1,935,300,000	$2,160,000,000
Plan Fiduciary Net Position	$0	$0	$0
Net OPEB Liability	$1,744,800,000	$1,935,300,000	$2,160,000,000
Plan Fiduciary Net Position as a Percentage of the Total OPEB Liability	0.0%	0.0%	0.0%

A one percent decrease in the healthcare trends rate decreases the TOL and NOL by approximately 10%. A one percent increase in the healthcare trends rate increases the TOL and NOL by approximately 12%.

OPEB Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the fiscal year ended June 30, 2020, the City recognized OPEB expense of $135.1 million. The table below shows the development of OPEB expense.

Calculation of OPEB Expense

Fiscal Year Ending	June 30, 2020	June 30, 2019
Measurement Year Ending	June 30, 2019	June 30, 2018
Change in Net OPEB Liability	$ 111,400,000	$ (37,700,000)
Change in Deferred Outflows	(41,700,000)	(50,500,000)
Change in Deferred Inflows	(31,500,000)	116,300,000
Non-Employer Contributions	-	-
Employer Contributions	96,900,000	96,400,000
OPEB Expense	$ 135,100,000	$ 124,500,000
OPEB Expense as % of Payroll	7.33%	6.90%
Operating Expenses		
Service Costs	$ 82,400,000	$ 81,800,000
Employee Contributions	-	-
Administrative Expenses	-	-
Total	$ 82,400,000	$ 81,800,000
Financing Expenses		
Interest Costs	$ 71,900,000	$ 67,900,000
Expected Return on Assets	-	-
Total	$ 71,900,000	$ 67,900,000
Changes		
Benefit Changes	$ -	$ -
Recognition of Assumption Changes	(25,500,000)	(31,500,000)
Recognition of Liability Gains and Losses	6,300,000	6,300,000
Recognition of Investment Gains and Losses	-	-
Total	$ (19,200,000)	$ (25,200,000)
OPEB Expense	$ 135,100,000	$ 124,500,000

At June 30, 2020, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources.

Schedule of Deferred Inflows and Outflows of Resources as of
June 30, 2020 Projected Fiscal Year End
June 30, 2019 Measurement Date

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 44,200,000	$ -
Changes in assumptions	48,000,000	175,300,000
Net differences between projected and actual earnings on OPEB plan investments	-	-
Contributions subsequest to measurement date	(104,600,000)	-
Totals	$ (12,400,000)	$ 175,300,000

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

June 30, 2021	(19,200,000)
June 30, 2022	(19,200,000)
June 30, 2023	(19,200,000)
June 30, 2024	(19,200,000)
June 30, 2025	(4,100,000)
Thereafter	(2,300,000)

The subsequent contributions after the measurement date are reflected as a deferred outflow, but this is not subject to a deferred recognition period in the OPEB expense. Instead, this will be fully recognized in the OPEB expense for the fiscal year ending June 30, 2021.

Required Supplementary Information

The schedule below shows the changes in the NOL and related ratios required by GASB.

Schedule of Changes in Net OPEB Liability and Related Ratios

Measurement Year Ending	06/30/2019	06/30/2018
Total OPEB Liability		
Service cost (beginning of year)	$ 82,400,000	$ 81,800,000
Interest (includes interest on service cost)	71,900,000	67,900,000
Changes in benefit terms	-	-
Differences between expected and actual experience	-	56,800,000
Changes of assumptions	54,000,000	(147,800,000)
Benefit payments, incl. refunds of member contributions	(96,900,000)	(96,400,000)
Net change in total OPEB liability	$ 111,400,000	$ (37,700,000)
Total OPEB liability - beginning	1,823,900,000	1,861,600,000
Total OPEB liability - ending	$ 1,935,300,000	$ 1,823,900,000
Plan fiduciary net position		
Contributions - employer	$ 96,900,000	$ 96,400,000
Contributions - non-employer	-	-
Contributions - member	-	-
Net investment income	-	-
Benefit payments, incl. refunds of member contributions	(96,900,000)	(96,400,000)
Administrative expense	-	-
Net change in fiduciary net position	$ -	$ -
Plan fiduciary net position - beginning	$ -	$ -
Plan fiduciary net position - ending	-	-
NET OPEB liability - ending	$ 1,935,300,000	$ 1,823,900,000
Plan fiduciary net position as a percentage of total OPEB liability	0.0%	0.0%
Covered payroll	$ 1,842,600,000	$ 1,805,400,000
Net OPEB lability as a percentage of covered payroll	105.0%	101.0%

The Plan is not currently being pre-funded and so there is no actuarially determined contribution. The actuarially determined contribution is a target or recommended contribution to the OPEB plan for the reporting period, determined in conformity with Actuarial Standards of Practice based on the most recent measurement available when the contributions for the reporting period was adopted. The Actuarial Required Contribution (ARC) determined under GASB Statement No. 45 is not a recommended contribution under Actuarial Standards of Practice, and thus is not shown. If the Plan decides to pre-fund the liabilities, we will provide an appropriate actuarially determined contribution.

18. RISK MANAGEMENT

The City is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The City (except for Aviation Fund operations, the Municipal Authority, and PICA) is self-insured for fire damage, casualty losses, public liability, workers' compensation and unemployment compensation. The Aviation Fund is self-insured for workers' compensation and unemployment compensation and insured through insurance carriers for other coverage. The City is self-insured for medical benefits provided to employees in the Fraternal Order of Police, its city-administered health plan, the International Association of Fire Fighters and District Council 47.

The City covers all claim settlements and judgments, except for those discussed above, out of the resources of the fund associated with the claim. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. These losses include: an estimate of claims that have been incurred but not reported; the effects of specific, incremental claims adjustment expenditures, salvage, and subrogation; and unallocated claims adjustment expenditures.

At June 30, the amount of these liabilities was $391.8 million for the Primary Government. This liability is the City's best estimate based on available information. Changes in the reported liability since June 30, 2018 resulted from the following:

Fiscal Years Ending June 30	Beginning Liability	Current Year Claims and Changes in Estimates	Claim Payments	Ending Liability
2018	$ 365.1	$ 199.3	$ (211.4)	$ 353.0
2019	$ 353.0	$ 207.9	$ (217.0)	$ 343.9
2020	$ 343.9	$ 271.9	$ (224.1)	$ 391.7

The City's unemployment compensation and workers' compensation coverages are provided through its General Fund. Unemployment compensation and workers' compensation coverages are funded by a pro-rata charge to the various funds. Payments for fiscal years 2020 and 2019 were $3.1 million and $3.5 million for unemployment compensation claims and $71.4 million and $69.9 million for workers' compensation claims, respectively.

The City's estimated outstanding workers' compensation liabilities are $267.9 million, discounted at 3.5%. On an undiscounted basis, these liabilities total $352.8 million. These liabilities include provisions for indemnity, medical and allocated loss adjustment expense (ALAE). Excluding the ALAE, the respective liabilities for indemnity and medical payments relating to workers' compensation total $245.4 million (discounted) and $325.5 million (undiscounted).

During the last five (5) fiscal years, no claim settlements have exceeded the level of insurance coverage for operations using third party carriers. None of the City's insured losses have been settled with the purchase of annuity contracts.

19. COMMITMENTS

The Airport had commitments, which are open encumbrance balances, of approximately $35.0 million and $43.7 million for operating expenses and $144.1 million and $119.1 million for capital assets and improvements for fiscal years 2020 and 2019, respectively. The Airport expects to fund these commitments through operating revenue and through bond proceeds, capital grants, customer facility charges, and passenger facility charges.

20. IMPACT OF COVID-19 ON THE AIRPORT

The outbreak of a novel strain of coronavirus ("COVID-19") spread to a substantial number of countries around the globe and was declared a pandemic by the World Health Organization on March 11, 2020. The pandemic resulted in significant domestic and international travel restrictions and negatively impacted the aviation industry, including revenues related to airlines, retail, concessions, parking, ground transportation, and car rentals. To address the unprecedented decline in demand for travel, the Airport took measures to decrease operating expenses and reduce expenditures on capital projects. Additionally, the Airport provided relief to concessionaires by eliminating minimum annual guaranteed rents, deferring three months of rents for concessionaires and tenants, as well as deferring three months of terminal rents and landing fees for airlines. The Airport required all deferrals to be paid by the end of calendar year 2020. Full repayment of these deferrals occurred by December 31, 2020.

The United States government passed The Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") to mitigate the broad disruptive effects of the COVID-19 pandemic. The CARES Act provided direct aid in the form of grants for airports as well as direct aid, loans and loan guarantees for passenger and cargo airlines. The Division was awarded $116,438,943 in CARES Act funds and allocated $116,281,943 to PHL and $157,000 to PNE. In fiscal year 2020, $53.8 million of Cares Act funds were used to pay debt service. The remaining CARES Act funds are expected to be used in fiscal years 2021 and 2022. Additionally, the Division continues to evaluate and seek other available sources of state and federal aid as they become available.

21. CONTINGENCIES

Claims and Litigation

Henderson Inverse Condemnation: In early September 2016, a Petition for the Appointment of a Board of View pursuant to the Pennsylvania Eminent Domain Code 26 Pa. C. Section 502(c), was filed in Delaware County, Pennsylvania against the City by numerous Henderson related entities and trusts (the "Hendersons"). The Petition alleged that the City effected a de facto taking of the Henderson properties (the "Property"), which Property is proximate to Philadelphia International Airport and located in Tinicum

Township, Delaware County. The City desired to acquire the Property for Airport purposes and had numerous discussions with representatives for the Hendersons over time.

The City filed Preliminary Objections to the Petition and there was a hearing on the Petition and the Preliminary Objections scheduled for January 2018. Prior to the hearing, the City filed its own Declaration of Taking in September 2017 and made an offer of just compensation. The City and the Hendersons then settled the foregoing matters. The City obtained possession of the Property and paid the Hendersons estimated just compensation of $54.5 million. The Hendersons' de facto taking case was dismissed with prejudice.

The Board of View, which was appointed by the Court of Common Pleas in Delaware County (the "Court") issued its Report, awarded damages on October 8, 2020 to the Hendersons in the amount of $139.1 million as "just compensation" for the taking of the Property. The amount of $54.5 million referenced above is to be deducted from this amount. The City has filed an appeal to the damage award to the Court raising objections, as a matter of law, to the Report. The Court will decide whether to modify and change the Report, refer it back to the same or a new board of viewers or deny the City's request. Following resolution of the appeal, there can be a trial de novo in the Court. The City is represented by outside counsel.

Host International, Inc. v. MarketPlace PHL, LLC: In May 2019, Host International, Inc. ("Host") instituted suit against MarketPlace PHL, LLC ("MarketPlace"), which manages all retail concession operations at Philadelphia International Airport pursuant to a January 1, 2015 concession agreement (the "Agreement") with the City, through its Commerce Department, Division of Aviation. The suit, filed in Federal court in the Eastern District of Pennsylvania, alleges breaches of antitrust laws in connection with MarketPlace having entered into a Beverage Services and Sponsorship Agreement with a company doing business as Pepsi Beverages Company. MarketPlace filed a Motion to Dismiss (the "Motion") in July 2019. The Motion was granted and Host has filed an appeal, which appeal is pending. MarketPlace and the City believe the underlying claims are without merit. Should the appeal be successful, and should the court thereafter find against MarketPlace and find that the claims have merit and if such a result has an impact on MarketPlace, such result may have an impact on the City based upon the agreement.

First Transit, Inc. (Demand Letter): First Transit contracted with the Department of Commerce, Division of Aviation for the provision of shuttle bus services to and from the Airport's various parking lots and facilities. As a result of the COVID-19 pandemic, the Airport's utilization of First Transit's services significantly declined, and the Contract has been suspended with termination likely during 2021 based on Airport requirements. First Transit's attorneys have written to the Airport claiming that they are prepared to engage in litigation over First Transit's "estimated $11 million in unreimbursed losses." At this early stage, we are unable to estimate the likelihood of success or potential exposure; however, based on an initial review of the contract and applicable case law, we consider liability, if any, to be far below the disclosure threshold and include this matter here in the interest of extreme caution.

22. SUBSEQUENT EVENTS

- In October 2020, the Division issued Airport Refunding Bonds, Series 2020A, B, & C in the original principal amount of $389.2 million. The 2020A Bonds were issued for the purpose of providing funds, together with other available moneys, to: (i) refund all of the outstanding Series 2010A Airport Revenue Bonds, and (ii) pay the cost of issuance of the 2020A Bonds. The 2020B Bonds were issued for the purpose of providing funds to (i) refinance certain outstanding Commercial Paper Notes, and (ii) pay the cost of issuance of the 2020B Bonds. The 2020C Bonds were issued for the purpose of providing funds to (i) refund all of the outstanding Series 2010D Airport Revenue Bonds, (ii) refinance certain outstanding Commercial Paper Notes, and (iii) pay the cost of issuance of the 2020C Bonds. These bonds were assigned an 'A2' rating by Moody's with a stable outlook, and an 'A' rating by Fitch with a negative outlook.

- In September 2020, S&P downgraded the Airport to "A-" with a negative outlook.

- A second round of emergency relief funding, known as the Coronavirus Response and Relief Supplemental Appropriation ACT ("CRRSAA"), was approved by the United States Congress and signed by the President on December 27, 2020 as an additional legislative measure to address the crisis created by the COVID-19 pandemic and includes nearly $2 billion in funds to be awarded to eligible U.S. airports and eligible concessionaires. The Division expects to be awarded approximately $28.9 million in March of 2021.

- An ordinance was introduced in Philadelphia City Council on February 18, 2021 to provide for a 2021 Aviation Division Early Retirement Window Program. If the ordinance is enacted into law, and if the employee's union, if any, has agreed to the terms of the program set forth in the ordinance, Airport employees who are within five years of the retirement plan minimum retirement age, and who meet other program requirements, will have the opportunity to retire early and receive enhanced benefits in connection with their retirement. If the ordinance in enacted, implementation of the program is likely to begin in March 2021.

(This Page Intentionally Left Blank)

REQUIRED SUPPLEMENTARY INFORMATION

CITY OF PHILADELPHIA
AVIATION FUND
Reconciliation of Fund Balance (Legally Enacted Basis) to Net Position (GAAP Basis)

	Fiscal Year 2020	Fiscal Year 2019	Percentage Increase (Decrease)
Fund balance, legal basis	$ 198,609,082	$ 179,116,574	10.9%
Add assets not included in legal basis:			
Current assets	43,440,102	28,030,178	55.0%
Fixed assets, net of depreciation	2,147,207,495	2,132,536,867	0.7%
Restricted assets	764,565,630	795,936,510	(3.9)%
	2,955,213,227	2,956,503,555	(0.0)%
Deduct liabilities not included in legal basis:			
Construction accounts payable	(24,595,685)	(28,622,124)	(14.1)%
Current liabilities	(247,383,590)	(193,869,313)	27.6%
Bonds payable	(1,571,520,719)	(1,648,172,557)	(4.7)%
Other long-term liabilities	(320,224,142)	(301,914,543)	6.1%
	(2,163,724,136)	(2,172,578,537)	(0.4)%
Add (deduct) fund balance accounts included in legal basis:			
Reserve for encumbrance, current	33,272,279	42,967,023	(22.6)%
Reserve for encumbrance, prior	(6,574,778)	(13,393,725)	(50.9)%
Reserve for collectible accounts	928,278	928,278	0.0%
	27,625,779	30,501,576	(9.4)%
Net position - GAAP basis	$ 1,017,723,952	$ 993,543,168	2.4%

CITY OF PHILADELPHIA
AVIATION FUND
Budgetary Comparison Schedule
For the Fiscal Year Ended June 30, 2020
(Amounts in thousands)

	Budgeted Amounts			Final Budget to Actual Positive (Negative)
	Original	Final	Actual	
Revenues				
Locally Generated Non-Tax Revenue	$497,797	$449,480	$360,678	($88,802)
Revenue from Other Governments	2,913	56,704	57,491	787
Revenue from Other Funds	1,527	1,527	1,333	(194)
Total Revenues	502,237	507,711	419,502	(88,209)
Expenditures and Encumbrances				
Personal Services	87,641	88,606	85,496	3,110
Pension Contributions	38,695	41,481	41,051	430
Other Employee Benefits	27,366	24,580	24,041	539
Sub-Total Employee Compensation	153,702	154,667	150,588	4,079
Purchase of Services	139,192	139,192	117,325	21,867
Materials and Supplies	9,373	9,373	6,071	3,302
Equipment	8,159	8,159	4,806	3,353
Contributions, Indemnities and Taxes	8,812	8,812	5,525	3,287
Debt Service	134,825	134,825	123,448	11,377
Payments to Other Funds	20,023	20,023	7,541	12,482
Total Expenditures and Encumbrances	474,086	475,051	415,304	59,747
Operating Surplus (Deficit) for the Year	28,151	32,660	4,198	(28,462)
Fund Balance Available for Appropriation, July 1, 2019	123,806	143,069	179,117	36,048
Operations in Respect to Prior Fiscal Years				
Commitments Cancelled - Net	15,000	15,000	16,281	1,281
Adjusted Fund Balance, July 1, 2019	138,806	158,069	195,398	37,329
Fund Balance Available for Appropriation, June 30, 2020	$166,957	$190,729	$199,596	$8,867

Disclosure Requirements
Fiscal Year Ended June 30, 2020

This report has been prepared pursuant to certain provisions of the following Continuing Disclosure Agreements, collectively referred to as the "Disclosure Agreements":

- Continuing Disclosure Agreements dated August 4, 2005, November 15, 2010, December 1, 2011, September 1, 2015, and December 15, 2017 between the City of Philadelphia, Pennsylvania and Digital Assurance Certification, L.L.C.

This report contains financial information and operating data which, together with the City of Philadelphia's Comprehensive Annual Financial Report ("CAFR"), constitute the "Annual Financial Information" as defined in the Disclosure Agreements.

In accordance with Section 3 of the Disclosure Agreements, the enclosed tables and financial information are substantially similar to the type set forth in the Official Statements for the City of Philadelphia, Pennsylvania Airport Revenue Bonds, Series, 2005C, 2010A/B/C/D, 2011A/B, 2015A, and 2017A/B.

Table 1

City of Philadelphia Aviation Division
Philadelphia International Airport (PHL)
Recent Trends in Enplaned Passengers
Fiscal Years 2018 - 2020

Airlines	Fiscal Year 2018	Fiscal Year 2019	Percentage Change	Fiscal Year 2020	Percentage Change
Domestic					
Scheduled Major / National					
American	6,099,214	6,609,437	8.4%	4,531,069	(31.4)%
Other	3,950,170	4,182,070	5.9%	3,341,166	(20.1)%
	10,049,384	10,791,507	7.4%	7,872,235	(27.1)%
Scheduled Regional / Commuter	3,321,659	3,252,260	(2.1)%	2,658,927	(18.2)%
Charter	1,900	2,896	52.4%	294	(89.8)%
Subtotal - Domestic	**13,372,943**	**14,046,663**	**5.0%**	**10,531,456**	**(25.0)%**
International					
Scheduled Major / National	1,572,725	1,738,566	10.5%	1,098,105	(36.8)%
Scheduled Regional / Commuter	299,643	303,195	1.2%	217,677	(28.2)%
Charter	142	0	(100.0)%	169	-------
Subtotal - International	**1,872,510**	**2,041,761**	**9.0%**	**1,315,951**	**(35.5)%**
Total Enplaned Passengers	**15,245,453**	**16,088,424**	**5.5%**	**11,847,407**	**(26.4)%**

Note: (1) The City's fiscal year ends June 30th.

(2) Domestic and International Enplanements for 2018 were restated.

Table 2

City of Philadelphia Aviation Division
Philadelphia International Airport (PHL)
Airline Market Shares of Enplaned Passengers
Fiscal Year 2020

Airlines	Enplaned Passengers	Percent of Total
Domestic		
Scheduled Major / National		
American Airlines	4,531,069	38.2%
Frontier Airlines	797,901	6.7%
Southwest Airlines	744,815	6.3%
Delta Air Lines	604,282	5.1%
Spirit Airlines	487,649	4.1%
United Airlines	391,686	3.3%
JetBlue Airways	177,613	1.5%
Alaska Airlines	114,340	1.0%
Sun Country Airlines	22,880	0.2%
	7,872,235	66.4%
Scheduled Regional / Commuter		
American Eagle		
Piedmont Airlines	1,082,605	9.1%
Republic Airlines	808,038	6.8%
PSA Airlines	576,780	4.9%
Envoy Air	6,202	0.1%
	2,473,625	20.9%
Other	185,302	1.6%
	2,658,927	22.4%
Charter	294	0.0%
Subtotal - Domestic	**10,531,456**	**88.9%**
International		
Scheduled Major / National		
American Airlines	815,679	6.9%
British Airways	79,991	0.7%
Qatar Airways	63,574	0.5%
Lufthansa German Airlines	56,945	0.5%
Frontier Airlines	44,084	0.4%
Aer Lingus	29,418	0.2%
Icelandair	6,492	0.1%
Spirit Airlines	1,922	0.0%
	1,098,105	9.3%
Scheduled Regional / Commuter		
American Eagle		
Piedmont Airlines	111,181	7.7%
Republic Airlines	21,360	0.2%
PSA Airlines	12,554	0.1%
	145,095	1.2%
Air Canada Express	72,582	0.6%
	217,677	1.8%
Charter	169	0.0%
Subtotal - International	**1,315,951**	**11.1%**
Total Enplaned Passengers	**11,847,407**	**100.0%**

Note: The City's fiscal year ends June 30th.

TABLE 3

City of Philadelphia Aviation Division
Philadelphia International Airport (PHL)
Airline Market Shares of Landed Weight (in 1,000 lb. Units)
Fiscal Year 2020

Airlines	Landed Weight	Percent of Total
Domestic		
Scheduled Major / National		
American Airlines	5,780,244	31.6%
Southwest Airlines	875,664	4.8%
Frontier Airlines	768,662	4.2%
Delta Air Lines	706,240	3.9%
Spirit Airlines	514,559	2.8%
United Airlines	442,788	2.4%
JetBlue Airways	243,445	1.3%
Alaska Airlines	129,926	0.7%
Sun Country Airlies	25,102	0.1%
Air Canada	269	0.0%
	9,486,899	51.8%
Scheduled Regional / Commuter		
American Eagle		
Piedmont Airlines	1,269,255	6.9%
Republic Airlines	1,096,532	6.0%
PSA Airlines	849,642	4.6%
Envoy Air	8,450	0.0%
	3,223,879	17.6%
Other	264,314	1.4%
	3,488,193	19.0%
Charter	878	0.0%
Subtotal - Domestic	**12,975,970**	**70.8%**
International		
Scheduled Major / National		
American Airlines	1,464,705	8.0%
British Airways	231,472	1.3%
Lufthansa German Airlines	135,418	0.7%
Qatar Airways	126,980	0.7%
Frontier Airlines	48,378	0.3%
Aer Lingus	45,614	0.2%
Icelandair	10,710	0.1%
Delta Air Lines	3,366	0.0%
Spirit Airlines	2,910	0.0%
	2,069,553	11.3%
Scheduled Regional / Commuter		
American Eagle		
Piedmont Airlines	111,657	0.6%
Republic Airlines	24,129	0.1%
PSA Airlines	15,925	0.1%
	151,710	0.8%
Air Canada Express	99,842	0.5%
	251,552	1.4%
Charter	2,766	0.0%
Subtotal - International	**2,323,871**	**12.7%**
All-Cargo Airlines	**3,018,703**	**16.5%**
Total Landed Weight	**18,318,544**	**100.0%**

Note: The City's Fiscal Year Ends June 30.

Table 4

City of Philadelphia Aviation Division
Philadelphia International Airport (PHL)
Summary of Historical Project Revenues and Expenses of the Airport System
(Fiscal Years ending June 30th - dollar amounts are listed in thousands)

	Fiscal Year 2016	Fiscal Year 2017	Fiscal Year 2018	Fiscal Year 2019	Fiscal Year 2020
Amounts Available for Debt Service					
1. Space rentals	108,115	113,400	123,705	116,966	85,717
2. Landing fees	73,968	80,457	90,438	83,890	55,080
3. Ramp Area rentals	1,213	572	427	212	(13)
4. International Terminal revenues	34,025	33,747	34,141	31,823	23,616
5. Subtotal, Airline Rentals, Fees and Charges	217,322	228,175	248,712	232,891	164,400
6. Nonairline Revenues	123,434	133,658	132,183	157,420	221,630
7. Interest income and Contribution for carrier incentive program	494	232	773	3,131	4,137
8. Total Project Revenues	341,250	362,065	381,668	393,442	390,167
9. Passenger Facility Charges (PFCs) Available for Debt Service	31,176	33,693	31,201	31,189	31,200
10. Portion of Fund Balance Attributable to Amounts Available for Debt Service	71,220	87,875	107,820	126,824	144,218
11. Total Amounts Available for Debt Service	443,646	483,633	520,689	551,455	565,585
Expenses					
12. Net Operating Expenses	132,149	136,498	150,972	161,161	151,739
13. Required Renewal Fund Deposit	500	250	0	0	0
14. Revenue Bond Debt Service	120,595	122,596	127,790	126,007	127,910
15. Interdepartmental Charges	106,775	116,753	116,749	121,054	123,017
16. Total Expenses	360,020	376,097	395,511	408,222	402,666
17. Net Revenue	$ 83,626	$ 107,536	$ 125,178	$ 143,233	$ 162,919
Rate Covenant Tests of the Original General Airport Revenue Bond Ordinance					
18. Test A (Line 11- Line 12- Line 13) / (Line 14)	2.58	2.83	2.89	3.10	3.24
19. Test B (Line 11- Line 12- Line 13- Line 15) / (Line 14)	1.69	1.88	1.98	2.14	2.27

Note: The information presented above reconciles to the Basic Financial Statements contained in the City's Comprehensive Annual Financial Report (CAFR), which is audited by the Office of the City Controller.

Table 5

City of Philadelphia Aviation Division
Philadelpha International Airport (PHL)
History of Applications to Use PFC Revenues

PFC Application No.	Approval Date	Initial Approved Amount	Amended Approved Amount
93-02-U-00-PHL	05/15/1993	$ 14,250,000	$ 12,805,493
95-03-C-00-PHL	02/27/1995	101,500,000	94,683,960
95-04-U-00-PHL	10/13/1995	950,000	1,270,605
95-05-C-00-PHL	11/21/1995	14,000,000	14,000,000
98-06-C-00-PHL	02/11/1998	26,150,000	19,534,950
99-08-U-00-PHL	10/12/1999	672,000,000	999,267,790
01-09-C-00-PHL	02/22/2000	22,250,000	24,177,050
06-10-C-00-PHL	02/16/2006	83,250,000	289,450,000
15-11-C-00-PHL	09/15/2015	109,080,000	109,080,000
	Totals	$ 1,043,430,000	$ 1,564,269,848

Table 6

City of Philadelphia Aviation Division
Philadelphia International Airport (PHL)
Historical PFC Revenues
Fiscal Years 1993 - 2020

Fiscal Year	Collections	Interest	Total Revenues
1993	$ 14,484,101	$ 142,790	$ 14,626,891
1994	22,605,318	1,111,511	23,716,829
1995	21,828,173	2,285,485	24,113,658
1996	22,817,704	2,277,935	25,095,639
1997	27,229,901	1,837,334	29,067,235
1998	30,931,674	1,654,752	32,586,426
1999	29,408,652	2,018,264	31,426,916
2000	32,278,858	2,828,083	35,106,941
2001	31,880,729	3,362,695	35,243,424
2002	53,688,877	2,112,347	55,801,223
2003	43,961,971	1,537,729	45,499,700
2004	51,766,443	808,417	52,574,859
2005	61,378,549	1,284,025	62,662,574
2006	62,165,176	3,252,682	65,417,858
2007	65,328,768	5,047,045	70,375,813
2008	70,120,974	5,098,760	75,219,734
2009	60,898,941	1,886,741	62,785,682
2010	61,696,738	353,391	62,050,129
2011	62,338,653	191,092	62,529,745
2012	59,885,669	325,805	60,211,475
2013	58,495,629	414,832	58,910,461
2014	60,377,268	329,507	60,706,775
2015	60,644,305	436,648	61,080,953
2016	61,256,560	538,897	61,795,457
2017	55,151,223	933,338	56,084,561
2018	60,302,833	1,337,307	61,640,140
2019	63,596,713	2,348,424	65,945,137
2020	55,582,198	1,991,200	57,573,398
Totals	$ 1,362,102,599	$ 47,747,035	$ 1,409,849,634
		Expenditures	$ 1,291,165,737
		Balance	$ 118,683,896

Note: The City's fiscal year ends June 30th.

Table 7

City of Philadelphia Aviation Division
Philadelphia International Airport (PHL)
Historical Enplaned Passengers
Fiscal Years 1990 - 2020

Fiscal Year	Domestic	International	Total	Percentage Increase (Decrease)
1990	7,400,854	379,667	7,780,521	
1991	7,322,959	388,954	7,711,913	(0.9)%
1992	7,041,274	534,004	7,575,278	(1.8)%
1993	7,645,396	582,621	8,228,017	8.6%
1994	7,777,184	607,718	8,384,902	1.9%
1995	8,419,133	634,955	9,054,088	8.0%
1996	8,538,732	665,334	9,204,066	1.7%
1997	9,502,168	890,094	10,392,262	12.9%
1998	10,601,187	1,104,443	11,705,630	12.6%
1999	10,737,979	1,329,813	12,067,792	3.1%
2000	10,652,391	1,326,524	11,978,915	(0.7)%
2001	11,149,732	1,521,721	12,671,453	5.8%
2002	10,501,846	1,499,659	12,001,505	(5.3)%
2003	10,519,234	1,617,391	12,136,625	1.1%
2004	11,149,952	1,938,821	13,088,773	7.8%
2005	13,427,191	2,063,378	15,490,569	18.4%
2006	13,563,540	2,011,457	15,574,997	0.5%
2007	13,864,721	1,986,970	15,851,691	1.8%
2008	13,971,056	2,081,917	16,052,973	1.3%
2009	13,357,446	2,005,297	15,362,743	(4.3)%
2010	13,334,229	1,859,512	15,193,741	(1.1)%
2011	13,635,784	1,975,799	15,611,583	2.8%
2012	13,368,218	1,975,908	15,344,126	(1.7)%
2013	13,246,485	1,969,400	15,215,885	(0.8)%
2014	13,273,937	2,042,116	15,316,053	0.7%
2015	13,272,717	2,040,021	15,312,738	(0.0)%
2016	13,695,700	1,987,858	15,683,558	2.4%
2017	12,967,584	1,839,298	14,806,882	(5.6)%
2018	13,372,943	1,872,510	15,245,453	3.0%
2019	14,046,663	2,041,761	16,088,424	5.5%
2020	10,531,456	1,315,951	11,847,407	(26.4)%

	Compound Annual Growth Rate		
2001 - 2006	4.0%	5.7%	4.2%
2001 - 2011	2.0%	2.6%	2.1%
2001 - 2016	1.4%	1.8%	1.4%
2001 - 2017	0.9%	1.2%	1.0%
2006 - 2011	0.1%	(0.4)%	0.0%
2006 - 2016	0.1%	(0.1)%	0.1%
2006 - 2017	(0.4)%	(0.8)%	(0.5)%
2011 - 2016	0.1%	0.1%	0.1%
2009 - 2018	0.0%	(0.8)%	(0.1)%
2010 - 2019	0.6%	1.0%	0.6%
2016 - 2020	(6.4)%	(9.8)%	(6.8)%
2011 - 2020	(2.8)%	(4.4)%	(3.0)%

Note: (1) The City's fiscal year ends June 30th.
(2) Domestic and International Enplanements from 2010 through 2018 were restated.

PHL PHILADELPHIA INTERNATIONAL AIRPORT

STATISTICAL SECTION

II. Statistical Section

Demographic and Economic Information

These schedules show the airport service area environment over the past ten years.

Exhibit S-1 Airport Information
Exhibit S-2 Population Trends
Exhibit S-3 Employment by Industry
Exhibit S-4 City of Philadelphia Airport Employees

Business Drivers

These schedules show the different factors that produce revenue for the airport over the past ten years.

Exhibit S-5 Commercial Flights and Available Seats
Exhibit S-6 Passenger Load Factors
Exhibit S-7 Commercial Passenger Enplanements
Exhibit S-8 Airline Market Share by Passenger Enplanements
Exhibit S-9 Aircraft Operations by Airport
Exhibit S-10 Cargo Tonnage and Market Share

Financial Trends and Revenue Capacity

These schedules show changes in Aviation's financial performance, major revenue sources, and rates and charges over the past ten years.

Exhibit S-11 Annual Revenues, Expenses and Changes in Fund Net Position
Exhibit S-12 Operating Revenues by Source
Exhibit S-13 Scheduled Rates and Charges

Debt Capacity

These schedules show current levels of outstanding debt and how Aviaiton has fulfilled debt obligations over the past ten years.

Exhibit S-14 Ratios of Outstanding Debt
Exhibit S-15 Pledged Debt Service Coverage
Exhibit S-16 Airport Debt Service by Year

Markets Served and Other Information

These schedules show domestic and international markets served, as well as other airport-related information over the past ten years..

Exhibit S-17 Current Top 30 Passenger Origin and Destination Markets
Exhibit S-18 Historical Domestic Top 10 Passenger Origin and Destination Markets
Exhibit S-19 Historical International Top 10 Passenger Destination Markets
Exhibit S-20 Airline Market Share by Landed Weight
Exhibit S-21 Passenger Facility Charges

Exhibit S-1: Philadelphia International Airport Information

Location	Located partly in the southwestern section of the City and partly in the northeastern section of Delaware County, about 7.2 miles from center city Philadelphia		
Acres	2,598 +/- acres		
Airport Code	PHL		
Runways		Length	Width
	9R-27L	12,000'	200'
	9L-27R	9,500'	150'
	17-35	6,501'	150'
	8-26	5,000'	150'
Aircraft Capability	Group VI - Airbus 380 (Limited)		
Terminals	Terminal A-East	433,001	square feet
	Terminal A-West	818,100	square feet
	Terminals B & C	951,721	square feet
	Terminals D & E	808,095	square feet
	Terminal F	243,437	square feet
	Total Terminal Space	**3,254,354**	**square feet**
	Number of Passenger Gates	126	gates
Parking	Public		
	Garage Parking	10,984	spaces
	Short-Term	839	spaces
	Surface Parking	7,117	spaces
	Total Public Parking	**18,940**	**spaces**
	Cell Phone Waiting Area	151	spaces
	Tenant Employee Parking	3,700	spaces
Cargo	Number of Cargo Buildings	6	buildings
	Cargo Space	449,761	square feet
International	Customs/Immigration Federal Inspection Facility		
Tower	TRACON - Philadelphia, PA - Operating 24 Hours/Day 7 Days/Week		
Intermodal Access	Interstate 95 (I-95) Regional Rail & Buses operated by the Southeastern Pennsylvania Transportation Authority (SEPTA)		
Northeast Philadelphia Airport	Located on a 1,118-acre site situated within the City limits about 10 miles by road northeast of center city Philadelphia and provides for general aviation, air taxi and corporate, as well as occasional military use		

Data as of December 31, 2020
Source: City of Philadelphia

Exhibit S-2: Population Trends

Metropolitan Statistical Area (MSA)

(By Calendar Year)

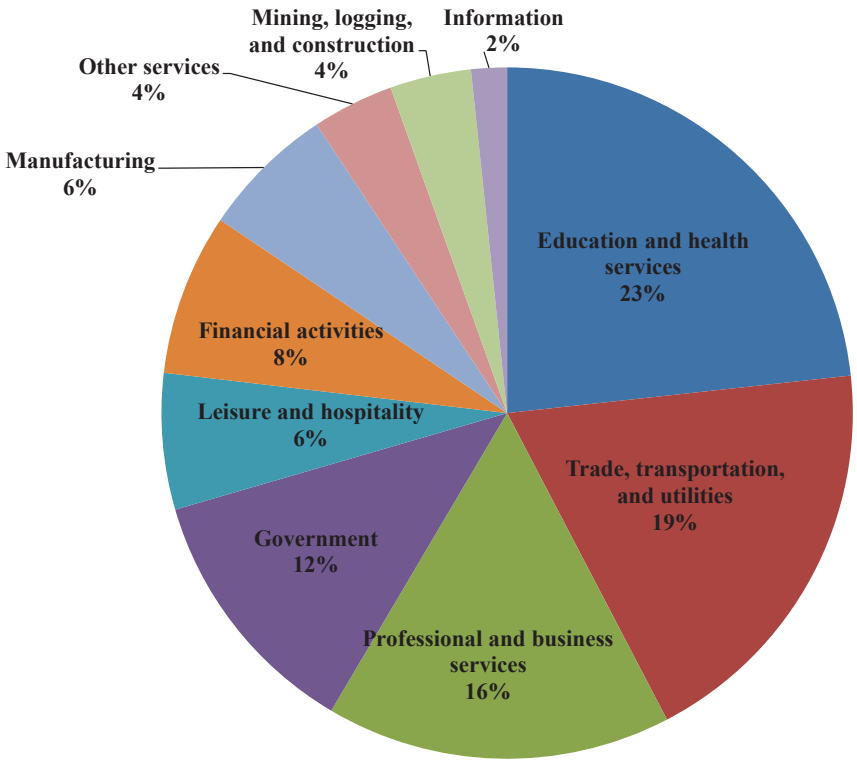
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	10-Year Annual Growth
Delaware & Maryland											
Cecil County, MD	102,855	102,826	102,746	102,701	102,452	102,249	101,931	101,767	101,585	101,172	0.17%
New Castle County, DE	558,753	559,335	559,793	557,851	555,587	552,465	549,486	546,120	542,282	538,831	0.36%
Total - Delaware & Maryland	661,608	662,161	662,539	660,552	658,039	654,714	651,417	647,887	643,867	640,003	0.33%
New Jersey											
Burlington County	445,349	445,384	448,596	448,342	448,844	450,318	449,858	451,256	450,486	449,200	(0.09%)
Camden County	506,471	507,078	510,719	510,741	510,809	510,913	511,798	512,827	513,180	513,506	(0.14%)
Gloucester County	291,636	291,408	292,206	291,703	291,651	291,151	290,151	289,912	289,605	288,994	0.09%
Salem County	62,385	62,607	62,792	63,158	63,730	64,360	64,840	65,446	65,883	65,982	(0.56%)
Total - New Jersey	1,305,841	1,306,477	1,314,313	1,313,944	1,315,034	1,316,742	1,316,647	1,319,441	1,319,154	1,317,682	(0.09%)
Pennsylvania											
Bucks County	628,270	628,195	628,341	626,751	626,209	625,806	625,321	625,572	626,067	625,431	0.05%
Chester County	524,989	522,046	519,293	516,489	515,226	512,864	509,388	506,283	503,404	499,920	0.49%
Delaware County	566,747	564,751	564,696	563,995	563,705	562,913	561,609	560,782	559,079	558,901	0.14%
Montgomery County	830,915	828,604	826,075	820,656	817,869	815,947	812,838	808,912	805,186	800,981	0.37%
Philadelphia County	1,584,064	1,584,138	1,580,863	1,574,765	1,570,507	1,564,042	1,558,109	1,551,944	1,539,649	1,528,271	0.36%
Total - Pennsylvania	4,134,985	4,127,734	4,119,268	4,102,656	4,093,516	4,081,572	4,067,265	4,053,493	4,033,385	4,013,504	0.30%
Philadelphia MSA	**6,102,434**	**6,096,372**	**6,096,120**	**6,077,152**	**6,066,589**	**6,053,028**	**6,035,329**	**6,020,821**	**5,996,406**	**5,971,189**	**0.22%**

Note: Population estimates for 2010 to 2016 modified by U.S. Census Bureau, Population Division.
Population estimates as of July 1st
2020 data is not available until March, 2021
Source: U.S. Census Bureau, Population Division

Exhibit S-3: Employment by Industry
Metropolitan Statistical Area (By Calendar Year)

Industry	Annual Average Number of Employees (in thousands) 2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	10-Year Annual Growth
Education and health services	649.4	678.4	658.0	641.3	621.7	603.6	589.3	574.5	566.2	556.9	1.55%
Trade, transportation, and utilities	532.5	536.2	529.2	523.2	522.0	518.5	514.9	509.3	505.8	501.9	0.59%
Professional and business services	450.7	480.7	477.2	466.7	461.0	450.7	439.9	431.5	423.8	417.3	0.77%
Government	334.9	346.8	338.7	335.6	333.8	334.3	335.5	337.4	340.0	347.5	-0.37%
Leisure and hospitality	177.7	273.1	268.7	265.9	259.0	252.3	247.0	241.4	236.8	230.1	-2.55%
Financial activities	211.4	220.5	217.1	214.6	211.8	208.4	204.1	203.2	200.3	199.3	0.59%
Manufacturing	175.2	181.8	181.1	180.3	179.0	179.6	179.7	180.2	182.4	185.6	-0.57%
Other services	106.5	121.8	120.5	120.3	119.8	117.6	116.8	118.9	120.0	119.4	-1.14%
Mining, logging, and construction	106.0	123.4	117.9	116.5	114.0	110.1	104.8	101.9	99.4	100.3	0.55%
Information	46.7	48.6	44.6	45.9	46.4	46.4	46.5	48.1	49.7	50.2	-0.72%
Philadelphia PA-NJ-DE-MD Metropolitan statistical area	**2,791.0**	**3,011.3**	**2,953.0**	**2,910.3**	**2,868.5**	**2,821.5**	**2,778.5**	**2,746.4**	**2,724.4**	**2,708.5**	**0.30%**

Area Employment by Industry - 2020



* Number of employees (in thousands) for 2011-2019 modified by U.S. Department of Labor, Bureau of Labor Statistics for all industries

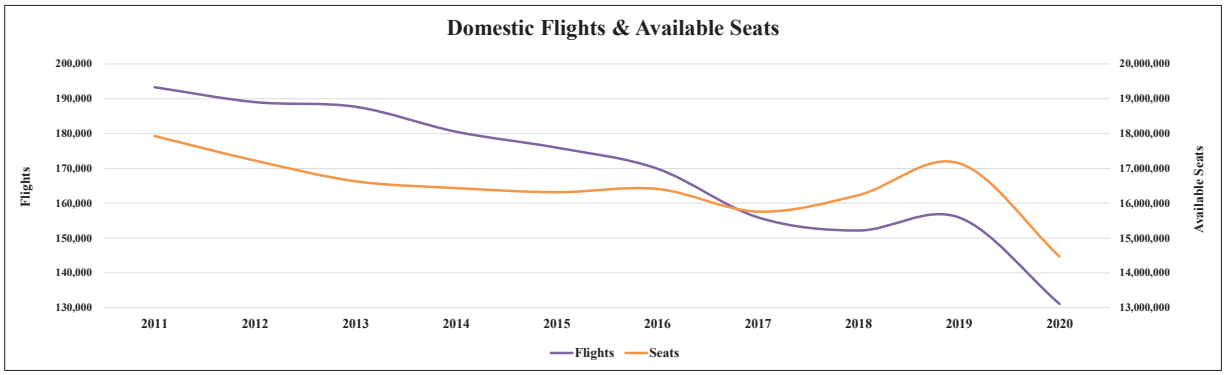
Source: U.S. Department of Labor, Bureau of Labor Statistics

Exhibit S-4: City of Philadelphia Airport Employees
(By Fiscal Year)

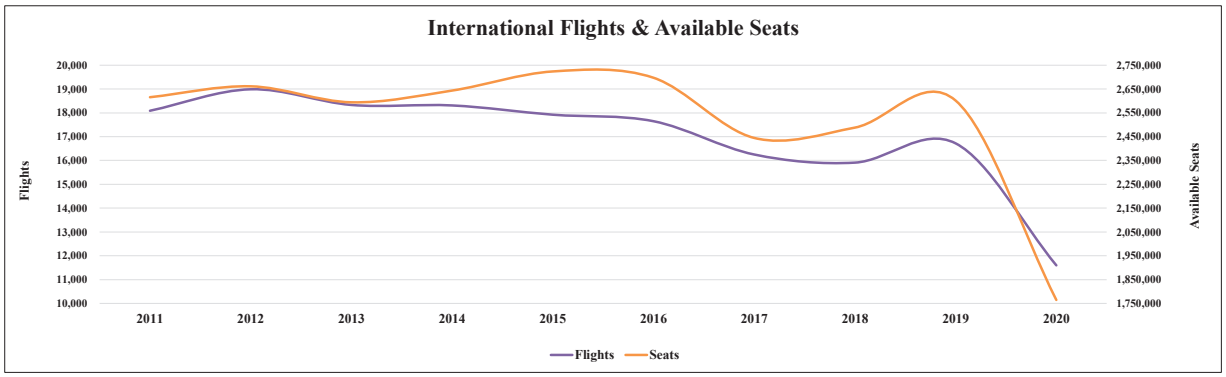
Filled positions at the end of the fiscal year.
Division of Aviation for 2011 - 2019 includes Division of Technology
Source: City of Philadelphia, Quarterly City Manager's Report

Exhibit S-5: Commercial Flights and Available Seats
(By Fiscal Year)

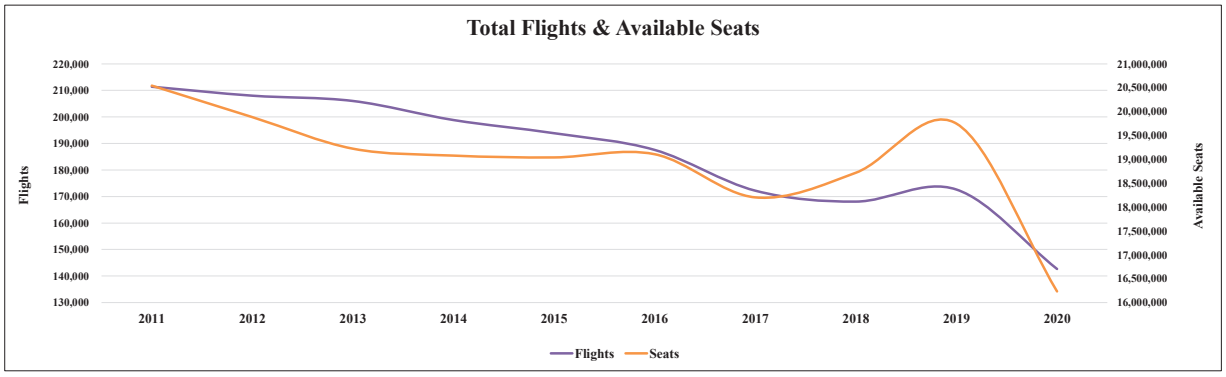
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
Domestic											
Flights	193,315	189,034	187,696	180,527	175,947	169,921	155,947	152,169	155,908	131,077	(3.81%)
Seats	17,929,812	17,223,904	16,629,825	16,435,626	16,317,090	16,411,017	15,759,155	16,232,474	17,147,659	14,469,247	(2.12%)



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
International											
Flights	18,089	18,990	18,332	18,312	17,923	17,650	16,252	15,911	16,720	11,598	(4.35%)
Seats	2,615,698	2,661,499	2,594,329	2,643,622	2,723,892	2,697,451	2,444,766	2,488,116	2,601,675	1,764,595	(3.86%)



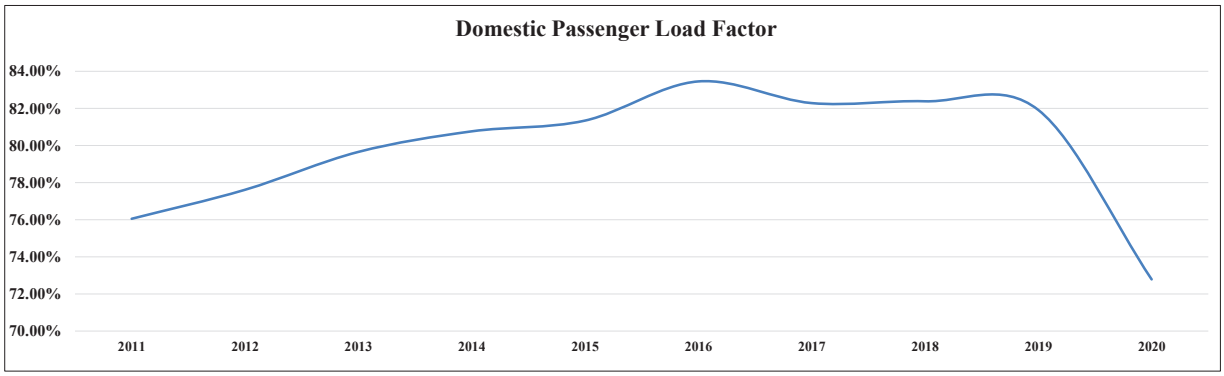
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
Total											
Flights	211,404	208,024	206,028	198,839	193,870	187,571	172,199	168,080	172,628	142,675	(3.86%)
Seats	20,545,510	19,885,403	19,224,154	19,079,248	19,040,982	19,108,468	18,203,921	18,720,590	19,749,334	16,233,842	(2.33%)



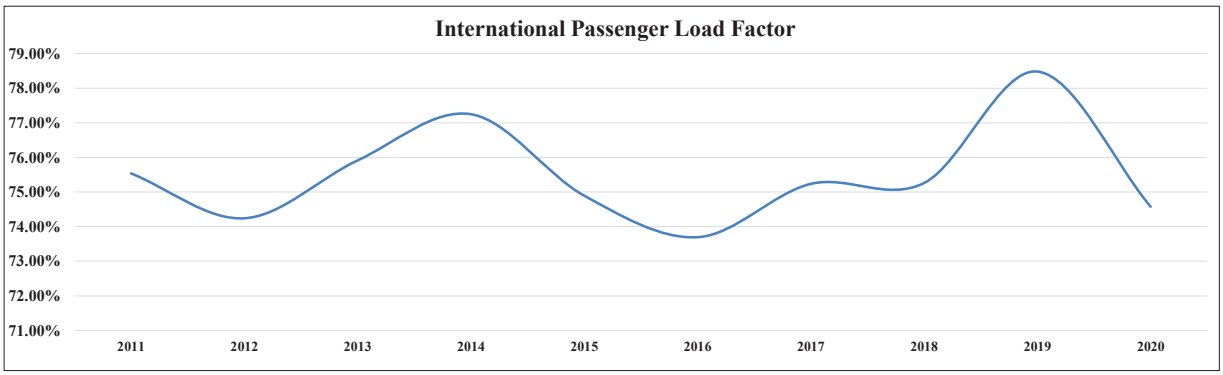
Source: Campbell-Hill Aviation Group, LLC

Exhibit S-6: Passenger Load Factors
(By Fiscal Year)

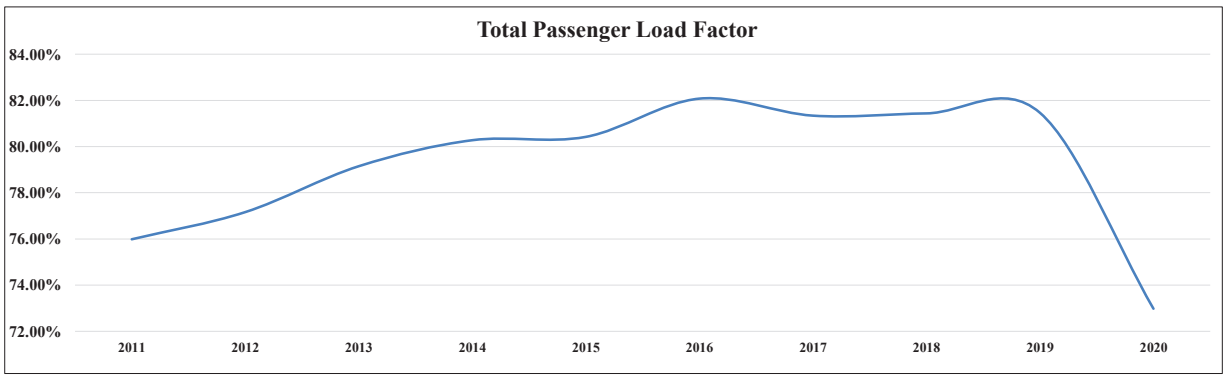
Domestic Passenger Load Factor	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
	76.05%	77.61%	79.65%	80.76%	81.34%	83.45%	82.29%	82.38%	81.92%	72.79%	(0.44%)



International Passenger Load Factor	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
	75.54%	74.24%	75.91%	77.25%	74.89%	73.69%	75.23%	75.26%	78.48%	74.58%	(0.13%)



Total Passenger Load Factor	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
	75.99%	77.16%	79.15%	80.28%	80.42%	82.08%	81.34%	81.44%	81.46%	72.98%	(0.40%)



* Note: Domestic and International Enplanements from 2010 through 2018 were restated.
Sources: Campbell-Hill Aviation Group, LLC
City of Philadelphia

Exhibit S-7: Commercial Passenger Enplanements

(By Fiscal Year)

Domestic enplanements

Fiscal Year	PHL Domestic Passenger Enplanements	PHL Annual Growth	U.S. Air Carrier Domestic Enplanements *	U.S. Annual Growth
2020	**10,531,456**	**(25.0%)**	**601,519,000**	**(24.4%)**
2019	14,046,663	5.0%	795,947,000	4.5%
2018	13,372,943	3.1%	761,971,000	4.1%
2017	12,967,584	(5.3%)	732,289,000	2.6%
2016	13,695,700	3.2%	713,652,000	5.3%
2015	13,272,717	(0.0%)	677,973,000	3.7%
2014	13,273,937	0.2%	654,061,000	1.3%
2013	13,246,485	(0.9%)	645,821,000	(0.1%)
2012	13,368,218	(2.0%)	646,199,000	1.0%
2011	13,635,784	2.3%	639,606,000	2.6%

International enplanements

Fiscal Year	PHL International Passenger Enplanements	PHL Annual Growth	U.S. Air Carrier International Enplanements *	U.S. Annual Growth
2020	**1,315,951**	**(35.5%)**	**81,986,000**	**(28.7%)**
2019	2,041,761	9.0%	114,999,000	3.1%
2018	1,872,510	1.8%	111,580,000	3.2%
2017	1,839,298	(7.5%)	108,069,000	1.6%
2016	1,987,858	(2.6%)	106,402,000	3.2%
2015	2,040,021	(0.1%)	103,114,000	1.1%
2014	2,042,116	3.7%	101,991,000	3.4%
2013	1,969,400	(0.3%)	98,593,000	1.7%
2012	1,975,908	0.0%	96,911,000	1.4%
2011	1,975,799	6.3%	95,526,000	5.5%

Total enplanements

Fiscal Year	PHL Total Passenger Enplanements	PHL Annual Growth	U.S. Air Carrier Total Enplanements	U.S. Annual Growth
2020	**11,847,407**	**(26.4%)**	**683,505,000**	**(25.0%)**
2019	16,088,424	5.5%	910,946,000	4.3%
2018	15,245,453	3.0%	873,551,000	3.9%
2017	14,806,882	(5.6%)	840,358,000	2.5%
2016	15,683,558	2.4%	820,054,000	5.0%
2015	15,312,738	(0.0%)	781,087,000	3.3%
2014	15,316,053	0.7%	756,052,000	1.6%
2013	15,215,885	(0.8%)	744,414,000	0.2%
2012	15,344,126	(1.7%)	743,110,000	1.1%
2011	15,611,583	2.8%	735,132,000	3.0%

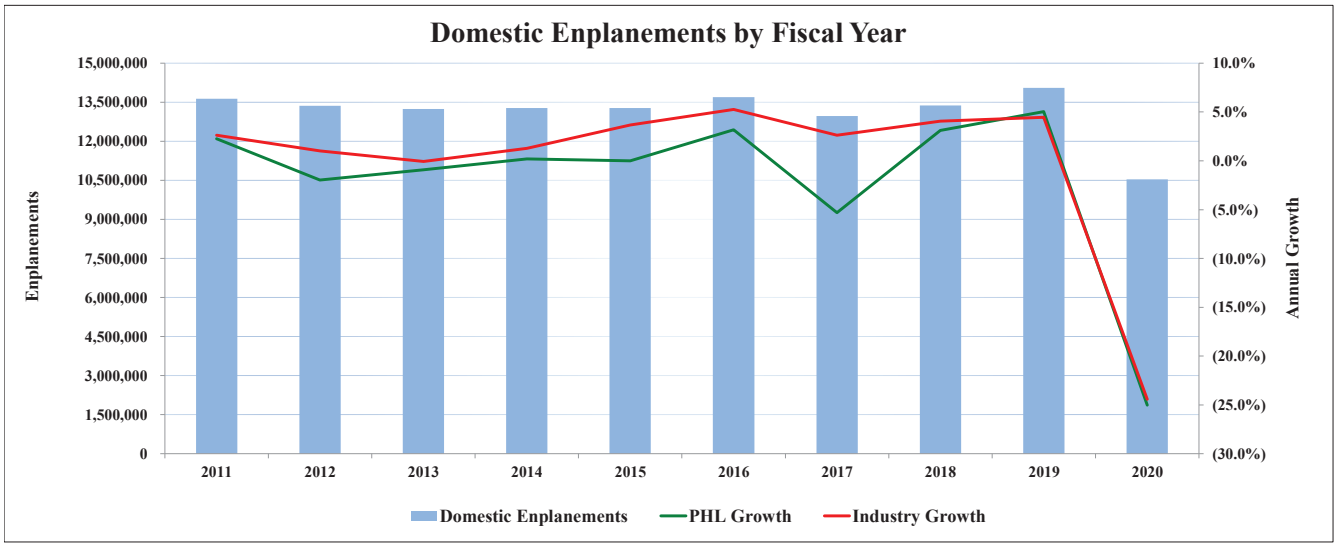
* 2017 U.S. Air Carrier Domestic and International Enplanements modified by Bureau of Transportation Statistics

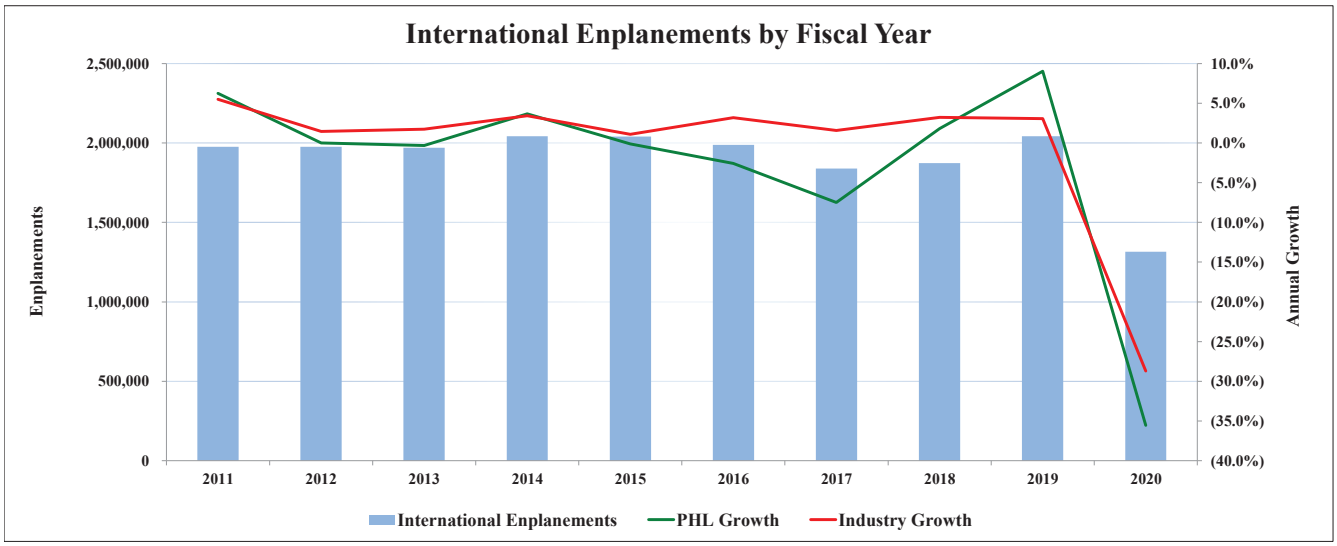
Note: Domestic and International Enplanements from 2010 through 2018 were restated.

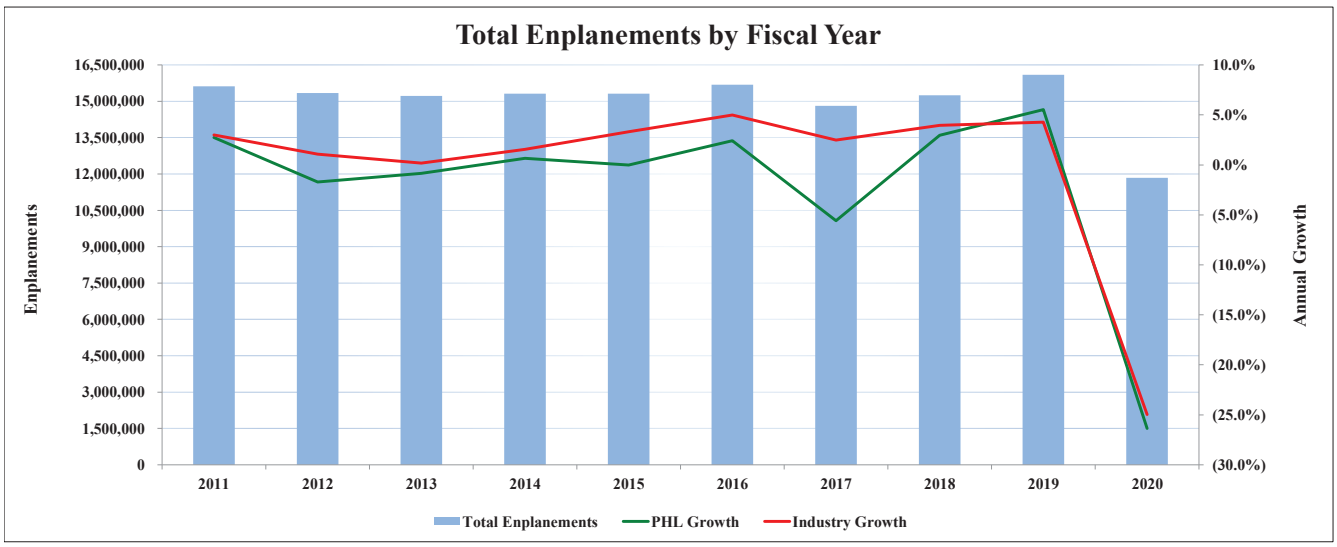
PHL Passenger Enplanements and Annual Growth from City of Philadelphia

U.S. Air Carrier Enplanements and Annual Growth from Bureau of Transportation Statistics

Exhibit S-7: Commercial Passenger Enplanements
(Continued, By Fiscal Year)







* Note: Domestic and International Enplanements from 2010 through 2018 were restated.
Source: City of Philadelphia
Source: Bureau of Transportation Statistics

Exhibit S-8: Airline Market Share by Passenger Enplanements

(By Fiscal Year)

Airlines	2020		2019		2018		2017		2016	
	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share
Domestic										
Scheduled major/national										
American	4,531,069	38.2%	6,609,437	41.1%	6,099,214	40.0%	5,869,032	39.6%	6,101,659	38.9%
Southwest	744,815	6.3%	1,096,018	6.8%	1,123,008	7.4%	1,152,350	7.8%	1,133,501	7.2%
Delta	604,282	5.1%	832,378	5.2%	834,666	5.5%	853,135	5.8%	973,307	6.2%
Frontier	797,901	6.7%	790,154	4.9%	657,572	4.3%	580,452	3.9%	473,972	3.0%
United	391,686	3.3%	554,088	3.4%	554,152	3.6%	529,057	3.6%	549,849	3.5%
Spirit	487,649	4.1%	515,578	3.2%	421,325	2.8%	361,782	2.4%	245,438	1.6%
JetBlue	177,613	1.5%	223,713	1.4%	218,290	1.4%	205,817	1.4%	183,285	1.2%
Alaska	114,340	1.0%	163,207	1.0%	141,157	0.9%	64,154	0.4%	59,076	0.4%
Sun Country	22,880	0.2%	6,934	0.0%	-	-	-	-	-	-
AirTran	-	-	-	-	-	-	-	-	-	-
Virgin America	-	-	-	-	-	-	-	-	-	-
Continental	-	-	-	-	-	-	-	-	-	-
USA 3000	-	-	-	-	-	-	-	-	-	-
Midwest Airlines	-	-	-	-	-	-	-	-	-	-
Northwest	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled major/national	7,872,235	66.4%	10,791,507	67.1%	10,049,384	65.9%	9,615,779	64.9%	9,720,087	62.0%
Scheduled regional/commuter										
American Eagle										
Piedmont	1,082,605	9.1%	1,432,000	8.9%	1,172,067	7.7%	918,638	6.2%	694,448	4.4%
Republic	808,038	6.8%	925,678	5.8%	1,063,517	7.0%	864,036	5.8%	1,326,308	8.5%
PSA	576,780	4.9%	671,061	4.2%	394,252	2.6%	309,469	2.1%	307,357	2.0%
Envoy	6,202	0.1%	8,147	0.1%	16,635	0.1%	-	-	-	-
Air Wisconsin	-	-	-	-	453,101	3.0%	1,002,131	6.8%	1,419,663	9.1%
Mesa	-	-	-	-	-	-	-	-	-	-
Chautauqua	-	-	-	-	-	-	-	-	-	-
Subtotal - American Eagle	2,473,625	20.9%	3,036,886	18.9%	3,099,572	20.3%	3,094,274	20.9%	3,747,776	23.9%
Other	185,302	1.6%	215,374	1.3%	222,087	1.5%	257,068	1.7%	227,752	1.5%
Subtotal - scheduled regional/commuter	2,658,927	22.4%	3,252,260	20.2%	3,321,659	21.8%	3,351,342	22.6%	3,975,528	25.3%
Charter	294	0.0%	2,896	0.0%	1,900	0.0%	463	0.0%	85	0.0%
Total - domestic	10,531,456	88.9%	14,046,663	87.3%	13,372,943	87.7%	12,967,584	87.6%	13,695,700	87.3%
International										
Scheduled										
American	815,679	6.9%	1,349,623	8.4%	1,228,549	8.1%	1,186,702	8.0%	1,324,804	8.4%
Piedmont	111,181	0.9%	161,566	1.0%	73,803	0.5%	-	-	-	-
Air Canada - Sky Regional / Jazz Aviation	72,582	0.6%	99,909	0.6%	93,978	0.6%	77,018	0.5%	61,797	0.4%
British	79,991	0.7%	97,561	0.6%	88,688	0.6%	118,177	0.8%	128,290	0.8%
Qatar	63,574	0.5%	80,795	0.5%	66,047	0.4%	52,728	0.4%	61,745	0.4%
Lufthansa	56,945	0.5%	78,033	0.5%	71,971	0.5%	73,251	0.5%	69,405	0.4%
Frontier	44,084	0.4%	74,154	0.5%	67,467	0.4%	68,053	0.5%	80,497	0.5%
Aer Lingus	29,418	0.2%	46,969	0.3%	10,951	0.1%	-	-	-	-
Republic	21,360	0.2%	41,720	0.3%	64,517	0.4%	36,300	0.2%	62,725	0.4%
Icelandair	6,492	0.1%	11,379	0.1%	9,690	0.1%	2,806	0.0%	-	-
Delta	0	0.0%	52	0.0%	29,362	0.2%	45,046	0.3%	35,045	0.2%
Air Wisconsin	-	-	-	-	67,128	0.4%	175,336	1.2%	160,730	1.0%
PSA	12,554	0.1%	-	-	217	0.0%	-	-	-	-
Spirit	1,922	0.0%	-	-	-	-	-	-	-	-
Air Jamaica / Caribbean	-	-	-	-	-	-	-	-	-	-
USA 3000	-	-	-	-	-	-	-	-	-	-
Air France	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled	1,315,782	11.1%	2,041,761	12.7%	1,872,368	12.3%	1,835,417	12.4%	1,985,038	12.7%
Charter	169	0.0%	-	-	142	0.0%	3,881	0.0%	2,820	0.0%
Total - international	1,315,951	11.1%	2,041,761	12.7%	1,872,510	12.3%	1,839,298	12.4%	1,987,858	12.7%
Grand total	**11,847,407**	**100.0%**	**16,088,424**	**100.0%**	**15,245,453**	**100.0%**	**14,806,882**	**100.0%**	**15,683,558**	**100.0%**

* Note: Domestic and International Enplanements from 2010 through 2018 were restated.

Source: City of Philadelphia

Exhibit S-8: Airline Market Share by Passenger Enplanements

(Continued, By Fiscal Year)

Airlines	2015		2014		2013		2012		2011	
	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share	Enplaned Passengers	Market Share
Domestic										
Scheduled major/national										
American	5,912,774	38.6%	6,090,891	39.8%	5,918,404	38.9%	5,852,418	38.1%	5,788,450	37.1%
Southwest	1,017,105	6.6%	927,172	6.1%	1,054,353	6.9%	1,494,613	9.7%	1,707,286	10.9%
Delta	924,773	6.0%	908,882	5.9%	804,404	5.3%	813,547	5.3%	805,797	5.2%
Frontier	154,956	1.0%	1,783	0.0%	28,307	0.2%	78,442	0.5%	89,554	0.6%
United	520,995	3.4%	492,899	3.2%	540,335	3.6%	427,458	2.8%	405,836	2.6%
Spirit	142,411	0.9%	129,417	0.8%	30,747	0.2%	-	-	-	-
JetBlue	123,511	0.8%	116,655	0.8%	15,502	0.1%	-	-	-	-
Alaska	56,514	0.4%	54,569	0.4%	47,617	0.3%	2,790	0.0%	-	-
Sun Country	-	-	-	-	-	-	-	-	-	-
AirTran	42,858	0.3%	189,037	1.2%	296,466	1.9%	258,203	1.7%	300,480	1.9%
Virgin America	26,566	0.2%	97,932	0.6%	155,152	1.0%	38,878	0.3%	-	-
Continental	-	-	-	-	-	-	164,217	1.1%	233,502	1.5%
USA 3000	-	-	-	-	-	-	1,052	0.0%	5,286	0.0%
Midwest Airlines	-	-	-	-	-	-	-	-	-	-
Northwest	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled major/national	8,922,463	58.3%	9,009,237	58.8%	8,891,287	58.4%	9,131,618	59.5%	9,336,191	59.8%
Scheduled regional/commuter										
American Eagle										
Piedmont	708,011	4.6%	792,688	5.2%	854,595	5.6%	762,204	5.0%	766,538	4.9%
Republic	1,529,350	10.0%	1,462,890	9.6%	1,307,524	8.6%	1,318,546	8.6%	1,424,740	9.1%
PSA	239,146	1.6%	231,547	1.5%	264,630	1.7%	264,325	1.7%	181,411	1.2%
Envoy	-	-	-	-	-	-	-	-	-	-
Air Wisconsin	1,508,945	9.9%	1,302,475	8.5%	1,333,837	8.8%	1,287,022	8.4%	1,360,164	8.7%
Mesa	49,094	0.3%	50,508	0.3%	-	-	-	-	-	-
Chautauqua	-	-	-	-	75,628	0.5%	84,918	0.6%	58,684	0.4%
Subtotal - American Eagle	4,034,546	26.3%	3,840,108	25.1%	3,836,214	25.2%	3,717,015	24.2%	3,791,537	24.3%
Other	315,442	2.1%	434,826	2.8%	518,639	3.4%	518,655	3.4%	507,479	3.3%
Subtotal - scheduled regional/commuter	4,349,988	28.4%	4,274,934	27.9%	4,354,853	28.6%	4,235,670	27.6%	4,299,016	27.5%
Charter	266	0.0%	603	0.0%	345	0.0%	930	0.0%	577	0.0%
Total - domestic	13,272,717	86.7%	13,284,774	86.7%	13,246,485	87.1%	13,368,218	87.1%	13,635,784	87.3%
International										
Scheduled										
American	1,424,940	9.3%	1,472,915	9.6%	1,458,393	9.6%	1,428,157	9.3%	1,409,484	9.0%
Piedmont	-	-	-	-	-	-	-	-	-	-
Air Canada - Sky Regional / Jazz Aviation	56,038	0.4%	56,524	0.4%	53,728	0.4%	52,515	0.3%	49,839	0.3%
British	120,461	0.8%	112,422	0.7%	110,271	0.7%	114,085	0.7%	107,276	0.7%
Qatar	57,650	0.4%	18,299	0.1%	-	-	-	-	-	-
Lufthansa	70,438	0.5%	63,334	0.4%	54,906	0.4%	51,403	0.3%	60,185	0.4%
Frontier	35,937	0.2%	23,108	0.2%	22,949	0.2%	14,539	0.1%	-	-
Aer Lingus	-	-	-	-	-	-	-	-	-	-
Republic	59,107	0.4%	45,726	0.3%	70,712	0.5%	105,734	0.7%	86,009	0.6%
Icelandair	-	-	-	-	-	-	-	-	-	-
Delta	18,784	0.1%	15,473	0.1%	15,672	0.1%	20,304	0.1%	40,212	0.3%
Air Wisconsin	195,937	1.3%	219,574	1.4%	182,534	1.2%	151,941	1.0%	162,515	1.0%
PSA	-	-	-	-	-	-	-	-	-	-
Spirit	-	-	-	-	-	-	-	-	-	-
Air Jamaica / Caribbean	-	-	-	-	66	0.0%	30,032	0.2%	35,200	0.2%
USA 3000	-	-	-	-	-	-	6,528	0.0%	24,492	0.2%
Air France	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled	2,039,292	13.3%	2,027,375	13.2%	1,969,231	12.9%	1,975,238	12.9%	1,975,212	12.7%
Charter	729	0.0%	3,904	0.0%	169	0.0%	670	0.0%	587	0.0%
Total - international	2,040,021	13.3%	2,031,279	13.3%	1,969,400	12.9%	1,975,908	12.9%	1,975,799	12.7%
Grand total	**15,312,738**	**100.0%**	**15,316,053**	**100.0%**	**15,215,885**	**100.0%**	**15,344,126**	**100.0%**	**15,611,583**	**100.0%**

* Note: (1) Domestic and International Enplanements from 2010 through 2018 were restated.

(2) American and US Airways numbers combined for all previous years.

Source: City of Philadelphia

Exhibit S-9: Aircraft Operations by Airport
(By Fiscal Year)

PHL Takeoffs and landings

Fiscal Year	Air Carrier	Commuter	General Aviation	Military	Total
2020	**221,914**	**83,226**	**11,683**	**521**	**317,344**
2019	263,684	107,327	14,644	457	386,112
2018	240,676	115,986	14,323	412	371,397
2017	222,618	141,120	14,184	412	378,334
2016	226,056	153,590	13,971	405	394,022
2015	237,788	161,386	14,548	399	414,121
2014	241,252	166,014	13,883	400	421,549
2013	240,165	183,828	13,848	423	438,264
2012	255,629	177,194	14,129	436	447,388
2011	266,138	173,255	18,325	1,114	458,832

Note: Philadelphia International Airport's annual aircraft operations have declined from FY 2006 through FY 2018. The reduction in flights can be partially attributed to airline mergers and consolidations, and increasing load factors. Airlines have been reducing the number of flights that use smaller, less fuel-efficient aircraft.

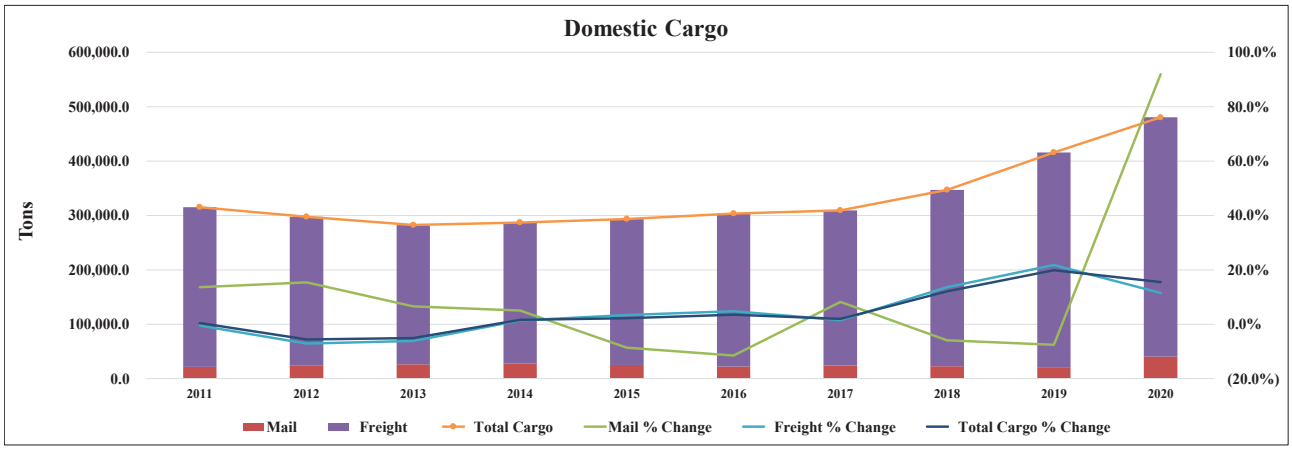
PNE Takeoffs and landings

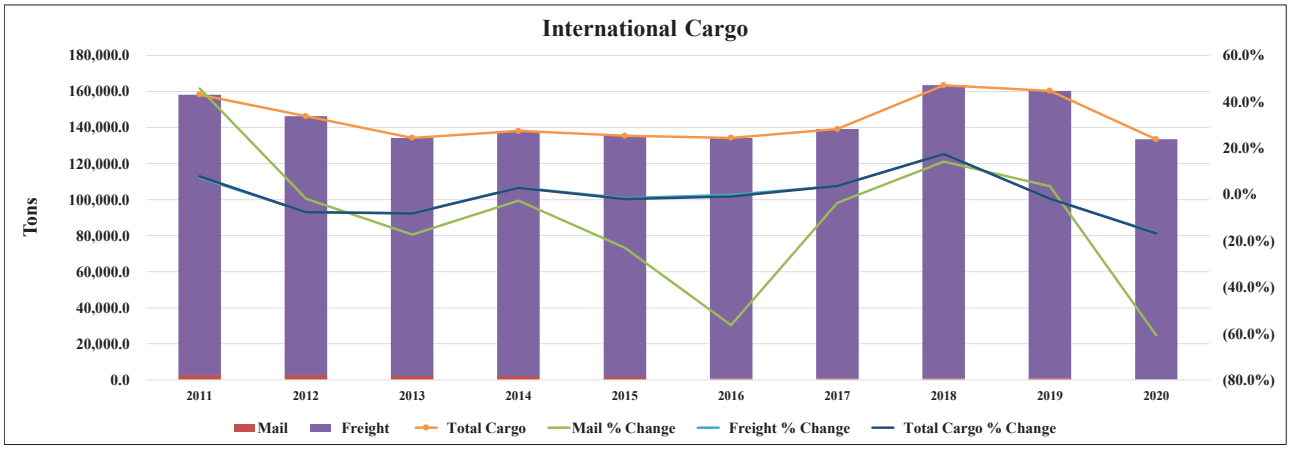
Fiscal Year	Air Carrier	Commuter	General Aviation	Military	Total
2020	**0**	**0**	**68,059**	**0**	**68,059**
2019	0	0	69,240	0	69,240
2018	0	0	55,817	0	55,817
2017	0	0	56,373	0	56,373
2016	0	0	54,222	0	54,222
2015	0	0	72,975	0	72,975
2014	0	0	71,723	0	71,723
2013	0	0	67,997	0	67,997
2012	0	0	70,454	0	70,454
2011	0	0	66,507	0	66,507

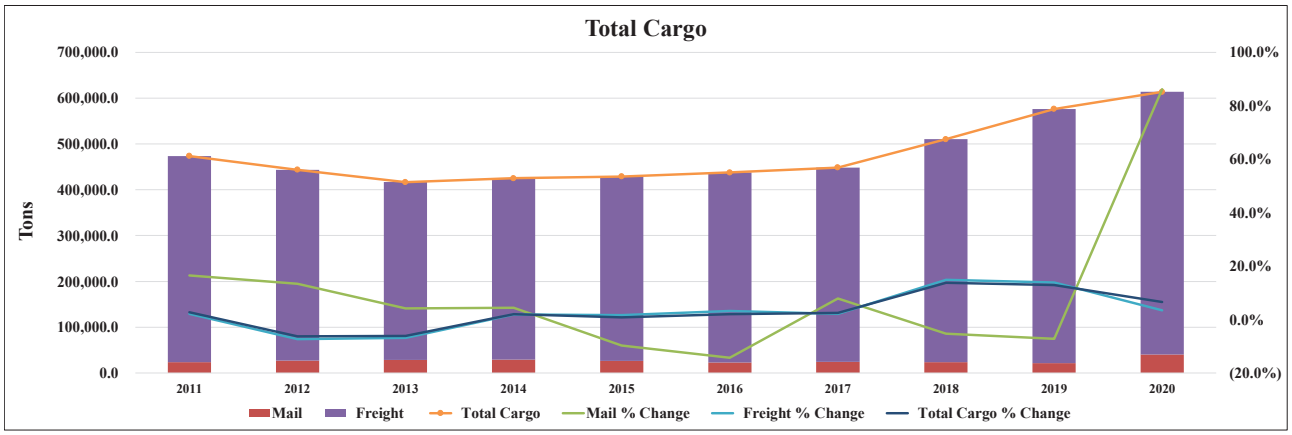
Note: Northeast Philadelphia Airport's annual aircraft operations have generally declined from FY 2005 through FY 2018. The reduction in flights can be partially attributed to a change in procedures for recording training flights ("touch and go" operations) from FY 2005, as well as the closing of Hortman Aviation Flight School in 2015.

Source: City of Philadelphia

Exhibit S-10: Cargo Tonnage
(By Fiscal Year)



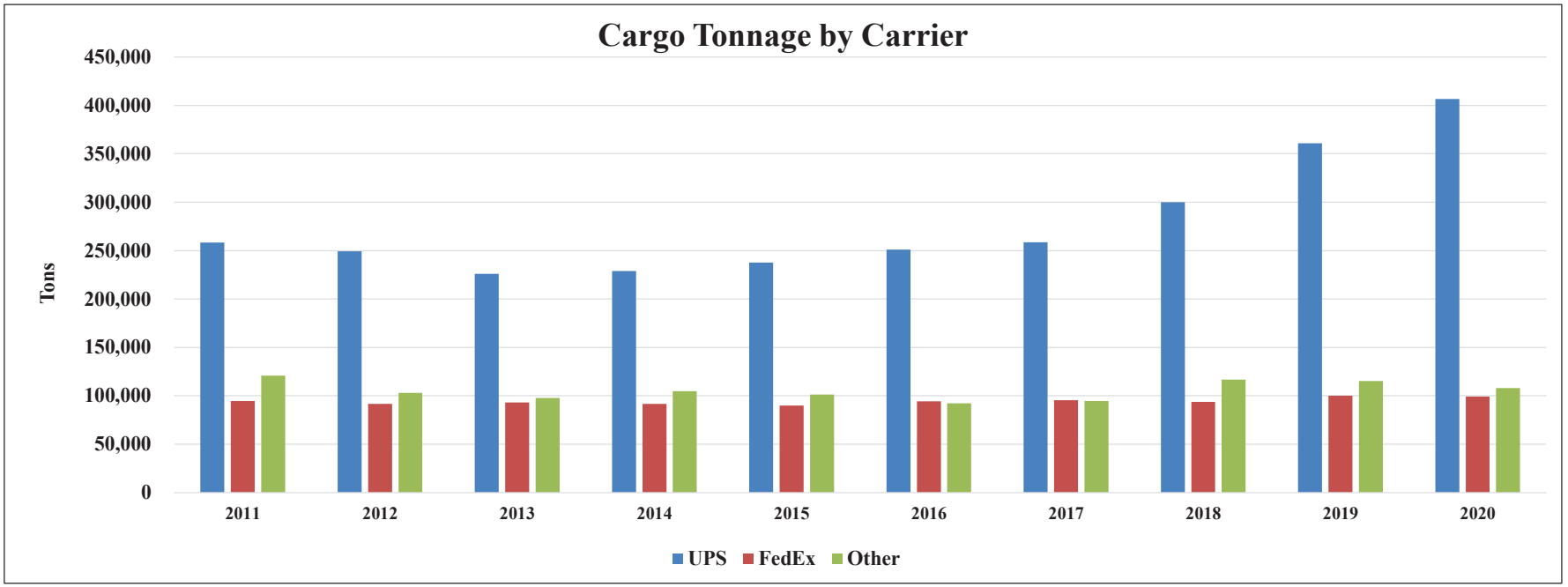




Source: City of Philadelphia

Exhibit S-10: Cargo Tonnage by Carrier
(Continued, By Fiscal Year)

Carrier	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	10-Year Annual Growth
UPS	258,382	249,200	225,839	228,810	237,529	251,080	258,615	299,905	360,955	406,468	4.63%
FedEx	94,547	91,748	93,041	91,628	89,925	94,341	95,518	93,789	100,064	99,311	0.49%
Other	120,691	102,934	97,791	104,768	101,421	92,337	94,535	116,736	115,252	108,061	(1.10%)
Total	473,620	443,882	416,671	425,206	428,875	437,758	448,668	510,430	576,271	613,840	2.63%



Source: City of Philadelphia

* Other Airlines include commercial airlines and itinerant passenger & cargo airlines.

Exhibit S-11: Annual Revenues, Expenses And Changes In Fund Net Position

(By Fiscal Year)

	2020	2019	2018	2017	2016	2015	2014	2013	Restated * 2012	2011
Operating revenues										
Charges for goods and services (1)	$ 74,473,841	$ 120,832,729	$ 128,320,912	$ 104,531,921	$ 110,787,260	$ 100,619,746	$ 110,782,462	$ 88,823,551	$ 78,331,485	$ 81,161,226
Rentals and concessions (2)	215,702,641	264,946,027	245,881,682	232,887,674	224,999,976	216,190,420	200,192,045	197,912,708	179,202,590	170,667,208
Miscellaneous operating revenues	5,228,340	5,292,986	5,367,810	4,200,936	5,009,010	5,554,490	4,439,768	4,630,590	5,631,463	6,226,427
Total operating revenues	295,404,822	391,071,742	379,570,404	341,620,531	340,796,246	322,364,656	315,414,275	291,366,849	263,165,538	258,054,861
Operating expenses										
Personal services	86,385,831	81,052,522	79,223,366	73,776,022	69,283,424	70,424,997	65,636,270	63,190,699	60,503,430	59,258,555
Purchase of services	107,925,323	113,187,323	111,100,076	118,283,429	108,418,709	101,642,118	94,403,544	88,684,536	81,733,892	78,491,464
Materials and supplies	8,862,639	8,202,311	9,805,303	5,156,099	6,944,528	8,669,852	8,927,068	6,557,009	6,728,927	4,458,556
Employee benefits	66,409,686	64,803,539	60,602,579	61,939,679	57,854,677	52,106,797	65,665,321	46,467,020	50,585,661	44,845,414
Indemnities and taxes	5,524,518	5,773,036	1,966,973	5,196,986	1,695,946	1,839,638	1,108,774	1,945,850	1,899,313	2,219,123
Depreciation and amortization	102,393,319	100,679,051	112,033,607	101,109,005	101,909,394	98,125,419	99,707,937	97,873,389	100,592,947	100,894,334
Total operating expenses	377,501,316	373,697,782	374,731,904	365,461,220	346,106,678	332,808,821	335,448,914	304,718,503	302,044,170	290,167,446
Operating income (loss)	(82,096,494)	17,373,960	4,838,500	(23,840,689)	(5,310,432)	(10,444,165)	(20,034,639)	(13,351,654)	(38,878,632)	(32,112,585)
Non-operating revenues (expenses)										
Federal, state and local grants	57,639,261	1,463,277	1,672,222	2,488,459	1,621,300	1,885,786	2,483,722	1,661,600	2,377,228	4,215,312
Interest income	25,343,078	23,582,264	9,836,271	3,786,077	2,658,109	363,206	1,076,392	632,234	5,654,556	2,235,393
Debt service, interest	(59,289,830)	(57,032,860)	(68,195,690)	(54,271,038)	(54,003,323)	(41,428,793)	(40,966,678)	(40,179,599)	(40,069,791)	(45,847,778)
Other revenue (expenses)	(50,338)	2,476,639	3,000,000	-	-	-	-	(13,994,139)	(407,921)	(5,247)
Loss on disposal of property, net	(307,101)	51,887	(59,048)	(122,785)	(67,463)	(69,113)	(75,920)	(13,394)	-	-
Customer facility charges	24,636,032	31,080,128	30,440,208	30,875,320	31,934,786	29,933,177	4,857,600	-	-	-
Passenger facility charges	46,749,088	64,031,965	61,067,558	59,384,648	60,920,335	61,180,724	60,653,369	58,188,449	59,741,500	62,042,429
Total non-operating revenues (expenses)	94,720,190	65,653,300	37,761,521	42,140,681	43,063,744	51,864,987	28,028,485	6,295,151	27,295,572	22,640,109
Gain (Loss) before capital contributions	12,623,696	83,027,260	42,600,021	18,299,992	37,753,312	41,420,822	7,993,846	(7,056,503)	(11,583,060)	(9,472,476)
Capital contributions										
Federal, state and local grants	20,327,935	22,238,626	19,583,401	9,566,140	24,203,573	35,549,920	20,046,410	39,691,462	29,242,258	39,639,059
Total capital contributions	20,327,935	22,238,626	19,583,401	9,566,140	24,203,573	35,549,920	20,046,410	39,691,462	29,242,258	39,639,059
Increase (decrease) in net position	$ 32,951,631	$ 105,265,886	$ 62,183,422	$ 27,866,132	$ 61,956,885	$ 76,970,742	$ 28,040,256	$ 32,634,959	$ 17,659,198	$ 30,166,583
Net position beginning of period	993,543,168	888,277,282	894,083,996	866,217,864	804,260,979	894,969,059	866,928,803	#REF!	#REF!	#REF!
Adjustment	(8,770,847)	-	(67,990,136)	-	-	(167,678,822)	-	-	(18,639,280)	-
Net position end of period	**$ 1,017,723,952**	**$ 993,543,168**	**$ 888,277,282**	**$ 894,083,996**	**$ 866,217,864**	**$ 804,260,979**	**$ 894,969,059**	**#REF!**	**#REF!**	**#REF!**

* Related to the adoption of GASB 65

Source: City of Philadelphia, Financial Statements

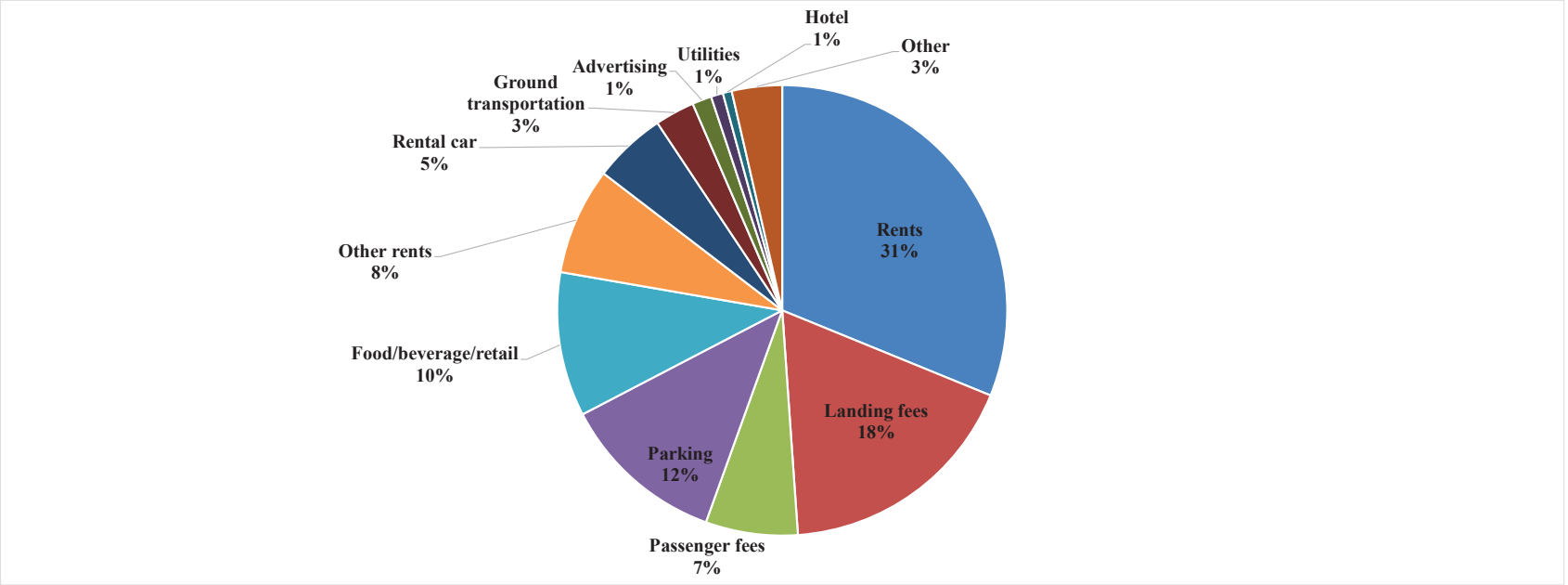
(1) Charges for goods and services are comprised of airline revenues, specifically landing fees and international arrival fees, and non-airline revenues, specifically utilities and other fees.

(2) Rental and concessions are comprised of airline revenues, specifically rents, and non-airline revenues, specifically concessions, and other rents.

Exhibit S-12: Operating Revenues by Source
(By Fiscal Year)

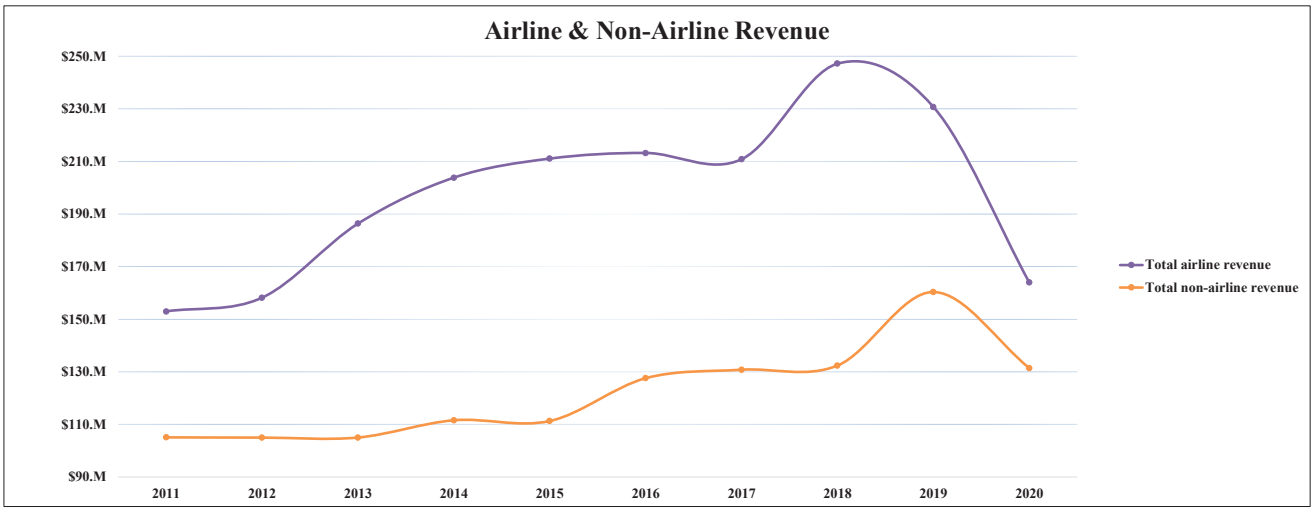
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011	10-Year Annual Growth
Airline revenue											
Rents	$ 92,060,092	$ 112,437,578	$ 122,195,881	$ 111,099,652	$ 107,504,766	$ 115,637,922	$ 98,895,068	$ 102,444,565	$ 84,597,375	$ 73,285,708	2.31%
Landing fees	52,351,021	81,040,660	88,769,632	67,710,165	71,796,365	68,868,068	80,068,379	63,876,786	57,390,056	62,137,487	(1.70%)
Passenger fees	19,556,454	37,249,170	36,228,901	32,017,978	33,927,721	26,573,596	24,873,375	20,041,927	16,202,394	17,565,552	1.08%
Total airline revenue	163,967,567	230,727,408	247,194,414	210,827,795	213,228,852	211,079,586	203,836,822	186,363,278	158,189,825	152,988,747	**0.70%**
Non-airline revenue											
Parking	35,023,752	37,151,976	33,620,940	33,892,719	29,968,056	29,090,299	25,000,777	24,147,808	25,035,368	28,008,554	2.26%
Food/beverage/retail	30,613,092	38,725,616	33,082,150	31,458,225	35,971,023	23,802,476	27,241,432	23,651,437	25,902,344	22,817,909	2.98%
Other rents	22,686,419	34,128,018	19,456,269	20,309,076	19,279,017	17,990,122	17,972,046	18,475,294	17,437,758	15,083,071	4.17%
Rental car	15,473,293	19,821,992	19,088,359	19,057,032	18,925,037	17,972,921	19,129,901	19,353,044	18,374,270	17,977,440	(1.49%)
Ground transportation	8,410,149	9,905,712	7,759,709	5,589,833	2,539,609	2,069,814	1,777,269	1,627,271	1,512,007	1,489,869	18.90%
Advertising	4,111,262	4,031,350	4,165,545	4,113,665	3,948,970	2,814,100	2,700,000	2,700,000	2,325,320	2,568,692	4.82%
Utilities	2,566,366	2,542,899	2,862,116	2,872,521	3,207,446	3,548,830	4,300,906	3,733,830	3,889,574	4,070,184	(4.51%)
Hotel	1,896,680	2,174,191	2,131,110	2,095,984	2,036,604	1,972,306	1,881,380	1,707,073	1,800,406	1,732,421	0.91%
Other	10,656,242	11,862,580	10,209,792	11,403,680	11,691,632	12,024,202	11,573,742	9,607,814	8,698,666	11,317,974	(0.60%)
Total non-airline revenue	131,437,255	160,344,334	132,375,990	130,792,736	127,567,394	111,285,070	111,577,453	105,003,571	104,975,713	105,066,114	**2.26%**
Total operating revenues	**$ 295,404,822**	**$ 391,071,742**	**$ 379,570,404**	**$ 341,620,531**	**$ 340,796,246**	**$ 322,364,656**	**$ 315,414,275**	**$ 291,366,849**	**$ 263,165,538**	**$ 258,054,861**	**1.36%**

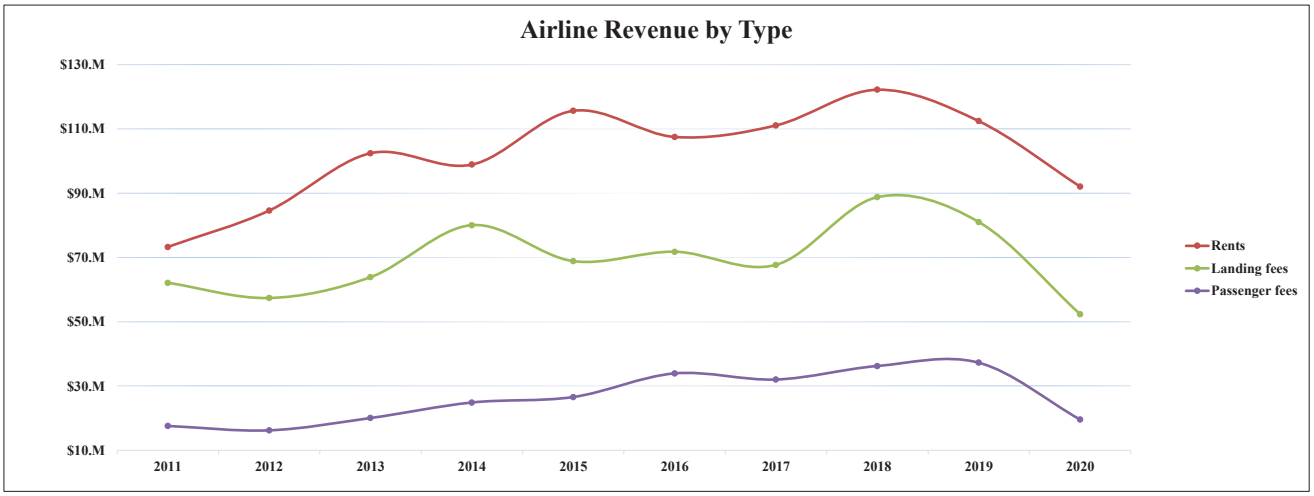
2020 Revenues by Source

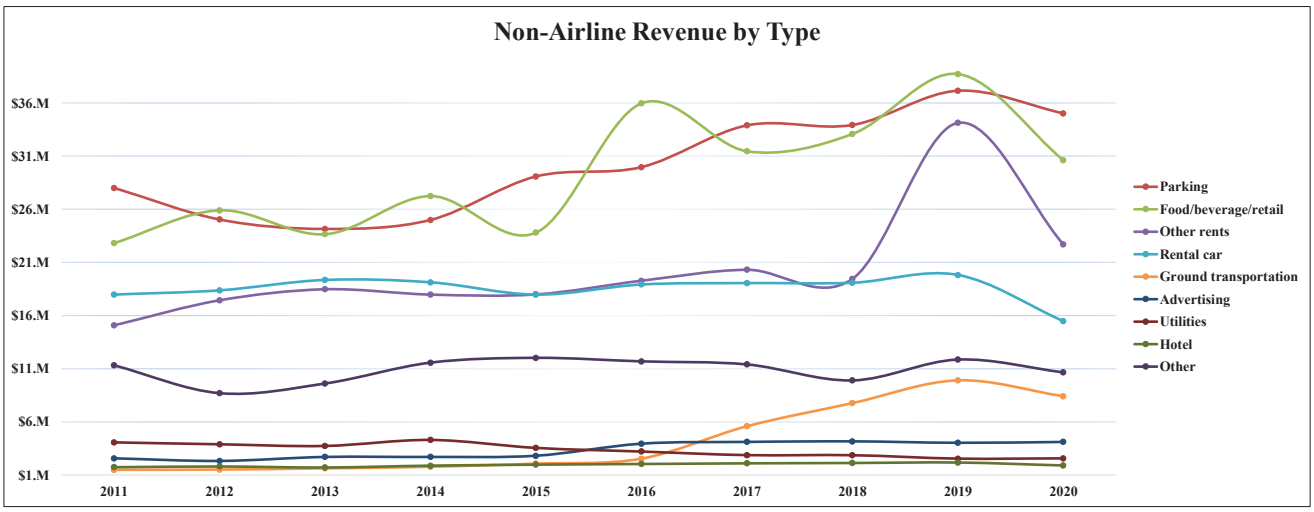


Source: City of Philadelphia

Exhibit S-12: Operating Revenues by Source
(Continued, By Fiscal Year)

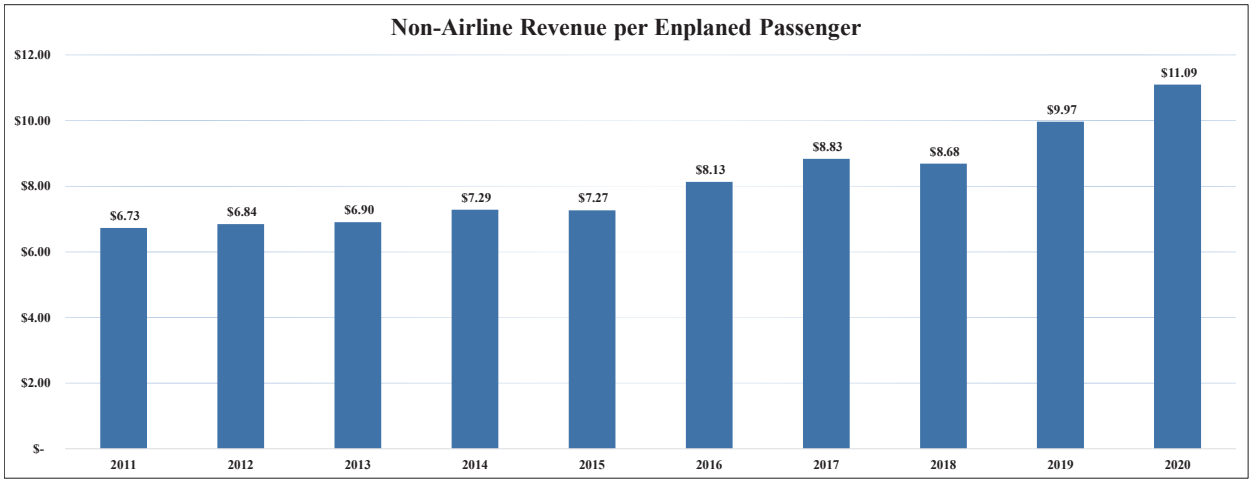


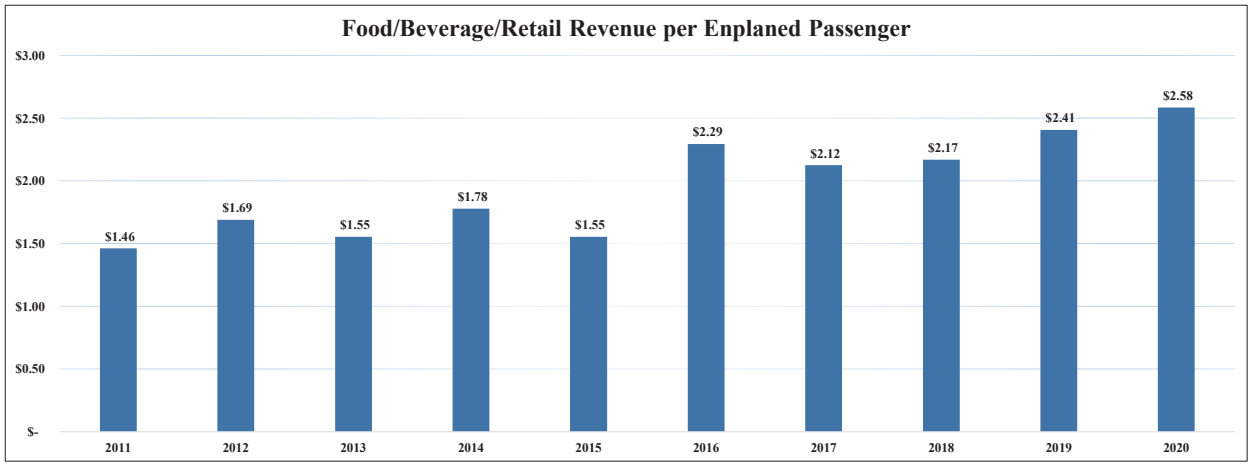


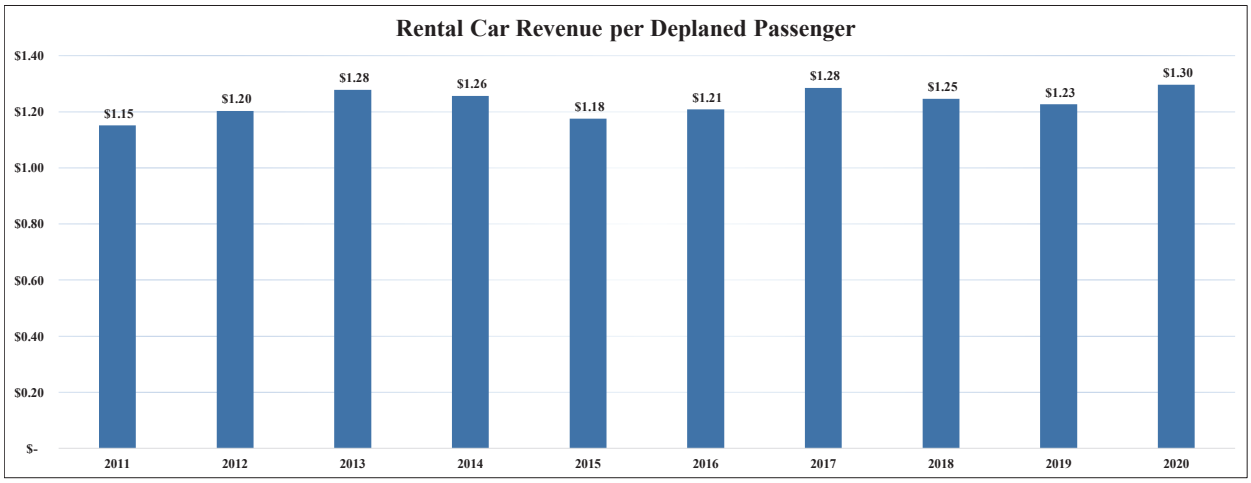


Source: City of Philadelphia

Exhibit S-12: Revenues by Source
(Continued, by Fiscal Year)



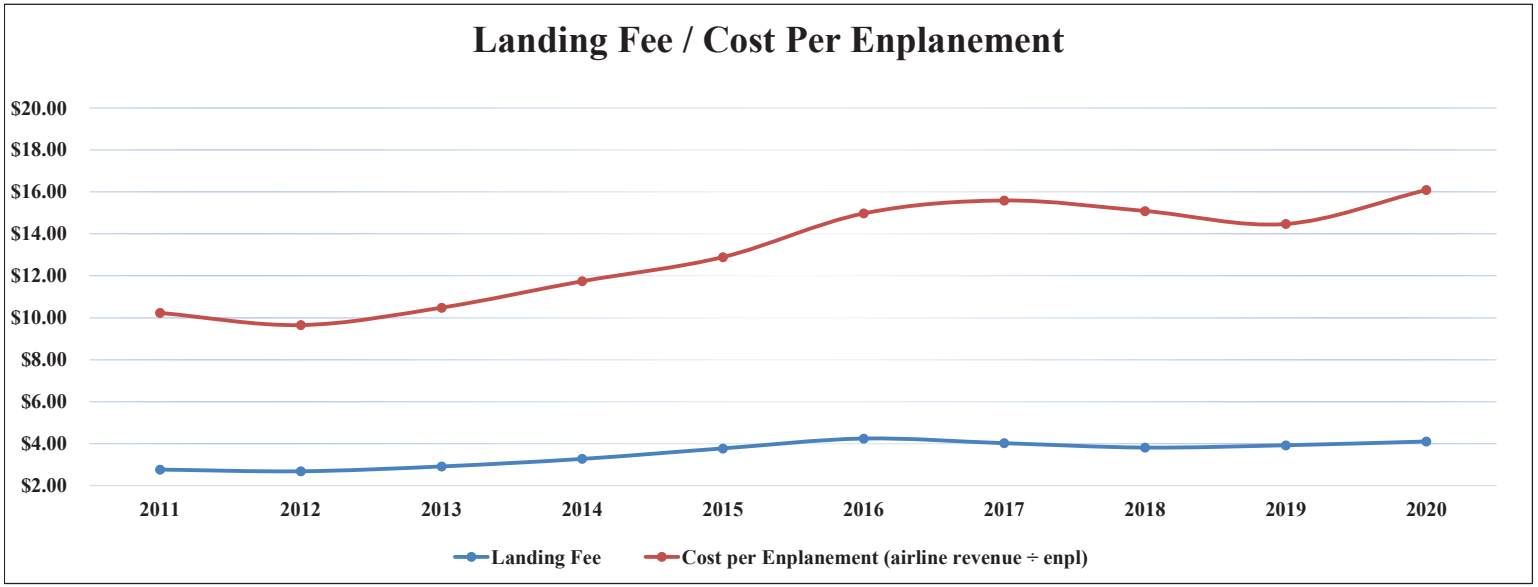




Source: City of Philadelphia

Exhibit S-13: Scheduled Rates and Charges
(By Fiscal Year)

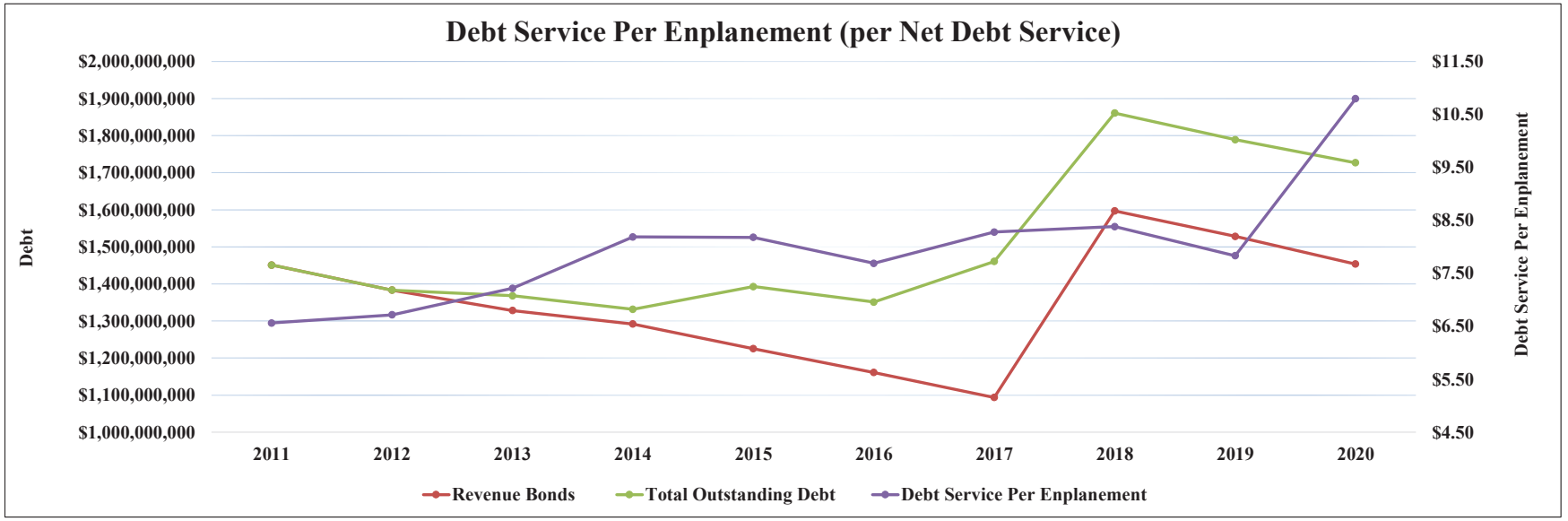
	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Signatory airline rates & charges										
Landing fee rate (per 1,000 pounds)	$ 4.10	$ 3.92	$ 3.81	$ 4.02	$ 4.24	$ 3.77	$ 3.27	$ 2.91	$ 2.68	$ 2.76
Terminal rental rates (per square foot)										
Type 1 - Ticket counter and ticket counter offices	$ 197.69	$ 219.02	$ 232.51	$ 241.74	$ 223.11	$ 195.38	$ 184.28	$ 172.51	$ 155.26	$ 163.61
Type 2 - Hold rooms, baggage claim area, baggage claim offices, airline lounge, airline space	$ 148.27	$ 164.26	$ 174.38	$ 181.30	$ 167.34	$ 146.54	$ 138.21	$ 129.38	$ 116.45	$ 122.71
Type 3 - Airline operations space, baggage makeup space, inbound baggage	$ 98.84	$ 109.51	$ 116.25	$ 120.87	$ 111.56	$ 97.69	$ 92.14	$ 86.25	$ 77.63	$ 81.81
Type 4 - FIS Area, cart tunnel/baggage recheck	$ 49.42	$ 54.75	$ 58.13	$ 60.43	$ 55.78	$ 48.85	$ 46.07	$ 43.13	$ 38.82	$ 40.90
Ramp area rental rate (per linear foot)	$ 25.33	$ 22.37	$ 16.30	$ (8.60)	$ 87.82	$ 71.35	$ 81.79	$ 76.34	$ 50.09	$ 86.96
International common use fees (per passenger)										
Enplaning area fee	$ 3.62	$ 4.75	$ 5.41	$ 5.11	$ 4.93	$ 4.10	$ 4.19	$ 3.75	$ 2.90	$ 3.02
Deplaning area fee	$ 3.46	$ 4.61	$ 5.16	$ 5.10	$ 4.82	$ 4.18	$ 4.10	$ 3.65	$ 2.95	$ 3.07
FIS Area fee	$ 5.21	$ 6.31	$ 7.21	$ 6.10	$ 4.96	$ 3.98	$ 3.30	$ 2.42	$ 2.08	$ 2.34
Ticket counter area fee	$ 1.79	$ 1.98	$ 1.72	$ 1.79	$ 1.98	$ 1.73	$ 1.63	$ 1.26	$ 1.41	$ 1.41
Passenger facility charges (per ticket sold)	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50	$ 4.50
Cost per enplanement	$ 16.09	$ 14.47	$ 15.09	$ 15.59	$ 14.97	$ 12.89	$ 11.74	$ 10.48	$ 9.65	$ 10.23



Source: City of Philadelphia

Exhibit S-14: Ratios of Outstanding Debt
(By Fiscal Year)

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Outstanding debt by type										
Revenue bonds payable, net	$ 1,453,462,105	$ 1,528,355,631	$ 1,596,864,911	$ 1,093,534,740	$ 1,160,904,087	$ 1,225,329,622	$ 1,291,748,241	$ 1,328,226,206	$ 1,383,070,191	$ 1,450,836,074
General obligation bonds payable, net	-	-	-	-	-	-	-	-	-	-
Commercial paper	155,262,000	140,262,000	141,162,000	242,100,000	189,900,000	167,600,000	39,700,000	39,600,000	-	-
Taxable revenue note	118,040,000	120,450,000	122,770,000	125,000,000	-	-	-	-	-	-
Total outstanding debt	$ 1,726,764,105	$ 1,789,067,631	$ 1,860,796,911	$ 1,460,634,740	$ 1,350,804,087	$ 1,392,929,622	$ 1,331,448,241	$ 1,367,826,206	$ 1,383,070,191	$ 1,450,836,074
Debt factors										
Enplaned passengers	11,847,407	16,088,424	15,245,453	14,806,882	15,683,558	15,312,738	15,316,053	15,215,885	15,344,126	15,611,583
Operating revenue	$ 295,404,822	$ 391,071,742	$ 379,570,404	$ 341,620,531	$ 340,796,245	$ 322,364,656	$ 315,414,275	$ 291,366,849	$ 263,165,538	$ 258,054,861
Total assets	$ 3,177,840,858	$ 3,179,048,877	$ 3,130,503,695	$ 2,663,111,931	$ 2,502,763,258	$ 2,470,974,676	$ 2,305,749,387	$ 2,336,308,473	$ 2,369,575,715	$ 2,428,885,363
Total MSA population*	6,102,434	6,096,372	6,096,120	6,096,120	6,077,152	6,066,589	6,053,028	6,035,329	6,020,821	5,996,406
Ratios										
Outstanding debt per enplaned passenger	$ 145.75	$ 111.20	$ 122.06	$ 98.65	$ 86.13	$ 90.97	$ 86.93	$ 89.89	$ 90.14	$ 92.93
Outstanding debt to operating revenue	$ 5.85	$ 4.57	$ 4.90	$ 4.28	$ 3.96	$ 4.32	$ 4.22	$ 4.69	$ 5.26	$ 5.62
Outstanding debt to total assets	$ 0.54	$ 0.56	$ 0.59	$ 0.55	$ 0.54	$ 0.56	$ 0.58	$ 0.59	$ 0.58	$ 0.60
Outstanding debt per capita	$ 282.96	$ 293.46	$ 305.24	$ 239.60	$ 222.28	$ 229.61	$ 219.96	$ 226.64	$ 229.71	$ 241.95



*** Estimated 2018 MSA data used**

All other MSA data source: U.S. Census Bureau, Population Division

Non-MSA data source: City of Philadelphia

Exhibit S-15: Pledged Debt Service Coverage

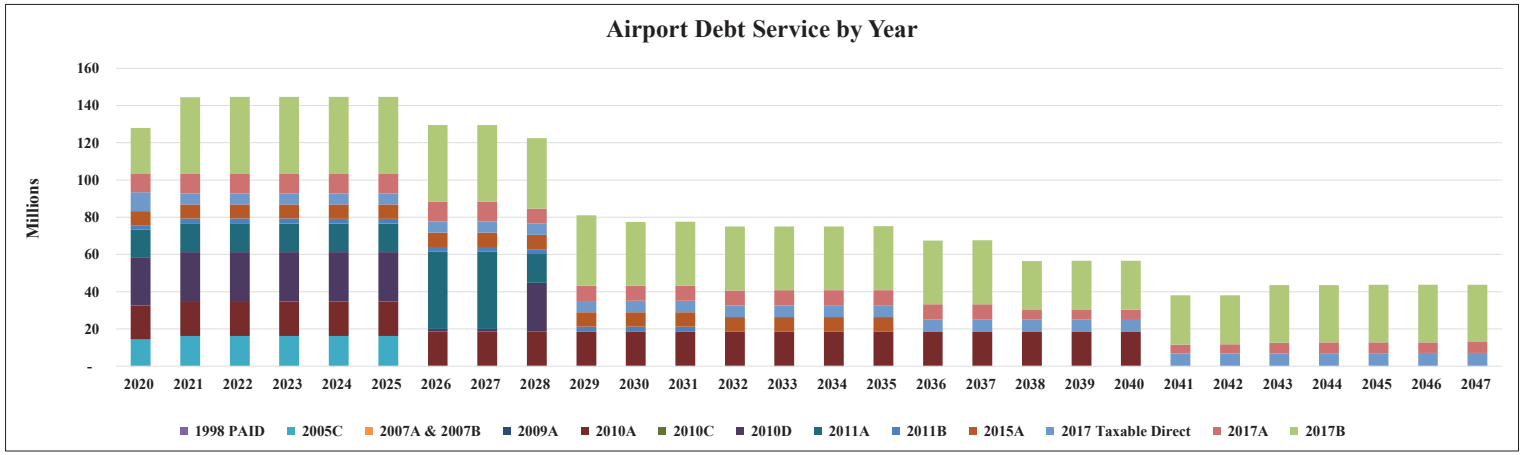
(By Fiscal Year)

		2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
	Amounts available for debt service										
	Fund balance	$ 144,218,209	$ 126,824,322	$ 107,819,701	$ 87,875,140	$ 71,220,305	$ 66,340,425	$ 66,542,146	$ 69,271,565	$ 65,939,354	$ 77,635,096
	Project revenues	390,167,827	393,443,075	381,668,041	362,065,094	341,249,876	322,846,631	316,893,125	291,781,082	269,584,048	260,785,011
	Passenger facility charges	31,199,992	31,188,782	31,201,355	33,692,950	31,176,287	31,169,120	31,168,394	31,159,879	31,572,638	32,352,816
1		565,586,028	551,456,179	520,689,097	483,633,184	443,646,468	420,356,176	414,603,665	392,212,526	367,096,040	370,772,923
	Total expenses										
2	Net operating expenses*	151,738,808	161,160,835	150,971,582	136,747,633	132,649,211	125,966,943	117,782,250	110,710,079	99,513,684	98,383,522
	Interdepartmental charges	123,017,460	121,054,115	116,749,066	116,753,148	106,775,414	108,692,423	103,902,286	101,858,400	92,666,125	88,638,745
3		274,756,268	282,214,950	267,720,648	253,500,781	239,424,625	234,659,366	221,684,536	212,568,479	192,179,809	187,022,267
	Funds available for debt service coverage										
4	Revenue bonds (Line 1 - Line 2)	413,847,220	390,295,344	369,717,515	346,885,551	310,997,257	294,389,233	296,821,415	281,502,447	267,582,356	272,389,401
5	All bonds (Line 1 - Line 3)	290,829,760	269,241,229	252,968,449	230,132,403	204,221,843	185,696,810	192,919,129	179,644,047	174,916,231	183,750,656
	Debt service										
	Revenue bonds										
	Series 1997A	-	-	-	-	-	-	-	-	-	-
	Series 1998A	-	-	-	-	-	-	-	-	-	7,133,834
	Series 1998 PAID	-	-	5,019	256	257	250	256	256	1,064,343	20,227,749
	Series 2001 PAID	-	-	-	-	-	-	-	-	2,936,077	13,458,483
	Series 2001B	-	-	-	-	-	-	-	-	-	2,758,744
	Series 2005A	-	-	-	-	-	8,127,118	8,318,454	8,315,455	8,122,767	8,319,705
	Series 2005B	-	-	-	-	-	-	-	-	-	-
	Series 2005C	14,303,578	15,798,022	16,506,573	15,816,253	15,510,902	15,321,233	15,525,161	15,680,308	15,324,563	15,332,559
	Series 2007A	-	-	3,669,500	11,780,500	11,677,215	11,513,459	11,775,999	11,744,763	11,507,400	9,421,986
	Series 2007B		-	1,169,625	6,933,000	6,872,668	6,773,572	6,928,249	6,928,000	6,768,480	6,927,250
	Series 2009A	-	-	814,652	3,745,704	3,717,417	3,663,031	3,746,016	3,748,666	3,657,784	3,749,316
	Series 2010A	18,207,471	18,527,965	18,665,713	18,668,963	18,508,796	18,248,041	17,046,190	1,284,292	5,000	5,000
	Series 2010B	-	-	-	-	-	5,444,908	5,572,999	5,573,750	5,449,704	5,189,246
	Series 2010C	-	-	9,444,750	9,448,250	9,361,206	9,237,111	9,444,749	9,447,250	9,229,230	1,561,654
	Series 2010D	25,738,362	26,192,436	26,392,200	26,404,199	26,164,179	25,795,633	26,388,847	26,391,851	25,781,859	8,362,121
	Series 2011A	14,985,877	15,228,633	15,356,406	15,340,656	15,203,315	14,973,955	15,319,405	15,310,406	10,666,811	-
	Series 2011B	2,528,576	2,568,328	2,590,019	2,594,019	2,569,120	2,534,670	2,593,018	2,591,019	2,528,127	-
	Series 2015A	7,479,890	7,610,344	7,663,150	7,668,550	7,734,447					
	Series 2017A	10,104,784	9,184,483	5,045,809							
	Series 2017B	24,354,513	20,980,992	12,681,150							
	Direct loan, commercial paper and credit facility fees	10,207,036	9,916,060	7,785,739	4,195,981	3,275,822	3,615,367	2,737,987	2,819,925		
6	**Net revenue bond debt service**	127,910,086	126,007,263	127,790,305	122,596,331	120,595,344	125,248,348	125,397,330	109,835,941	103,042,145	102,447,647
	General obligation bonds	-	-	-	-	-	-	-	-	-	-
7	**Total net debt service**	$ 127,910,086	$ 126,007,263	$ 127,790,305	$ 122,596,331	$ 120,595,344	$ 125,248,348	$ 125,397,330	$ 109,835,941	$ 103,042,145	$ 102,447,647
	Debt service coverage										
	Revenue bonds only - Test "1" (Line 4/Line 6)	3.24	3.10	2.89	2.83	2.58	2.35	2.37	2.56	2.60	2.66
	Total debt service - Test "2" (Line 5/Line 7)	2.27	2.14	1.98	1.88	1.69	1.48	1.54	1.64	1.70	1.79

* Includes required Renewal Fund deposits

Exhibit S-16: Airport Debt Service by Year
(By Fiscal Year)

Year	1998 PAID	2005C	2007A & 2007B	2009A	2010A	2010C	2010D	2011A	2011B	2015A	2017 Taxable Direct	2017A	2017B	Total
2020	-	14,303,578	-	-	18,207,471	-	25,738,362	14,985,877	2,528,576	7,479,890	10,207,036	10,104,784	24,354,513	127,910,086
2021	-	16,235,471	-	-	18,667,963	-	26,391,000	15,388,156	2,589,500	7,665,450	5,806,579	10,490,294	41,344,000	144,578,412
2022	-	16,212,846	-	-	18,670,463	-	26,392,250	15,401,156	2,592,975	7,663,700	5,836,514	10,484,294	41,340,500	144,594,697
2023	-	16,189,761	-	-	18,669,713	-	26,388,625	15,412,156	2,590,163	7,667,700	5,868,652	10,487,294	41,344,750	144,618,813
2024	-	16,168,470	-	-	18,668,963	-	26,388,825	15,420,156	2,590,763	7,666,700	5,902,853	10,488,294	41,344,500	144,639,523
2025	-	16,141,080	-	-	18,668,963	-	26,382,025	15,439,156	2,591,306	7,665,450	5,938,978	10,476,794	41,348,000	144,651,752
2026	-	-	-	-	18,668,713	-	1,300,950	41,517,406	2,591,406	7,663,450	5,971,886	10,487,794	41,348,000	129,549,605
2027	-	-	-	-	18,666,263	-	1,300,950	41,530,656	2,585,656	7,665,200	6,006,578	10,479,544	41,342,500	129,577,346
2028	-	-	-	-	18,669,863	-	26,080,950	15,510,656	2,588,656	7,669,950	6,047,913	8,167,294	37,814,500	122,549,781
2029	-	-	-	-	18,667,475	-	-	-	2,589,450	7,661,950	6,085,612	8,165,544	37,817,750	80,987,780
2030	-	-	-	-	18,666,250	-	-	-	2,587,813	7,671,200	6,129,675	8,168,794	34,252,000	77,475,731
2031	-	-	-	-	18,669,525	-	-	-	2,588,250	7,671,200	6,169,822	8,166,294	34,263,500	77,528,590
2032	-	-	-	-	18,666,275	-	-	-	-	7,663,600	6,216,053	8,167,794	34,260,000	74,973,722
2033	-	-	-	-	18,669,525	-	-	-	-	7,669,000	6,263,089	8,167,544	34,260,250	75,029,408
2034	-	-	-	-	18,667,525	-	-	-	-	7,667,750	6,310,789	8,170,044	34,262,000	75,078,108
2035	-	-	-	-	18,669,025	-	-	-	-	7,665,000	6,359,014	8,167,744	34,263,000	75,123,783
2036	-	-	-	-	18,665,250	-	-	-	-	-	6,412,625	8,168,681	34,261,000	67,507,556
2037	-	-	-	-	18,664,000	-	-	-	-	-	6,466,340	8,164,150	34,263,750	67,558,240
2038	-	-	-	-	18,661,250	-	-	-	-	-	6,525,021	4,941,750	26,363,500	56,491,521
2039	-	-	-	-	18,665,250	-	-	-	-	-	6,583,388	4,942,250	26,362,750	56,553,638
2040	-	-	-	-	18,663,750	-	-	-	-	-	6,641,300	4,940,500	26,363,500	56,609,050
2041	-	-	-	-	-	-	-	-	-	-	6,708,618	4,941,250	26,358,750	38,008,618
2042	-	-	-	-	-	-	-	-	-	-	6,774,923	4,939,000	26,361,750	38,075,673
2043	-	-	-	-	-	-	-	-	-	-	6,840,075	5,788,500	30,905,000	43,533,575
2044	-	-	-	-	-	-	-	-	-	-	6,913,933	5,791,750	30,904,250	43,609,933
2045	-	-	-	-	-	-	-	-	-	-	6,986,078	5,788,500	30,903,000	43,677,578
2046	-	-	-	-	-	-	-	-	-	-	7,066,371	5,793,500	30,903,250	43,763,121
2047	-	-	-	-	-	-	-	-	-	-	7,095,794	5,790,750	30,906,750	43,793,294
2048	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	95,251,206	-	-	391,553,471	-	186,363,937	190,605,377	31,014,513	122,477,190	182,135,507	218,830,721	949,817,013	2,368,048,934



Sources: City of Philadelphia, Schedule of Rate Covenant Compliance (2020)
Frasca & Associates, LLC (2021 and forward)

Exhibit S-17: Current Top 30 Passenger Origination and Destination Markets

(By Fiscal Year)

Domestic		
2020 Market	Distance	Daily Pax
Orlando, Florida	862	1,671
Atlanta, Georgia	665	900
Boston, Massachusetts	280	822
Los Angeles, California	2,394	788
Ft. Lauderdale, Florida	994	781
Chicago-O'Hare, Illinois	676	736
Tampa/St. Petersburg, Florida	920	695
Denver, Colorado	1,552	666
Dallas/Fort Worth, Texas	1,299	647
Miami, Florida	1,014	551
San Francisco, California	2,514	550
Las Vegas, Nevada	2,170	544
San Juan, Puerto Rico	1,579	471
Charlotte, North Carolina	447	431
Nashville, Tennessee	673	419
Phoenix, Arizona	2,069	406
Fort Myers-Regional, Florida	994	376
Minneapolis/St Paul, Minnesota	977	330
Detroit-Wayne Co., Michigan	451	329
Houston-Intercontinental, Texas	1,322	323
Raleigh/Durham, North Carolina	336	315
Seattle/Tacoma, Washington	2,370	295
San Diego, California	2,363	267
New Orleans, Louisiana	1,087	266
West Palm Beach, Florida	952	258
Chicago-Midway, Illinois	666	235
Austin, Texas	1,427	208
Jacksonville, Florida	742	207
St. Louis, Missouri	811	196
Cincinnati, Ohio	505	182

International		
2020 Market	Distance	Daily Pax
London-Heathrow, England	3,534	420
Toronto-Pearson, Canada	346	289
Cancun, Mexico	1,464	270
Dublin, Ireland	3,263	214
Montego Bay, Jamaica	1,484	177
Doha, Qatar	6,780	177
Montreal-Dorval, Canada	394	166
Frankfurt, Germany	3,937	161
Rome-Da Vinci, Italy	4,357	132
Madrid, Spain	3,671	122
Paris-De Gaulle, France	3,716	120
Punta Cana, Dominican Rep	1,527	119
Manchester, England	3,423	107
Amsterdam, Netherlands	3,725	100
Zurich, Switzerland	4,012	87
Aruba, Aruba	1,916	67
Barcelona, Spain	3,913	64
Ottawa, Canada	377	63
Nassau, Bahamas	1,032	62
Venice-Treviso, Italy	4,234	62
Athens, Greece	5,012	61
Prague, Czech Republic	4,169	59
Lisbon, Portugal	3,448	59
Bermuda, Atlantic Ocean	784	57
Budapest, Hungary	4,449	55
St. Maarten, St. Maarten (Dutch)	1,672	55
Edinburgh, Scotland	3,338	49
Shannon, Ireland	3,165	35
Quebec, Canada	516	30
Berlin-Tegel, Germany	4,054	25

Daily Pax represents passengers per day each way

Distance is great-circle distance between PHL and indicated airport

Source: U.S. DOT O&D Passenger Survey (domestic) and T-100 (International) data via Cirium

Exhibit S-18: Historical Domestic Top 10 Passenger Origination and Destination Markets

(By Fiscal Year)

FY 2020	
Market	**Daily Pax**
Orlando, Florida	1,671
Atlanta, Georgia	900
Boston, Massachusetts	822
Los Angeles, California	788
Ft. Lauderdale, Florida	781
Chicago-O'Hare, Illinois	736
Tampa/St. Petersburg, Florida	695
Denver, Colorado	666
Dallas/Fort Worth, Texas	647
Miami, Florida	551

FY 2019	
Market	**Daily Pax**
Orlando, Florida	2,209
Atlanta, Georgia	1,255
Boston, Massachusetts	1,231
Los Angeles, California	1,216
Ft. Lauderdale, Florida	1,077
Chicago-O'Hare, Illinois	1,041
Tampa/St. Petersburg, Florida	963
Denver, Colorado	920
Dallas/Fort Worth, Texas	880
San Francisco, California	860

FY 2018	
Market	**Daily Pax**
Orlando, Florida	2,109
Atlanta, Georgia	1,345
Los Angeles, California	1,154
Boston, Massachusetts	1,097
Ft. Lauderdale, Florida	1,035
Chicago-O'Hare, Illinois	1,011
Tampa/St. Petersburg, Florida	954
Denver, Colorado	899
Dallas/Fort Worth, Texas	861
Las Vegas, Nevada	762

FY 2017	
Market	**Daily Pax**
Orlando, Florida	2,055
Atlanta, Georgia	1,329
Chicago-O'Hare, Illinois	1,128
Boston, Massachusetts	1,053
Los Angeles, California	1,028
Ft. Lauderdale, Florida	956
Tampa/St. Petersburg, Florida	916
Denver, Colorado	855
Las Vegas, Nevada	808
Dallas/Fort Worth, Texas	782

FY 2016	
Market	**Daily Pax**
Orlando, Florida	2,064
Atlanta, Georgia	1,450
Chicago-O'Hare, Illinois	1,295
Boston, Massachusetts	1,053
Tampa/St. Petersburg, Florida	936
Los Angeles, California	910
Ft. Lauderdale, Florida	872
Las Vegas, Nevada	862
Dallas/Fort Worth, Texas	780
Denver, Colorado	734

FY 2015	
Market	**Daily Pax**
Orlando, Florida	1,618
Atlanta, Georgia	1,066
Boston, Massachusetts	1,056
Chicago-O'Hare, Illinois	1,012
Los Angeles, California	857
Las Vegas, Nevada	831
Tampa/St. Petersburg, Florida	799
Dallas/Fort Worth, Texas	791
San Francisco, California	766
Ft. Lauderdale, Florida	675

FY 2014	
Market	**Daily Pax**
Orlando, Florida	1,402
Boston, Massachusetts	1,018
Atlanta, Georgia	948
Los Angeles, California	937
Chicago-O'Hare, Illinois	923
Las Vegas, Nevada	900
Dallas/Fort Worth, Texas	818
San Francisco, California	779
Ft. Lauderdale, Florida	727
Tampa/St. Petersburg, Florida	670

FY 2013	
Market	**Daily Pax**
Orlando, Florida	1,589
Chicago-O'Hare, Illinois	1,016
Atlanta, Georgia	994
Los Angeles, California	977
San Francisco, California	886
Ft. Lauderdale, Florida	779
Las Vegas, Nevada	769
Tampa/St. Petersburg, Florida	761
Dallas/Fort Worth, Texas	677
Boston, Massachusetts	669

FY 2012	
Market	**Daily Pax**
Orlando, Florida	1,667
Atlanta, Georgia	1,045
Chicago-O'Hare, Illinois	947
Boston, Massachusetts	915
Los Angeles, California	824
Ft. Lauderdale, Florida	744
San Francisco, California	706
Las Vegas, Nevada	693
Tampa/St. Petersburg, Florida	678
Dallas/Fort Worth, Texas	603

FY 2011	
Market	**Daily Pax**
Orlando, Florida	1,693
Atlanta, Georgia	1,116
Chicago-O'Hare, Illinois	1,002
Boston, Massachusetts	925
Ft. Lauderdale, Florida	758
Tampa/St. Petersburg, Florida	744
Los Angeles, California	706
Las Vegas, Nevada	680
Dallas/Fort Worth, Texas	620
Denver, Colorado	588

Daily Pax represents passengers per day each way

Distance is great-circle distance between PHL and indicated airport

Source: GRA, Incorporated for FY 2010 - FY 2019; Restated Daily Pax updated 10.5X scaling to reflect latest GRA recommendation for undersampling correc

Source for FY2020: U.S. DOT O&D Passenger Survey data via Cirium.

Exhibit S-19: Historical International Top 10 Passenger Destination Markets

(By Fiscal Year)

FY 2020	
Market	**Daily Pax**
London-Heathrow, England	420
Toronto-Pearson, Canada	289
Cancun, Mexico	270
Dublin, Ireland	214
Montego Bay, Jamaica	177
Doha, Qatar	177
Montreal-Dorval, Canada	166
Frankfurt, Germany	161
Rome-Da Vinci, Italy	132
Madrid, Spain	122

FY 2019	
Market	**Daily Pax**
London-Heathrow, England	638
Toronto-Pearson, Canada	392
Cancun, Mexico	360
Dublin, Ireland	320
Punta Cana, Dominican Rep	294
Frankfurt, Germany	274
Montego Bay, Jamaica	265
Montreal-Dorval, Canada	262
Doha, Qatar	221
Rome-Da Vinci, Italy	200

FY 2018	
Market	**Daily Pax**
London-Heathrow, England	647
Toronto-Pearson, Canada	417
Cancun, Mexico	366
Frankfurt, Germany	293
Punta Cana, Dominican Rep	284
Montreal-Dorval, Canada	274
Montego Bay, Jamaica	228
Dublin, Ireland	210
Rome-Da Vinci, Italy	193
Doha, Qatar	192

FY 2017	
Market	**Daily Pax**
London-Heathrow, England	649
Cancun, Mexico	414
Toronto-Pearson, Canada	385
Frankfurt, Germany	295
Punta Cana, Dominican Rep	289
Montreal-Dorval, Canada	242
Montego Bay, Jamaica	207
Paris-De Gaulle, France	202
Rome-Da Vinci, Italy	201
Dublin, Ireland	187

FY 2016	
Market	**Daily Pax**
London-Heathrow, England	654
Cancun, Mexico	472
Toronto-Pearson, Canada	391
Frankfurt, Germany	338
Punta Cana, Dominican Rep	316
Montego Bay, Jamaica	244
Montreal-Dorval, Canada	200
Rome-Da Vinci, Italy	200
Paris-De Gaulle, France	195
Madrid, Spain	181

FY 2015	
Market	**Daily Pax**
London-Heathrow, England	557
Cancun, Mexico	428
Frankfurt, Germany	376
Toronto-Pearson, Canada	370
Punta Cana, Dominican Rep	311
Paris-De Gaulle, France	220
Montego Bay, Jamaica	216
Tel Aviv/Yafo, Israel	204
Montreal-Dorval, Canada	198
Rome-Da Vinci, Italy	195

FY 2014	
Market	**Daily Pax**
London-Heathrow, England	507
Frankfurt, Germany	437
Cancun, Mexico	388
Punta Cana, Dominican Rep	264
Toronto-Pearson, Canada	264
Paris-De Gaulle, France	232
Tel Aviv/Yafo, Israel	216
Montego Bay, Jamaica	210
Rome-Da Vinci, Italy	209
Munich, Germany	202

FY 2013	
Market	**Daily Pax**
London-Heathrow, England	518
Frankfurt, Germany	444
Cancun, Mexico	357
Toronto-Pearson, Canada	315
Paris-De Gaulle, France	248
Montego Bay, Jamaica	235
Rome-Da Vinci, Italy	225
Munich, Germany	222
Punta Cana, Dominican Rep	215
Tel Aviv/Yafo, Israel	212

FY 2012	
Market	**Daily Pax**
London-Heathrow, England	515
Frankfurt, Germany	463
Cancun, Mexico	351
Toronto-Pearson, Canada	344
Montego Bay, Jamaica	317
Paris-De Gaulle, France	244
Rome-Da Vinci, Italy	229
Manchester, England	218
Tel Aviv/Yafo, Israel	214
Munich, Germany	205

FY 2011	
Market	**Daily Pax**
London-Heathrow, England	510
Frankfurt, Germany	495
Cancun, Mexico	377
Toronto-Pearson, Canada	372
Paris-De Gaulle, France	292
Montego Bay, Jamaica	246
Montreal-Dorval, Canada	241
Rome-Da Vinci, Italy	229
Manchester, England	227
Tel Aviv/Yafo, Israel	207

Daily Pax represents passengers per day each way
Distance is great-circle distance between PHL and indicated airport
Source: GRA, Incorporated for FY 2010 - FY 2019
Source for FY 2020: U.S. DOT T-100 data via Cirium

Exhibit S-20: Airline Market Share by Landed Weight

(By Fiscal Year, Expressed in 1,000 lb. Units)

Airlines	2020		2019		2018		2017		2016	
	Landed Weight	Market Share	Landed Weight	Market Share	Landed Weight	Market Share	Landed Weight	Market Share	Landed Weight	Market Share
Domestic										
Scheduled major/national										
American	5,780,244	31.6%	7,555,183	41.2%	6,596,290	36.0%	6,519,145	33.0%	6,622,369	31.8%
Southwest	875,664	4.8%	1,137,504	6.2%	1,136,154	6.2%	1,147,550	5.8%	1,122,080	5.4%
Frontier	768,662	4.2%	679,553	3.7%	610,208	3.3%	540,837	2.7%	463,422	2.2%
Delta	706,240	3.9%	944,727	5.2%	965,077	5.3%	986,238	5.0%	1,054,651	5.1%
Spirit	514,559	2.8%	503,168	2.7%	434,762	2.4%	394,267	2.0%	265,760	1.3%
United	442,788	2.4%	607,765	3.3%	608,859	3.3%	581,513	2.9%	593,949	2.9%
JetBlue	243,445	1.3%	284,454	1.6%	269,609	1.5%	249,728	1.3%	219,834	1.1%
Alaska	129,926	0.7%	176,452	1.0%	153,673	0.8%	61,952	0.3%	55,912	0.3%
Sun Country	25,102	0.1%	-	-	-	-	-	-	-	-
Air Canada	269	0.0%	807	0.0%	574	0.0%	647	0.0%	660	0.0%
AirTran	-	-	-	-	-	-	-	-	-	-
Virgin America	-	-	-	-	-	-	-	-	-	-
Continental	-	-	-	-	-	-	-	-	-	-
USA 3000	-	-	-	-	-	-	-	-	-	-
Midwest Airlines	-	-	-	-	-	-	-	-	-	-
Northwest	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled major/national	9,486,899	51.8%	11,889,613	64.9%	10,775,207	58.8%	10,481,877	53.0%	10,398,636	49.9%
Scheduled regional/commuter										
American Eagle										
Piedmont	1,269,255	6.9%	1,556,777	8.5%	1,288,107	7.0%	1,073,784	5.4%	856,093	4.1%
Republic	1,096,532	6.0%	1,192,913	6.5%	1,311,277	7.2%	1,054,737	5.3%	1,573,718	7.6%
PSA	849,642	4.6%	894,744	4.9%	513,352	2.8%	411,243	2.1%	393,415	1.9%
Envoy	8,450	0.0%	11,961	0.1%	19,929	0.1%	-	-	448	0.0%
Air Wisconsin	-	-	-	-	530,395	2.9%	1,170,582	5.9%	1,641,945	7.9%
Mesa	-	-	-	-	-	-	-	-	-	-
Chautauqua	-	-	-	-	-	-	-	-	-	-
Subtotal - American Eagle	3,223,879	17.6%	3,656,396	20.0%	3,663,060	20.0%	3,710,345	18.8%	4,465,619	21.4%
Other	264,314	1.4%	266,991	1.5%	263,343	1.4%	299,419	1.5%	262,640	1.3%
Subtotal - scheduled regional/commuter	3,488,193	19.0%	3,923,387	21.4%	3,926,403	21.4%	4,009,764	20.3%	4,728,259	22.7%
Charter	878	0.0%	11,982	0.1%	4,054	0.0%	1,706	0.0%	679	0.0%
Total - domestic	12,975,970	70.8%	15,824,982	86.4%	14,705,664	80.3%	14,493,348	73.4%	15,127,575	72.7%
International										
Scheduled										
American	1,464,705	8.0%	2,443,560	13.3%	2,332,684	12.7%	2,136,282	10.8%	2,575,401	12.4%
British	231,472	1.3%	263,789	1.4%	237,237	1.3%	292,559	1.5%	293,400	1.4%
Lufthansa	135,418	0.7%	160,317	0.9%	142,492	0.8%	144,230	0.7%	155,154	0.7%
Qatar	126,980	0.7%	167,058	0.9%	165,072	0.9%	163,004	0.8%	174,408	0.8%
Piedmont	111,657	0.6%	158,973	0.9%	71,848	0.4%	-	-	-	-
Air Canada - Sky Regional / Jazz Aviation	99,842	0.5%	133,305	0.7%	132,880	0.7%	123,047	0.6%	106,378	0.5%
Frontier	48,378	0.3%	70,208	0.4%	62,575	0.3%	60,003	0.3%	76,825	0.4%
Aer Lingus	45,614	0.2%	70,140	0.4%	15,750	0.1%	-	-	-	-
Republic	24,129	0.1%	47,818	0.3%	72,324	0.4%	41,748	0.2%	79,176	0.4%
PSA	15,925	0.1%	-	-	268	0.0%	-	-	-	-
Icelandair	10,710	0.1%	16,104	0.1%	14,224	0.1%	3,780	0.0%	142	0.0%
Delta	3,366	0.0%	3,184	0.0%	62,562	0.3%	84,262	0.4%	81,552	0.4%
Spirit Airlines	2,910	0.0%	-	-	-	-	-	-	-	-
JetBlue	-	-	142	0.0%	142	0.0%	172	0.0%	142	0.0%
United	-	-	142	0.0%	-	-	-	-	-	-
Southwest	-	-	128	0.0%	256	0.0%	-	-	-	-
Air Wisconsin	-	-	-	-	68,761	0.4%	187,389	0.9%	192,136	0.9%
Air Jamaica / Caribbean	-	-	-	-	-	-	-	-	-	-
Continental	-	-	-	-	-	-	-	-	-	-
USA 3000	-	-	-	-	-	-	-	-	-	-
Air France	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled	2,321,105	12.7%	3,534,868	19.3%	3,379,075	18.4%	3,236,477	16.4%	3,734,713	17.9%
Charter	2,766	0.0%	4,184	0.0%	1,290	0.0%	6,400	0.0%	3,273	0.0%
Total - international	2,323,871	12.7%	3,539,052	19.3%	3,380,365	18.5%	3,242,877	16.4%	3,737,986	18.0%
All-cargo airlines	3,018,703	16.5%	2,599,498	14.2%	2,199,913	12.0%	2,022,419	10.2%	1,955,784	9.4%
Grand total	**18,318,544**	**100.0%**	**21,963,532**	**119.9%**	**20,285,942**	**110.7%**	**19,758,643**	**100.0%**	**20,821,345**	**100.0%**

Note: American and US Airways numbers combined for all previous years.

Source: City of Philadelphia

Exhibit S-20: Airline Market Share by Landed Weight

(Continued, By Fiscal Year, Expressed in 1,000 lb. Units)

Airlines	2015		2014		2013		2012		2011	
	Landed Weight	Market Share	Landed Weight	Market Share	Landed Weight	Market Share	Landed Weight	Market Share	Landed Weight	Market Share
Domestic										
Scheduled major/national										
American	6,645,942	30.3%	6,729,332	31.1%	6,494,844	31.3%	6,519,126	30.5%	6,592,315	30.0%
Southwest	1,073,920	4.9%	1,010,276	4.7%	1,189,716	5.7%	1,883,282	8.8%	2,335,648	10.6%
Frontier	164,022	0.7%	4,693	0.0%	28,290	0.1%	79,842	0.4%	101,704	0.5%
Delta	1,074,449	4.9%	1,024,831	4.7%	955,459	4.6%	972,645	4.6%	978,725	4.5%
Spirit	143,495	0.7%	132,519	0.6%	31,841	0.2%	-	-	-	-
United	585,951	2.7%	555,244	2.6%	661,536	3.2%	536,659	2.5%	518,260	2.4%
JetBlue	158,080	0.7%	158,398	0.7%	18,624	0.1%	-	-	-	-
Alaska	55,475	0.3%	55,410	0.3%	52,460	0.3%	2,880	0.0%	-	-
Sun Country	-	-	-	-	-	-	-	-	-	-
Air Canada	440	0.0%	660	0.0%	1,100	0.0%	880	0.0%	1,173	0.0%
AirTran	42,864	0.2%	204,488	0.9%	340,320	1.6%	301,816	1.4%	331,168	1.5%
Virgin America	35,545	0.2%	134,812	0.6%	213,741	1.0%	55,269	0.3%	-	-
Continental	-	-	-	-	-	-	179,638	0.8%	242,627	1.1%
USA 3000	-	-	-	-	-	-	-	-	23,036	0.1%
Midwest Airlines	-	-	-	-	-	-	-	-	-	-
Northwest	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled major/national	9,980,183	45.4%	10,010,661	46.2%	9,987,931	48.1%	10,532,037	49.3%	11,124,656	50.7%
Scheduled regional/commuter										
American Eagle										
Piedmont	844,519	3.8%	984,862	4.5%	1,108,958	5.3%	1,035,539	4.8%	1,038,016	4.7%
Republic	1,758,726	8.0%	1,729,624	8.0%	1,575,475	7.6%	1,629,517	7.6%	1,732,415	7.9%
PSA	292,049	1.3%	274,903	1.3%	321,950	1.5%	332,498	1.6%	243,104	1.1%
Envoy	-	-	-	-	-	-	-	-	-	-
Air Wisconsin	1,730,258	7.9%	1,486,845	6.9%	1,559,460	7.5%	1,576,239	7.4%	1,573,231	7.2%
Mesa	60,863	0.3%	64,607	0.3%	-	-	-	-	74	0.0%
Chautauqua	-	-	-	-	86,587	0.4%	96,884	0.5%	70,759	0.3%
Subtotal - American Eagle	4,686,414	21.3%	4,540,840	21.0%	4,652,430	22.4%	4,670,677	21.9%	4,657,599	21.2%
Other	382,585	1.7%	501,896	2.3%	626,130	3.0%	620,913	2.9%	605,377	2.8%
Subtotal - scheduled regional/commuter	5,068,999	23.1%	5,042,736	23.3%	5,278,560	25.4%	5,291,590	24.8%	5,262,976	24.0%
Charter	1,641	0.0%	4,257	0.0%	1,192	0.0%	9,055	0.0%	2,878	0.0%
Total - domestic	15,050,823	68.5%	15,057,655	69.5%	15,267,683	73.5%	15,832,682	74.1%	16,390,510	74.6%
International										
Scheduled										
American	2,710,497	12.3%	2,809,292	13.0%	2,644,675	12.7%	2,634,850	12.3%	2,584,725	11.8%
British	284,499	1.3%	275,550	1.3%	268,709	1.3%	277,447	1.3%	270,121	1.2%
Lufthansa	165,814	0.8%	137,300	0.6%	112,147	0.5%	112,152	0.5%	135,775	0.6%
Qatar	183,868	0.8%	44,280	0.2%	-	-	-	-	-	-
Piedmont	-	-	-	-	-	-	-	-	-	-
Air Canada - Sky Regional / Jazz Aviation	99,695	0.5%	99,656	0.5%	99,814	0.5%	94,620	0.4%	95,210	0.4%
Frontier	35,976	0.2%	25,738	0.1%	25,738	0.1%	18,770	0.1%	-	-
Aer Lingus	-	-	-	-	-	-	-	-	-	-
Republic	74,146	0.3%	58,631	0.3%	103,697	0.5%	158,701	0.7%	115,635	0.5%
PSA	-	-	-	-	-	-	-	-	-	-
Icelandair	142	0.0%	-	-	-	-	-	-	-	-
Delta	34,650	0.2%	22,694	0.1%	24,104	0.1%	29,898	0.1%	62,752	0.3%
Spirit Airlines	-	-	-	-	-	-	-	-	-	-
JetBlue	142	0.0%	-	-	-	-	-	-	-	-
United	-	-	-	-	-	-	-	-	-	-
Southwest	128	0.0%	-	-	-	-	-	-	-	-
Air Wisconsin	220,289	1.0%	255,351	1.2%	240,546	1.2%	228,326	1.1%	208,069	0.9%
Air Jamaica / Caribbean	-	-	-	-	-	-	47,424	0.2%	50,394	0.2%
Continental	-	-	-	-	-	-	1,028	0.0%	-	-
USA 3000	-	-	-	-	-	-	-	-	26,307	0.1%
Air France	-	-	-	-	-	-	-	-	-	-
Subtotal - scheduled	3,809,846	17.3%	3,728,492	17.2%	3,519,430	16.9%	3,603,216	16.9%	3,548,988	16.2%
Charter	2,532	0.0%	6,377	0.0%	1,483	0.0%	10,696	0.1%	9,394	0.0%
Total - International	3,812,379	17.4%	3,734,869	17.2%	3,520,913	16.9%	3,613,912	16.9%	3,558,382	16.2%
All-Cargo Airlines	1,909,573	8.7%	1,899,162	8.8%	1,849,771	8.9%	1,911,577	9.0%	2,010,961	9.2%
Grand Total	**20,772,775**	**94.6%**	**20,691,686**	**95.6%**	**20,638,367**	**99.4%**	**21,358,171**	**100.0%**	**21,959,853**	**100.0%**

Note: American and US Airways numbers combined for all previous years.

Source: City of Philadelphia

Exhibit S-21: Passenger Facility Charges
(By Fiscal Year)

Airlines	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
American Airlines	$ 30,835,285	$ 42,224,374	$ 40,555,758	$ 39,043,549	$ 41,796,027	$ 44,750,745	$ 45,073,825	$ 42,039,158	$ 41,513,163	$ 41,717,336
Frontier Airlines	3,337,467	3,976,829	3,401,138	2,885,920	2,677,659	1,099,228	110,986	194,315	419,786	400,188
Delta Air Lines	2,985,885	3,821,901	3,682,816	4,026,462	4,341,411	4,278,345	4,431,825	4,280,096	4,497,340	4,647,891
Southwest Airlines	2,356,576	4,051,031	4,175,470	4,368,651	4,289,012	4,105,508	4,239,400	4,631,058	5,723,994	7,189,896
Spirit Airlines	2,175,675	2,413,729	1,924,982	1,612,767	1,176,999	662,867	580,156	232,309	-	-
United Airlines	1,723,831	2,562,644	2,784,830	2,858,141	3,294,665	3,242,993	3,605,346	4,300,163	3,748,743	3,366,328
JetBlue Airways	700,938	959,985	929,915	842,883	783,146	534,959	493,608	112,065	-	-
British Airways	660,997	1,206,820	1,150,912	1,139,619	921,880	869,270	472,492	436,866	459,661	433,965
Alaska Airlines	346,259	699,374	462,178	307,026	233,192	216,975	196,234	176,761	46,155	-
Qatar Airways	336,050	504,626	438,982	378,817	478,185	510,368	244,782	-	-	-
Air Canada	276,193	412,727	394,457	316,888	262,846	238,548	314,671	300,001	315,303	279,844
Lufthansa German Airlines	172,183	274,763	255,235	269,827	252,421	277,672	278,363	248,459	227,404	248,691
Aer Lingus	135,287	195,223	107,638	-	-	-	-	-	-	-
Icelandair	23,508	50,274	43,518	37,135	-	-	-	-	-	-
Virgin America	-	-	-	-	-	45,827	396,871	620,919	271,653	-
AirTran Airways	-	-	-	-	-	-	-	474,237	1,094,262	1,287,966
Continental Airlines	-	-	-	-	-	-	-	-	1,001,188	1,766,211
Air Jamaica / Caribbean	-	-	-	-	-	-	-	-	118,003	152,355
USA 3000 Airlines	-	-	-	-	-	-	-	-	26,862	136,200
Midwest Airlines	-	-	-	-	-	-	-	-	-	58,127
Air France	-	-	-	-	-	-	-	-	-	-
Northwest Airlines	-	-	-	-	-	-	-	-	-	-
Other	682,953	677,664	759,727	1,296,964	412,891	347,420	214,807	142,043	277,982	357,430
Total	**$ 46,749,088**	**$ 64,031,965**	**$ 61,067,558**	**$ 59,384,648**	**$ 60,920,335**	**$ 61,180,724**	**$ 60,653,369**	**$ 58,188,449**	**$ 59,741,500**	**$ 62,042,429**

The figures presented above are on the accrual basis and reconcile to those reported on the Statement of Revenues, Expenses and Changes in Fund Net Position.

Source: City of Philadelphia

APPENDIX III
GOVERNMENT AND FINANCIAL INFORMATION OF THE CITY OF PHILADELPHIA

The Series 2021 Bonds are payable solely from Pledged Amounts as described in the Official Statement. The Series 2021 Bonds are not secured by the full faith, credit or taxing power of the City, or create any debt or charge against the tax or general revenues of the City, or create any lien or charge against any property of the City other than against the Pledged Amounts. This APPENDIX III is included for purposes of providing general financial information regarding the City.

TABLE OF CONTENTS

Page

OVERVIEW 1
Fiscal Health of the City 1
THE GOVERNMENT OF THE CITY OF PHILADELPHIA 8
Introduction 8
History and Organization 8
Elected and Appointed Officials 9
Government Services 12
Local Government Agencies 12
Cybersecurity 15
Climate Change 16
CITY FINANCES AND FINANCIAL PROCEDURES 17
General 18
Current City Disclosure Practices 19
Independent Audit and Opinion of the City Controller 20
Budgetary Accounting Practices 20
DISCUSSION OF FINANCIAL OPERATIONS 20
Principal Operations 20
Fund Accounting 21
Budget Procedure 21
Budget Stabilization Reserve 22
Annual Financial Reports 23
Five-Year Plans of the City 23
Quarterly Reporting to PICA 24
Summary of Operations 25
Current Financial Information 27
REVENUES OF THE CITY 29
General 29
Major Revenue Sources 29
Wage, Earnings, and Net Profits Taxes 31
Business Income and Receipts Tax 32
Real Property Taxes 33
Sales and Use Tax 39
Real Property Transfer Tax 40
Other Taxes 41

TABLE OF CONTENTS
(continued)

Page

Collection Initiatives 41
Other Locally Generated Non-Tax Revenues 41
Revenue from Other Governments 42
Revenues from City-Owned Systems 42
Philadelphia Parking Authority Revenues 43
Other Tax Rate Changes 44
EXPENDITURES OF THE CITY 45
Personal Services (Personnel) 45
Overview of City Employees 45
Overview of Employee Benefits 48
Overview of Current Labor Situation 49
Purchase of Services 52
City Payments to School District 53
City Payments to SEPTA 53
City Payments to Convention Center Authority 54
PENSION SYSTEM 55
Overview 55
Pension System; Pension Board 57
Funding Requirements; Funding Standards 59
UAL and its Calculation 61
Pension Adjustment Fund 62
Rates of Return; Asset Values; Changes in Plan Net Position 63
Funded Status of the Municipal Pension Fund 66
Annual Contributions 68
Actuarial Projections of Funded Status 73
OTHER POST-EMPLOYMENT BENEFITS 75
PGW PENSION PLAN 76
General 76
PGW Pension Plan 76
Pension Costs and Funding 77
Projections of Funded Status 79
Additional Information 80
PGW OTHER POST-EMPLOYMENT BENEFITS 81
CITY CASH MANAGEMENT AND INVESTMENT POLICIES 83
General Fund Cash Flow 83

TABLE OF CONTENTS
(continued)

Page

Consolidated Cash 83
Investment Practices 84
DEBT OF THE CITY 85
General 85
Short-Term Debt 87
Long-Term Debt 87
Other Long-Term Debt Related Obligations 90
PICA Bonds 90
OTHER FINANCING RELATED MATTERS 92
Swap Information 92
Swap Policy 93
Letter of Credit Agreements 94
Recent and Upcoming Financings 95
CITY CAPITAL PROGRAM 96
Certain Historical Capital Expenditures 96
Fiscal Year 2021-2026 Adopted Capital Program 97
LITIGATION 98
General Fund 98
Water Fund 99
Aviation Fund 100
PGW 100

OVERVIEW

The City of Philadelphia (the "City" or "Philadelphia"), located along the southeastern border of the Commonwealth of Pennsylvania (the "Commonwealth" or "Pennsylvania"), is the largest city in the Commonwealth and the sixth largest city in the United States with approximately 1.584 million residents (based on 2019 estimates). According to the 2010 U.S. Census, the City increased its population in the ten years from 2000 to 2010, reflecting the City's first population gain in 60 years. From 2010 to 2019, the City increased its population by 3.6%. The City is also the center of the United States' eighth largest metropolitan statistical area, which is an 11-county area encompassing the City, Camden, NJ, and Wilmington, DE and represents approximately 6.1 million residents (based on 2019 estimates).

The City benefits from its strategic geographical location, relative affordability, cultural and recreational amenities, and its growing strength in key industries. The City's economy is composed of diverse industries, with virtually all classes of industrial and commercial businesses represented. The City is a major regional business and personal services center with strengths in insurance, law, finance, healthcare, higher education, utilities, and the arts. In addition, the City is a center for health, education, research and science facilities with the nation's largest concentration of healthcare resources within a 100-mile radius.

The cost of living in the City is relatively moderate and affordable compared to other major metropolitan areas in the northeast United States. The City, as one of the country's education centers, offers its business community a large and diverse labor pool that draws from major universities including, within the geographical boundaries of the City, the University of Pennsylvania ("Penn"), Temple University, Drexel University, St. Joseph's University, and LaSalle University, among others.

Fiscal Health of the City

The City has implemented several strategies to address significant fiscal challenges, including the novel coronavirus ("COVID-19") pandemic, for Fiscal Year 2021 and over the course of Fiscal Years 2022-2026, which are described in the Fiscal Year 2021 Adopted Budget, the Twenty-Ninth Five-Year Plan, the Proposed Fiscal Year 2022 Budget, the Proposed Thirtieth Five-Year Plan, and the FY 2021 Third Quarter QCMR (all as defined herein), as applicable.

COVID-19: On January 31, 2020, the United States Department of Health and Human Services declared a public health emergency for the United States to aid the nation's health care community in responding to COVID-19. On March 11, 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic, and on March 13, 2020, the President of the United States declared a national state of emergency.

Due to the increase in the number of COVID-19 cases around the country and internationally, federal, state, and local bodies enacted legislation, and other administrative orders, directives, and guidance to mitigate the impacts of COVID-19 on the general population and the economy. In March 2020, the Commonwealth was placed under a disaster emergency order as issued by the Governor of Pennsylvania (the "Governor"). By April 1, 2020, stay at home orders were in place for the entire Commonwealth. The Commonwealth's restrictions in the stay at home orders have since been modified, as circumstances permitted. All of the Commonwealth's COVID-19 restrictions, other than mask-wearing, were lifted on May 31, 2021. Mask-wearing requirements in the Commonwealth are expected to remain in place until at least 70% of Pennsylvanians over the age of 18 are vaccinated.

The Mayor also implemented various emergency measures and other actions to respond to the spread of COVID-19 in the City, including its own stay at home order. Such measures were modified

depending on the then-current health and safety conditions in the City. The City's restrictions in its stay at home order were lifted on June 2, 2021. The City's last two COVID-19 restrictions – indoor mask-wearing requirements and certain limitations on restaurant alcohol sales – were lifted on June 11, 2021.

In the City, there have been more than 154,000 confirmed cases of COVID-19, resulting in more than 3,700 deaths. While the overall risk of COVID-19 transmission in the City remains high, cases in the City have begun to abate. The approval by the United States Food and Drug Administration of vaccines from three manufacturers for general use is expected to help limit the duration of the COVID-19 pandemic. In the City, vaccine distribution for frontline healthcare workers began in mid-January. Over the next several months, Philadelphians had access to the COVID-19 vaccinations based on a phased schedule of priority populations informed by guidance from the Centers for Disease Control and Prevention. Currently, all Philadelphians over the age of 12 are eligible to receive the COVID-19 vaccinations. For more information on the City's response to COVID-19, including the phased distribution of the COVID-19 vaccines, see https://www.phila.gov/programs/coronavirus-disease-2019-covid-19/. Such website is included herein for reference only and the information contained therein is not incorporated by reference in this Official Statement.

In response to increased expenses related to COVID-19, various federal, state, and local recovery grants have become available to the City, including recovery grants under the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") and the American Rescue Plan Act of 2021 (the "American Rescue Plan"). The CARES Act and the American Rescue Plan include substantial federal relief funds for state and local governments, including the City, to address the impact of COVID-19 on the economy, public health, state and local governments, individuals, and businesses. The funds include the $276 million Coronavirus Relief Fund (via the CARES Act) and the $1.395 billion Coronavirus Local Fiscal Recovery Fund (via the American Rescue Plan), which represent the two biggest allocations made to the City. The City expects to receive the Coronavirus Local Fiscal Recovery Funds under the American Rescue Plan in two tranches. The first half is expected to be received in June 2021 and the second half is expected to be received in the fourth quarter of Fiscal Year 2022.

To oversee the management of COVID-19 recovery grants, the City formed a Recovery Office and Steering Committee, comprised of representatives from various City offices and departments, including the Mayor's Office, the Office of the Managing Director, Finance, Commerce, and Planning and Development, among others. In determining how such funds are allocated, the Recovery Office and Steering Committee has identified three key themes to drive investments: (i) protecting public health and safety, (ii) protecting vulnerable residents, and (iii) economic recovery. Federal, state, and local funding has been secured for businesses and individuals impacted by the pandemic. Recovery funds have also been used for a number of initiatives aimed at supporting vulnerable populations, including (a) establishing meal distribution sites throughout the City, (b) providing digital access for children learning remotely, (c) providing non-congregate sheltering for those who are high-risk for COVID-19, and (d) supporting safety and social distancing within the City's shelter system.

Fiscal Impact. The City continues to closely monitor and assess the effects of the COVID-19 pandemic and its economic, operating, financial, and budgetary impact on the City. Such impact is significant, but cannot be fully quantified at this time. As a result of revenue losses and increases in expenses relating to COVID-19 and the ensuing economic downturn, the City identified a $749 million budgetary gap for Fiscal Year 2021 to be addressed in the Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan through reductions to planned spending, reduced reserve levels, and increased tax rates and fee adjustments.

The Fiscal Year 2021 Adopted Budget, the Twenty-Ninth Five-Year Plan, the Proposed Fiscal Year 2022 Budget, the Proposed Thirtieth Five-Year Plan, and the FY 2021 Third Quarter QCMR, as

applicable, reflect the sudden, dramatic increases in service demands, unanticipated costs, and economic conditions as a result of the COVID-19 global pandemic and the City's associated response. The City has identified certain COVID-19-related costs for the remainder of Fiscal Year 2021 and has set aside an additional $50 million for such anticipated costs. Federal funding from the CARES Act and the American Rescue Plan may also be available to cover some of these costs.

On April 15, 2021, the Mayor submitted the Proposed Fiscal Year 2022 Budget to City Council, along with the Proposed Thirtieth Five-Year Plan. While the City continues to be significantly impacted by COVID-19, the City expects revenues to increase as compared to the current estimates for Fiscal Year 2021, growing by as much as 13%. Such increase in revenues is largely due to drawing down on approximately $575 million in federal relief funding from the American Rescue Plan, which is expected to replace lost revenue to support core government services and pandemic response efforts. The Proposed Fiscal Year 2022 Budget projects that Fiscal Year 2022 will end with a cumulative adjusted year end General Fund balance of $109.3 million. However, revenues over the course of the Proposed Thirtieth Five-Year Plan are projected to be less than the revenue projections included in the Twenty-Ninth Five-Year Plan. Over the course of the Proposed Thirtieth Five-Year Plan, the City has identified a projected $1.5 billion budgetary gap that is expected to be addressed, in part, by available federal relief funding from the American Rescue Plan. Such federal relief funding alone will not be sufficient to close the projected budgetary gap and, as a result, the City also expects to implement spending reductions in Fiscal Years 2022-2026.

For more information on the City's historical financial operations and the City's projected General Fund balances for Fiscal Years 2021-2026, see "DISCUSSION OF FINANCIAL OPERATIONS" and Tables 1 and 2 (and the text following Table 2) herein. For more information on the Proposed Fiscal Year 2022 Budget and the Proposed Thirtieth Five-Year Plan, see "DISCUSSION OF FINANCIAL OPERATIONS – Current Financial Information – Proposed Fiscal Year 2022 Budget and Proposed Thirtieth Five-Year Plan."

Revenues. As a result of the COVID-19 pandemic, the City has seen an immediate impact on certain revenue sources, resulting in projected revenues of $4.599 billion in Fiscal Year 2021 (based on the current estimate included in the FY 2021 Third Quarter QCMR), a $235.0 million (4.9%) decrease compared to Fiscal Year 2020, which included one quarter of revenue losses from the pandemic. For Fiscal Year 2021, the City is currently projecting a decline in various components of its tax base, including decreases in Wage and Earnings Taxes, Real Estate Taxes, Real Property Transfer Taxes, Sales and Use Taxes, and Business Income and Receipts Taxes ("BIRT"), resulting in projected tax collections of $3.264 billion in Fiscal Year 2021 (based on the current estimate included in the FY 2021 Third Quarter QCMR), a $291.9 million (8.2%) decrease compared to Fiscal Year 2020.

The impact on Wage and Earnings Taxes is compounded because commuters account for about 40% for all Wage and Earnings Taxes. Such tax is not due when those commuters are required to work from home outside the City and may also lead to an increase in tax credit eligibility for such remote workers. If there are more long-term or permanent shifts to work from home, changes in consumer preferences, and population shifts, then there may be a greater and lasting negative impact on City finances. In the Proposed Thirtieth Five-Year Plan, the City's economists estimate that 15% of non-residents will not return to an office in the City, creating a permanent reduction in Wage and Earnings Tax collections. In Fiscal Year 2020, the non-resident portion of the Wage and Earnings Taxes was approximately 13% of General Fund total revenue. The City is also projecting reductions in amusement and hotel taxes, among other tax base impacts.

For information on the budgeted amounts and current estimates for tax revenues for Fiscal Year 2021, see "– Fiscal Health of the City – Tax Revenues" and "REVENUES OF THE CITY" and Table 3 herein.

Expenses. The City is projecting higher costs for essential services and increased fixed costs, including overtime and other added labor costs and higher pension payments. With tax filing and payment deadlines delayed in calendar year 2020, the City also expected lower near-term collections and issued tax and revenue anticipation notes in Fiscal Year 2021 to maintain cash flow (see "OTHER FINANCING RELATED MATTERS – Recent and Upcoming Financings").

The City incurred in Fiscal Year 2020 and projects for Fiscal Year 2021 significant new expenses for healthcare to reduce the spread of COVID-19 and treat those affected, including labor costs and expenses for testing sites and supplies, quarantine locations and services, surge hospital capacity, medical vehicles, personal protective equipment, disinfectant/cleaning supplies, morgue capacity, business supports, and vaccination rollout and administration. In addition to ongoing pandemic-related expenses, the City has incurred additional expenses relating to certain unplanned events in Fiscal Year 2021 that stress operations and the local economy.

The Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan include CARES Act funding for Fiscal Years 2020 and 2021 in the amounts of $100 million in the General Fund and $176 million in the Grants Revenue Fund, respectively. Such amounts are available to be transferred periodically from the Grants Revenue Fund to the General Fund to reimburse for COVID-19-related costs, including transfers of $76 million in Fiscal Year 2021. The FY 2021 Third Quarter QCMR also includes transfers of $26 million in Fiscal Year 2021 from available federal COVID-19 relief funding from the American Rescue Plan. In addition, the Proposed Fiscal Year 2022 Budget includes approximately $575 million in federal COVID-19 relief funding from the American Rescue Plan for Fiscal Year 2022.

As described above, federal COVID-19 relief funding available to the City from the CARES Act and the American Rescue Plan have been included in the Fiscal Year 2021 Adopted Budget, the Twenty-Ninth Five-Year Plan, the Proposed Fiscal Year 2022 Budget, the Proposed Thirtieth Five-Year Plan, and the FY 2021 Third Quarter QCMR, as applicable. The total amount of federal relief funding from such programs that will be allocated to the City is not known at this time. The City does not include potential federal stimulus funding entitlements, reimbursements from the Federal Emergency Management Agency ("FEMA"), or funds from other federal or Commonwealth sources that may be received in its budgetary projections or five-year financial planning.

Budget Measures. The projected revenue losses and increases in expenses described above are expected to be addressed with reductions to planned spending, reduced reserve levels, and revenue enhancements.

Even with budgetary spending pressures, the City expects to increase its annual contribution to the School District of Philadelphia (the "School District") by $25.5 million from $227.1 million in Fiscal Year 2020 to $252.6 million in Fiscal Year 2021. For more information on the School District, see "– Fiscal Health of the City – Increased Funding for the School District," "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Local Government Agencies – Mayoral-Appointed or Nominated Agencies – The School District," Table 6 – Real Estate Tax Rates and Allocations, and "EXPENDITURES OF THE CITY – City Payments to School District" and Table 21 herein.

The City has implemented measures to reduce spending, including (i) a hiring freeze, (ii) layoffs for temporary, seasonal, and part-time workforce, (iii) pay cuts, (iv) containing labor costs with the City's unions, (v) reducing certain overtime expenses, and (vi) eliminating vacant positions, among others.

The City is projecting that Fiscal Year 2021 will end with a cumulative adjusted year end General Fund balance of $51.7 million. For more information on the City's historical financial operations and the City's projected General Fund balances for Fiscal Years 2021-2026, see "DISCUSSION OF FINANCIAL OPERATIONS" and Tables 1 and 2 (and the text following Table 2) herein.

The Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan include budgeted reserves for specific costs or scenarios in the future. Over the course of the Twenty-Ninth Five-Year Plan, the City has reduced the projected overall reserve allocations to make a portion of those funds available for the delivery of services, while maintaining a minimal level of reserve balances to guard against greater than expected revenue losses or new spending pressures. For information on budgeted reserves, see "– Fiscal Health of the City – Budgeted Reserves" and "DISCUSSION OF FINANCIAL OPERATIONS," Table 1, footnotes 9, 15, and 16, and Table 2, footnotes 5, 9, and 10 herein.

For Fiscal Year 2021, the City has also drawn down on the funds set aside in the Budget Stabilization Reserve. For information on the Budget Stabilization Reserve, see "– Fiscal Health of the City – Budget Stabilization Reserve" and "DISCUSSION OF FINANCIAL OPERATIONS – Budget Stabilization Reserve" herein.

The Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan include certain revenue enhancements, totaling $40.6 million in Fiscal Year 2021. Such revenue enhancements include (i) freezing the BIRT rate at the Fiscal Year 2020 level for the next three Fiscal Years (such rate was scheduled to be reduced); (ii) freezing the resident rate for Wage and Earnings Taxes and Net Profits Taxes at the Fiscal Year 2020 level for the next three Fiscal Years (such rate was scheduled to be reduced); (iii) raising the non-resident rate for Wage and Earnings Taxes and Net Profits Taxes for one year; (iv) raising the parking tax rate for one year; (v) eliminating the discount for early payment of Real Estate Taxes; (vi) adjusting license and permit fees; and (vii) raising the commercial refuse fee.

The City continues to closely monitor and assess the effects of the COVID-19 pandemic and its impact on the City's financial position and operations. The overall impact on City revenues, expenditures, reserves, budgets, and financial position has been significant. The full fiscal impact of COVID-19 on the City is likely to change significantly as the situation further develops and is expected to impact various economic sectors throughout the City, including higher education, healthcare, travel, leisure and hospitality, and professional services, among others. The long-term impact of COVID-19 on the City will depend heavily on future events and actions by the federal and Commonwealth governments, as well as other nations around the world. No assurance can be given regarding future events or impacts because many actions and events are unpredictable, unknowable at this time, and outside the control of the City.

The information provided by the City in this Official Statement and previous filings by the City on EMMA was provided as of the respective dates and for the periods specified therein and is subject to change without notice. In particular, the dates as of and periods for which information was provided in this Official Statement and previous filings by the City on EMMA may have occurred before the COVID-19 pandemic and before realizing the economic impact of measures instituted to slow the spread of COVID-19. Accordingly, such information may not be indicative of future results or performance due to these and other factors.

General Fund Reserves: In the Fiscal Year 2021 Adopted Budget, the City projected that Fiscal Year 2020 would end with a cumulative adjusted year end General Fund balance of $254.9 million. Based on the actual results included in the City's audited Annual Comprehensive Financial Report for Fiscal Year 2020 (the "Fiscal Year 2020 ACFR"), the City reported that Fiscal Year 2020 ended with a cumulative adjusted year end General Fund balance of $290.7 million. Such number has been included as part of the current estimate for Fiscal Year 2021 in the FY 2021 Third Quarter QCMR. The City's current estimate is that Fiscal Year 2021 will end with a cumulative adjusted year end General Fund balance of $51.7 million, which is below the Mayor's target for the General Fund balance of 6-8% of expenditures.

The City's General Fund balance remains below recommended levels. The Government Finance Officers Association ("GFOA") recommends fund balances of approximately 17% of revenues or expenditures and the City's General Fund balances over the course of the Proposed Thirtieth Five-Year Plan are projected to be below the City's internal 6-8% goal. The projected Fiscal Year 2021 General Fund balance of $51.7 million, as noted above, is approximately 1.0% of planned expenditures for such Fiscal Year.

For more information on the City's historical financial operations and the City's projected General Fund balances for Fiscal Years 2021-2026, see "DISCUSSION OF FINANCIAL OPERATIONS" and Tables 1 and 2 (and the text following Table 2) herein.

Budget Stabilization Reserve: To provide the City with a financial cushion should unexpected costs arise, the City made a deposit of $34.3 million to the Budget Stabilization Reserve (as defined herein), pursuant to the adopted budget for Fiscal Year 2020. Pursuant to the Fiscal Year 2021 Adopted Budget, the City has drawn down on such funds and redirected them to spending. At present, there are no funds in the Budget Stabilization Reserve.

The Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR do not include any payment to the Budget Stabilization Reserve in Fiscal Year 2021. The Proposed Fiscal Year 2022 Budget and the Proposed Thirtieth Five-Year Plan do not include any additional payments to the Budget Stabilization Reserve in Fiscal Years 2022-2026. For more information on the Budget Stabilization Reserve, see "DISCUSSION OF FINANCIAL OPERATIONS – Budget Stabilization Reserve" herein.

Budgeted Reserves: The Fiscal Year 2021 Adopted Budget, the Twenty-Ninth Five-Year Plan, and the FY 2021 Third Quarter QCMR, as applicable, include budgeted reserves, certain of which are described below.

Labor Reserve. The City's unions are covered by bargaining agreements through June 30, 2021. The Twenty-Ninth Five-Year Plan includes a labor reserve for potential future labor cost increases once such agreements expire (the "Labor Reserve").

Reopening and Recession Reserve. To mitigate against the fiscal impact of the national and local economic recession and the costs of reopening efforts related to COVID-19, the Fiscal Year 2021 Adopted Budget, the Twenty-Ninth Five-Year Plan, and the FY 2021 Third Quarter QCMR, as applicable, include a reopening and recession reserve to address related expenses (the "Reopening and Recession Reserve").

Additional Payment to the Municipal Pension Fund. In Fiscal Year 2020, the City allocated $22.0 million for additional payments to the Municipal Pension Fund. Such amounts were allocated from available monies in the General Fund and were in addition to the amounts required to be paid to the

Municipal Pension Fund under the City's Revenue Recognition Policy (as defined herein). To date, such additional payments have not been made to the Municipal Pension Fund. See "PENSION SYSTEM."

Information related to the foregoing reserves can be found in Tables 1 and 2 in "DISCUSSION OF FINANCIAL OPERATIONS," see Table 1, footnotes 9, 15, and 16, and Table 2, footnotes 5, 9, and 10.

In the Proposed Fiscal Year 2022 Budget, the Proposed Thirtieth Five-Year Plan, and the FY 2021 Third Quarter QCMR, as applicable, the City projects that the Labor Reserve and the Reopening and Recession Reserve will total approximately (i) $0.0 million in Fiscal Year 2021 (current estimate), (ii) $100.0 million in Fiscal Year 2022, (iii) $110.0 million in Fiscal Year 2023, (iv) $65.0 million in Fiscal Year 2024, (v) $75.0 million in Fiscal Year 2025, and (vi) $75.0 million in Fiscal Year 2026.

For the foregoing reserves, any portion of such reserves that is not used to offset the applicable stated costs will increase the General Fund balance at the end of the given Fiscal Year, if not used by the City for other purposes.

Tax Revenues: More than 70% of the City's revenues come from local taxes and more than 89% of tax revenues come from just four taxes: Wage and Earnings Taxes, Real Estate Taxes, BIRT, and Real Property Transfer Taxes. The largest portion of these tax revenues, more than 42%, comes from the Wage and Earnings Tax (see Table 3 and "REVENUES OF THE CITY – Wage, Earnings, and Net Profits Taxes" herein). Approximately 40% of the Wage and Earnings Tax is paid by non-resident workers. Additionally, the City remains unique among the nation's largest cities in that it imposes a tax on both corporate profits and revenue through the BIRT, which is projected to generate 15.8% of the City's local tax revenue in Fiscal Year 2021 (based on the FY 2021 Third Quarter QCMR). See "REVENUES OF THE CITY" and Table 3 herein.

High Fixed Costs: The City's high fixed costs consume a significant portion of the City's budget. The largest of such costs is the City's payment to the Municipal Pension Fund. Based on the current estimate in the FY 2021 Third Quarter QCMR, pension costs are expected to consume approximately 13.5% of General Fund expenditures in Fiscal Year 2021, with a City pension cost of approximately $665.2 million (from the General Fund). Even with such payments, the Municipal Pension Fund is only about 50% funded on an actuarial basis (51.9% in 2020). See "PENSION SYSTEM" and Table 27 herein.

Increased Funding for the School District: In the Fiscal Year 2021 Adopted Budget, the City's direct contribution to the School District from the General Fund is $252.6 million in Fiscal Year 2021, which amount is unchanged as the current estimate in the FY 2021 Third Quarter QCMR. Such amount is $25.5 million higher than the contribution for Fiscal Year 2020 ($227.1 million). The School District is an independent governmental entity.

For more information on the School District, see "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Local Government Agencies – Mayoral-Appointed or Nominated Agencies – The School District." For more information on the City's historical contributions to the School District, see "EXPENDITURES OF THE CITY – City Payments to School District" and Table 21 herein.

This "OVERVIEW" is intended to highlight the strategies implemented by the City to address its principal anticipated fiscal challenges and the City continues to monitor the circumstances related thereto. The reader is cautioned to review with care the more detailed information presented in this APPENDIX III.

THE GOVERNMENT OF THE CITY OF PHILADELPHIA

Introduction

As noted above, the City is the largest city in the Commonwealth, the sixth largest city in the United States, and the center of the United States' eighth largest metropolitan statistical area. The City benefits from its strategic geographical location, relative affordability, cultural and recreational amenities, and its growing strength in key industries.

As one of the country's education centers, the City offers the business community a large and diverse labor pool. Penn, Temple University, Drexel University, St. Joseph's University, La Salle University, and Community College of Philadelphia are certain of the well-known institutions of higher education located in the City. There are also a number of other well-known colleges and universities located near the City, notably including Villanova University, Bryn Mawr College, Haverford College, Swarthmore College, Lincoln University, and the Camden Campus of Rutgers University, among others.

The City is a center for health, education, research and science facilities. In the City, there are more than 30 hospitals, including the Children's Hospital of Philadelphia, Hospital of the University of Pennsylvania, Einstein Medical Center-Philadelphia, Temple University Hospital, and Thomas Jefferson University Hospitals and Jefferson Health, among others, and schools of medicine, dentistry, pharmacy, optometry, podiatry, and veterinary medicine.

Tourism is important to the City and is driven by the City's extraordinary historic and cultural assets. The City's Historic District includes Independence Hall, the Liberty Bell, Carpenters' Hall, the Betsy Ross House, and Elfreth's Alley, the Nation's oldest residential street. The Benjamin Franklin Parkway District includes the Philadelphia Museum of Art, the Barnes Foundation, and the Rodin Museum. The Avenue of the Arts, located along a mile-long section of South Broad Street between City Hall and Washington Avenue, includes the Kimmel Center, the Academy of Music, and other performing arts venues. All of the foregoing are key tourist attractions in the City.

History and Organization

The City was incorporated in 1789 by an Act of the General Assembly of the Commonwealth (the "General Assembly") (predecessors of the City under charters granted by William Penn in his capacity as proprietor of the colony of Pennsylvania may date to as early as 1682). In 1854, the General Assembly, by an act commonly referred to as the Consolidation Act: (i) made the City's boundaries coterminous with the boundaries of Philadelphia County (the same boundaries that exist today) (the "County"); (ii) abolished all governments within these boundaries other than the City and the County; and (iii) consolidated the legislative functions of the City and the County. Article 9, Section 13 of the Pennsylvania Constitution abolished all county offices in the City, provides that the City performs all functions of county government, and states that laws applicable to counties apply to the City.

Since 1952, the City has been governed under a Home Rule Charter authorized by the General Assembly pursuant to the First Class City Home Rule Act, Act of April 21, 1949, P.L. 665, Section 17, and adopted by the voters of the City (as amended and supplemented, the "City Charter"). The City Charter provides, among other things, for the election, organization, powers and duties of the legislative branch (the "City Council") and the executive and administrative branch, as well as the basic rules governing the City's fiscal and budgetary matters, contracts, procurement, property, and records. Under Article XII of the City Charter, the School District operates as a separate and independent home rule school district. Certain other constitutional provisions and Commonwealth statutes continue to govern

various aspects of the City's affairs, notwithstanding the broad grant of powers of local self-government in relation to municipal functions set forth in the First Class City Home Rule Act.

Under the City Charter, there are two distinct principal governmental entities in the City: (i) the City, which performs municipal and county functions; and (ii) the School District, which has boundaries coterminous with the City and responsibility for all public primary and secondary education.

The court system in the City, consisting of Common Pleas and Municipal Courts, is part of the Commonwealth judicial system. Although judges are paid by the Commonwealth, most other court costs are paid by the City, with partial reimbursement from the Commonwealth.

Elected and Appointed Officials

The Mayor is elected for a term of four years and is eligible to be elected for no more than two successive terms. Each of the seventeen members of City Council is also elected for a four-year term, which runs concurrently with that of the Mayor. There is no limitation on the number of terms that may be served by members of City Council. Of the members of City Council, ten are elected from districts and seven are elected at-large. No more than five of the seven at-large candidates for City Council may be nominated by any one party or political body. The District Attorney and the City Controller are elected at the mid-point of the terms of the Mayor and City Council.

The City Controller's responsibilities derive from the City Charter, various City ordinances and state and federal statutes, and contractual arrangements with auditees. The City Controller must follow Generally Accepted Government Auditing Standards, established by the federal Government Accountability Office (formerly known as the General Accounting Office), and Generally Accepted Auditing Standards, promulgated by the American Institute of Certified Public Accountants (collectively, "Generally Accepted Auditing Standards").

The City Controller audits and reports on the City's and the School District's respective Annual Comprehensive Financial Reports ("ACFRs"), federal assistance received by the City, and the performance of City departments. The City Controller also conducts a pre-audit program of City expenditure documents required to be submitted for approval, such as invoices, payment vouchers, purchase orders and contracts. Documents are selected for audit by category and statistical basis. The Pre-Audit Division verifies that expenditures are authorized and accurate in accordance with the City Charter and other pertinent legal and contractual requirements before any moneys are paid by the City Treasurer. The Pre-Audit Technical Unit, consisting of auditing and engineering staff, inspects and audits capital project design, construction and related expenditures. Other responsibilities of the City Controller include investigation of allegations of fraud, preparation of economic reports, certification of the City's debt capacity and the capital nature and useful life of the capital projects, and opining to the Pennsylvania Intergovernmental Cooperation Authority ("PICA") on the reasonableness of the assumptions and estimates in the City's five-year financial plans.

Under the City Charter, the principal officers of the City's government are the Managing Director of the City (the "Managing Director"), the Director of Finance of the City (the "Director of Finance"), the City Solicitor (the "City Solicitor"), the Director of Commerce (the "Director of Commerce"), the City Representative (the "City Representative"), and the Director of Planning and Development (the "Director of Planning and Development"). Under the City Charter, the Mayor appoints the Managing Director, the Director of Finance, the Director of Commerce, the City Representative, and the Director of Planning and Development. The Mayor, with the advice and consent of a majority of City Council, also appoints the City Solicitor.

The Managing Director, in coordination with the senior officials of City departments and agencies, is responsible for supervising the operating departments and agencies of the City that render the City's various municipal services. The Director of Commerce is charged with the responsibility of promoting and developing commerce and industry. The City Representative is the Ceremonial Representative of the City and especially of the Mayor. The City Representative is charged with the responsibility of giving wide publicity to any items of interest reflecting the activities of the City and its inhabitants, and for the marketing and promotion of the image of the City. Under the City Charter, the Director of Planning and Development oversees the Department of Planning and Development, which includes three divisions: (i) the Division of Development Services; (ii) the Division of Planning and Zoning; and (iii) the Division of Housing and Community Development. Such divisions represent five budgetary programs/fiscal divisions, including Executive Administration, Planning & Zoning, Development Services, Community Development, and Housing Development.

The City Solicitor is head of the Law Department and acts as legal advisor to the Mayor, City Council, and all of the agencies of the City government. The City Solicitor is also responsible for: (i) advising on legal matters pertaining to all of the City's contracts and bonds; (ii) assisting City Council, the Mayor, and City agencies in the preparation of ordinances for introduction in City Council; and (iii) conducting litigation involving the City.

The Director of Finance is the chief financial and budget officer of the City and is selected from three names submitted to the Mayor by a Finance Panel, which is established pursuant to the City Charter and is comprised of the President of the Philadelphia Clearing House Association, the Chairman of the Philadelphia Chapter of the Pennsylvania Institute of Certified Public Accountants, and the Dean of the Wharton School of Finance and Commerce of the University of Pennsylvania. Under Mayor Kenney's administration, the Director of Finance is responsible for the financial functions of the City, including: (i) development of the annual operating budget, the capital budget, and capital program; (ii) the City's program for temporary and long-term borrowing; (iii) supervision of the operating budget's execution; (iv) the collection of revenues through the Department of Revenue; (v) the oversight of pension administration as Chairperson of the Board of Pensions and Retirement; and (vi) the supervision of the Office of Property Assessment. The Director of Finance is also responsible for the appointment and supervision of the City Treasurer, whose office manages the City's debt program and serves as the disbursing agent for the distribution of checks and electronic payments from the City Treasury and the management of cash resources.

The following are brief biographies of Mayor Kenney, his Chief of Staff, the Director of Finance, and the City Treasurer.

James F. Kenney, Mayor. On November 3, 2015, James F. Kenney was elected as the City's 99th Mayor and was sworn into office on January 4, 2016. Mayor Kenney was reelected to a second term on November 5, 2019 and was sworn into office on January 6, 2020. Mayor Kenney is a lifelong resident of the City and a graduate of La Salle University. In 1991, Mayor Kenney was elected to serve as a Democratic City Councilman At-Large and was a member of City Council for 23 years.

James Engler, Chief of Staff. Mr. Engler was appointed Chief of Staff effective August 10, 2018. Prior to that, Mr. Engler served as Deputy Mayor for Policy and Legislation since January 2016. In that role, Mr. Engler served as a senior liaison between the Mayor's Office and City Council and was responsible for developing administration policy priorities and working with stakeholders inside and outside of government to advance those goals.

Rob Dubow, Director of Finance. Mr. Dubow has served as Director of Finance since being appointed on January 7, 2008. Prior to that appointment, Mr. Dubow was the Executive Director of

PICA. He has also served as Executive Deputy Budget Secretary of the Commonwealth, from 2004 to 2005, and as Budget Director for the City, from 2000 to 2004.

Jacqueline Dunn, City Treasurer. On February 11, 2021, Ms. Dunn was appointed City Treasurer. Prior to such appointment, Ms. Dunn served as Acting City Treasurer since September 25, 2020, and prior to that, she served as Deputy City Treasurer since July 2019. As City Treasurer, Ms. Dunn (i) oversees the issuance of all notes and bonds on behalf of the City's General Fund and Enterprise Funds used to finance capital projects, (ii) manages cash collections and cash resources in the City Treasury, and (iii) serves as the disbursing agent for the distribution of checks and electronic payments from the City Treasury. Ms. Dunn also serves as the Director of Finance's designee on the Philadelphia Board of Pensions and Retirement. In 2014, Ms. Dunn joined the City as an Assistant Finance Director in the Finance Department. In 2016, she was appointed Chief of Staff to the Director of Finance. Prior to joining the City, Ms. Dunn worked for Public Financial Management and the Annenberg Public Policy Center. She has a master's degree in Governmental Administration and a bachelor's degree in Political Science, both from the University of Pennsylvania.

Prior City Treasurer. On September 25, 2020, Christian Dunbar was terminated from his employment as the City Treasurer immediately following the announcement of federal criminal charges against him, which were filed by the United States Attorney's Office for the Eastern District of Pennsylvania. Such charges involve alleged embezzlement and immigration fraud prior to Mr. Dunbar's employment with the City. In May 2021, federal personal income tax charges, relating to tax years 2015-2019, were added to the other criminal charges in a superseding indictment.

Although the embezzlement and immigration fraud charges do not relate to activities occurring during Mr. Dunbar's employment with the City, the Mayor asked the City's Inspector General to conduct a review of the City Treasurer's Office from the time Mr. Dunbar served as Deputy City Treasurer commencing in January 2016 through his termination as City Treasurer. The Inspector General has completed such review, which did not identify any evidence related to the federal criminal charges. Mr. Dunbar's personal income taxes and any related matters were not the subject of the Inspector General's review.

In light of the charges against Mr. Dunbar, the City Treasurer's Office has also conducted an internal review of its financial, investment, and accounting policies and procedures. The City Treasurer's Office has adopted certain measures to strengthen its protocols and expects to continue to implement strategies to improve the operations of the office.

Separately, the City Controller's Office opened an investigation of the City Treasurer's Office regarding accounts for COVID-19-related emergency expenses and sent notice of the investigation to the City Treasurer's Office on September 22, 2020. The City Controller's Office received information that, at a minimum, suggested the accounts had not been processed through the City's financial accounting system ("FAMIS"), against the City's standard accounting procedures. The City Controller has ordered that payments outside of FAMIS stop immediately and opened an investigation into any such accounts.

The City Treasurer's Office has controls and separation of duties that are intended to safeguard City funds and prevent misappropriation of such funds. The City Treasurer's Office has cooperated fully with the Inspector General's review, the investigation of the City Controller's Office, and other related inquiries.

Government Services

Municipal services provided by the City include: (i) police and fire protection; (ii) health care; (iii) certain welfare programs; (iv) construction and maintenance of local streets, highways, and bridges; (v) trash collection, disposal and recycling; (vi) provision for recreational programs and facilities; (vii) maintenance and operation of the water and wastewater systems (the "Water and Wastewater Systems"); (viii) acquisition and maintenance of City real and personal property, including vehicles; (ix) maintenance of building codes and regulation of licenses and permits; (x) maintenance of records; (xi) collection of taxes and revenues; (xii) purchase of supplies and equipment; (xiii) construction and maintenance of airport facilities (the "Airport System"); and (xiv) maintenance of a prison system.

The City owns the assets that comprise the Philadelphia Gas Works ("PGW" or the "Gas Works"). PGW serves residential, commercial, and industrial customers in the City. PGW is operated by Philadelphia Facilities Management Corporation ("PFMC"), a non-profit corporation specifically organized to manage and operate PGW for the benefit of the City. For more information on PGW, see "PGW PENSION PLAN," "PGW OTHER POST-EMPLOYMENT BENEFITS," "EXPENDITURES OF THE CITY – PGW Annual Payments," and "LITIGATION – PGW."

Local Government Agencies

There are a number of governmental authorities and quasi-governmental non-profit corporations that also provide services within the City. Certain of these entities are comprised of governing boards, the members of which are either appointed or nominated, in whole or part, by the Mayor, while others are independent of the Mayor's appointment or recommendation.

Mayoral-Appointed or Nominated Agencies

Philadelphia Industrial Development Corporation and Philadelphia Authority for Industrial Development. The Philadelphia Industrial Development Corporation ("PIDC") and the Philadelphia Authority for Industrial Development ("PAID"), along with the City's Commerce Department, coordinate the City's efforts to maintain an attractive business environment, attract new businesses to the City, and retain existing businesses. PIDC manages PAID's activities through a management agreement. Of the 30 members of the board of PIDC, eight are City officers or officials (the Mayor, the Managing Director, the Finance Director, the Commerce Director, the Director of Planning and Development, the City Solicitor, and two members of City Council), nine members are designated by the President of the Chamber of Commerce of Greater Philadelphia (the "Chamber of Commerce"), and the remaining 13 members are jointly designated by the Chamber of Commerce and the Commerce Director. The five-member board of PAID is appointed by the Mayor.

Philadelphia Municipal Authority. The Philadelphia Municipal Authority (formerly the Equipment Leasing Authority of Philadelphia) ("PMA") was originally established for the purpose of buying equipment and vehicles to be leased to the City. PMA's powers have been expanded to include any project authorized under applicable law that is specifically authorized by ordinance of City Council. PMA is governed by a five-member board appointed by City Council from nominations made by the Mayor.

Philadelphia Energy Authority. The Philadelphia Energy Authority ("PEA") was established by the City and incorporated in 2011 for the purpose of facilitating and developing energy generation projects, facilitating and developing energy efficiency projects, the purchase or facilitation of energy supply and consumer energy education. PEA is authorized to participate in projects on behalf of the City, other government agencies, institutions and businesses. PEA is governed by a five-member board

appointed by City Council from four nominations made by the Mayor and one nomination from City Council.

Philadelphia Redevelopment Authority. The Philadelphia Redevelopment Authority (formerly known as the Redevelopment Authority of the City of Philadelphia) (the "PRA"), supported by federal funds through the City's Community Development Block Grant Fund and by Commonwealth and local funds, is responsible for the redevelopment of the City's blighted areas. PRA is governed by a five-member board appointed by the Mayor.

Philadelphia Land Bank. The Philadelphia Land Bank (the "PLB") is an independent agency formed under the authority of City ordinance and Pennsylvania law to return vacant and tax delinquent properties to productive reuse. The PLB has an 11-member board of directors, of which five are appointed by the Mayor and five are appointed by City Council. The final board member is appointed by a majority vote of the other board members.

Philadelphia Housing Authority. The Philadelphia Housing Authority (the "PHA") is a public body organized pursuant to the Housing Authorities Law of the Commonwealth and is neither a department nor an agency of the City. PHA is responsible for developing and managing low and moderate income rental units and limited amounts of for-sale housing in the City. PHA is also responsible for administering rental subsidies to landlords who rent their units to housing tenants qualified by PHA for such housing assistance payments. PHA is governed by a nine-member Board of Commissioners, all of whom are appointed by the Mayor with the approval of a majority of the members of City Council. The terms of the Commissioners are concurrent with the term of the appointing Mayor. Two of the members of the Board are required to be PHA residents.

Hospitals and Higher Education Facilities Authority of Philadelphia. The Hospitals and Higher Education Facilities Authority of Philadelphia (the "Hospitals Authority") assists non-profit hospitals by financing hospital construction projects. The City does not own or operate any hospitals. The powers of the Hospitals Authority also permit the financing of construction of buildings and facilities for certain colleges and universities and other health care facilities and nursing homes. The Hospitals Authority is governed by a five-member board appointed by City Council from nominations made by the Mayor.

Southeastern Pennsylvania Transportation Authority. The Southeastern Pennsylvania Transportation Authority ("SEPTA"), which is supported by transit revenues and federal, Commonwealth, and local funds, is responsible for developing and operating a comprehensive and coordinated public transportation system in the southeastern Pennsylvania region. Two of the 15 members of SEPTA's board are appointed by the Mayor and confirmed by City Council. SEPTA is not a department or agency of the City. For more information on SEPTA, see "EXPENDITURES OF THE CITY – City Payments to SEPTA."

Pennsylvania Convention Center Authority. The Pennsylvania Convention Center Authority (the "Convention Center Authority") constructed and maintains, manages, and operates the Pennsylvania Convention Center, which opened on June 25, 1993. The Pennsylvania Convention Center is owned by the Commonwealth and leased to the Convention Center Authority. An expansion of the Pennsylvania Convention Center was completed in March 2011. This expansion enlarged the Pennsylvania Convention Center to approximately 2,300,000 square feet with the largest contiguous exhibit space in the Northeast, the largest convention center ballroom on the East Coast, and the ability to host large tradeshows or two major conventions simultaneously.

Of the 15 members of the board of the Convention Center Authority, two are appointed by the Mayor and one by each of the President and Minority Leader of City Council. The Director of Finance is an ex-officio member of the Board with no voting rights. The Commonwealth, the City and the Convention Center Authority have entered into an operating agreement with respect to the operation and financing of the Pennsylvania Convention Center. In January 2014, SMG began managing and operating the Pennsylvania Convention Center, instituting a number of measures intended to reduce and control show costs and improve customer service. For more information on the Convention Center Authority, see "EXPENDITURES OF THE CITY – City Payments to Convention Center Authority."

The School District. The School District was established, pursuant to the First Class City Home Rule Education Act, by the Educational Supplement to the City Charter as a separate and independent home rule school district to provide free public education to the City's residents. Under the City Charter, the School District is governed by the Board of Education of the School District of Philadelphia (the "Board of Education"), which is appointed by the Mayor.

Under the City Charter, the Board of Education is required to levy taxes annually, within the limits and upon the subjects authorized by the General Assembly or City Council, in amounts sufficient to provide for operating expenses, debt service charges, and for the costs of any other services incidental to the operation of public schools. The School District has no independent power to authorize school taxes. Certain financial information regarding the School District is included in the City's ACFR.

The School District is part of the Commonwealth system of public education. In a number of matters, including the incurrence of short-term and long-term debt, the School District is governed by the separate statutes of the Commonwealth. The School District is a separate political subdivision of the Commonwealth, and the City has no property interest in or claim on any revenues or property of the School District.

In the Fiscal Year 2020 ACFR, the City reported that its direct contribution to the School District from the General Fund was $227.1 million in Fiscal Year 2020. In the Fiscal Year 2021 Adopted Budget, the City's direct contribution to the School District from the General Fund is $252.6 million in Fiscal Year 2021, which amount is unchanged as the current estimate in the FY 2021 Third Quarter QCMR. Such amounts do not include funding from taxes levied by the School District and authorized by City Council. For more information on the City's historical contributions to the School District, see "EXPENDITURES OF THE CITY – City Payments to School District" and Table 21.

Non-Mayoral-Appointed or Nominated Agencies

PICA. PICA was created by the Pennsylvania Intergovernmental Cooperation Authority Act for Cities of the First Class (the "PICA Act") in 1991 to provide financial assistance to cities of the first class, and it continues in existence for a period not exceeding one year after all of its liabilities, including the PICA Bonds (as defined herein), have been fully paid and discharged. The City is the only city of the first class in the Commonwealth. The Governor, the President pro tempore of the Pennsylvania Senate, the Minority Leader of the Pennsylvania Senate, the Speaker of the Pennsylvania House of Representatives, and the Minority Leader of the Pennsylvania House of Representatives each appoints one voting member of PICA's board. The Secretary of the Budget of the Commonwealth and the Director of Finance of the City serve as ex officio members of PICA's board with no voting rights.

In January 1992, the City and PICA entered into an Intergovernmental Cooperation Agreement (the "PICA Agreement"), pursuant to which PICA agreed to issue bonds from time to time, at the request of the City, for the purpose of funding, among other things, deficits in the General Fund and a debt service reserve. See "DEBT OF THE CITY – PICA Bonds."

Under the PICA Act and for so long as any PICA Bonds are outstanding, the City is required to submit to PICA: (i) a five-year financial plan on an annual basis; and (ii) quarterly financial reports, each as further described below under "DISCUSSION OF FINANCIAL OPERATIONS – Five-Year Plans of the City" and "– Quarterly Reporting to PICA." Under the PICA Act, at such time when no PICA Bonds are outstanding, the City will no longer be required to prepare such annual financial plans or quarterly reports. As of May 31, 2021, the principal amount of PICA Bonds outstanding was $56,075,000. The final maturity date for such PICA Bonds is June 15, 2023. For more information on PICA Bonds, see "DEBT OF THE CITY – PICA Bonds."

The PICA Act and the PICA Agreement provide PICA with certain financial and oversight functions. PICA has the power to exercise certain advisory and review procedures with respect to the City's financial affairs, including the power to review and approve the five-year financial plans prepared by the City, and to certify non-compliance by the City with the then-existing five-year plan. PICA is also required to certify non-compliance if, among other things, no approved five-year plan is in place or if the City has failed to file mandatory revisions to an approved five-year plan. Under the PICA Act, any such certification of non-compliance would, upon certification by PICA, require the Secretary of the Budget of the Commonwealth to withhold funds due to the City from the Commonwealth or any of its agencies (including, with certain exceptions, all grants, loans, entitlements, and payments payable to the City by the Commonwealth, including payment of the portion of the PICA Tax, as further described under "DEBT OF THE CITY – PICA Bonds" below, otherwise payable to the City). Such withheld funds are held in escrow by the Commonwealth or in the applicable City account until such non-compliance is cured. A majority vote of PICA will determine when the conditions that caused the City to be certified as non-compliant have ceased to exist. Following such vote, PICA notifies the Secretary of the Budget and the withheld funds are released (together with all interest and income earned thereon during the period held in escrow).

Philadelphia Parking Authority. The Philadelphia Parking Authority (the "PPA") is responsible for: (i) the construction and operation of parking facilities in the City and at Philadelphia International Airport ("PHL"); and (ii) enforcement of on-street parking regulations. The members of the PPA's board are appointed by the Governor, with certain nominations from the General Assembly. PPA is not a department or agency of the City. For more information on the PPA, see "REVENUES OF THE CITY – Philadelphia Parking Authority Revenues."

Cybersecurity

The City relies on a complex technology environment to conduct its operations. As a recipient and provider of personal, private, and sensitive information, the City and its departments and offices face multiple cyber threats including, but not limited to, hacking, viruses, malware, and other attacks on computers and other sensitive digital networks and systems.

The City's Office of Innovation and Technology works to protect the City from cyber threats by adopting new technology and ensuring City systems and citizen data are protected. The Office of Innovation and Technology follows industry best practices, develops City-wide security policies, provides regular security training to all City employee users, and uses security tools to mitigate, prevent, deter, and respond to incidents if and when they occur. Additionally, to identify potential vulnerabilities and proactively mitigate them, the City organizes periodic (i) vulnerability scanning of critical systems, (ii) penetration tests of the information security environment, and (iii) regular internal testing of systems and users. These tests are performed by both the Office of Innovation and Technology and third parties.

The Office of Innovation and Technology has worked to establish relationships with federal and state government, and commercial, academic, and law enforcement security experts. It is the City's

expectation that such relationships will enable the City to stay informed of threats and continuing improvements to security systems.

No assurances can be given that the City's security and operational control measures will be successful in guarding against future cyber threats and attacks. The results of any attack on the City's computer and information technology systems could impact its operations and damage the City's digital networks and systems, and the costs of remedying any such damage could be substantial.

Climate Change

The City's Office of Sustainability ("OOS") works with partners around the City, both public and private, to educate and prepare the City for climate change, among other things. OOS is responsible for implementing Greenworks Philadelphia, the City's comprehensive sustainability plan, which consists of a variety of initiatives to prepare the City for future climate–related challenges.

Planning for the potential impact of climate change in the City is challenging. The City's climate is variable and projections of future conditions range significantly. Potential climate change impacts include rising temperatures (heat waves); air quality issues; increased heavy precipitation events (rain or snow); rising sea levels (two feet by 2050 and four feet by 2100); and storm surges from more intense hurricanes and tropical storms.

Under the mid-century (2050) and end-of-century (2100) analyses, the City projects that it will experience a greater frequency of heavy and extremely heavy precipitation events, with the largest increase occurring in precipitation that falls during winter months. Heavy precipitation and flooding can be caused by a variety of weather systems, including tropical storms and hurricanes, thunderstorms, and frontal activity. When these heavy precipitation events fall as rain, they often exceed the capacity of the City's storm sewer infrastructure; when they fall as snow, they require many City resources to manage. Some of these projections are already becoming a reality, as the City has experienced an increase in the intensity and frequency of storm events over the last decade, which has on occasion resulted in significant flooding.

The sea level rising is a particularly important risk for the City, as rising seas affect water levels in the Delaware and Schuylkill Rivers bordering the City. Higher sea levels will increase the depth and extent of flooding in and around the City from storm surges. Low-lying areas already experience localized flooding during heavy storm events, and both municipal infrastructure and private development exist along the two rivers. Because of the City's topography and its location next to tidal rivers, many City facilities and other properties are vulnerable to sea level rise, even under conservative sea level rise scenarios. For example, Philadelphia International Airport (PHL) and at least a dozen other City facilities would be exposed to flooding with two feet of sea level rise, a scenario that is likely to occur by mid-century. Under the mid-century sea level rise scenario (indicating two feet of sea level rise), only one City facility is highly vulnerable to flooding, but under the end-of-century sea level rise scenario (four feet of sea level rise), 19 facilities are highly vulnerable and another 12 City facilities are moderately vulnerable. Hundreds of additional facilities (both City and private) are highly vulnerable to both riverine flooding and the combination of sea level rise and storm surge.

Financial Impact. While the financial effects of climate change are difficult to quantify, the City has developed some cost estimates related to its future fiscal impact. Climate change will increase both the risk of expensive extreme events and the regular, recurring costs of doing business, along with equally important but less quantifiable costs to quality of life in the City. Proactive planning for climate change can help to reduce many of these costs, both public and private.

Climate change is increasing the intensity of extreme storms, and just one severe hurricane could cause more than $2 billion in damages across the City. The City expects to see more frequent extreme storms with higher winds and more flooding, due in part to sea level rise combined with heavy rains. Depending on severity, each of these storms could cause an estimated $20 million to $900 million in damages in the City.

In addition to increasing disaster costs, higher heat and more precipitation will increase the everyday cost of doing business for the City's government, businesses, and residents. Increased operating costs from climate change across all sectors would result in a significant economic impact in the City. Much of these costs will be borne by City departments in combination with Commonwealth and federal government; others will fall directly on the private sector.

As the effects of climate change take shape in the City, annual costs related thereto are expected to include a variety of increases ranging from energy and maintenance costs to the increasing costs of continuing to provide services. For example, the City expects climate change to (i) increase annual electricity costs by up to $1 million due to increased demand for air conditioning; (ii) create an additional $2 million to $4 million in roadway maintenance costs from precipitation, freeze-thaw cycles, and high temperatures; and (iii) increase the annual cost of running heat emergency helplines to advise callers about how to avoid heat stress and refer those in need of help to emergency services.

The City also expects to face a variety of other increased costs due to climate change, such as (i) costs associated with a variety of respiratory diseases caused by higher levels of ozone (with costs for medical treatment and lost productivity associated with these diseases approaching $20 million by 2050), and (ii) increased regional transportation expenses (increased operational costs and damages from climate change could rise by almost $2 million per year).

In 2016, OOS, along with a cross-departmental Climate Adaptation Working Group, issued *Growing Stronger: Toward a Climate-Ready Philadelphia* to (i) assess vulnerabilities and preparation opportunities for municipal government; (ii) identify low-barrier and high-impact internal actions that can be taken to reduce risks and decrease stressors on City infrastructure services; and (iii) guide proactive projects with benefits beyond municipal operations. City-wide climate adaptation planning efforts are now also underway.

In addition to participating in planning efforts, City departments are taking action and implementing projects that aim to increase resilience on a broad array of climate issues. The Department of Public Property ensures that emergency generators in City-maintained facilities are well maintained and fueled, which is intended to allow other City departments to continue providing services during emergency situations. During heat emergencies, the Department of Public Health ensures communication among City agencies and deploys environmental health teams into the community. Philadelphia Parks and Recreation works with citizen scientists to identify forest restoration practices suitable for the City's changing climate. Regarding broader development across the City, the Philadelphia City Planning Commission (the "Planning Commission") requires new facilities located in flood zones to be raised 18 inches above FEMA base flood elevation, and the Philadelphia Water Department (the "Water Department") promotes green storm water infrastructure as a source control measure to minimize flooding impacts.

CITY FINANCES AND FINANCIAL PROCEDURES

Except as otherwise noted, the financial statements, tables, statistics, and other information shown below have been prepared by the Office of the Director of Finance and can be reconciled to the financial statements in the Fiscal Year 2020 ACFR and notes therein. The Fiscal Year 2020 ACFR was prepared

by the Office of the Director of Finance in conformance with guidelines adopted by the Governmental Accounting Standards Board and the American Institute of Certified Public Accountants' audit guide, Audits of State and Local Government Units and audited by the City Controller under Generally Accepted Auditing Standards.

General

Governmental funds account for their activities using the current financial resources measurement focus and the modified accrual basis of accounting. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal period. Expenditures are generally recorded when a liability is incurred, as in the case of full accrual accounting. Debt service expenditures, as well as expenditures related to compensated absences and claims and judgments, are recorded only when payment is due; however, those expenditures may be accrued if they are to be liquidated with available resources.

Imposed non-exchange revenues, such as real estate taxes, are recognized when the enforceable legal claim arises and the resources are available. Derived tax revenues, such as wage, BIRT, net profits and earnings taxes, are recognized when the underlying exchange transaction has occurred and the resources are available. Grant revenues are recognized when all the applicable eligibility requirements have been met and the resources are available. All other revenue items are considered to be measurable and available only when cash is received by the City.

Revenue that is considered to be program revenue includes: (i) charges to customers or applicants for goods received, services rendered or privileges provided; (ii) operating grants and contributions; and (iii) capital grants and contributions. Internally dedicated resources are reported as general revenues rather than as program specific revenues; therefore, all taxes are considered general revenues.

The City's financial statements reflect the following three funds as major Governmental Funds:

- The General Fund is the City's primary operating fund. It accounts for all financial resources of the general government, except those required to be accounted for in other funds.

- The Health Choices Behavioral Health Fund accounts for resources received from the Commonwealth. These resources are restricted to providing managed behavioral health care to residents of the City.

- The Grants Revenue Fund accounts for the resources received from various federal, Commonwealth, and private grantor agencies, including those received by the City's Department of Human Services ("DHS"). The resources are restricted to accomplishing the various objectives of the grantor agencies.

The City also reports on permanent funds, which are used to account for resources legally held in trust for use by the park and library systems of the City. There are legal restrictions on the resources of the permanent funds that require the principal to remain intact, while only the earnings may be used for the programs.

The City reports on the following fiduciary funds:

- The Municipal Pension Fund accumulates resources to provide pension benefit payments to qualified employees of the City and certain other quasi-governmental organizations.

- The PGW Retirement Reserve Fund accounts for contributions made by PGW to provide pension benefit payments to its qualified employees under its pension plan. For more information on the PGW Pension Plan (as defined herein), see "PGW PENSION PLAN."

- The Escrow Fund accounts for funds held in escrow for various purposes.

- The Employees Health & Welfare Fund accounts for funds deducted from employees' salaries for payment to various organizations.

- The Departmental Custodial Accounts account for funds held in custody by various departments of the City.

The City reports on the following major proprietary funds:

- The Water Fund accounts for the activities related to the operation of the Water and Wastewater Systems.

- The Aviation Fund accounts for the activities of the Airport System.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's ongoing operations. The principal operating revenues of the Water Fund are charges for water and sewer service. The principal operating revenues of the Aviation Fund are charges for the use of the City's airports, PHL and Northeast Philadelphia Airport. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Current City Disclosure Practices

It is the City's practice to file its ACFR, which contains the audited combined financial statements of the City, in addition to certain other information, such as the City's bond ratings and information about upcoming debt issuances, with the Municipal Securities Rulemaking Board ("MSRB") as soon as practicable after delivery of such information. For bonds issued in calendar year 2015 and thereafter, the annual filing deadline is February 28; for bonds issued prior to calendar year 2015, the annual filing deadline is 240 days after the end of the respective Fiscal Year, being February 25. The Fiscal Year 2020 ACFR was filed with the MSRB on February 25, 2021, through the MSRB's Electronic Municipal Market Access ("EMMA") system.

A wide variety of information concerning the City is available from publications and websites of the City and others, including the City's investor information website at http://www.phila.gov/investor (the "City's Investor Website"). Any such information that is inconsistent with the information set forth in this Official Statement should be disregarded. No such information is a part of or incorporated into this Official Statement.

Independent Audit and Opinion of the City Controller

The City Controller has examined and expressed opinions on the basic financial statements of the City contained in the Fiscal Year 2020 ACFR. The City Controller has not participated in the preparation of this Official Statement nor in the preparation of the budget estimates and projections and cash flow statements and forecasts set forth in various tables contained in this Official Statement. Consequently, the City Controller expresses no opinion with respect to any of the data contained in this Official Statement other than what is contained in the basic financial statements of the City in the Fiscal Year 2020 ACFR.

Budgetary Accounting Practices

The City's budgetary process accounts for certain transactions on a basis other than generally accepted accounting principles ("GAAP"). In accordance with the City Charter, the City has formally established budgetary accounting control for its operating and capital improvement funds.

The operating funds of the City, consisting of the General Fund, nine (9) Special Revenue Funds (County Liquid Fuels Tax, Special Gasoline Tax, Health Choices Behavioral Health, Hotel Room Rental Tax, Grants Revenue, Community Development, Car Rental Tax, Housing Trust, and Acute Care Hospital Assessment) and two Enterprise Funds (Water and Aviation Funds), are subject to annual operating budgets adopted by City Council. These budgets appropriate funds for all City departments, boards and commissions by major class of expenditure within each department. Major classes are defined as: (i) personal services; (ii) purchase of services; (iii) materials and supplies; (iv) equipment; (v) contributions, indemnities, and taxes; (vi) debt service; (vii) payments to other funds; and (viii) advances and other miscellaneous payments. The appropriation amounts for each fund are supported by revenue estimates and take into account the elimination of accumulated deficits and the re-appropriation of accumulated surpluses to the extent necessary. All transfers between major classes (except for materials and supplies and equipment, which are appropriated together) must have City Council approval. Appropriations that are not expended or encumbered at Fiscal Year-end are lapsed.

The City's capital budget is adopted annually by City Council. The capital budget is appropriated by project for each department. Requests to transfer appropriations between projects must be approved by City Council. Any appropriations that are not obligated at year-end are either lapsed or carried forward to the next Fiscal Year.

Schedules prepared on the legally enacted basis differ from the GAAP basis in that both expenditures and encumbrances are applied against the current budget, adjustments affecting activity budgeted in prior years are accounted for through fund balance or as reduction of expenditures and certain interfund transfers and reimbursements are budgeted as revenues and expenditures. The primary difference between the GAAP and legal (budgetary) fund balance is due to the timing of recognizing the BIRT. The legal basis recognizes BIRT revenues in the Fiscal Year they are collected. The GAAP basis requires the City to recognize the BIRT revenues (which are primarily paid in April) for the calendar year in which the BIRT taxes are due, requiring the City to defer a portion of the April payment into the next Fiscal Year. For more information on BIRT, see "REVENUES OF THE CITY – Business Income and Receipts Tax."

DISCUSSION OF FINANCIAL OPERATIONS

Principal Operations

The major financial operations of the City are conducted through the General Fund. In addition to the General Fund, operations of the City are conducted through two other major governmental funds

and 19 non-major governmental funds. The City operates on a July 1 to June 30 fiscal year ("Fiscal Year") and reports on all the funds of the City, as well as its component units, in the City's ACFR. PMA's and PICA's financial statements are blended with the City's statements. The financial statements for PGW, PRA, the PPA, the School District, the Community College of Philadelphia, the Community Behavioral Health, Inc., the Delaware River Waterfront Corporation, and PAID are presented discretely.

Fund Accounting

Funds are groupings of activities that enable the City to maintain control over resources that have been segregated for particular purposes or objectives. All of the funds of the City can be divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

Governmental Funds. The governmental funds are used to account for the financial activity of the City's basic services, such as: general government; economic and neighborhood development; public health, welfare and safety; cultural and recreational; and streets, highways and sanitation. The funds' financial activities focus on a short-term view of the inflows and outflows of spendable resources, as well as on the balances of spendable resources available at the end of the Fiscal Year. The financial information presented for the governmental funds is useful in evaluating the City's short-term financing requirements.

The City maintains 22 individual governmental funds. The City's ACFRs, including the Fiscal Year 2020 ACFR, present data separately for the General Fund, Grants Revenue Fund, and Health Choices Behavioral Health Fund, which are considered to be major funds. Data for the remaining 19 funds are combined into a single aggregated presentation.

Proprietary Funds. The proprietary funds are used to account for the financial activity of the City's operations for which customers are charged a user fee; they provide both a long- and short-term view of financial information. The City maintains three enterprise funds that are a type of proprietary fund – airport, water and wastewater operations, and industrial land bank.

Fiduciary Funds. The City is the trustee, or fiduciary, for its employees' pension plans. It is also responsible for PGW's employees' retirement reserve assets. Both of these fiduciary activities are reported in the City's ACFRs, including the Fiscal Year 2020 ACFR, as separate financial statements of fiduciary net assets and changes in fiduciary net assets.

See "CITY FINANCES AND FINANCIAL PROCEDURES" for a further description of these governmental, proprietary, and fiduciary funds.

Budget Procedure

The City Charter provides that, at least 90 days before the end of the Fiscal Year, the operating budget for the next Fiscal Year is prepared by the Mayor and submitted to City Council for adoption. The budget, as adopted, must be balanced and provide for discharging any estimated deficit from the current Fiscal Year and make appropriations for all items to be funded with City revenues. The Mayor's budgetary estimates of revenues for the ensuing Fiscal Year and projection of surplus or deficit for the current Fiscal Year may not be altered by City Council. Not later than the passage of the operating budget ordinance, City Council must enact such revenue measures as will, in the opinion of the Mayor, yield sufficient revenues to balance the budget. While the City Charter requires the Mayor to submit the operating budget for the next Fiscal Year to City Council at least 90 days before the end of the Fiscal Year, such submissions have occasionally been submitted after such deadline. For example, the Mayor submitted the Proposed Fiscal Year 2022 Budget to City Council on April 15, 2021, along with the

Proposed Thirtieth Five-Year Plan. Such submission was after the 90-day deadline described above. There is no practical consequence to submitting the proposed budget after the 90-day deadline in the City Charter. For more information on the submission of the Proposed Fiscal Year 2022 Budget, see "OVERVIEW – Fiscal Health of the City – COVID-19 – Fiscal Impact."

The City Charter provides that, at least 30 days before the end of the Fiscal Year, City Council must adopt by ordinance an operating budget and a capital budget for the ensuing Fiscal Year and a capital program for the six ensuing Fiscal Years. If the Mayor disapproves the bills, he must return them to City Council with the reasons for his disapproval at the first meeting thereof held not less than ten days after he receives such bills. If the Mayor does not return the bills within the time required, they become law without his approval. If City Council passes the bills by a vote of two-thirds of all of its members within seven days after the bills have been returned with the Mayor's disapproval, they become law without his approval. While the City Charter requires that City Council adopt the ordinances for the operating and capital budgets at least 30 days before the end of the Fiscal Year, in practice, such ordinances are often adopted after such deadline, but before the end of such Fiscal Year. For example, the City's Fiscal Year 2021 operating budget ordinance was presented to City Council on March 5, 2020, revised and resubmitted to City Council on May 1, 2020, approved by City Council on June 25, 2020, and signed by the Mayor on June 26, 2020. There is no practical consequence to adopting the budget ordinances after the deadline in the City Charter, but before the end of the Fiscal Year.

The capital program is prepared annually by the Planning Commission to present the capital expenditures planned for each of the six ensuing Fiscal Years, including the estimated total cost of each project and the sources of funding (local, state, federal, and private) estimated to be required to finance each project. The capital improvement plans for the Water Department and the Division of Aviation are included in the City's capital program. The capital program is reviewed by the Mayor and transmitted to City Council for adoption with his recommendation thereon. The Capital Program ordinance for Fiscal Years 2021-2026 (the "Fiscal Year 2021-2026 Adopted Capital Program") was approved by City Council on June 25, 2020, and signed by the Mayor on June 26, 2020 (see Table 48). The Mayor submitted the proposed capital budget for Fiscal Years 2022-2027 on April 15, 2021, along with the Proposed Fiscal Year 2022 Budget and the Proposed Thirtieth Five-Year Plan.

The capital budget ordinance, authorizing in detail the capital expenditures to be made or incurred in the ensuing Fiscal Year from City Council appropriated funds, is adopted by City Council concurrently with the capital program. The capital budget must be in full conformity with that part of the capital program applicable to the Fiscal Year that it covers.

For information on the Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan, see "– Current Financial Information – Fiscal Year 2021 Adopted Budget and Twenty-Ninth Five-Year Plan" herein. For information on the Proposed Fiscal Year 2022 Budget and the Proposed Thirtieth Five-Year Plan, see "– Current Financial Information – Proposed Fiscal Year 2022 Budget and Proposed Thirtieth Five-Year Plan" herein. For information on the City's capital program, see "CITY CAPITAL PROGRAM" herein.

Budget Stabilization Reserve

In April 2011, the City adopted an amendment to the City Charter that established the "Budget Stabilization Reserve." Under the City Charter, if the projected General Fund balance for the upcoming Fiscal Year equals or exceeds three percent of General Fund appropriations for such Fiscal Year, the annual operating budget ordinance is required to provide for appropriations to a Budget Stabilization Reserve. Such reserve is to be created and maintained by the Director of Finance as a separate fund, which may not be commingled with any other funds of the City. City Council can appropriate additional

amounts to the Budget Stabilization Reserve by ordinance, no later than at the time of passage of the annual operating budget ordinance and only upon recommendation of the Mayor. Total appropriations to the Budget Stabilization Reserve are subject to a limit of five percent of General Fund appropriations. Amounts in the Budget Stabilization Reserve from the prior Fiscal Years, including any investment earnings certified by the Director of Finance, are to remain on deposit therein. The City made a deposit of $34.3 million to the Budget Stabilization Reserve, pursuant to the adopted budget for Fiscal Year 2020.

Withdrawals from the Budget Stabilization Reserve are permitted only upon (i) approval by ordinance of a transfer of appropriations from the Budget Stabilization Reserve and only for the purposes set forth in such transfer ordinance and (ii) either (1) a certification by the Director of Finance that General Fund revenues actually received by the City during the prior Fiscal Year were at least one percent less than the General Fund revenues set forth in the Mayor's estimate of receipts, or (2) a certification by the Director of Finance that such withdrawal is necessary to avoid either a material disruption in City services or to fund emergency programs necessary to protect the health, safety or welfare of City residents, and that it would be fiscally imprudent to seek emergency appropriations pursuant to the City Charter. Any such certification must be approved either by a resolution adopted by two-thirds of all of the members of City Council or an agency of the Commonwealth with responsibility for ensuring the fiscal stability of the City. For information on the withdrawal from the Budget Stabilization Reserve for Fiscal Year 2021, see "OVERVIEW – Fiscal Health of the City – Budget Stabilization Reserve."

Annual Financial Reports

The City is required by the City Charter to issue, within 120 days after the close of each Fiscal Year, a statement as of the end of the Fiscal Year showing the balances in all funds of the City, the amounts of the City's known liabilities, and such other information as is necessary to furnish a true picture of the City's financial condition (the "Annual Financial Reports"). The Annual Financial Reports, which are released on or about October 28 of each year, are intended to meet these requirements and are unaudited. As described above, the audited financial statements of the City are contained in its ACFR, which is published at a later date. The Annual Financial Reports contain financial statements for all City governmental funds and blended component units presented on the modified accrual basis. The proprietary and fiduciary funds are presented on the full accrual basis. They also contain budgetary comparison schedules for those funds that are subject to an annual budget. The financial statements of the City's discretely presented component units that are available as of the date of the Annual Financial Reports are also presented. Historically, the results for General Fund balance have not materially changed between the Annual Financial Reports and the ACFRs.

The Annual Financial Report for Fiscal Year 2020 was released on October 28, 2020. As noted herein, the Fiscal Year 2020 ACFR was filed with the MSRB on February 25, 2021, through the EMMA system. See "CITY FINANCES AND FINANCIAL PROCEDURES – Current City Disclosure Practices."

Five-Year Plans of the City

The PICA Act requires the City to annually prepare a financial plan that includes projected revenues and expenditures of the principal operating funds of the City for five Fiscal Years consisting of the current Fiscal Year and the subsequent four Fiscal Years. Each five-year plan, which must be approved by PICA, is required, among other things, to eliminate any projected deficits, balance the Fiscal Year budgets, and provide procedures to avoid fiscal emergencies. Under the PICA Act, each five-year plan is required to be submitted at least 100 days prior to the beginning of the next Fiscal Year or on such other date as PICA may approve upon the request of the City. It is the City's practice to submit its five-year plans to PICA after City Council approves, and the Mayor signs, the operating budget ordinance for

the next Fiscal Year, which is typically after the 100-day deadline. For example, on June 26, 2020, the City submitted the Twenty-Ninth Five-Year Plan to PICA, which was one day after City Council approved, and the same day the Mayor signed, the Fiscal Year 2021 Adopted Budget. PICA recommended approval of the Twenty-Ninth Five-Year Plan on July 21, 2020. For information on the Twenty-Ninth Five-Year Plan, see "– Current Financial Information – Fiscal Year 2021 Adopted Budget and Twenty-Ninth Five-Year Plan" herein.

As noted herein, the City submitted the Proposed Fiscal Year 2022 Budget to City Council on April 15, 2021, along with the Proposed Thirtieth Five-Year Plan. Such plan will be submitted to PICA after City Council's approval, and the Mayor's signing, of the Proposed Fiscal Year 2022 Budget. For more information on the submission of the Proposed Fiscal Year 2022 Budget, see "OVERVIEW – Fiscal Health of the City – COVID-19 – Fiscal Impact."

Quarterly Reporting to PICA

The PICA Act requires the City to prepare and submit quarterly reports to PICA so that PICA may determine whether the City is in compliance with the then-current five-year plan. Each quarterly report is required to describe actual or current estimates of revenues, expenditures, and cash flows compared to budgeted revenues, expenditures, and cash flows by covered funds for each month in the previous quarter and for the year-to-date period from the beginning of the then-current Fiscal Year of the City to the last day of the fiscal quarter or month, as the case may be, just ended. Each such report is required to explain any variance existing as of such last day.

Under the PICA Agreement, a "variance" is deemed to have occurred as of the end of a reporting period if (i) a net adverse change in the fund balance of a covered fund (i.e., a principal operating fund) of more than 1% of the revenues budgeted for such fund for that Fiscal Year is reasonably projected to occur, such projection to be calculated from the beginning of the Fiscal Year for the entire Fiscal Year, or (ii) the actual net cash flows of the City for a covered fund are reasonably projected to be less than 95% of the net cash flows of the City for such covered fund for that Fiscal Year originally forecast at the time of adoption of the budget, such projection to be calculated from the beginning of the Fiscal Year for the entire Fiscal Year.

PICA may not take any action with respect to the City for variances if the City: (i) provides a written explanation of the variance that PICA deems reasonable; (ii) proposes remedial action that PICA believes will restore overall compliance with the then-current five-year plan; (iii) provides information in the immediately succeeding quarterly financial report demonstrating to the reasonable satisfaction of PICA that the City is taking remedial action and otherwise complying with the then-current five-year plan; and (iv) submits monthly supplemental reports until it regains compliance with the then-current five-year plan.

A failure by the City to explain or remedy a variance would, upon certification by PICA, require the Secretary of the Budget of the Commonwealth to withhold funds due to the City from the Commonwealth or any of its agencies (including, with certain exceptions, all grants, loans, entitlements and payments payable to the City by the Commonwealth, including payment of the portion of the PICA Tax, as further described under "DEBT OF THE CITY – PICA Bonds" below, otherwise payable to the City). The City uses its Quarterly City Manager's Reports to satisfy the quarterly reporting requirement to PICA. Such reports are released within 45 days following the end of the applicable quarter and the most recent versions of such reports are available on the City's Investor Website. The most recent Quarterly City Manager's Report is the report for the period ending March 31, 2021, which was released on May 17, 2021 (the "FY 2021 Third Quarter QCMR"). The next Quarterly City Manager's Report is

the report for the period ending June 30, 2021, and it is expected to be released on or about August 15, 2021.

Summary of Operations

The following table presents the summary of operations for the General Fund for Fiscal Years 2017-2020 and budgeted amounts and current estimates for Fiscal Year 2021. For a description of the legally enacted basis on which the City's budgetary process accounts for certain transactions, see "CITY FINANCES AND FINANCIAL PROCEDURES – Budgetary Accounting Practices." "Current Estimate," as used in the tables and text below, refers (except as otherwise indicated) to the most recently revised estimates for Fiscal Year 2021, which were released by the City on May 17, 2021, as part of the FY 2021 Third Quarter QCMR, unless otherwise noted herein.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 1
General Fund
Summary of Operations (Legal Basis)
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD)[1, 2]

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021 (June 26, 2020)	Current Estimate 2021 (May 17, 2021)
Revenues						
Real Property Taxes	$587.1	$650.4	$696.6	$699.1	$684.5	$712.3
Wage and Earnings Tax	1,448.9	1,542.3	1,581.9	1,599.2	1,519.1	1,381.1
Net Profits Tax	22.3	32.3	35.8	29.2	29.9	24.7
Business Income and Receipts Tax	417.5	446.1	540.9	534.2	464.3	516.7
Sales Tax[3]	188.4	198.4	224.2	204.6	174.5	209.7
Other Taxes[4]	367.7	454.9	458.6	419.7	390.4	356.4
Philadelphia Beverage Tax[5]	39.5	77.4	76.9	69.9	67.4	63.0
Total Taxes	3,071.4	3,401.8	3,614.8	3,555.9	3,330.1	3,264.0
Locally Generated Non-Tax Revenue	309.5	320.6	349.1	365.1	357.9	347.0
Revenue from Other Governments						
Net PICA Taxes Remitted to the City[6]	409.5	454.2	493.6	495.9	470.6	462.7
Other Revenue from Other Governments[7]	307.7	323.9	311.1	362.6	297.6	375.0
Total Revenue from Other Governments	717.2	778.2	804.7	858.5	768.2	837.8
Receipts from Other City Funds	60.1	55.4	51.7	54.0	125.6[8]	149.7[8]
Total Revenue	4,158.2	4,556.1	4,820.3	4,833.6	4,581.8	4,598.5
Obligations/Appropriations						
Personal Services	1,589.0	1,690.1	1,749.8	1,874.2[9]	1,795.2	1,828.8
Purchase of Services[10]	851.4	891.1	915.5	1,016.8	948.6	1,023.3
Materials, Supplies and Equipment	94.4	102.2	113.3	125.6	117.3	140.2
Employee Benefits	1,241.0[11]	1,314.0[11]	1,371.1[11]	1,363.4[11]	1,287.2[11]	1,302.2[11]
Indemnities, Contributions, and Refunds[12]	186.6	195.2	279.8	342.5	378.7	382.3
City Debt Service[13]	140.9	148.8	159.8	159.2	185.7	185.7
Payments to Other City Funds	36.5	61.5	183.2[14]	154.8[8]	67.2	67.2
Advances & Miscellaneous Payments[15]	0.0	0.0	0.0	0.0	25.0[16]	0.0
Payment to Budget Stabilization Reserve	0.0	0.0	0.0	0.0	0.0	0.0
Total Obligations/Appropriations	4,139.8	4,402.9	4,772.4	5,036.5	4,804.9	4,929.7
Operating Surplus (Deficit) for the Year	18.4	153.2	47.9	(202.9)	(223.1)	(331.2)
Net Adjustments – Prior Year	22.5	26.3	22.0	54.9	19.5	92.2
Cumulative Fund Balance Prior Year	148.3	189.2	368.8	438.7	254.9[17]	290.7[17]
Cumulative Adjusted Year End Fund Balance (Deficit)	$189.2	$368.8	$438.7	$290.7[17]	$51.4	$51.7

(1) Sources: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021 (Adopted Budget), the Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan, as applicable. For Fiscal Year 2021 (Current Estimate), the FY 2021 Third Quarter QCMR.

(2) Figures may not sum due to rounding.

(3) For more information on the City Sales Tax, see "REVENUES OF THE CITY – Sales and Use Tax."

(4) Includes Amusement Tax, Real Property Transfer Tax, Parking Lot Tax, Smokeless Tobacco Tax and miscellaneous taxes.

(5) The Philadelphia Beverage Tax (as defined herein) taxes the distribution of certain beverages at 1.5 cents per ounce and became effective January 1, 2017.

(6) For a detailed breakdown of "Net PICA Taxes Remitted to the City," see Table 43. Such figures reflect revenues received by the City from the PICA Tax of 1.50%, the proceeds of which are remitted to PICA for payment of debt service on PICA Bonds and PICA expenses. After paying debt service and expenses, net proceeds from the tax are remitted to the City as Revenue from Other Governments. See "DEBT OF THE CITY – PICA Bonds."

(7) For a detailed breakdown of "Other Revenue from Other Governments," see Table 12. "Other Revenue from Other Governments" includes state gaming revenues.

(8) Includes $34.3 million from the Budget Stabilization Reserve.

(9) Includes $22.0 million for additional payments to the Municipal Pension Fund.

(10) Includes debt service on lease and service agreement financings.

(11) For Fiscal Year 2017, includes $19.2 million from City Sales Tax revenues for the Municipal Pension Fund. For Fiscal Year 2018, includes $24.2 million from such tax revenues for the Municipal Pension Fund. For Fiscal Year 2019, includes $52.1 million from such tax revenues for the Municipal Pension Fund. For Fiscal Year 2020, includes $42.7 million from such tax revenues for the Municipal Pension Fund. For Fiscal Year 2021 (Adopted Budget), assumes $27.3 million from such tax revenues for the Municipal Pension Fund. For Fiscal Year 2021 (Current Estimate), assumes $44.9 million from such tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."

(12) Includes contributions to the School District. See also Table 21 and the accompanying text herein.

(13) Includes debt service on General Obligation Debt (as defined herein) and, if issued and outstanding, interest on tax and revenue anticipation notes; excludes debt service on PICA Bonds and lease and service agreement financings.

(14) Includes $20.0 million for recession-related expenses.

(15) Advances & Miscellaneous Payments includes certain budgeted reserves for a given Fiscal Year. Any portion of such reserves that is not used to offset the applicable stated costs will increase the General Fund balance at the end of the given Fiscal Year, if not used by the City for other purposes.

(16) Includes $25.0 million in the Reopening and Recession Reserve.

(17) In its Fiscal Year 2021 Adopted Budget, the City projected that Fiscal Year 2020 would end with a General Fund balance of $254.9 million. In the Fiscal Year 2020 ACFR, the City reported that Fiscal Year 2020 ended with a General Fund balance of $290.7 million. Such number has been included as the "Cumulative Fund Balance Prior Year" in the FY 2021 Third Quarter QCMR.

Current Financial Information

Table 2 below shows General Fund balances for Fiscal Year 2020 and budgeted amounts and current estimates for Fiscal Year 2021.

Table 2
General Fund – Fund Balance Summary
(Amounts in Thousands of USD)[1]

	Fiscal Year 2020 Actual[2] (June 30, 2020)	Fiscal Year 2021 Adopted Budget[2] (June 26, 2020)	Fiscal Year 2021 Current Estimate[2] (May 17, 2021)
REVENUES			
Taxes	$3,555,945[3]	$3,330,098[3]	$3,263,999[3]
Locally Generated Non – Tax Revenues	365,113	357,890	347,034
Revenue from Other Governments	858,539	768,197	837,763
Revenues from Other Funds of City	53,995	125,608[4]	149,748[4]
Total Revenue	**$4,833,592**	**$4,581,793**	**$4,598,544**
OBLIGATIONS / APPROPRIATIONS			
Personal Services	$1,874,182[5]	$1,795,159	$1,828,775
Personal Services – Employee Benefits	1,363,379[6]	1,287,159[6]	1,302,161[6]
Purchase of Services[7]	1,016,807	948,562	1,023,342
Materials, Supplies, and Equipment	125,643	117,304	140,169
Contributions, Indemnities, and Taxes	342,543	378,737	382,337
Debt Service[8]	159,227	185,714	185,714
Payments to Other Funds	154,753[4]	67,216	67,216
Advances & Miscellaneous Payments[9]	0	25,000[10]	0
Payment to Budget Stabilization Reserve	0	0	0
Total Obligations / Appropriations	**$5,036,534**	**$4,804,851**	**$4,929,714**
Operating Surplus (Deficit)	**(202,942)**	**(223,058)**	**(331,170)**
OPERATIONS IN RESPECT TO PRIOR FISCAL YEARS			
Net Adjustments – Prior Years	54,934	19,500	92,202
Operating Surplus/(Deficit) & Prior Year Adj.	(148,008)	(203,558)	(238,968)
Prior Year Fund Balance	438,680	254,908[11]	290,672[11]
Year End Fund Balance	**$290,672**[11]	**$51,350**	**$51,704**

(1) Figures may not sum due to rounding.

(2) Sources: For Fiscal Year 2020, the Fiscal Year 2020 ACFR. For Fiscal Year 2021 Adopted Budget, the Fiscal Year 2021 Adopted Budget and the Twenty-Ninth Five-Year Plan, as applicable. For Fiscal Year 2021 Current Estimate, the FY 2021 Third Quarter QCMR.

(3) For Fiscal Year 2020, includes $69.9 million in revenue from the Philadelphia Beverage Tax. For Fiscal Year 2021 Adopted Budget, assumes $67.4 million in revenue from such tax. For Fiscal Year 2021 Current Estimate, assumes $63.0 million in revenue from such tax. The Philadelphia Beverage Tax taxes the distribution of certain beverages at 1.5 cents per ounce and became effective January 1, 2017.

(4) Includes $34.3 million from the Budget Stabilization Reserve.

(5) Includes $22.0 million for additional payments to the Municipal Pension Fund.

(6) For Fiscal Year 2020, includes $42.7 million from City Sales Tax revenues for the Municipal Pension Fund. For Fiscal Year 2021 (Adopted Budget), assumes $27.3 million from such tax revenues for the Municipal Pension Fund. For Fiscal Year 2021 (Current Estimate), assumes $44.9 million from such tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."

(7) Includes debt service on lease and service agreement financings.

(8) Includes debt service on General Obligation Debt (as defined herein) and, if issued and outstanding, interest on tax and revenue anticipation notes; excludes debt service on PICA Bonds and lease and service agreement financings.

(9) Advances & Miscellaneous Payments includes certain budgeted reserves for a given Fiscal Year. Any portion of such reserves that is not used to offset the applicable stated costs will increase the General Fund balance at the end of the given Fiscal Year, if not used by the City for other purposes.

(10) Includes $25.0 million in the Reopening and Recession Reserve.

(11) In its Fiscal Year 2021 Adopted Budget, the City projected that Fiscal Year 2020 would end with a General Fund balance of $254.908 million. In the Fiscal Year 2020 ACFR, the City reported that Fiscal Year 2020 ended with a General Fund balance of $290.672 million. Such number has been included as the "Prior Year Fund Balance" in the FY 2021 Third Quarter QCMR.

The following discussion of the Fiscal Year 2021 Adopted Budget, the Twenty-Ninth Five-Year Plan, the Proposed Fiscal Year 2022 Budget, the Proposed Thirtieth Five-Year Plan, and the FY 2021 Third Quarter QCMR, as applicable, is based, in part, on projections and forward-looking statements related to Fiscal Year 2021 and Fiscal Year 2022. No assurance can be given that the applicable budget estimates and forward-looking statements will be realized or that City Council will adopt the Proposed Fiscal Year 2022 Budget in the form proposed by the Mayor. The final five-year plan for Fiscal Years 2022-2026 will depend, in part, on the final adopted Fiscal Year 2022 operating budget. The accuracy of such budget estimates and forward-looking statements cannot be verified until after the close of the applicable Fiscal Year and the completion of the related audit.

Fiscal Year 2021 Adopted Budget and Twenty-Ninth Five-Year Plan. The City's proposed Fiscal Year 2021 operating budget was submitted by the Mayor to City Council on March 5, 2020, along with the City's proposed five-year plan for Fiscal Years 2021-2025. Each of those documents was revised and resubmitted on May 1, 2020 to include the City's then-current assessment of the impact of the COVID-19 pandemic on the City's financial position and operations. On June 25, 2020, City Council approved the Fiscal Year 2021 operating budget ordinance, which was signed by the Mayor on June 26, 2020 (the "Fiscal Year 2021 Adopted Budget").

On June 26, 2020, the City submitted to PICA its FY 2021-2025 Five Year Financial Plan Per Council Approved Budget (the "Twenty-Ninth Five-Year Plan"). PICA recommended approval of such plan on July 21, 2020, on the condition that the City provides monthly updates on obligations and revenues to protect against any significant deviation from projected revenues, obligations or fund balance, which could appropriately be deemed a variance by PICA and require a revision to the Twenty-Ninth Five-Year Plan in accordance with the PICA Act and the PICA Agreement. PICA staff, in recommending that PICA approve the Twenty-Ninth Five-Year Plan, noted that the revenue and expenditure projections presented in the Twenty-Ninth Five-Year Plan were [quoting from the PICA Act] "based on reasonable and appropriate assumptions and methods of estimation . . . consistently applied." The PICA staff report concluded that "[a]lthough PICA is confident that the [Twenty-Ninth Five-Year Plan] is based on reasonable and appropriate assumptions, and year end fund balances are positive throughout the life of the [Twenty-Ninth Five-Year Plan], certain factors were identified that might present risks to the [Twenty-Ninth Five-Year Plan]." The PICA report identified such factors as: (i) the length and uncertainty of the COVID-19 global pandemic; (ii) the possibility of slower than projected economic growth over the period covered by the plan; (iii) the projected growth of BIRT collections; (iv) low General Fund balance levels; and (v) increasing overtime and pension costs. The PICA staff report also highlighted certain other financial concerns that could impact the City's financial condition, including, among others (a) future labor, overtime, and employee health benefit costs; (b) funding of the now locally controlled School District; (c) speculative revenues from sources such as locally generated non-tax revenue, revenue from other governments, and revenue from other funds; and (d) the use of the Budget Stabilization Reserve in Fiscal Year 2021 and the lack of near-term plans to fund such reserve (not projected to occur until Fiscal Year 2025).

As part of the Twenty-Ninth Five-Year Plan, the City has also included certain contingency measures that may be implemented if actual revenue collections are lower than expected. Such contingency measures include (i) recognizing known underspending of funds in Fiscal Year 2020, (ii) utilizing the Reopening and Recession Reserve and the Labor Reserve, and (iii) delaying or reducing new initiatives that have not commenced, among others. If implemented, such contingency measures are expected to allow the City to achieve a balanced plan and positive annual General Fund balances in each year of the plan even if revenues are weaker than projected.

Fiscal Year 2021 Current Estimates. The current estimates for Fiscal Year 2021 are derived from information included in the FY 2021 Third Quarter QCMR, as applicable. In the FY 2021 Third Quarter QCMR, the City estimates that it will end Fiscal Year 2021 with a General Fund balance (on the legally enacted basis) of approximately $51.7 million.

Proposed Fiscal Year 2022 Budget and Proposed Thirtieth Five-Year Plan. The City's proposed Fiscal Year 2022 operating budget (the "Proposed Fiscal Year 2022 Budget") was submitted by the Mayor to City Council on April 15, 2021, along with the City's proposed five-year plan for Fiscal Years 2022-2026 (the "Proposed Thirtieth Five-Year Plan").

For Fiscal Years 2022-2026, the Proposed Thirtieth Five-Year Plan projects that the City will end such Fiscal Years with General Fund balances (on the legally enacted basis) of approximately (i) $109.3 million (Fiscal Year 2022), (ii) $152.8 million (Fiscal Year 2023), (iii) $157.0 million (Fiscal Year 2024), (iv) $143.2 million (Fiscal Year 2025), and (v) $106.8 million (Fiscal Year 2026).

For information on the current assessment of the fiscal impact of COVID-19 on the City, see "OVERVIEW – Fiscal Health of the City – COVID-19."

For more information on the City's annual budget process under the City Charter and the five-year financial plans and quarterly reporting required under the PICA Act, see "– Budget Procedure," "– Five-Year Plans of the City," and "– Quarterly Reporting to PICA," above.

REVENUES OF THE CITY

General

Prior to 1939, the City relied heavily on the real estate tax as the mainstay of its revenue system. In 1932, the General Assembly adopted an act (commonly referred to as the Sterling Act) under which the City is permitted to levy any tax that was not specifically pre-empted by the Commonwealth. Acting under the Sterling Act and other Pennsylvania legislation, the City has taken various steps over the years to broaden its sources of income, including: (i) enacting the wage, earnings, and net profits tax in 1939; (ii) introducing a sewer service charge to make the sewage treatment system self-sustaining after 1945; (iii) requiring under the City Charter that the water, sewer, and other utility systems be fully self-sustaining; (iv) enacting the Mercantile License Tax (a gross receipts tax on business done within the City) in 1952, which was replaced as of the commencement of Fiscal Year 1985 by the Business Privilege Tax (renamed the Business Income and Receipts Tax in May 2012), and (v) enacting the City Sales Tax (as defined herein) for City general revenue purposes effective beginning in Fiscal Year 1992.

Major Revenue Sources

The City currently derives its revenues primarily from various taxes, non-tax revenues, and receipts from other governments. See Table 3 for General Fund tax revenues for Fiscal Years 2017-2020 and budgeted amounts and current estimates for Fiscal Year 2021. The following discussion of the City's revenues does not take into account revenues in the non-debt related funds. The tax rates for Fiscal Years 2017 through 2020 are contained in the Fiscal Year 2020 ACFR.

Table 3 provides a detailed breakdown of the "Total Taxes" line from Table 1 above. Table 3 does not include "Revenues from Other Governments," which consists of "Net PICA Taxes Remitted to the City" and "Other Revenue from Other Governments." "Net PICA Taxes Remitted to the City" is set forth in Table 1 and a detailed breakdown of such revenues is shown in Table 43. "Other Revenue from

Other Governments" is set forth in Table 1 and a detailed breakdown of such revenues is shown in Table 12.

Table 3
General Fund Tax Revenues
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD) [1], [2], [3]

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021 (June 26, 2020)	Current Estimate 2021 (May 17, 2021)
Real Property Taxes						
Current	$542.9	$611.3	$658.2	$671.8	$647.5	$694.1
Prior	44.2	39.1	38.4	27.3	36.8	18.2
Total	$587.1	$650.4	$696.6	$699.1	$684.3	$712.3
Wage and Earnings Tax[4]						
Current	$1,440.6	$1,536.9	$1,577.5	$1,591.9	$1,513.7	$1,500.7
Prior	8.3	5.4	4.4	7.3	5.4	(119.6)
Total	$1,448.9	$1,542.3	$1,581.9	$1,599.2	$1,519.1	$1,381.1
Business Taxes						
Business Income and Receipts Tax Current & Prior	$417.5	$446.1	$540.9	$534.2	$464.3	$516.7
Net Profits Tax						
Current	$25.3	$27.6	$29.5	$22.5	$25.2	$20.0
Prior	(3.0)	4.7	6.4	6.7	4.7	4.7
Subtotal Net Profits Tax	$22.3	$32.3	$35.8	$29.2	$29.9	$24.7
Total Business and Net Profits Taxes	$439.8	$478.4	$576.7	$563.4	$494.2	$541.5
Other Taxes						
Sales and Use Tax[5]	$188.4	$198.4	$224.2	$204.6	$174.5	$209.7
Amusement Tax	20.6	23.0	26.4	18.4	16.6	2.3
Real Property Transfer Tax	247.3	331.5	328.4	319.8	292.8	299.3
Parking Taxes	96.1	96.5	99.3	77.3	76.7	51.5
Other Taxes	3.8	4.0	4.4	4.3	4.4	3.3
Subtotal Other Taxes	$556.1	$653.3	$682.7	$624.4	$565.1	$566.1
Philadelphia Beverage Tax[6]	39.5	77.4	76.9	69.9	67.4	63.0
TOTAL TAXES	**$3,071.4**	**$3,401.8**	**$3,614.8**	**$3,555.9**	**$3,330.1**	**$3,264.0**

(1) Sources: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021 (Adopted Budget), the Fiscal Year 2021 Adopted Budget. For Fiscal Year 2021 (Current Estimate), the FY 2021 Third Quarter QCMR.
(2) See Table 7 in the Fiscal Year 2020 ACFR for tax rates.
(3) Figures may not sum due to rounding.
(4) Does not include the PICA Tax of 1.50%, the proceeds of which are remitted to PICA for payment of debt service on PICA Bonds and PICA expenses. After paying debt service and expenses, net proceeds from the tax are remitted to the City as Revenue from Other Governments. See "DEBT OF THE CITY – PICA Bonds" for a description of the PICA Tax.
(5) For more information on the City Sales Tax, see "– Sales and Use Tax" and Table 11.
(6) The Philadelphia Beverage Tax taxes the distribution of certain beverages at 1.5 cents per ounce and became effective January 1, 2017.

Wage, Earnings, and Net Profits Taxes

The largest tax revenue source (comprising more than 45% of all tax revenues in Fiscal Year 2020) is the wage, earnings, and net profits tax (collectively, the "Wage, Earnings, and Net Profits Tax"). The Wage and Earnings Tax is collected from all employees working within City limits, and all City residents regardless of work location. The Net Profits Tax is collected on the net profits from the operation of a trade, business, profession, enterprise or other activity conducted by individuals, partnerships, associations or estates and trusts within the City limits. The following table sets forth the resident and non-resident Wage, Earnings, and Net Profits Tax rates for Fiscal Years 2017-2021, the annual Wage, Earnings, and Net Profits Tax receipts in Fiscal Years 2017-2020, and the budgeted amount and current estimate of such receipts for Fiscal Year 2021.

Table 4
Summary of Wage, Earnings, and Net Profits Tax Rates and Receipts
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)[1]

Fiscal Year	Resident Wage, Earnings and Net Profits Tax Rates[2]	Non-Resident Wage, Earnings and Net Profits Tax Rates	Annual Wage, Earnings and Net Profits Tax Receipts (including PICA Tax) (Amounts in Millions of USD)[3]
2017	3.9004%	3.4741%	$1,940.4 (Actual)
2018	3.8907%	3.4654%	$2,071.5 (Actual)
2019	3.8809%	3.4567%	$2,146.4 (Actual)
2020	3.8712%	3.4481%	$2,162.8 (Actual)
2021	3.8712%	3.5019%	$2,056.8 (Adopted Budget) $1,905.8 (Current Estimate)

(1) See Table 7 in the Fiscal Year 2020 ACFR for tax rates for Fiscal Years 2017-2020. See the Proposed Thirtieth Five-Year Plan for tax rates for Fiscal Year 2021.
(2) Includes PICA Tax. See "DEBT OF THE CITY – PICA Bonds" for a description of the PICA Tax.
(3) Sources: For Fiscal Years 2017-2020, the City's ACFRs for the City's annual wage, earnings, and net profits tax receipts and the City's Quarterly City Manager's Reports for gross PICA Tax (see first column in Table 43). For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR.

Commonwealth funding from gaming revenues is mandated by statute to be used to reduce the resident and nonresident Wage, Earnings, and Net Profits Tax rate. Gaming revenues have averaged approximately $86.3 million in Fiscal Years 2017-2020. For Fiscal Year 2021, the budgeted amount and current estimate of gaming revenues is $86.3 million.

See "– Other Tax Rate Changes" herein, for information regarding wage and earnings tax rate reductions under the Proposed Thirtieth Five-Year Plan.

In a 2015 decision by the Supreme Court of the United States (*Comptroller of the Treasury of Maryland v. Wynne*, 135 S. Ct. 1787 (2015)), a state's failure to provide certain credits against its personal income tax was held to have violated the dormant Commerce Clause of the United States Constitution. Such personal income tax was applied to income earned outside of the state of residency, and residents were not given a credit for income taxes paid to the state where such income was earned, resulting, in the circumstances presented, in taxing income earned interstate at a rate higher than income earned intrastate. The City provides a credit to resident taxpayers against their respective wage, earnings, and net profits tax liabilities for similar taxes paid to another locality, but does not provide a credit for similar taxes paid to another state. Taxpayers have challenged the City's refusal to grant a credit for taxes paid to other states and have appealed to the Commonwealth Court on such matters. To date, the City's position has been upheld by both the Tax Review Board and the Court of Common Pleas. The City estimates the cost of current appeals to be approximately $10 million.

Business Income and Receipts Tax

Pursuant to The First Class City Business Tax Reform Act of 1984, City Council imposed a business tax measured by gross receipts, net income or the combination of the two. The same year, City Council by ordinance repealed the Mercantile License Tax and the General Business Tax and imposed the Business Privilege Tax. As of May 1, 2012, the Business Privilege Tax was renamed the Business Income and Receipts Tax (or BIRT). The BIRT allows for particular allocations and tax computations for regulated industries, public utilities, manufacturers, wholesalers, and retailers. Rental activities are usually considered to be business activities. Every estate or trust (whether the fiduciary is an individual or a corporation) must file a BIRT return if the estate or trust is engaged in any business or activity for profit within the City. There are also credit programs where meeting the requirement of the program allows for a credit against the BIRT. All persons subject to both the BIRT and the Net Profits Tax are entitled to apply a credit of 60% of the net income portion of their BIRT liability against what is due on the Net Profits Tax to the maximum of the Net Profits Tax liability for that tax year.

In November 2011, legislation was enacted to halt a previously enacted program of reducing the gross receipts portion of the BIRT and to commence reductions in the net income portion of the BIRT. The following table provides a summary of BIRT rates for tax years 2012-2024. Future BIRT rates remain subject to amendment by action of City Council and the Mayor.

Table 5
Summary of Business Income and Receipts Tax Rates

Tax Year	Gross Receipts	Net Income
2012	1.415 mills	6.45%
2013	1.415 mills	6.45%
2014	1.415 mills	6.43%
2015	1.415 mills	6.41%
2016	1.415 mills	6.39%
2017	1.415 mills	6.35%
2018	1.415 mills	6.30%
2019	1.415 mills	6.25%
2020	1.415 mills	6.20%
2021	1.415 mills	6.20%
2022	1.415 mills	6.20%
2023	1.415 mills	6.20%
2024	1.415 mills	6.15%

The 2011 legislation incorporated several changes intended to help small and medium sized businesses and lower costs associated with starting a new business in order to stimulate new business formation and increase employment in the City, including the following: (i) the Commercial Activity License fee for all businesses was eliminated in 2014; (ii) business taxes for the first two years of operations for all new businesses with at least three employees in their first year and six employees in their second year were eliminated beginning in 2012; and (iii) across the board exclusions on the gross receipts portion of the BIRT were provided for all businesses phased in over a three-year period beginning in 2014 and eventually excluding the first $100,000 of gross receipts, along with proportional reductions in the net income portion of the BIRT. The legislation also provided for implementation of single sales factor apportionment in 2015, which enables businesses to pay BIRT based solely on sales in the City, rather than on property or payroll.

By Fiscal Year 2024, the net income (profits) portion of the business tax is projected to reach 6.15%. In addition, legislation was enacted, effective for tax year 2019, to (i) eliminate the requirement for new businesses to make an estimated business tax payment when filing a return for their first tax year

of business operations and (ii) allow such estimated payments in the second year to be made in quarterly installments.

Real Property Taxes

Assessment and Collection. Taxes are levied on the assessed value of all taxable residential and commercial real property located within the City's boundaries for the City and for the School District (each, a "Real Estate Tax") as assessed by the Office of Property Assessment ("OPA") and collected by the Department of Revenue for both the City and the School District. Real Estate Taxes are authorized by Commonwealth law with the millage split between the City Real Estate Tax and the School District Real Estate Tax changing over the years. Currently, the City Real Estate Tax is equal to 45% of the total authorized millage and the School District Real Estate Tax is equal to 55% of the total authorized millage. Real Estate Taxes are levied on a calendar year basis. By separate ordinances, City Council authorizes and levies the rate of the City Real Estate Tax and authorizes the rate of the School District Real Estate Tax. The Board of Education levies all School District taxes, including the School District Real Estate Tax. Bills are sent in December for the following year and payments are due March 31.

For tax year 2014, all properties in Philadelphia were reassessed at their actual market value by OPA under the Actual Value Initiative ("AVI") in order to replace outdated values and inequities within the system. Under AVI, the total assessed value of all properties more accurately reflected the market in the City and the total assessment grew substantially. As a result, the Mayor and City Council significantly reduced the Real Estate Tax rate to ensure that, in its first year, the reassessment resulted in the collection of approximately the same amount of Real Estate Taxes as the prior year (tax year 2013).

In order to mitigate any hardship that could be created by the substantial increases in assessed value, the ordinance imposing the new Real Estate Tax rates included a Homestead Exemption of $30,000 for all primary residential owner-occupants, which was subsequently increased to $40,000 of assessed value in Fiscal Year 2019. In the adopted budget for Fiscal Year 2020, the Homestead Exemption was increased from $40,000 to $45,000 of assessed value. In addition to the Homestead Exemption, the City has also instituted several other property tax relief programs for taxpayers.

In December 2019, City Council also passed legislation to modify the existing 10-year property tax abatement for new construction of residential properties. Such program has been adjusted to exempt 100% of the improvement value in the first year with graduated 10% annual reductions in the exemption percentage each subsequent year. No changes were made to the existing property tax abatement programs for commercial buildings or substantial rehabilitation of residential structures. Due to the COVID-19 pandemic, this legislation was amended to delay its effective date and will apply to exemption applications beginning January 1, 2022.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

The Real Estate Tax rates for tax years 2016-2020 are set forth in Table 6 below:

Table 6
Real Estate Tax Rates and Allocations

Tax Year	City	School District	Total
2016	0.6317%	0.7681%	1.3998%
2017	0.6317%	0.7681%	1.3998%
2018	0.6317%	0.7681%	1.3998%
2019	0.6317%	0.7681%	1.3998%
2020	0.6317%	0.7681%	1.3998%

For Fiscal Year 2020, the actual amount of Real Estate Tax revenue for the City was $671.8 million (excluding delinquent collections). For Fiscal Year 2021, the budgeted amount of Real Estate Tax revenue for the City is $647.5 million (excluding delinquent collections). For Fiscal Year 2021, the current estimate of Real Estate Tax revenue for the City is $694.1 million (excluding delinquent collections). See Table 3 above. For information on the process for appealing a property tax assessment, see the text before and after Table 7 below.

Table 7 shows certified property values for tax years 2021 and 2022.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 7
Certified Property Values for Tax Years 2021 and 2022

Tax Year 2021

Category	Market Value[1]	Taxable Assessed Value	Exempt Assessed Value	Homestead	# of Properties
Single Family Residential	$79,889,823,850	$63,697,212,563	$6,844,885,434	$9,347,725,853	457,751
Multi-Family Residential (Apartments)[2]	30,080,351,000	21,561,546,044	8,201,312,244	317,492,712	42,331
Non-Residential[3]	55,443,377,866	28,471,130,722	26,926,216,544	46,030,600	36,763
Vacant Land	4,541,666,800	2,154,649,414	2,384,398,986	2,618,400	44,611
Total	**$169,955,219,516**	**$115,884,538,743**	**$44,356,813,208**	**$9,713,867,565**	**581,456**

[1] Assessment data current as of December 31, 2019.
[2] Apartments were split from the previous hotels and apartments category and are now reflected as multi-family residential.
[3] Includes commercial, industrial, store with dwelling, hotels, and motels.

Tax Year 2022

Category	Market Value[1]	Taxable Assessed Value	Exempt Assessed Value	Homestead	# of Properties
Single Family Residential	$80,355,038,591	$63,566,942,535	$7,305,795,823	$9,482,300,233	461,956
Multi-Family Residential (Apartments)[2]	27,909,714,448	19,414,879,091	8,176,867,345	317,968,012	42,451
Non-Residential[3]	57,837,117,231	30,205,808,358	27,586,486,873	44,822,000	32,908
Vacant Land	4,942,431,920	2,137,721,190	2,798,497,830	6,212,900	44,233
Total	**$171,044,302,190**	**$115,325,351,174**	**$45,867,647,871**	**$9,851,303,145**	**581,548**

[1] Assessment data current as of March 31, 2021.
[2] Apartments were split from the previous hotels and apartments category and are now reflected as multi-family residential.
[3] Includes commercial, industrial, store with dwelling, hotels, and motels.

Assessment and Appeals. OPA is responsible for property assessments, while the Board of Revision of Taxes ("BRT"), an independent, seven-member board appointed by the Board of Judges of the Philadelphia Common Pleas Court, is the property assessment appeals board.

OPA certifies the market values by March 31 of the prior year (i.e., for tax year 2021, OPA certified the market values on March 31, 2020). Taxpayers base their appeals on the certified market values, and therefore, the assessed values are adjusted as the appeals are finalized. In some circumstances and for certain tax years, taxpayers are permitted, during the appeals process, to pay their property tax bills based on the certified market value of their properties from the prior assessment. For budgetary purposes, OPA provides updated assessment data to the Office of the Director of Finance by February of each year, from which Real Estate Tax projections are made. Certified values can vary substantially from the amounts included in such data and, as such, Real Estate Tax collections can also vary from the amounts included in the City's proposed annual operating budget.

Another factor that can cause Real Estate Tax projections to vary is the review of abatements whose terms expire each year. Such process typically occurs in April or May of each year with OPA manually calculating expiring abatements. OPA staff is in the process of converting this manual calculation system to an automated process. However, such conversion has not been completed at this time. For Tax Year 2022, the manual calculation process will be utilized and is still ongoing. As such, the City's total taxable assessed value estimates are likely to be higher once the abatement review process is completed and any necessary revisions are made.

Under AVI, OPA set up a new process called a first level review ("FLR"), where a taxpayer could request an administrative review of its assessment notice prior to launching a formal appeal with the BRT. The BRT has the authority, following a formal appeal, to either increase, decrease, or leave unchanged the property assessment. Some appeals are not resolved before bills are sent to taxpayers. As such, some property assessments are modified after taxpayers receive bills.

For tax year 2018 (as certified on March 31, 2017), OPA changed the assessed values of over 45,000 parcels (which included properties of all categories, including commercial and residential parcels) throughout the City as part of its reassessment. In September 2017, the owners of multiple commercial properties in the City filed a lawsuit against the City in the Court of Common Pleas. The plaintiffs in such matter alleged, based on a July 2017 Pennsylvania Supreme Court decision, that OPA violated the uniformity clause of the Pennsylvania Constitution in reassessing commercial properties and not residential properties for tax year 2018. The plaintiffs sought declaratory relief, a permanent injunction, and an order directing OPA to recertify their properties at tax year 2017 values. Subsequently, twelve additional cases were filed, asserting virtually the same claims. All of the cases, which encompass approximately 600 plaintiffs and approximately 700 properties, were consolidated for management purposes. In a ruling handed down on July 18, 2019, the Common Pleas Court found that plaintiffs were owed refunds for overpayments equal to the difference between the plaintiffs' Real Estate Taxes for tax year 2017 and tax year 2018. The total amount of these refunds against the City and the School District may be up to approximately $60 million. The City and School District appealed the ruling on October 22, 2019. As noted below, City-wide reassessments were conducted for tax years 2019 and 2020. As such, the City does not expect the Real Estate Taxes for such tax years to be impacted by the final judgment on this matter. For more general information on judgments and settlements on claims against the City, see "LITIGATION."

For tax year 2020 (as certified on March 31, 2019), OPA revised the assessed values of over 503,000 parcels throughout the City as part of its reassessment. As of June 3, 2021, OPA has received

11,728 FLRs, with approximately 20% that have yet to be decided. As of June 3, 2021, BRT has received 7,629 appeals, with approximately 3,003 that have yet to be decided.

For tax year 2021 (as certified on March 31, 2020), OPA had planned to conduct a second year of trending for assessments, but initial results showed certain anomalies that would result in assessed values that were not acceptable to the City's standards. As such, the City carried forward the assessed values from tax year 2020, with the exception of properties that had new construction, expiring abatements, renovations, subdivisions, consolidations, or errors in prior year assessments. As of June 3, 2021, OPA has received 678 FLRs, with approximately 10% that have yet to be decided. As of June 3, 2021, BRT has received 2,279 appeals, with approximately 2,275 that have yet to be decided.

For tax year 2022 (as certified on March 31, 2021), the City did not conduct a citywide reassessment due to operational delays regarding COVID-19. As such, the City carried forward the assessed values from tax year 2021, with the exception of properties that had new construction, expiring abatements, renovations, subdivisions, consolidations, or errors in prior year assessments. As described below in "Review of Assessment Methodology," OPA will continue implementing procedures to ensure greater accuracy in future assessments.

Review of Assessment Methodology. OPA continues to review its assessment methodology in order to improve the transparency and accuracy of its assessment activities and the quality of assessments. Such efforts include (i) implementing the new computer-assisted mass appraisal system program, (ii) contracting with an outside vendor to improve the quality of OPA's data, (iii) strengthening OPA's modeling team, and (iv) providing more training to the sales validation team, which was created in 2019, to help ensure improved data.

Real Estate Tax Collection Initiatives. Since 2010, the City has pursued a number of initiatives to improve the collection of Real Estate Taxes, including (i) prompt correspondence with taxpayers with overdue Real Estate Taxes, (ii) using outside collection firms to collect overdue Real Estate Taxes, (iii) sequestration of delinquent properties occupied by commercial tenants, and (iv) tax lien sales.

Real Estate Tax Tables. See Table 8 below for data with respect to Real Estate Taxes levied from 2016 to 2020 and collected by the City from January 1, 2016 to June 30, 2020. See Table 9 for the assessed property values of the City's principal taxable assessed parcels in 2022. See Table 10 for the 2022 market and assessed values of the ten highest valued taxable real properties in the City, as well as the amounts and duration of Real Estate Tax abatements with respect to such properties.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 8
City of Philadelphia
Real Property Taxes Levied and Collected
For the Calendar Years 2016-2020
(Amounts in Millions of USD)[1], [2]

Calendar Year	Taxes Levied Based on Original Assessment[3]	Taxes Levied Based on Adjusted Assessment[4]	Collections in the Calendar Year of Levy[6]	Percentage Collected in the Calendar Year of Levy	Collections in Subsequent Years[5], [6]	Total Collections to Date: All Years[6]	Percentage Collected to Date: All Years[6]
2016	$569.9	$548.8	$525.2	95.7%	$21.1	$546.3	99.5%
2017	$580.5	$564.7	$542.9	96.1%	$19.5	$562.4	99.6%
2018	$658.1	$628.4	$604.4	96.2%	$14.9	$619.3	98.6%
2019	$709.4	$686.1	$660.4	96.3%	$9.4	$669.8	97.6%
2020	$722.7	$709.2	$644.2	N/A	N/A	$644.2	N/A

(1) Source: Fiscal Year 2020 ACFR.

(2) Real Estate Taxes are levied by the City and the School District. While this table reflects City General Fund Real Estate Tax revenues exclusively, the School District Real Estate Tax collection rates are the same.

(3) Taxes are levied on a calendar year basis. They are due on March 31.

(4) Adjustments include assessment appeals, a 1% discount for payment in full by February 28, the senior citizen tax discount, and the tax increment financing return of tax paid. For more information on the reassessment appeal process, see "– Real Property Taxes – Assessment and Appeals."

(5) Includes payments from capitalization charges. This capitalization occurs one time, after the end of the first year of the levy, on any unpaid balances.

(6) For calendar year 2020, the data shown reflects collections through June 30, 2020. For earlier calendar years, the data shown reflects collections through December 31 of the respective year.

Table 9
Principal Taxable Assessed Parcels – 2022
(Amounts in Millions of USD)[1]

	2022	
Taxpayer	**Assessment[2]**	**Percentage of Total Assessments**
EQC Nine Penn Center Prop	$400.0	0.32%
Kim Sub Cira Square LP	370.6	0.30
Liberty Property Phila[3]	359.0	0.29
NG 1500 Market St LLC	349.9	0.28
Phila Liberty Place LP	327.0	0.26
PRU 1901 Market LLC	278.0	0.22
Commerce Square Partners	266.4	0.21
Phila Plaza Phaze II	252.7	0.20
Philadelphia Market Street	250.3	0.20
Brandywine Operating	236.4	0.19
Total	**$3,090.1**	**2.46%**
Total Taxable Assessments[4]	**$125,598.4**	

Source: City of Philadelphia, Office of Property Assessment.

(1) Figures may not sum due to rounding.

(2) Assessment Values rounded to the nearest $100,000 and only include the largest assessed property for each taxpayer, additional properties owned by the same taxpayer are not included.

(3) Acquired by Prologis, Inc. in the first quarter of calendar year 2020.

(4) Total 2022 Taxable Assessment as of March 31, 2021.

Table 10
Ten Largest Certified Market and Assessment Values of Tax-Abated Properties
Certified Values for 2022
(Amounts in Millions of USD)[1], [2]

Location	2022 Certified Market Value	Total Assessment	Total Taxable Assessment	Total Exempt Assessment	Exempt Through Tax Year
900 Packer Ave	$435.0	$435.0	$35.0	$400.0	2030
1001-99 N Delaware Ave	$307.4	$307.4	$49.7	$257.7	2026
1800 Arch St	$278.8	$278.8	$27.9	$250.9	2027
2201 Park Towne Pl	$276.9	$276.9	$206.1	$70.8	2027
401 N Broad St	$245.8	$245.8	$223.1	$22.7	2026
1801 John F Kennedy	$185.0	$185.0	$123.7	$61.3	2024
170 S Independence W Mall	$162.1	$162.1	$141.2	20.9	2028
1601 Vine St	$154.1	$154.1	$13.8	$140.3	2028
2402-14 Market St	$148.0	$148.0	$32.3	115.7	2028
450 N 18th St	$146.3	$146.3	$14.6	$131.7	2027

Source: City of Philadelphia, Office of Property Assessment.

(1) Figures may not sum due to rounding.
(2) Certified Values as of 03/31/2021.

Sales and Use Tax

Pursuant to the authorization granted by the Commonwealth under the PICA Act, the City adopted a 1% sales and use tax (the "City Sales Tax") for City general revenue purposes effective beginning in Fiscal Year 1992. It is imposed in addition to, and on the same basis as, the Commonwealth's sales and use tax. Vendors are required to pay City Sales Taxes to the Commonwealth Department of Revenue together with the Commonwealth sales and use tax. The State Treasurer deposits the collections of City Sales Taxes in a special fund and disburses the collections, including any investment income earned thereon, less administrative fees of the Commonwealth Department of Revenue, to the City on a monthly basis.

The City's budgets for Fiscal Years 2010-2014 provided for an increase in the City Sales Tax rate to 2%, as authorized by the Commonwealth effective October 8, 2009, through June 30, 2014. In July 2013, the Commonwealth authorized the implementation of a new, permanent 1% increase in the City Sales Tax rate effective July 1, 2014, which was adopted by the City on June 12, 2014 and became effective on July 1, 2014. Under the reauthorized City Sales Tax, the first $120 million collected from such additional 1% is distributed to the School District. For Fiscal Years 2015-2018, the General Assembly authorized the City to use the next $15 million of City Sales Tax revenues from such additional 1% collected in such Fiscal Years for the payment of debt service on obligations issued by the City for the benefit of the School District. Following such debt service payments, that remaining portion of the City Sales Tax revenues from such additional 1% distributed to the City is required to be used exclusively in accordance with Act 205 (as defined herein) and deposited to the Municipal Pension Fund.

The following table sets forth the City Sales Taxes collected in Fiscal Years 2017-2020 and the budgeted amount and current estimate for Fiscal Year 2021.

Table 11
Summary of City Sales Tax Collections
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD)[1]

Fiscal Year	City Sales Tax Collections
2017 (Actual)	$188.4[2]
2018 (Actual)	$198.4[2]
2019 (Actual)	$224.2[3]
2020 (Actual)	$204.6[3]
2021 (Adopted Budget)	$174.5[3]
2021 (Current Estimate)	$209.7[3]

[1] Sources: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR, as applicable.

[2] Net collections estimated to be distributed to the City (i) from the first 1% City Sales Tax, (ii) following the distribution of $120 million of revenues from the second 1% City Sales Tax to the School District, and (iii) following the payment of debt service on obligations issued by the City for the benefit of the School District, as described above.

[3] Net collections estimated to be distributed to the City from the first 1% City Sales Tax and following the distribution of $120 million of revenues from the second 1% City Sales Tax to the School District, as described above.

Real Property Transfer Tax

Real Property Transfer Taxes are collected in connection with the sale of real property in the City. The Real Property Transfer Tax rate in the City is 4.278%, 3.278% of which is imposed by the City and 1% of which is charged by the Commonwealth. In the Fiscal Year 2020 ACFR, the City reported that it collected approximately $319.8 million in revenues from the Real Property Transfer Tax in Fiscal Year 2020.

In the Proposed Thirtieth Five-Year Plan (and for Fiscal Year 2021, the FY 2021 Third Quarter QCMR), the City currently estimates for Fiscal Years 2021-2026 that it will collect approximately (i) $299.3 million (Fiscal Year 2021), (ii) $294.9 million (Fiscal Year 2022), (iii) $295.8 million (Fiscal Year 2023), (iv) $304.9 million (Fiscal Year 2024), (v) $315.3 million (Fiscal Year 2025), and (vi) $326.1 million (Fiscal Year 2026) in revenues from the Real Property Transfer Tax in such Fiscal Years.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Other Taxes

The City also collects parking taxes, an amusement tax, a valet parking tax, an outdoor advertising tax, a smokeless tobacco tax, the Philadelphia Beverage Tax (see below), and other miscellaneous taxes.

In June 2016, City Council passed the Philadelphia Beverage Tax (Chapter 19-4100 of the Philadelphia Code) (the "Philadelphia Beverage Tax"). On October 31, 2016, the Department of Revenue adopted regulations for the Philadelphia Beverage Tax. The Philadelphia Beverage Tax taxes the distribution of certain beverages at 1.5 cents per ounce and became effective January 1, 2017.

The Philadelphia Beverage Tax is deposited into the General Fund, and with the additional revenue, the City has budgeted for pre-Kindergarten, community schools, and debt service for improvements to parks, playgrounds, recreation centers, and libraries, as contemplated by the City's Rebuild program. In the Fiscal Year 2020 ACFR, the City reported that it collected approximately $69.9 million in revenues from the Philadelphia Beverage Tax for Fiscal Year 2020.

In the Proposed Thirtieth Five-Year Plan (and for Fiscal Year 2021, the FY 2021 Third Quarter QCMR), the City currently estimates that for Fiscal Years 2021-2026 that it will collect approximately (i) $63.0 million (Fiscal Year 2021), (ii) $72.5 million (Fiscal Year 2022), (iii) $76.9 million (Fiscal Year 2023), (iv) $76.3 million (Fiscal Year 2024), (v) $75.7 million (Fiscal Year 2025), and (vi) $75.2 million (Fiscal Year 2026) in revenues from the Philadelphia Beverage Tax in such Fiscal Years.

Collection Initiatives

The City is pursuing a multifaceted strategy designed to improve collections of various taxes while decreasing delinquencies. Key compliance strategies continue to include revocation of commercial licenses and sequestration, among others.

In addition to compliance efforts, the City has completed two projects – one to implement technology solutions for its cashiering and payments processing systems and another to develop an integrated data warehouse and case management system. These initiatives improve operational efficiencies and drive compliance efforts by providing tools previously unavailable to the City.

As a result of economic disruptions from the COVID-19 pandemic, the City's regular collection strategies have been modified. At this time, the Department of Revenue continues to send bills and notifications and pursue outreach efforts. Some legal action, enforcement projects, and placements with collection agencies are slowly resuming as economic conditions improve. The City continues to evaluate and pursue long-time delinquent accounts and place liens on properties for property-based taxes and fees. Along with existing flexible payment agreements for property tax and water fees, the City also launched new payment agreements for all business taxes in an effort to bring businesses affected by COVID-19 closures into compliance. For information on collection initiatives related to Real Estate Taxes, see "– Real Property Taxes – Real Estate Tax Collection Initiatives."

Other Locally Generated Non-Tax Revenues

These revenues include license fees and permit sales, traffic fines and parking meter receipts, court related fees, stadium revenues, interest earnings and other miscellaneous charges and revenues of the City.

Revenue from Other Governments

The following table presents revenues received from other governmental jurisdictions for Fiscal Years 2017-2020, the budgeted amount and current estimate for Fiscal Year 2021, and the percentage such revenues represent in the General Fund. The table does not reflect substantial amounts of revenues from other governments received by the Grants Revenue Fund, Community Development Fund, and other operating and capital funds of the City.

Table 12
Revenue from Other Governmental Jurisdictions
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Dollar Amounts in Millions of USD)[1], [2], [3]

Fiscal Year	Commonwealth[4]	Federal Government	Other Governments[5]	Total	Percentage of General Fund Revenues
2017 (Actual)	$214.7	$37.6	$55.4	$307.7	7.4%
2018 (Actual)	$224.5	$31.3	$68.2	$323.9	7.1%
2019 (Actual)	$214.8	$21.9	$74.4	$311.1	6.5%
2020 (Actual)	$215.1	$85.5[6]	$62.0	$362.6	7.5%
2021 (Adopted Budget)	$222.8	$23.0	$51.8	$297.6	6.5%
2021 (Current Estimate)	-	-	-	$375.0	8.2%

(1) Sources: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR, as applicable. A breakdown of revenues from the Commonwealth, the federal government, and other governments is not available in the FY 2021 Third Quarter QCMR.
(2) Figures may not sum due to rounding.
(3) Does not include the PICA Tax.
(4) Such revenues are for health, welfare, court, and various other specified purposes.
(5) Such revenues primarily consist of payments from PGW, parking fines and fees from PPA, and other authorized adjustments.
(6) Includes CARES Act funds to reimburse for COVID-19-related costs.

Revenues from City-Owned Systems

In addition to taxes, the City realizes revenues through the operation of various City-owned systems, such as the Water and Wastewater Systems and PGW. The City has issued revenue bonds with respect to the Water and Wastewater Systems and PGW to be paid solely from and secured by a pledge of the respective revenues of these systems. The revenues of the Water and Wastewater Systems and PGW are not legally available for payment of other obligations of the City until, on an annual basis, all revenue bond debt service requirements and covenants relating to those bonds have been satisfied, and then only in a limited amount and upon satisfaction of certain other conditions.

Water Fund. The revenues of the Water Department are required to be segregated from other funds of the City. Under the City's Restated General Water and Wastewater Revenue Bond Ordinance of 1989 (the "Water Ordinance"), an annual transfer may be made from the Water Fund to the City's General Fund in an amount not to exceed the lesser of (i) all Net Reserve Earnings and (ii) $4,994,000. "Net Reserve Earnings" means the amount of interest earnings during the Fiscal Year on amounts in the Debt Reserve Account and Subordinated Bond Fund, each as defined in the Water Ordinance.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

The following table shows the amounts transferred from the Water Fund to the General Fund for Fiscal Years 2017-2020 and the budgeted amount and current estimate for Fiscal Year 2021.

Table 13
Transfers from Water Fund to General Fund (Excess Interest on Sinking Fund Reserve)
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)[(1), (2)]

Fiscal Year	Amount Transferred
2017 (Actual)	$1,866,455
2018 (Actual)	$1,627,838
2019 (Actual)	$4,094,824
2020 (Actual)	$4,994,000
2021 (Adopted Budget and Current Estimate)	$1,500,000

(1) Sources: For Fiscal Years 2017-2020, the City's Supplemental Report of Revenues & Obligations for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the Proposed Fiscal Year 2022 Budget.
(2) The Water Department's budgeted amount for such transfers is typically greater than the figure included in the City's operating budget.

The City also budgets for certain transfers from the Water Fund to the General Fund related to services performed and costs borne by the General Fund. For Fiscal Year 2020, the amount of such transfers was approximately $4.4 million. For Fiscal Year 2021, the budgeted amount of such transfers is approximately $9.0 million, while the current estimate is $7.8 million.

PGW. The revenues of PGW are required to be segregated from other funds of the City. Payments for debt service on PGW bonds are made directly by PGW. PGW is required to make an annual payment of $18 million to the General Fund. The Fiscal Year 2021 Adopted Budget includes such $18 million annual payment to the General Fund from PGW for such Fiscal Year. For more information on PGW, see "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Government Services."

Philadelphia Parking Authority Revenues

The PPA was established by City ordinance pursuant to the Pennsylvania Parking Authority Law (P.L. 458, No. 208 (June 5, 1947)). Various statutes, ordinances, and contracts authorize the PPA to plan, design, acquire, hold, construct, improve, maintain and operate, own or lease land and facilities for parking in the City, including such facilities at PHL, and to administer the City's on-street parking program.

The PPA owns and operates five parking garages and a number of surface parking lots at PHL. The land on which these garages and surface lots are located is leased from the City, acting through the Division of Aviation, pursuant to a lease expiring in 2030 (the "Lease Agreement"). The Lease Agreement provides for payment of rent to the City, which is equal to gross receipts less operating expenses, debt service on the PPA's bonds issued to finance improvements at PHL, and reimbursement to the PPA for capital expenditures and prior year operating deficits relating to its operations at PHL, if any.

The PPA's administrative costs are a component of its operating expenses. In 1999, at the request of the FAA, the PPA and the City entered into a letter agreement (the "FAA Letter Agreement"), which contained a formula for calculating the PPA's administrative costs and capped such costs at 28% of the PPA's total administrative costs for all of its cost centers. The PPA owns and/or operates parking facilities at a number of locations in the City in addition to those at PHL. The PPA parking facilities at PHL are cost centers for purposes of the FAA Letter Agreement.

On-street parking revenues are administered and collected, on behalf of the City, by the PPA. Pursuant to Pennsylvania law, the PPA transmits these revenues to the City, net of any actual expenses incurred in the administration of the on-street parking system in accordance with the PPA's approved budget. If such net revenues exceed a designated threshold, then any excess above that threshold is to be transmitted to the School District. The current threshold is $35 million and includes a mandatory escalator to take into account increases in revenues.

The following table presents payments received by the City from PPA for on-street parking for Fiscal Years 2017-2020 and the budgeted amount and current estimate for Fiscal Year 2021.

Table 14
PPA On-Street Parking Payments to the City
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)[1], [2]
(Amounts in Millions of USD)

Fiscal Year	Payments to the City
2017 (Actual)	$39.9
2018 (Actual)	$41.3
2019 (Actual)	$39.1
2020 (Actual)	$32.6
2021 (Adopted Budget)	$31.2
2021 (Current Estimate)	$25.2

(1) Sources: For Fiscal Years 2017-2020, the City's Supplemental Report of Revenues & Obligations for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR, as applicable.
(2) Table 14 shows City revenues; none of such payments is transferred to the School District.

Other Tax Rate Changes

The Proposed Thirtieth Five-Year Plan includes changes to both the resident and non-resident wage and earnings tax. The following table details rates under the Proposed Thirtieth Five-Year Plan.

Table 15
Changes in Wage and Earnings Tax Rates[1]

	Proposed Thirtieth Five-Year Plan	
Fiscal Year	Resident Wage and Earnings Tax Rates[2]	Non-Resident Wage and Earnings Tax Rates
2021	3.8712%	3.5019%
2022	3.8398%	3.4201%
2023	3.8360%	3.4167%
2024	3.8322%	3.4133%
2025	3.8283%	3.4099%
2026	3.8245%	3.4065%

(1) Source: The Proposed Thirtieth Five-Year Plan.
(2) Includes PICA Tax. See "DEBT OF THE CITY – PICA Bonds" for a description of the PICA Tax.

Under the Proposed Thirtieth Five-Year Plan, receipts from the Wage and Earnings Tax are estimated to decline in Fiscal Year 2021 by 12.59% and then grow year over year at a rate of (i) 8.11% in Fiscal Year 2022, (ii) 8.52% in Fiscal Year 2023, (iii) 4.36% in Fiscal Year 2024, (iv) 4.68% in Fiscal Year 2025, and (v) 4.45% in Fiscal Year 2026.

EXPENDITURES OF THE CITY

Three of the principal City expenditures are for personal services (personnel) (including pensions and other employee benefits), purchase of services (including payments to SEPTA), and debt service. The expenditures for personal services (personnel) and purchase of services are addressed below under this caption; debt service is addressed below under "DEBT OF THE CITY."

Personal Services (Personnel)

As of June 30, 2020, the City employed 28,339 full-time employees, representing approximately 4.7% of employees in Philadelphia (approximately 608,945 employees, according to preliminary, non-seasonally adjusted data from the Bureau of Labor Statistics). Of the 28,339 full-time employees, the salaries of 22,422 were paid from the General Fund. Additional sources of funding for full-time City employees include the Grants Revenue Fund, the Water Fund, and the Aviation Fund, as well as grants and contributions from other governments. Activities funded through such grants and contributions are not undertaken if funding is not received. The following table sets forth the number of filled, full-time positions of the City as of the dates indicated.

Table 16
Filled, Full-Time Positions[1], [2]

	June 30, 2016	June 30, 2017	June 30, 2018	June 30, 2019	June 30, 2020
General Fund					
Police	6,942	6,986	7,172	7,241	7,175
Fire	2,316	2,281	2,511	2,530	2,628
Courts	1,839	1,856	1,867	1,842	1,825
Prisons	2,289	2,277	2,177	2,130	1,975
Streets	1,676	1,702	1,738	1,736	1,925
Public Health	653	687	711	752	739
Human Services[3]	449	385	517	396	437
All Other	5,263	5,436	5,533	5,583	5,718
Total – General Fund	21,427	21,610	22,226	22,210	22,422
Other Funds	5,615	5,849	5,641	5,873	5,917
Total – All Funds	27,042	27,459	27,867	28,083	28,339

(1) Source: Table P-1 in the City's Quarterly City Manager's Reports.
(2) Table 16 does not include seasonal or temporary employees.
(3) Positions have been transferred to the Grants Revenue Fund. Non-reimbursed expenditures will be transferred to the General Fund during the fiscal year.

Overview of City Employees

The wages and benefits of City employees vary not only by position, but also by whether the employees are represented by a union and, if so, which union. Employee wages and benefits may also be impacted by whether the employee is subject to the civil service system or exempt from those rules. Thus, City employees may be broken down into three major categories for purposes of understanding how their wages and benefits are determined: (i) employees who are not subject to the civil service system ("exempt employees"); (ii) employees who fall under the civil service system but are not represented by a union ("non-represented employees"); and (iii) employees who are subject to the civil service system and are represented by a union ("union employees").

As of January 31, 2021, the City had over 23,000 unionized employees, representing approximately 80% of the City's employees. Such employees were represented by the City's four

municipal unions: (i) Fraternal Order of Police ("FOP") Lodge No. 5; (ii) International Association of Fire Fighters ("IAFF") Local 22; (iii) American Federation of State, County and Municipal Employees District Council 33 ("AFSCME DC 33"); and (iv) American Federation of State, County and Municipal Employees District Council 47 ("AFSCME DC 47"). The foregoing unions were previously covered by bargaining agreements through June 30, 2020. In light of the COVID-19 global pandemic, the City and all of its unions reached one-year agreements to extend contract terms through June 30, 2021, as described in more detail in Table 18 below.

On March 29, 2020, the City and FOP Lodge No. 5 (Police Department) reached a one-year extension agreement, which resulted in a 2.5% wage increase, a one-time lump sum bonus for members, and a lump sum payment to the retiree health fund. The cost of the bonus was funded by a one-month City contribution holiday to the health fund. This contract resulted in a projected aggregate cost to the City of approximately $19.11 million during Fiscal Years 2020 and 2021.

On March 29, 2020, the City reached a one-year agreement with the FOP Lodge No. 5 (Philadelphia Sheriff's Office and Register of Wills), reflecting annual wage increases of 2.0% for Register of Wills employees and 2.25% for Sheriff's Office employees. The contract resulted in a projected aggregate cost to the City of approximately $729,198 during Fiscal Years 2020 and 2021.

On April 7, 2020, the City and AFSCME DC 47 Locals 2186, 2187, and 810 reached one-year agreements, reflecting a 2.0% wage increase for employees and a one-time lump sum bonus for members. The cost of the bonus will be funded by a City contribution holiday to the health and welfare fund. The agreement was expected to result in a projected aggregate cost to the City of approximately $3.83 million during Fiscal Years 2020 and 2021.

On April 16, 2020, the City and IAFF Local 22 reached a one-year extension agreement, which resulted in a 2.5% wage increase and a lump sum payment to the retiree health fund. The contract was expected to result in a projected aggregate cost to the City of approximately $8.30 million during Fiscal Years 2020 and 2021.

On May 4, 2020, the City and AFSCME DC 33 reached a one-year extension agreement, which resulted in a 2.0% wage increase and a one-time lump sum bonus for members. The contract was expected to result in a projected aggregate cost to the City of approximately $4.83 million during Fiscal Years 2020 and 2021.

On May 6, 2020, the City and AFSCME DC 33 Local 159 reached a one-year extension agreement, which resulted in a 2.25% wage increase and a one-time lump sum bonus for members. The contract was expected to result in a projected aggregate cost to the City of approximately $2.76 million during Fiscal Years 2020 and 2021.

AFSCME DC 33 and AFSCME DC 33 Local 159 share a common health fund. The cost of the bonuses for AFSCME DC 33 and AFSCME DC 33 Local 159 (as described in the two preceding paragraphs) have been partially offset by reduced monthly contributions to the health fund. As of May 2021, such reduced monthly contributions have been paused and the City is currently making full contributions to the health fund. It is not known at this time when the reduced monthly contributions will resume. Separately, in May 2021, the City provided the health fund for AFSCME DC 33 and AFSCME DC 33 Local 159 with a one-time million lump sum payment of $10 million.

The costs of the agreements discussed above have been included in the City's five-year plans, as applicable. See "DISCUSSION OF FINANCIAL OPERATIONS – Current Financial Information" herein).

For more information on the current status of the interest arbitration awards that have been issued for, and contract settlements reached with, the City's major labor organizations, as well as changes that have been made for non-represented employees, see Table 18.

Collective bargaining with respect to the wages, hours and other terms and conditions of employment of union employees, other than uniformed employees of the Police Department and the Fire Department, is governed by the Public Employee Relations Act (Pa. P.L. 563, No. 195 (1970)) ("PERA"). PERA requires the City and the unions to negotiate in good faith to attempt to reach agreement on new contract terms and, if an impasse exists after such negotiations, to mediate through the Commonwealth Bureau of Mediation. Once the mediation procedures have been satisfied, and if no collective bargaining agreement has been reached, most employees covered by PERA are permitted to strike. Certain employees, however, including employees of the Sheriff's Office and the Register of Wills represented by the FOP, corrections officers represented by AFSCME DC 33, and employees of the First Judicial District represented by AFSCME DC 47, are not permitted to strike under PERA. These employees must submit any impasse to binding interest arbitration once the mediation procedures have been satisfied. PERA permits parties at an impasse, which are not required to submit to binding interest arbitration, to do so voluntarily. Provisions of an interest arbitration award issued under PERA that require legislative action are considered advisory only and the legislative body is permitted to meet, consider, and reject those provisions.

Uniformed employees of the Police Department and the Fire Department bargain under the Policemen and Firemen Collective Bargaining Act (Pa. P.L. 237, No. 111 (1968)) ("Act 111"), which provides for final and binding interest arbitration to resolve collective bargaining impasses and prohibits these employees from striking. Interest arbitration under Act 111 operates similarly to interest arbitration under PERA, but City Council is not permitted to reject the portions of an interest arbitration award that require legislative action. To the contrary, City Council is required to pass any legislation necessary to implement the award unless doing so would violate state or federal law. Thus, the arbitration panel has significant, although not limitless, power to issue an award on mandatory subjects of bargaining. As with interest arbitration under PERA, the arbitration panel cannot issue an award on a matter that is one of inherent managerial policy. In addition to the grounds available to challenge a PERA interest arbitration award on appeal, the PICA Act requires an Act 111 interest arbitration panel to, among other things, give substantial weight to the City's five-year plan and ability to pay for the cost of the award without negatively impacting services, and gives the City the right to appeal the award to the Court of Common Pleas if it believes the panel has failed to meet these responsibilities. If the arbitration panel fails to do so or, among other things, if it awards wages or benefits that exceed what is assumed in the most-recent five-year plan without substantial evidence in the record demonstrating that the City can afford these increases without adversely impacting service levels, the Court of Common Pleas is required to vacate the arbitration award and remand it to the arbitration panel.

Overview of Employee Benefits

The City provides various pension, life insurance, and health benefits for its employees. The benefits offered depend on the employee's union status and bargaining unit, if applicable. General Fund employee benefit expenditures for Fiscal Years 2017 through 2021 are shown in the following table.

Table 17
General Fund Employee Benefit Expenditures
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD)[1]

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021	Current Estimate 2021
Pension Costs[2]	$665.2[5]	$742.2[6]	$752.5[7]	$759.5[8]	$650.2[9]	$665.2[10]
Health						
Payments under City-administered plan	83.8	81.6	77.7	78.6	92.0	92.0
Payments under union-administered plans	345.3	336.6	379.3	365.1	367.3	367.3
Total Health	429.1	418.2	457.0	443.7	459.3	459.3
Federal Insurance Contributions Act (FICA) Taxes[3]	75.1	80.4	81.8	80.1	84.3	84.3
Other[4]	71.5	72.9	79.8	80.1	93.4	93.4
Total	$1,241.0	$1,314.0	$1,371.1	$1,363.4	$1,287.2	$1,302.2

(1) Sources: The City's five-year financial plans, the City's Quarterly City Manager's Reports, and other City records. "Payments under City-administered plan" and "Payments under union-administered plans" were provided by the City, Department of Human Resources and the Office of Budget and Program Evaluation. Figures may not sum due to rounding.
(2) Includes debt service on Pension Bonds (as defined herein) and the Commonwealth contributions to the Municipal Pension Fund. See Tables 29 and 30.
(3) Includes payments of social security and Medicare taxes.
(4) Includes payments for unemployment compensation, employee disability, group life, group legal, tool allowance, and flex cash payments.
(5) Includes $19.2 million from City Sales Tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."
(6) Includes $24.2 million from City Sales Tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."
(7) Includes $52.1 million from City Sales Tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."
(8) Includes $42.7 million from City Sales Tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."
(9) Assumes $27.3 million from City Sales Tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."
(10) Assumes $44.9 million from City Sales Tax revenues for the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."

Each of the City's four municipal unions sponsors its own health plan that provides medical, prescription, dental and optical benefits to participating employees and eligible retirees through trusts on which the City has varying degrees of minority representation. Exempt and non-represented employees, along with represented employees of the Register of Wills and employees represented by AFSCME DC 33 who have chosen not to become members of the union's healthcare plan, receive health benefits through a plan sponsored and administered by the City. Each of the plans provides different benefits determined by the plan sponsor or through collective bargaining. To provide health care coverage, the City pays a negotiated monthly premium for employees covered by the union contract for AFSCME DC 33 and is self-insured for all other eligible employees. Aside from AFSCME DC 33, the City is responsible for the actual health care cost that is invoiced to the City's unions by their respective vendors. The actual cost can be a combination of self-insured claim expenses, premiums, ancillary services, and administrative expenses. In addition, employees who satisfy certain eligibility criteria receive five years of health benefits after their retirement. See "OTHER POST-EMPLOYMENT BENEFITS" below. Such benefits are determined and administered by the plan in which the employee participated at the time of his or her retirement. Other employee benefits, including life insurance and paid leave, are similarly determined by the respective collective bargaining agreements, as well as City policies and Civil Service Regulations. Employees also participate in the Municipal Pension Plan. See "PENSION SYSTEM" below.

Overview of Current Labor Situation

Table 18 summarizes the current status of the contract settlements reached with the City's major labor organizations, as well as changes that have been made for non-represented employees. It also provides a brief summary of pension reforms that have occurred since 2016, as part of previous labor contract settlements. The following table does not include exempt employees. Such category of employees were subject to pay reductions in Fiscal Year 2021.

Table 18
Status of Arbitration Awards and Labor Contract Settlements

Organization	Authorized Number of Full-Time Citywide Employees Represented[1]	Status of Arbitration Award or Contract Settlement	Wage Increases	Pension Reforms[2]
FOP Lodge No. 5 (Police Department)	6,391	One-year contract extension effective July 1, 2020 through June 30, 2021	• 2.5% pay increase effective May 4, 2020	• Current employees in Plan 87 or Plan 10 will pay an additional .92% of salary effective 7/1/17, increasing by an additional .92% of salary effective 7/1/18 (total increase of 1.84%). These contributions are on top of the current 5% or 6% contribution rates in effect, varies by plan membership • Employees hired on or after 7/1/17 will be required to pay an additional 2.5% of salary
FOP Lodge No. 5 (Sheriff's Office and Register of Wills)	365	One-year contract extension effective July 1, 2020 through June 30, 2021	Sheriff's Office employees: • 2.25% increase effective May 4, 2020 Register of Wills employees: • 2.0% increase effective May 4, 2020	• Tiered contribution system for current employees under which employees who have higher salaries pay a higher percent of their salaries as contributions to the pension fund • Mandatory stacked-hybrid plan for new hires under which employees receive a defined benefit pension for their first $65,000 of earnings and a defined contribution pension for earnings above $65,000 • Plan 10 is closed to new enrollment for members of Lodge 5 • DROP (as defined below) interest rate decreases from 4.5% to the rate on the one-year treasury effective January 1 of each year for participants not currently enrolled or eligible to enroll
IAFF Local 22	2,669	One-year contract extension effective July 1, 2020 through June 30, 2021	• 2.5% pay increase effective May 4, 2020	• Current employees in Plan 87 or Plan 10 will pay an additional .92% of salary effective 7/1/17, increasing by an additional .92% of salary effective 7/1/18 (total increase of 1.84%). These contributions are on top of the current 5% or 6% contribution rates in effect; varies by plan membership • Employees hired on or after 7/1/17 will be required to pay an additional 2.5% of salary
AFSCME DC 33	8,092	One-year contract term effective July 1, 2020 through June 30, 2021	• 2.0% pay increase effective May 4, 2020	• Tiered contribution system for current employees under which employees who have higher salaries pay a higher percent of their salaries as contributions to the pension fund • Mandatory stacked-hybrid plan for new hires under which employees receive a defined benefit pension for their first $65,000 of earnings and a defined contribution pension for earnings above $65,000 • Plan 10 is closed to new enrollment for members of DC33 • DROP interest rate decreases from 4.5% to the rate on the one year treasury effective January 1 of each year for participants not currently enrolled or eligible to enroll

[1] From data provided by the Mayor's Office of Labor Relations on January 31, 2021.
[2] "Plan 87," "Plan 10," and "Plan 16" referenced in this column are described in Table 19.

Organization	Authorized Number of Full-Time Citywide Employees Represented[1]	Status of Arbitration Award or Contract Settlement	Wage Increases	Pension Reforms[2]
AFSCME DC 33, Local 159 Correctional Officers	1,797	One-year contract effective July 1, 2020 through June 30, 2021	• 2.25% pay increase effective May 4, 2020	• Tiered contribution system for current employees under which employees who have higher salaries pay a higher percent of their salaries as contributions to the pension fund • Mandatory stacked-hybrid plan for new hires under which employees receive a defined benefit pension for their first $65,000 of earnings and a defined contribution pension for earnings above $65,000 • Plan 10 is closed to new enrollment for members of DC33 • DROP interest rate decreases from 4.5% to the rate on the one year treasury effective January 1 of each year for participants not currently enrolled or eligible to enroll
AFSCME DC 47	3,724	One-year contract extension effective July 1, 2020 through June 30, 2021	• 2.0% pay increase effective May 1, 2020	• Tiered contribution system for current employees under which employees who have higher salaries pay a higher percent of their salaries as contributions to the pension fund (effective January 1, 2019) • Mandatory stacked-hybrid plan for new hires under which employees receive a defined benefit pension for their first $65,000 of earnings and a defined contribution pension for earnings above $65,000 (effective January 1, 2019) • Plan 10 is closed to new enrollment for members of DC47 (effective January 1, 2019)
AFSCME DC 47 Local 810 Court Employees	480	One-year contract extension effective July 1, 2020 through June 30, 2021	• 2.0% pay increase effective May 1, 2020	• Tiered contribution system for current employees under which employees who have higher salaries pay a higher percent of their salaries as contribution to the pension fund (effective January 1, 2019) • Mandatory stacked-hybrid plan for new hires under which employees receive a defined benefit pension for their first $65,000 of earnings and a defined contribution pension for earnings above $65,000 (effective January 1, 2019) • Plan 10 is closed to new enrollment for members of DC47 (effective January 1, 2019)
Non-Represented Employees	1,157	Changes for non-represented employees	• 2.0% pay increase effective May 1, 2020	• Tiered contribution system for current employees under which employees who have higher salaries pay a higher percent of their salaries as contribution to the pension fund (effective January 1, 2019) • Mandatory stacked-hybrid plan for new hires under which employees receive a defined benefit pension for their first $65,000 of earnings and a defined contribution pension for earnings above $65,000 (effective January 1, 2019) • Previous 2011 reforms to DROP program remain in place; interest rate was decreased from 4.5% to the rate on the one year treasury effective January 1 of each year for participants not currently enrolled or eligible to enroll and eligibility age remains increased by two years

[1] From data provided by the Mayor's Office of Labor Relations on January 31, 2021.
[2] "Plan 87," "Plan 10," and "Plan 16" referenced in this column are described in Table 19.

Certain features of the 1987 Plan ("Plan 87"), the 2010 Plan ("Plan 10"), and the 2016 Plan ("Plan 16") are summarized below. Plan 87 is solely a defined benefit plan. Plan 10 and Plan 16 are "hybrid" plans that include both defined benefit and defined contribution components. A more comprehensive summary of each plan is included as Appendix D of the July 1, 2020 Valuation (as defined herein). See "PENSION SYSTEM" below.

Table 19
Summary of Key Aspects of Plan 87, Plan 10, and Plan 16

Plan 87	Normal Retirement Eligibility	Average Final Compensation ("AFC")	Defined Benefit – Retirement Benefits Multiplier
Municipal (Plan Y)	Age 60 and 10 years of credited service[1]	Average of three highest calendar or anniversary years	• (2.2% x AFC x years of service up to 10 years) plus (2.0% x AFC x numbers of years in excess of 10 years), subject to a maximum of 100% of AFC
Police and Fire	Age 50 and 10 years of credited service[1]	Average of two highest calendar or anniversary years	• (2.2% x AFC x years of service up to 20 years) plus (2.0% x AFC x numbers of years in excess of 20 years), subject to a maximum of 100% of AFC
Elected Official (Plan L)	Age 55 and 10 years of credited service[2]	Average of three highest calendar or anniversary years	• 3.5% x AFC x years of service, subject to a maximum of 100% of AFC

Plan 10	Normal Retirement Eligibility	Average Final Compensation ("AFC")	Defined Benefit – Retirement Benefits Multiplier
Municipal	Age 60 and 10 years of credited service	Average of five highest calendar or anniversary years	• 1.25% x AFC x years of service up to 20 years
Police and Fire[3]	Age 50 and 10 years of credited service	Average of five highest calendar or anniversary years	• 1.75% x AFC x years of service up to 20 years - **Defined Contribution** • The City matches employee contributions at a 50% rate, with the total City match not to exceed 1.5% of compensation for each year. • After five years of credited service, the full amount in the account is distributed to the employee when he or she separates from City service. • The right to the portion of the account attributable to City contributions does not vest until the completion of five years of credited service.

Plan 16	Normal Retirement Eligibility	Average Final Compensation ("AFC")	Defined Benefit – Retirement Benefits Multiplier
Municipal	Age 60 and 10 years of credited service	Lesser of (i) AFC under Plan Y (of Plan 87) (which is the average of three highest calendar or anniversary years) or (ii) $65,000	• (2.2% x AFC x years of service up to 10 years) plus (2.0% x AFC x numbers of years in excess of 10 years), subject to a maximum of 100% of AFC - **Defined Contribution** • Employees may voluntarily participate in the defined contribution portion; employee contributions vest immediately. • For employees with annual salaries above the cap, the City matches employee contributions at a 50% rate, with the total City match not to exceed 1.5% of compensation for each year (only if employee is contributing); the City's matching contributions vest after five years of credited service. • The maximum annual employee contribution is $19,500, excluding the City's matching contributions.

[1] Five years of credited service for those who make additional contributions. See "PENSION SYSTEM – Pension System; Pension Board – Membership."
[2] The lesser of two full terms or eight years of credited service for those elected officials who make additional contributions. See "PENSION SYSTEM – Pension System; Pension Board – Membership."
[3] Under Plan 10 (Police and Fire), pension contributions freeze after 20 years. At such time and for each subsequent year, the employee's pension payments remain fixed and the employee may no longer make pension contributions.

Purchase of Services

The following table shows the City's major purchase of services, which represents one of the major classes of expenditures from the General Fund. Table 20 shows contracted costs of the City for Fiscal Years 2017-2020 and the budgeted amounts and current estimates for Fiscal Year 2021.

Table 20
Purchase of Services in the General Fund
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD)[1], [7]

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021	Current Estimate 2021
Human Services[2]	$75.7	$76.3	$82.8	$88.6	$129.3	$130.8
Public Health	70.7	72.7	72.9	96.1	90.5	93.4
Public Property[3]	158.5	157.4	163.9	176.9	166.2	167.1
Streets[4]	46.2	49.2	53.5	54.4	59.5	69.6
First Judicial District	12.1	13.5	10.3	11.1	8.5	8.5
Licenses & Inspections	12.0	11.6	13.5	12.6	13.5	13.5
Homeless Services[5]	38.0	39.2	47.3	50.2	36.0	37.0
Prisons	105.3	102.2	92.5	101.0	88.4	95.6
All Other[6]	332.9	369.0	378.8	425.9	357.2	407.8
Total	**$851.4**	**$891.1**	**$915.5**	**$1,016.8**	**$948.6**	**$1,023.3**

(1) For Fiscal Years 2017-2020, the City's Supplemental Report of Revenues & Obligations for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and City records.
(2) Includes payments for care of dependent and delinquent children.
(3) Includes payments for SEPTA, space rentals, and utilities.
(4) Includes solid waste disposal costs.
(5) Includes homeless shelter and boarding home payments.
(6) Includes the Convention Center subsidy, payments for vehicle leasing, and debt service on lease and service agreement financings, among other things.
(7) Figures may not sum due to rounding.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

City Payments to School District

The following table presents the City's payments to the School District from the General Fund for Fiscal Years 2017-2020 and the budgeted amount and current estimate for Fiscal Year 2021.

Table 21
City Payments to School District
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD)[1]

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021	Current Estimate 2021
City Payments to School District	$104.3	$104.3	$180.9	$227.1	$252.6	$252.6

[1] Sources: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR, as applicable.

Beginning with the City's adopted budget for Fiscal Year 2016, the City implemented a $25 million property tax increase and a $10 million parking tax increase to benefit the School District. The figures in Table 21 reflect such increases.

For more discussion of the School District, see "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Local Government Agencies – *Mayoral-Appointed or Nominated Agencies* – The School District," above. For a discussion of changes in the funding provided by the City to the School District, see "REVENUES OF THE CITY – Sales and Use Tax." For a discussion of the transition to AVI and how such transition affects funding for the School District, see "REVENUES OF THE CITY – Real Property Taxes."

City Payments to SEPTA

SEPTA operates a public transportation system within the City and Bucks, Chester, Delaware, and Montgomery counties. SEPTA's operating budget is supported by federal, Commonwealth, and local subsidies, including payments from the City. The following table presents the City's payments to SEPTA from the General Fund for Fiscal Years 2017-2020 and the budgeted amount and current estimate for Fiscal Year 2021.

Table 22
City Payments to SEPTA
Fiscal Years 2017-2020 (Actual) and 2021 (Adopted Budget and Current Estimate)
(Amounts in Millions of USD)[1]

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Adopted Budget 2021	Current Estimate 2021
City Payment to SEPTA	$79.7	$81.9	$84.6	$86.3	$84.6	$84.6

[1] Sources: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR, as applicable.

The City budgets operating subsidies each Fiscal Year to match the estimated operating subsidies of the Commonwealth under Act 89. The state operating subsidy is funded through the Pennsylvania Public Transportation Trust Fund as created by Act 44 of 2007, amended by Act 89 of 2013. The local match requirement is calculated to match state operating subsidies. In addition, local matching funds must be appropriated each Fiscal Year in which state funds are received in order for SEPTA to receive the full allocation of state funds. The Proposed Thirtieth Five-Year Plan projects annual operating subsidy payments to SEPTA from the City will increase to $104.5 million by Fiscal Year 2026.

City Payments to Convention Center Authority

In connection with the financing of the expansion to the Pennsylvania Convention Center and the refinancing of debt for the original Pennsylvania Convention Center construction, the Commonwealth, the City, and the Convention Center Authority entered into an operating agreement in 2010 (the "Convention Center Operating Agreement"). The Convention Center Operating Agreement provides for the operation of the Convention Center by the Convention Center Authority and includes an annual subsidy of $15,000,000 from the City to the Convention Center Authority in each Fiscal Year through Fiscal Year 2040.

As authorized by ordinance, the City has agreed to pay to the Convention Center Authority on a monthly basis a certain percentage of hotel room taxes and hospitality promotion taxes collected during the term of the Convention Center Operating Agreement. The remaining percentages of such taxes are paid to the City's tourism and marketing agencies. The General Fund does not retain any portion of the proceeds of the hotel room rental tax or the hospitality promotion tax.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

PENSION SYSTEM

The amounts and percentages set forth under this heading relating to the City's pension system, including, for example, actuarial liabilities and funded ratios, are based upon numerous demographic and economic assumptions, including the investment return rates, inflation rates, salary increase rates, post-retirement mortality, active member mortality, rates of retirement, etc. The reader is cautioned to review and carefully consider the assumptions set forth in the documents that are cited as the sources for the information in this section. In addition, the reader is cautioned that such sources and the underlying assumptions are relevant as of their respective dates, and are subject to changes, any of which could cause a significant change in the unfunded actuarial liability.

Each year, an actuarial valuation report of the City's pension system is published in late March or early April. Such report includes, as of July 1 of a given Fiscal Year, an examination of the current financial condition of the pension system, key historical trends, and the projected financial outlook of the pension system, among other information. In addition, an annual report on the audited financial statements of the City's pension system is published in late December or early January. The information included under the caption "PENSION SYSTEM" is derived from the actuarial valuation reports or the annual reports on the audited financial statements of the City's pension system, unless otherwise noted herein.

Overview

The City faces significant ongoing financial challenges in meeting its pension obligations, including an unfunded actuarial liability ("UAL") of approximately $5.8 billion as of July 1, 2020. In Fiscal Year 2020, the City's contribution to the Municipal Pension Fund was approximately $768.7 million, of which the General Fund's share (including the Commonwealth contribution) was $627.1 million. See Table 29. The City's aggregate pension costs (consisting of payments to the Municipal Pension Fund and debt service on the Pension Bonds (as defined herein) have increased from approximately 11.19% of the City's General Fund budget to approximately 13.01% of the General Fund budget from Fiscal Years 2011 to 2020). See Table 31. The funded ratio of the Municipal Pension Plan was 76.7% on July 1, 1999 (at which time the UAL was approximately $1.4 billion), and was 51.9% on July 1, 2020.

The decline in the Municipal Pension System's funded status and the net growth of the unfunded liability is the product of a number of factors, including the following:

- The declines in the equity markets in 2000-2001 and in 2008-2009. See Table 24 below.

- A reduction in the assumed rate of return, from 8.75% in 2009 to 7.50% effective July 1, 2020 (i.e., Fiscal Year 2021). Although the gradual reductions in the assumed rates of return reflected in Table 24 are considered a prudent response to experience studies, by reducing the assumed return in the measurement of the actuarial liabilities, it serves to increase the UAL from what it otherwise would have been.

- Adopting more conservative mortality rates in response to experience studies performed by the Municipal Pension Plan actuary.

- The Municipal Pension Plan is a mature system, which means the number of members making contributions to the Municipal Pension Plan is less than the number of retirees and other beneficiaries receiving payments from the Municipal Pension Plan, by approximately 8,200. As a result, the aggregate of member contributions and the City's contributions are less than the

amount of benefits and refunds payable in most years, with the result that in such years investment income must be relied upon to meet such difference before such income can contribute to an increase in the Municipal Pension System's assets growth. See Table 26 (which reflects that in Fiscal Years 2018-2020, however, the aggregate of member contributions and the City's contribution exceeded the amount of benefits and refunds payable in such Fiscal Years).

- The determination by the City, commencing in Fiscal Year 2005, to fund in accordance with the "minimum municipal obligation" ("MMO"), as permitted and as defined by Pennsylvania law, in lieu of the City Funding Policy (as defined herein), resulted in the City contributing less than otherwise would have been contributed. See below, "– Funding Requirements; Funding Standards."

- Revising, in Fiscal Year 2009, in accordance with Pennsylvania law, the period over which the UAL was being amortized, such that the UAL as of July 1, 2009 was "fresh started" to be amortized over a 30-year period ending June 30, 2039. In addition, changes were made to the periods over which actuarial gains and losses and assumption changes were amortized under Pennsylvania law. See "– UAL and its Calculation – Actuarial Valuations."

The City has taken a number of steps to address the funding of the Municipal Pension Plan, including the following:

- Reducing the assumed rate of return on a gradual and consistent basis, which results in the City making larger annual contributions. See Table 24 below.

- Adopting more conservative mortality rates in response to experience studies performed by the Municipal Pension Plan actuary reducing the potential for future experience losses due to mortality experience.

- In conjunction with the revisions to the amortization periods that occurred in Fiscal Year 2009, changing from a level percent of pay amortization schedule to a level dollar amortization schedule. This results in producing payments that ensure that a portion of principal on the UAL is paid each year.

- Funding consistently an amount greater than the MMO (subject to the authorized deferrals for Fiscal Year 2011 described below). See Table 29.

- Entering into collective bargaining agreements by which additional contributions are being made (and will be made) by certain current (and future) members and by which benefits will be capped for certain future members of the Municipal Pension Plan. See Table 18.

- Securing additional funding, including funds required to be deposited by the City to the Municipal Pension Fund from its share of sales tax revenue.

- Adopting a Revenue Recognition Policy (defined and described below), by which sources of anticipated additional revenue that will be received by the System are specifically dedicated toward paying down the unfunded pension liability and not to reducing future costs of the City. The additional revenue is tracked and accumulated in a notional account, which is then deducted from the Actuarial Asset Value to determine the contribution under the Revenue Recognition Policy. As a result, such contribution is higher than the MMO.

- Changing the investment strategy to increase the use of passive investment vehicles, which has resulted in increased returns and decreased fees.

As a result of (i) recent pension reforms adopting a defined benefit plan capped at $65,000 for new municipal employees, along with increased employee contributions, (ii) a portion of the sales tax dedicated to paying down the UAL, and (iii) the various other reforms mentioned above, the funded ratio of the Municipal Pension Plan increased from 44.8% in Fiscal Year 2016 to 51.9% in Fiscal Year 2020. During Fiscal Years 2018, 2019, and 2020, the UAL decreased by 0.7%, 3.2% and 2.3%, respectively. The Municipal Pension Fund has also had a positive cash flow for three consecutive Fiscal Years (see "– Rates of Return; Asset Values; Changes in Plan Net Position – Changes in Plan Net Position" and Table 26).

This "Overview" is intended to highlight certain of the principal factors that led to the pension system's current funded status, and significant steps the City and the Pension Board (as defined herein) have taken to address the underfunding. The reader is cautioned to review with care the more detailed information presented below under this caption, "PENSION SYSTEM."

Pension System; Pension Board

The City maintains two defined-benefit pension programs: (i) the Municipal Pension Plan, a single employer plan, which provides benefits to police officers, firefighters, non-uniformed employees, and non-represented appointed and elected officials, and (ii) the PGW Pension Plan, a single employer plan, which provides benefits to PGW employees. The Municipal Pension Plan is administered through 20 separate benefit structures, the funding for which is accounted for on a consolidated basis by the Municipal Pension Fund. Such benefit structures establish for their respective members different contribution levels, retirement ages, etc., but all assets are available to pay benefits to all members of the Municipal Pension Plan. The Municipal Pension Plan is a mature plan, initially established in 1915, with net investment assets that totaled approximately $5.8 billion as of June 30, 2020. The Municipal Pension Plan has approximately 28,900 members who make contributions to the plan, and provides benefits to approximately 37,100 retirees and other beneficiaries.

PGW is principally a gas distribution facility owned by the City. For accounting presentation purposes, PGW is a component unit of the City and follows accounting rules as they apply to proprietary fund-type activities. The PGW Pension Plan is funded with contributions by PGW to such plan, which are treated as an operating expense of PGW, and such plan is not otherwise addressed under the caption "PENSION SYSTEM." See "PGW PENSION PLAN" below.

Contributions are made by the City to the Municipal Pension Fund from: (i) the City's General Fund; (ii) funds that are received by the City from the Commonwealth for deposit into the Municipal Pension Fund; and (iii) various City inter-fund transfers, representing amounts contributed, or reimbursed, to the City's General Fund for pensions from the City's Water Fund, Aviation Fund, and certain other City funds or agencies. See Table 29. In addition to such City (employer) contribution, the other principal additions to the Municipal Pension Fund are: (i) member (employee) contributions; (ii) interest and dividend income; (iii) net appreciation in asset values; and (iv) net realized gains on the sale of investments. See Table 26 below. An additional source of funding is that portion of the 1% Sales Tax rate increase that is required under Pennsylvania law to be deposited to the Municipal Pension Fund. See "REVENUES OF THE CITY – Sales and Use Tax."

The City of Philadelphia Board of Pensions and Retirement (the "Pension Board") was established by the City Charter to administer "a comprehensive, fair and actuarially sound pension and retirement system covering all officers and employees of the City." The City Charter provides that the

Pension Board "shall consist of the Director of Finance, who shall be its chairman, the Managing Director, the City Controller, the City Solicitor, the Personnel Director and four other persons who shall be elected to serve on the Board by the employees in the civil service in such manner as shall be determined by the Board." In addition, there is one non-voting member on the Pension Board, who is appointed by the President of City Council. An Executive Director, together with a budgeted staff of 73 personnel, administers the day-to-day activities of the retirement system, providing services to approximately 66,000 members.

The Municipal Pension Plan, the Municipal Pension Fund, and the Pension Board are for convenience sometimes collectively referred to under this caption as the "Municipal Retirement System."

Membership. The following table shows the membership totals for the Municipal Pension Plan, as of July 1, 2020 and as compared to July 1, 2019.

Table 23
Municipal Pension Plan – Membership Totals

	July 1, 2020	July 1, 2019	% Change
Actives	28,892	28,596	1.0%
Terminated Vesteds	929	965	-3.7%
Disabled	3,833	3,883	-1.3%
Retirees	22,249	22,241	0.0%
Beneficiaries	8,471	8,574	-1.2%
Deferred Retirement Option Plan ("DROP")	1,642	2,069	-20.6%
Total City Members	66,016	66,328	-0.5%
Annual Salaries	$1,921,217,453	$1,842,554,883	4.3%
Average Salary per Active Member	$66,497	$64,434	3.2%
Annual Retirement Allowances	$789,023,043	$774,067,324	1.9%
Average Retirement Allowance	$22,835	$22,309	2.4%

Source: July 1, 2020 Valuation.

As shown in Table 23, total membership in the Municipal Pension Plan decreased by 0.5%, or from 66,328 to 66,016 members, from July 1, 2019 to July 1, 2020, including an increase of 1.0% in active members from 28,596 to 28,892 (who were contributing to the Municipal Pension Fund). Of the 66,016 members, 37,124 were retirees, beneficiaries, disabled, and other members (who were withdrawing from, or not contributing to, the Municipal Pension Fund).

Subject to the exceptions otherwise described in this paragraph, employees and officials become vested in the Municipal Pension Plan upon the completion of ten years of service. Employees and appointed officials who hold positions that are exempt from civil service and who are not entitled to be represented by a union, and who were hired before January 13, 1999, may elect accelerated vesting after five years of service in return for payment of a higher employee contribution than if the vesting period were ten years. Such employees and officials become vested after five years of service if hired after January 13, 1999 or seven years of service if hired after January 1, 2019, and pay a higher employee contribution than if the vesting period were ten years. Elected officials become vested in the Municipal Pension Plan once they complete service equal to the lesser of two full terms in their elected office or eight years and pay a higher contribution than if the vesting period were ten years. Elected officials pay an additional employee contribution for the full cost of the additional benefits they may receive over those

of general municipal employees. Upon retirement, employees and officials may receive up to 100% of their average final compensation depending upon their years of credited service and the plan in which they participate.

All City employees participate in the U.S. Social Security retirement system except for uniformed Police and uniformed Fire employees.

Certain membership information relating to the City's municipal retirement system provided by the Pension Board is set forth in Appendix A to the July 1, 2020 Actuarial Valuation Report (the "July 1, 2020 Valuation") and includes as of July 1, 2020, among other information, active and non-active member data by plan, age/service distribution for active participants and average salary for all plans, and age and benefit distributions for non-active member data.

Funding Requirements; Funding Standards

City Charter. The City Charter establishes the "actuarially sound" standard quoted above. Case law has interpreted "actuarially sound" as used in the City Charter to require the funding of two components: (i) "normal cost" (as defined below) and (ii) interest on the UAL. (*Dombrowski v. City of Philadelphia*, 431 Pa. 199, 245 A.2d 238 (1968)).

Pennsylvania Law. The Municipal Pension Plan Funding Standard and Recovery Act (Pa. P.L. 1005, No. 205 (1984)) ("Act 205"), applies to all municipal pension plans in Pennsylvania, "[n]otwithstanding any provision of law, municipal ordinance, municipal resolution, municipal charter, pension plan agreement or pension plan contract to the contrary . . . ." Act 205 provides that the annual financial requirements of the Municipal Pension Plan are: (i) the normal cost; (ii) administrative expense requirements; and (iii) an amortization contribution requirement. In addition, Act 205 requires that the MMO be payable to the Municipal Pension Fund from City revenues, and that the City shall provide for the full amount of the MMO in its annual budget. The MMO is defined as "the financial requirements of the pension plan reduced by . . . the amount of any member contributions anticipated as receivable for the following year." Act 205 further provides that the City has a "duty to fund its municipal pension plan," and the failure to provide for the MMO in its budget, or to pay the full amount of the MMO, may be remedied by the institution of legal proceedings for mandamus.

In accordance with Pennsylvania law and Act 205, the City uses the entry age normal actuarial funding method, whereby "normal cost" (associated with active employees only) is the present value of the benefits that the City expects to become payable in the future distributed evenly as a percent of expected payroll from the age of first entry into the plan to the expected age at retirement. The City's share of such normal cost (to which the City adds the Plan's administrative expenses) is reduced by member contributions. The term "level" means that the contribution rate for the normal cost, expressed as a percentage of active member payroll, is expected to remain relatively level over time.

The City has budgeted and paid at least the full MMO amount since such requirement was established, and more specifically, prior to Fiscal Year 2005 the City had been contributing to the Municipal Pension Plan the greater amount as calculated pursuant to the City Funding Policy which was implemented before Act 205 was effective, as described below. Beginning in Fiscal Year 2018, the City is contributing under the Revenue Recognition Policy (defined below), which requires higher contribution amounts than under the MMO. Payment of the MMO is a condition for receipt of the Commonwealth contribution to the Municipal Pension Fund. See Table 29.

Act 205 was amended in 2009 by Pa. P.L. 396, No. 44 ("Act 44") to authorize the City to: (i) "fresh start" the amortization of the UAL as of July 1, 2009 by a level annual dollar amount over 30 years

ending June 30, 2039; and (ii) revise the amortization periods for actuarial gains and losses and assumption changes in accordance with Act 44, as described below under "UAL and its Calculation – Actuarial Valuations." In addition, Act 44 authorized the City to defer, and the City did defer, $150 million of the MMO otherwise payable in Fiscal Year 2010, and $80 million of the MMO otherwise payable in Fiscal Year 2011, subject to repayment of the deferred amounts by June 30, 2014. The City repaid the aggregate deferred amount of $230 million, together with interest at the then-assumed interest rate of 8.25%, in Fiscal Year 2013. See Table 29. Because the final amortization date is fixed, if all actuarial assumptions are achieved, the unfunded liability would decline to zero as of the final amortization date. To the extent future experience differs from the assumptions used to establish the 30-year fixed amortization payment schedule, new amortization bases attributable to a particular year's difference would be established and amortized over their own 20-year schedule.

GASB; City Funding Policy. Governmental Accounting Standards Board ("GASB") Statement No. 27, "Accounting for Pensions by State and Local Governmental Employers" ("GASB 27"), applied to the City for Fiscal Years beginning prior to July 1, 2014. For the Fiscal Year beginning July 1, 2014, GASB Statement No. 68 ("GASB 68"), which amends GASB 27 in several significant respects, applies. GASB 27 defined an "annual required contribution" ("ARC") as that amount sufficient to pay (i) the normal cost and (ii) the amortization of UAL, and provides that the maximum acceptable amortization period is 30 years (for the initial 10 years of implementation, 1996-2006, a 40-year amortization period was permitted). GASB 27 did not establish funding requirements for the City but rather was an accounting and financial reporting standard. GASB 68 does not require the calculation of an ARC but does require the City to include as a liability on its balance sheet the City's "net pension liability," as defined by GASB 68. The City has been funding the Municipal Pension Fund since Fiscal Year 2003 based on the MMO (at a minimum), including the deferral permitted by Act 44. See Table 29 below.

The City, prior to Fiscal Year 2005, had been funding the Municipal Pension Fund in accordance with what the City referred to as the "City Funding Policy." That reference was used and continues to be used in the Actuarial Reports. Under the City Funding Policy, the UAL as of July 1, 1985 was to be amortized over 34 years ending June 30, 2019, with payments increasing at 3.3% per year, the assumed payroll growth. This initial UAL base under the City's Funding Policy has now been fully amortized. Other changes in the unfunded actuarial liability were amortized in level-dollar payments over various periods as prescribed in Act 205. In 1999, the City issued pension funding bonds, the proceeds of which were deposited directly into the Municipal Pension Fund to pay down its UAL. See "– Annual Contributions – *Annual Debt Service Payments on the Pension Bonds*" below.

Revenue Recognition Policy. The City follows a policy (the "Revenue Recognition Policy") to contribute each year to the Municipal Pension Fund an amount in excess of the MMO. Aspects of such policy are mandated by City ordinance or labor agreements, as applicable. The determination for such additional funding is based on not including (i) the portion of the amounts generated by the increase in the Sales Tax rate that became effective on July 1, 2014 and are required by Act 205 to be deposited to the Municipal Pension Fund (see "REVENUES OF THE CITY – Sales and Use Tax"), (ii) contributions to be made by City employees that are under Plan 16 (described above in the text that immediately follows Table 19), and (iii) additional member contributions for current and future members in Plan 87 Police, Plan 87 Fire, and all Municipal Plans in the actuarial asset value when determining the annual contribution obligation.

The amounts projected by the City in the Proposed Thirtieth Five-Year Plan (and for Fiscal Year 2021, the FY 2021 Third Quarter QCMR) to be deposited from Sales Tax revenue into the Municipal Pension Fund, for the six Fiscal Years 2021-2026, respectively, are as follows: $44.9 million; $48.2 million; $52.9 million; $59.1 million; $65.8 million; and $72.6 million.

UAL and its Calculation

According to the July 1, 2020 Valuation, the funded ratio (the valuation of assets available for benefits to total actuarial liability) of the Municipal Pension Fund as of July 1, 2020 was 51.9% and the Municipal Pension Fund had an unfunded actuarial liability ("UAL") of $5.795 billion. The UAL is the difference between total actuarial liability ($12.038 billion as of July 1, 2020) and the actuarial value of assets ($6.243 billion as of July 1, 2020).

Key Actuarial Assumptions. In accordance with Act 205, the actuarial assumptions must be, in the judgment of both Cheiron (the independent consulting actuary for the Municipal Pension Fund) and the City, "the best available estimate of future occurrences in the case of each assumption." The assumed investment return rate used in the July 1, 2020 Valuation was 7.50% a year (which includes an inflation assumption of 2.75%), net of administrative expenses, compounded annually. For the prior actuarial valuation, the assumed investment return rate was 7.55%. See Table 24 for the assumed rates of return for Fiscal Years 2011 to 2020. The 7.55% was used to establish the MMO payment for Fiscal Year 2021 and 7.50% will be used to establish the MMO payment for Fiscal Year 2022.

Other key actuarial assumptions in the July 1, 2020 Valuation include the following: (i) total annual payroll growth of 3.30%, (ii) annual administrative expenses assumed to increase 3.30% per year, (iii) to recognize the expense of the benefits payable under the Pension Adjustment Fund (as described below), actuarial liabilities were increased by 0.54%, based on the statistical average expected value of the benefits, (iv) a vested employee who terminates will elect a pension deferred to service retirement age so long as their age plus years of service at termination are greater than or equal to 55 (45 for police and fire employees in the 1967 Plan), (v) for municipal and elected members, 65% of all disabilities are ordinary and 35% are service-connected, and (vi) for police and fire members, 25% of all disabilities are ordinary and 75% are service-connected.

"Smoothing Methodology". The Municipal Retirement System uses an actuarial value of assets to calculate its annual pension contribution, using an asset "smoothing method" to dampen the volatility in asset values that could occur because of fluctuations in market conditions. The Municipal Retirement System used a five-year smoothing prior to Fiscal Year 2009, and beginning with Fiscal Year 2009 began employing a ten-year smoothing. Using the ten-year smoothing methodology, investment returns in excess of or below the assumed rate are prospectively distributed in equal amounts over a ten-year period, subject to the requirement that the actuarial value of assets will be adjusted, if necessary, to ensure that the actuarial value of assets will never be less than 80% of the market value of the assets, nor greater than 120% of the market value of the assets. The actuarial value of assets as of July 1, 2020, was approximately 108.0% of the market value of the assets, as compared to 102.9% as of July 1, 2019.

Actuarial Valuations. The Pension Board engages an independent consulting actuary (currently Cheiron) to prepare annually an actuarial valuation report. Act 205, as amended by Act 44, establishes certain parameters for the actuarial valuation report, including: (i) use of the entry age normal actuarial cost method; (ii) that the report shall contain: (a) actuarial exhibits, financial exhibits, and demographic exhibits; (b) an exhibit of normal costs expressed as a percentage of the future covered payroll of the active membership in the Municipal Pension Plan; and (c) an exhibit of the actuarial liability of the Municipal Pension Plan; and (iii) that changes in the actuarial liability be amortized in level-dollar payments as follows: (a) actuarial gains and losses be amortized over 20 years beginning July 1, 2009 (prior to July 1, 2009, gains and losses were amortized over 15 years); (b) assumption changes be amortized over 15 years beginning July 1, 2010 (prior to July 1, 2010, assumption changes were amortized over 20 years); (c) plan changes for active members be amortized over 10 years; (d) plan changes for inactive members be amortized over one year; and (e) plan changes mandated by the Commonwealth be amortized over 20 years.

Act 205 further requires that an experience study be conducted at least every four years, and cover the five-year period ending as of the end of the plan year preceding the plan year for which the actuarial valuation report is filed. The most recent Experience Study was prepared by Cheiron in March 2018 for the period July 1, 2012 – June 30, 2017. The actuarial and demographic assumptions that were adopted by the Pension Board in response to such Experience Study continue to be employed for the July 1, 2020 Valuation (which is used to determine the June 30, 2022 fiscal year end MMO, City Funding Policy, and Revenue Recognition Policy contributions). Details of these assumption changes and the experience of the Municipal Pension Plan can be found in the *City of Philadelphia Municipal Retirement System Experience Study Results for the period covering July 1, 2012 – June 30, 2017,* available at the Investor Information section of the City's Investor Website.

Pension Adjustment Fund

Pursuant to § 22-311 of the Philadelphia Code, the City directed the Pension Board to establish a Pension Adjustment Fund ("PAF") on July 1, 1999, and further directed the Pension Board to determine, effective June 30, 2000 and each Fiscal Year thereafter, whether there are "excess earnings" as defined available to be credited to the PAF. The Pension Board's determination is to be based upon the actuary's certification using the "adjusted market value of assets valuation method" as defined in § 22-311. Although the portion of the assets attributed to the PAF is not segregated from the assets of the Municipal Pension Fund, the Philadelphia Code provides that the "purpose of the Pension Adjustment Fund is for the distribution of benefits as determined by the Board for retirees, beneficiaries or survivors [and] [t]he Board shall make timely, regular and sufficient distributions from the Pension Adjustment Fund in order to maximize the benefits of retirees, beneficiaries or survivors." Distributions are to be made "without delay" no later than six months after the end of each Fiscal Year. The PAF was established, in part, because the Municipal Retirement System does not provide annual cost-of-living increases to retirees or beneficiaries. At the time the PAF was established, distributions from the PAF were subject to the restriction that the actuarial funded ratio using the "adjusted market value of assets" be not less than such ratio as of July 1, 1999 (76.7%). That restriction was deleted in 2007.

The amount to be credited to the PAF is 50% of the "excess earnings" that are between one percent (1%) and six percent (6%) above the actuarial assumed investment rate. Earnings in excess of six percent (6%) of the actuarial assumed investment rate remain in the Municipal Pension Fund. Although the Pension Board utilizes a ten-year smoothing methodology, as explained above, for the actuarial valuation of assets for funding and determination of the MMO, § 22-311 provides for a five-year smoothing to determine the amount to be credited to the PAF. The actuary determined that for the Fiscal Year ended June 30, 2020, there were no "excess earnings" as defined to be credited to the PAF. The Pension Board transfers to the PAF the full amount calculated by the actuary as being available in any year for transfer within six months of the Pension Board designating the amount to be transferred.

Transfers to the PAF and the resultant additional distributions to retirees result in removing assets from the Municipal Pension Plan. To account for the possibility of such transfers, and as an alternative to adjusting the assumed investment return rate to reflect such possibility, the actuary applies a load of 0.54% to the calculated actuarial liability as part of the funding requirement and MMO. Such calculation was utilized for the first time in the July 1, 2013 actuarial valuation.

The market value of assets as used under this caption, "PENSION SYSTEM," represents the value of the assets if they were liquidated on the valuation date and this value includes the PAF (except as otherwise indicated in certain tables), although the PAF is not available for funding purposes. The actuarial value of assets does not include the PAF.

Rates of Return; Asset Values; Changes in Plan Net Position

Rates of Return. The following table sets forth for the Fiscal Years 2011-2020 the market value of assets internal rate of return and actuarial value of assets internal rate of return experienced by the Municipal Pension Fund, and the assumed rate of return. The 5-year and 10-year annual average returns as of June 30, 2020, were 5.07% and 7.02%, respectively, on a market value basis.

Table 24
Municipal Pension Fund
Annual Rates of Return

Year Ending June 30,	Market Value	Actuarial Value[(1)]	Assumed Rate of Return
2011	19.4%	9.9%	8.15%
2012	0.2%	2.4%	8.10%
2013	10.9%	5.1%	7.95%
2014	15.7%	4.8%	7.85%
2015	0.3%	5.8%	7.80%
2016	-3.2%	4.5%	7.75%
2017	13.1%	4.4%	7.70%
2018	9.0%	5.1%	7.65%
2019	5.7%	7.6%	7.60%
2020	1.5%	6.5%	7.55%

Source: July 1, 2020 Valuation.

(1) Net of PAF. See "Pension Adjustment Fund" above. The actuarial values reflect a ten-year smoothing.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Asset Values. The following table sets forth, as of the July 1 actuarial valuation date for the years 2011-2020, the actuarial and market values of assets in the Municipal Pension Fund and the actuarial value as a percentage of market value.

Table 25
Actuarial Value of Assets vs. Market Value of Net Assets
(Dollar Amounts in Millions of USD)

Actuarial Valuation Date (July 1)	Actuarial Value of Assets[(1)]	Market Value of Net Assets[(1)]	Actuarial Value as a Percentage of Market Value
2011[(2)]	$4,719.1	$4,259.2	110.8%
2012[(2)]	$4,716.8	$4,151.8	113.6%
2013	$4,799.3	$4,444.1	108.0%
2014	$4,814.9	$4,854.3	99.2%
2015	$4,863.4	$4,636.1	104.9%
2016	$4,936.0	$4,350.8	113.5%
2017	$5,108.6	$4,873.0	104.8%
2018	$5,397.4	$5,340.1	101.1%
2019	$5,852.5	$5,687.2	102.9%
2020	$6,242.7	$5,781.6	108.0%

Source: July 1, 2020 Valuation for Actuarial Value of Assets; 2011-2020 Actuarial Reports for Market Value of Net Assets.

(1) For purposes of this table, the Market Value of Net Assets excludes the PAF, which as of June 30, 2020 equaled $1.244 million. The Actuarial Value of Assets excludes that portion of the Municipal Pension Fund that is allocated to the PAF. The actuarial values reflect a ten-year smoothing.

(2) The July 1, 2011 and July 1, 2012 actuarial and market values of assets include the total deferred contribution of $230 million. See Table 29 below.

Changes in Plan Net Position. The following table sets forth, for Fiscal Years 2016-2020, the additions, including employee (member) contributions, City contributions (including contributions from the Commonwealth), investment income and miscellaneous income, and deductions, including benefit payments and administration expenses, for the Municipal Pension Fund. Debt service payments on pension funding bonds (as described below at "Annual Contributions – *Annual Debt Service Payments on the Pension Bonds*") are made from the City's General Fund, Water Operating Fund, and Aviation Operating Fund, but are not made from the Municipal Pension Fund, and therefore are not included in Table 26. In those years in which the investment income is less than anticipated, the Municipal Pension Fund may experience negative changes (total deductions greater than total additions), which, as the table reflects, did occur in Fiscal Year 2016. Furthermore, if unrealized gains are excluded from Table 26, resulting in a comparison of cash actually received against actual cash outlays, it results in a negative cash flow in Fiscal Years 2016-2017, which is typical of a mature retirement system. In Fiscal Years 2018-2020, there was a positive cash flow.

Contributions from the Commonwealth are provided pursuant to the provisions of Act 205. Any such contributions are required to be used to defray the cost of the City's pension system. The amounts contributed by the Commonwealth for each of the last ten Fiscal Years are set forth in Table 29 below. The contributions from the Commonwealth are capped pursuant to Act 205, which provides that "[n]o municipality shall be entitled to receive an allocation of general municipal pension system State aid in an amount greater that 25% of the total amount of the general municipal pension system State aid available."

Employee (member) contribution amounts reflect contribution rates as a percent of pay, which for the plan year beginning July 1, 2020, vary from 6.00% to 8.50% for police and fire employees, and from 2.37% to 7.00% for municipal employees excluding elected officials. These rates include the increases for police employees effective July 1, 2017 resulting from the FOP Lodge No. 5 and IAFF Local No. 22 Labor Contracts. Such contracts increased member contributions for current police officers in Plan 87 and Plan 10 by 0.92% effective July 1, 2017 and an additional 0.92% effective July 1, 2018. For new police officers and fire fighters hired or rehired on or after July 1, 2017, the member contribution rate is increased by 2.5% over the rate which would otherwise be in effect as of July 1, 2017. The rates also include the increases in contributions for certain municipal employees and elected officials currently in Plans 67, 87 and 87 Prime and elected officials as required by legislation. This legislation called for employees in these groups to pay an additional 0.5% of compensation from January 1, 2015 to December 31, 2015 and an additional 1.0% from January 1, 2016 onwards. New employees in these groups entering Plan 87 Municipal Prime will pay an additional 1.0% of compensation which is included in the table below. Finally, these rates do not include the additional tiered contributions paid by current and future municipal employees based on their level of compensation.

Table 26
Changes in Net Position of the Municipal Pension Fund
Fiscal Years 2016-2020
(Amounts in Thousands of USD)

	2016	2017	2018	2019	2020
Beginning Net Assets (Market Value)[1]	$4,674,252	$4,357,975	$4,874,075	$5,341,286	$5,688,383
Additions					
- Member Contributions	67,055	73,607	83,289	99,180	111,825
- City Contributions[2]	660,247	706,237	781,984	797,806	768,721
- Investment Income[3]	(147,424)	563,372	438,515	301,749	85,228
- Miscellaneous Income[4]	1,742	3,253	1,812	1,987	1,923
Total	$581,620	$1,346,469	$1,305,600	$1,200,721	$967,697
Deductions					
- Benefits and Refunds	(889,343)	(821,495)	(828,266)	(842,469)	(862,198)
- Administration	(8,554)	(8,874)	(10,123)	(11,155)	(10,991)
Total	$(897,897)	$(830,369)	$(838,389)	$(853,624)	$(873,189)
Ending Net Assets (Market Value)	$4,357,975	$4,874,075	$5,341,286	$5,688,383	$5,782,891

Source: Municipal Pension Fund's audited financial statements.

(1) Includes the PAF, which is not available for funding purposes.

(2) City Contributions include pension contributions from the Commonwealth. See Table 29.

(3) Investment income is shown net of fees and expenses, and includes interest and dividend income, net appreciation (depreciation) in fair value of investments, and net gains realized upon the sale of investments.

(4) Miscellaneous income includes securities lending and other miscellaneous revenues.

Funded Status of the Municipal Pension Fund

The following two tables set forth, as of the July 1 actuarial valuation date for the years 2011-2020, the asset value, the actuarial liability, the UAL, the funded ratio, covered payroll and UAL, as a percentage of covered payroll for the Municipal Pension Fund on actuarial and market value bases, respectively.

Table 27
Schedule of Funding Progress (Actuarial Value)
(Dollar Amounts in Millions of USD)

Actuarial Valuation Date (July 1)	Actuarial Value of Assets[(1)] (a)	Actuarial Liability (b)	UAL (Actuarial Value) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b-a)/c]
2011	$4,719.1[(2)]	$9,487.5	$4,768.4	49.7%	$1,371.3	347.7%
2012	$4,716.8[(2)]	$9,799.9	$5,083.1	48.1%	$1,372.2	370.4%
2013	$4,799.3	$10,126.2	$5,326.9	47.4%	$1,429.7	372.6%
2014	$4,814.9	$10,521.8	$5,706.9	45.8%	$1,495.4	381.6%
2015	$4,863.4	$10,800.4	$5,937.0	45.0%	$1,597.8	371.6%
2016	$4,936.0	$11,024.8	$6,088.8	44.8%	$1,676.5	363.2%
2017	$5,108.6	$11,275.7	$6,167.1	45.3%	$1,744.7	353.5%
2018	$5,397.4	$11,521.0	$6,123.5	46.8%	$1,805.4	339.2%
2019	$5,852.5	$11,783.1	$5,930.6	49.7%	$1,842.6	321.9%
2020	$6,242.7	$12,038.1	$5,795.4	51.9%	$1,921.2	301.7%

Source: July 1, 2020 Valuation.

(1) The July 1, 2011 and July 1, 2012 Actuarial Value of Assets includes the total deferred contribution of $230 million.

(2) Reflects the assumed rate of return on deferred contributions at the time of the deferral.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 28
Schedule of Funding Progress (Market Value)
(Dollar Amounts in Millions of USD)

Actuarial Valuation Date (July 1)	Market Value of Net Assets[1] (a)	Actuarial Liability (b)	UAL (Market Value) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAL as a % of Covered Payroll [(b-a)/c]
2011	$4,259.2	$9,487.5	$5,228.3	44.9%	$1,371.3	381.3%
2012	$4,151.8	$9,799.9	$5,648.1	42.4%	$1,372.2	411.6%
2013	$4,444.1	$10,126.2	$5,682.1	43.9%	$1,429.7	397.4%
2014	$4,854.3	$10,521.8	$5,667.6	46.1%	$1,495.4	379.0%
2015	$4,636.1[2]	$10,800.4	$6,164.3	42.9%	$1,597.8	385.8%
2016	$4,350.8[2]	$11,024.8	$6,674.0	39.5%	$1,676.5	398.1%
2017	$4,873.0[2]	$11,275.7	$6,402.7	43.2%	$1,744.7	367.0%
2018	$5,340.1[2]	$11,521.0	$6,180.9	46.4%	$1,805.4	342.4%
2019	$5,687.2[2]	$11,783.1	$6,095.9	48.3%	$1,842.6	330.8%
2020	$5,781.6[2]	$12,038.1	$6,256.5	48.0%	$1,921.2	325.7%

Source: 2011-2020 Actuarial Valuation Reports.

(1) The July 1, 2011 and July 1, 2012 Market Value of Net Assets includes the total deferred contribution of $230 million.

(2) For purposes of this table, the Market Value of Net Assets excludes the PAF, which as of June 30, 2015 equaled $38,198,762; as of June 30, 2016 equaled $7,223,000; as of June 30, 2017 equaled $1,097,499; as of June 30, 2018 equaled $1,160,247; as of June 30, 2019 equaled $1,225,114; and as June 30, 2020 equaled $1,243,871.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Annual Contributions

Annual Municipal Pension Contributions

Table 29 shows the components of the City's annual pension contributions to the Municipal Pension Fund for the Fiscal Years 2011-2020.

Table 29
Total Contribution to Municipal Pension Fund
(Dollar Amounts in Millions of USD)

Fiscal Year	General Fund Contribution (A)	Commonwealth Contribution (B)	Aggregate General Fund Contribution (A+B)	Water Fund Contribution	Aviation Fund Contribution	Grants Funding and Other Funds Contribution[1]	Contributions from Quasi-governmental Agencies	Pension Bond Proceeds	Total Contribution (C)	MMO (D)	MMO (Deferred) Makeup Payments	% of MMO Contributed (C/D)
2011	$325.8[2]	$61.8	$387.6	$37.7	$17.1	$13.6	$14.2	$0.0	$470.2[2]	$511.0	$(80.0)[3]	100.0%[4]
2012	$352.7	$95.0	$447.7	$43.8	$20.6	$27.4	$16.2	$0.0	$555.7	$507.0	-	109.7%
2013	$356.5	$65.7	$422.2	$41.4	$20.3	$27.2	$18.1	$252.6[3]	$781.8	$492.0	$230.0[3]	100.0%[4]
2014	$365.8	$69.6	$435.4	$45.5	$22.5	$30.0	$19.8	$0.0	$553.2	$523.4	-	105.7%
2015	$388.5	$62.0	$450.5	$48.3	$23.9	$33.4	$21.1	$0.0	$577.2	$556.0	-	103.8%
2016	$449.6	$62.6	$512.2	$55.1	$27.1	$34.8	$31.0	$0.0	$660.2	$595.0	-	111.0%
2017	$487.0	$68.7	$555.7	$61.0	$28.8	$33.3	$27.4	$0.0	$706.2	$629.6	-	112.2%
2018	$559.7	$72.4	$632.1	$62.7	$28.8	$32.5	$25.9	$0.0	$782.0	$661.3	-	118.3%
2019	$567.7	$74.8	$642.5	$64.7	$31.6	$33.8	$25.2	$0.0	$797.8	$668.3	-	119.4%
2020	$545.1	$82.0	$627.1	$71.6	$34.0	$14.6	$21.4	$0.0	$768.7	$675.8	-	113.7%

(1) Other Funds Contributions represents contributions to the Municipal Pension Fund from the City's Special Gasoline Tax Fund, Community Development Block Grant Fund, Municipal Pension Fund, and Housing Trust Fund.

(2) Reflects the actual cash outlays for Fiscal Year 2011, which does not include the deferred contributions authorized pursuant to Act 44. See "– Funding Requirements; Funding Standards – Pennsylvania Law" above for a discussion of pension contribution deferrals authorized pursuant to Act 44.

(3) As authorized pursuant to Act 44, the City deferred payments to the Municipal Pension Fund of $150 million in fiscal year 2010 and $80 million in fiscal year 2011. Those amounts were repaid in fiscal year 2013, in which year the City made a contribution of $252.6 million to the Municipal Pension Fund, consisting of $230 million of proceeds of Pension Bonds that were issued in October 2012 and $22.6 million in refunding savings from a refunding Pension Bond financing in December 2012. See "– *Annual Debt Service Payments on the Pension Bonds*" below.

(4) Act 205 directs the Actuary, in performing the actuarial valuations, to disregard deferrals, and therefore for ease of presentation 100.0% is reflected in this column for both the years in which the deferrals occurred and the year in which the makeup payment was made.

Annual Debt Service Payments on the Pension Bonds

Pension funding bonds ("Pension Bonds") were initially issued in Fiscal Year 1999 (the "1999 Pension Bonds"), at the request of the City, by PAID. Debt service on the Pension Bonds is payable pursuant to a Service Agreement between the City and PAID. The Service Agreement provides that the City is obligated to pay a service fee from its current revenues and the City covenanted in the agreement to include the annual amount in its operating budget and to make appropriations in such amounts as are required. If the City's revenues are insufficient to pay the full service fee in any Fiscal Year as the same becomes due and payable, the City has covenanted to include amounts not so paid in its operating budget for the ensuing Fiscal Year.

The 1999 Pension Bonds were issued in the principal amount of $1.3 billion, and the net proceeds were used, together with other funds of the City, to make a contribution in Fiscal Year 1999 to the Municipal Pension Fund in the amount of approximately $1.5 billion.

In October 2012, PAID, at the request of the City, issued Pension Bonds in the principal amount of $231.2 million, the proceeds of which were used principally to make the $230 million repayment of deferred contributions to the Municipal Pension Fund reflected in Table 29 above. These bonds had maturities of April 1, 2013 and 2014, and have been repaid.

In December 2012, PAID, at the request of the City, issued Pension Bonds in the approximate principal amount of $300 million (the "2012 Pension Bonds"), the proceeds of which were used to currently refund a portion of the 1999 Pension Bonds. The refunding generated savings of approximately $22.6 million, which the City deposited into the Municipal Pension Fund.

In April 2021, PAID, at the request of the City, issued bonds in the approximate principal amount of $137 million, the proceeds of which were used, among other things, to refund a portion of the 1999 Pension Bonds and the 2012 Pension Bonds. Such refunding restructured debt service to provide the City with budgetary relief in Fiscal Years 2021 and 2022. No proceeds of the bonds were used to make a deposit to the City Retirement System.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 30 shows the components of the City's annual debt service payments on the Pension Bonds for the Fiscal Years 2011-2020.

Table 30
Total Debt Service Payments on Pension Bonds
(Amounts in Millions of USD)

Fiscal Year	General Fund Payment	Water Fund Payment	Aviation Fund Payment	Other Funds Payment[1]	Grants Funding	Total Payment
2011	$97.7	$10.3	$4.6	$0.8	$1.5	$114.9
2012	$100.1	$10.7	$4.8	$0.7	$3.4	$119.7
2013[2]	$196.6	$21.5	$10.1	$1.3	$3.8	$233.3
2014[2]	$211.0	$23.6	$11.2	$1.4	$3.7	$250.9
2015	$107.7	$12.6	$5.9	$0.8	$4.0	$131.0
2016	$109.9	$13.7	$6.4	$0.9	$3.8	$134.7
2017	$109.5	$14.5	$6.6	$0.9	$3.3	$134.8
2018	$110.1	$14.3	$6.3	$0.9	$3.1	$134.7
2019	$109.8	$14.2	$6.6	$1.1	$3.0	$134.7
2020	$110.1	$15.7	$7.1	$1.2	$0.6	$134.7

(1) Other Funds Payments represents the allocable portion of debt service payments on the City's Pension Bonds from the City's Community Development Block Grant Fund and Municipal Pension Fund.

(2) The increase in debt service payments in fiscal years 2013 and 2014 over the fiscal year 2012 amounts reflect the debt service payments on the Pension Bonds that were issued in October 2012.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Annual Pension Costs of the General Fund

Table 31 shows the annual pension costs of the General Fund for the Fiscal Years 2011-2020, being the sum of the General Fund Contribution to the Municipal Pension Fund (column (A) in Table 29 above) and the General Fund debt service payments on Pension Bonds (Table 30 above).

Table 31
Annual Pension Costs of the General Fund
(Amounts in Millions of USD)

Fiscal Year	General Fund Pension Fund Contribution (A)[1]	General Fund Pension Bond Debt Service Payment (B)	Annual Pension Costs (A+B)	Total General Fund Expenditures (C)	General Fund portion of Annual Pension Costs as % of Total General Fund Expenditures (A+B) / C
2011	$325.8	$97.7	$423.5	$3,785.29	11.19%
2012	$352.7	$100.1	$452.8	$3,484.88	12.99%
2013	$356.5	$196.6	$553.1	$3,613.27	15.31%
2014	$365.8	$211.0	$576.8	$3,886.56	14.84%
2015	$388.5	$107.7	$496.2	$3,831.51	12.95%
2016	$449.6	$109.9	$559.5	$4,015.80	13.93%
2017	$487.0	$109.5	$596.5	$4,139.80	14.41%
2018	$559.7	$110.1	$669.8	$4,402.85	15.21%
2019	$567.7	$109.8	$677.5	$4,772.39	14.20%
2020	$545.1	$110.1	$655.2	$5,036.53	13.01%

[1] Does not include Commonwealth contribution. See Table 29.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

The following table shows the annual City contribution to the Municipal Pension Fund as a percentage of the covered employee payroll.

Table 32
Annual City Contribution as % of Covered Employee Payroll
(Dollar Amounts in Thousands of USD)

Fiscal Year	Annual City Contribution	Fiscal Year Covered Employee Payroll[(1)]	ACC as % of Payroll
2011	$470,155	$1,371,274	34.29%
2012	$555,690	$1,372,174	40.50%
2013	$781,823	$1,429,723	54.68%
2014	$553,179	$1,495,421	36.99%
2015	$577,195	$1,597,849	36.12%
2016	$660,247	$1,676,549	39.38%
2017	$706,237	$1,744,728	40.48%
2018	$781,984	$1,805,400	43.31%
2019	$797,806	$1,842,555	43.30%
2020	$768,721	$1,921,217	40.01%

Source: Municipal Pension Fund Financial Statements, June 30, 2020.

(1) The definition of "covered-employee payroll" in GASB 68 differs slightly from the "covered payroll" definition in GASB 27. See "PENSION SYSTEM – Funding Requirements; Funding Standards – *GASB; City Funding Policy*."

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Actuarial Projections of Funded Status

Cautionary Note. The information under this subheading, "Actuarial Projections of Funded Status," was prepared by Cheiron. The table below shows a five-year projection of Revenue Recognition Policy ("RRP") payments, Actuarial Value of Assets, Actuarial Liability, UAL, and Funded Ratio. The charts below show projections of funded ratios and City contributions based on the RRP through Fiscal Year 2040. All projections, whether for five years or for twenty years, are subject to actual experience deviating from the underlying assumptions and methods, and that is particularly the case for the charts below for the periods beyond the projections in the five-year table. **Projections and actuarial assessments are "forward looking" statements and are based on assumptions which may not be fully realized in the future and are subject to change, including changes based on the future experience of the City's Municipal Pension Fund and Municipal Pension Plan.**

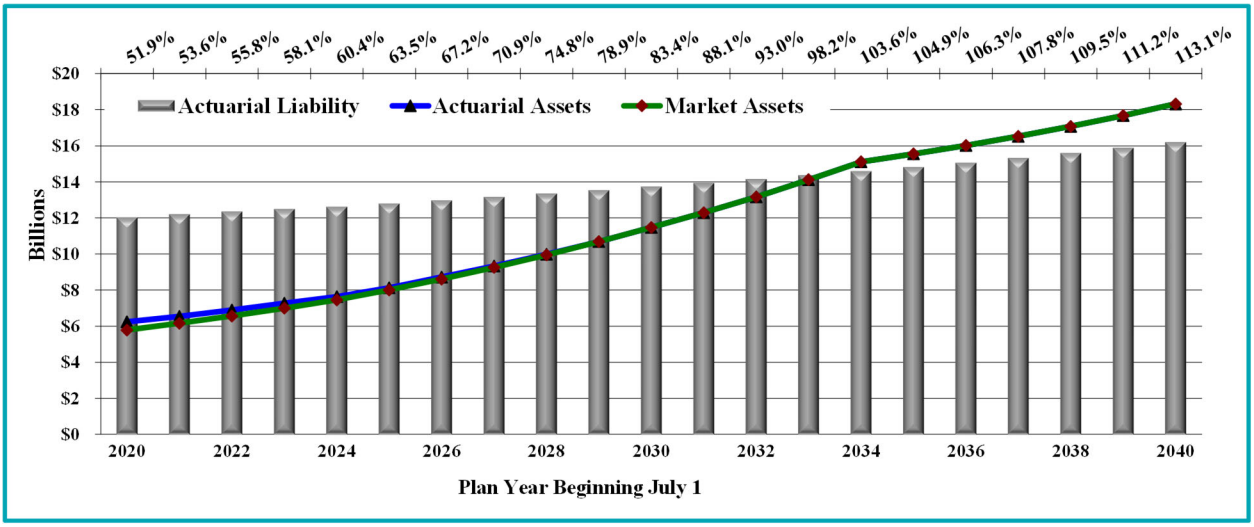
The projections are on the basis that all assumptions as reflected in the July 1, 2020 Valuation are exactly realized and the City makes all future RRP payments on schedule as required by the funding policy adopted by the Pension Board, and must be understood in the context of the assumptions, methods and benefits in effect as described in the July 1, 2020 Valuation. Included among such assumptions are: (i) the rates of return for the Municipal Pension Fund over the projection period will equal 7.50% annually, (ii) RRP contributions will be made each year, (iii) the provisions of Act 205 as amended by Act 44 will remain in force during the projection period, and (iv) the future population changes of the participants in the pension plan will follow the demographic actuarial assumptions with the active population remaining constant in the future. The July 1, 2020 Valuation includes charts reflecting the contributions based on MMO (Baseline projection set 1), and charts reflecting the additional contributions in accordance with the RRP (Baseline projection set 2). The charts provided below reflect the RRP contributions, which are higher than the MMO required under Pennsylvania law. Using the RRP, the System is projected to be 80% funded by 2030 and 100% funded by 2034, four years earlier than under the MMO projections. By the end of the projection period, the System is expected to be funded at 113.1% compared to 104.9% when MMO contributions are made. See the July 1, 2020 Valuation for further discussion of the assumptions and methodologies used by the Actuary in preparing the July 1, 2020 Valuation and the following projections, all of which should be carefully considered in reviewing the projections. The July 1, 2020 Valuation is available for review on the website of the City's Board of Pensions. The table and charts below separately set forth estimates of Sales Tax revenues that will be deposited by the City into the Municipal Pension Fund, which were provided by the City to Cheiron at the time of the valuation and differ from the current estimates or budgeted amounts of such revenues as included in the Proposed Fiscal Year 2022 Budget, the Proposed Thirtieth Five-Year Plan, or the FY 2021 Third Quarter QCMR, as applicable. Cheiron has not analyzed and makes no representation regarding the validity of the sales tax revenue assumptions and estimates provided by the City. See "REVENUES OF THE CITY – Sales and Use Tax." Each of the tables and graphs that follow are part of the July 1, 2020 Valuation and such report should be referenced regarding the underlying benefits, methods, and assumptions utilized in the production of these values.

Five-Year Projection. The following chart provides dollar amounts in millions of USD.

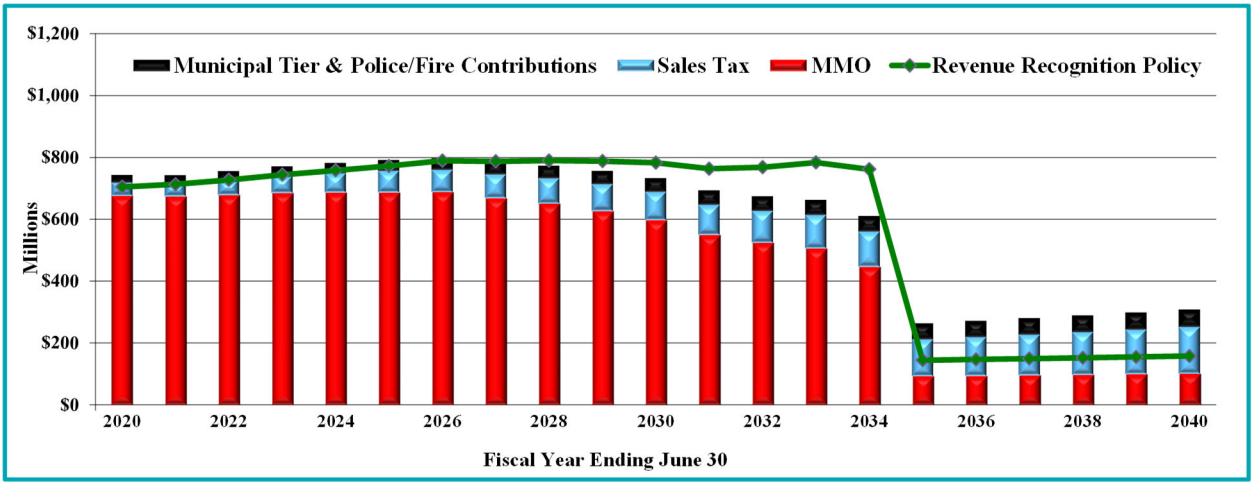
Fiscal Year End	RRP	Sales Tax Contribution	Actuarial Value of Assets	Actuarial Liability	UAL	Funded Ratio
2021	$ 713.0	$ 42.2	$ 6,242.7	$ 12,038.1	$ 5,795.4	51.9%
2022	727.4	48.8	6,542.1	12,208.0	5,666.0	53.6%
2023	744.3	55.4	6,898.5	12,364.3	5,465.8	55.8%
2024	758.1	62.5	7,270.5	12,506.5	5,236.0	58.1%
2025	772.4	70.1	7,635.1	12,632.9	4,997.8	60.4%
2026	789.6	72.1	8,129.1	12,806.6	4,677.5	63.5%

Twenty-Year Projections.

Funded Ratio Chart based on the RRP:



Expected City Contribution Chart based on the RRP:



OTHER POST-EMPLOYMENT BENEFITS

The City self-administers a single employer, defined benefit plan for post-employment benefits other than pension benefits ("OPEB"), and funds such plan on a pay-as-you-go basis. The City's OPEB plan provides for those persons who retire from the City and are participants in the Municipal Pension Plan: (i) post-employment healthcare benefits for a period of five years following the date of retirement and (ii) lifetime life insurance coverage ($7,500 for firefighters who retired before July 1, 1990; $6,000 for all other retirees). In general, retirees eligible for OPEB are those who terminate their employment after ten years of continuous service to immediately become pensioned under the Municipal Pension Plan.

To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by the union contract for AFSCME DC 33 and is self-insured for all other eligible pre-Medicare retirees. Aside from AFSCME DC 33, the City is responsible for the actual health care cost that is invoiced to the City's unions by their respective vendors. The actual cost can be a combination of self-insured claim expenses, premiums, ancillary services, and administrative expenses. Eligible union represented employees receive five years of coverage through their union's health fund. The City's funding obligation for pre-Medicare retiree benefits is the same as for active employees. Union represented and non-union employees may defer their retiree health coverage until a later date. For some groups, the amount that the City pays for their deferred health care is based on the value of the health benefits at the time the retiree claims the benefits, but for police and fire retirees who retired after an established date, the City pays the cost of five years of coverage when the retiree claims the benefits.

The annual payments made by the City for OPEB for Fiscal Years 2016-2020 are shown in Table 33 below.

Table 33
Annual OPEB Payment
(Amounts in Thousands of USD)

Fiscal Year ended June 30,	Annual OPEB Payment
2016	$107,200
2017	$114,800
2018	$96,400
2019	$96,900
2020	$104,600

Source: See Note IV.3 to the City's ACFRs for such Fiscal Years.

For financial reporting purposes, although the City funds OPEB on a pay-as-you-go basis, it is required to include in its financial statements (in accordance with GASB Statement No. 75) a calculation similar to that performed to calculate its pension liability. Pursuant to GASB 75, an annual required contribution is calculated which, if paid on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded actuarial liability over a period not to exceed 30 years. As of June 30, 2019, the date of the most recent actuarial valuation, the UAL for the City's OPEB was $1.935 billion, the covered annual payroll was $1.843 billion, and the ratio of UAL to the covered payroll was 105.03%. See Note IV.3 to the Fiscal Year 2020 ACFR.

PGW PENSION PLAN

General

PGW consists of all the real and personal property owned by the City and used for the acquisition, manufacture, storage, processing, and distribution of gas within the City, and all property, books, and records employed and maintained in connection with the operation, maintenance, and administration of PGW. The City Charter provides for a Gas Commission (the "Gas Commission") to be constituted and appointed in accordance with the provisions of contracts between the City and the operator of PGW as may from time to time be in effect, or, in the absence of a contract, as may be provided by ordinance. The Gas Commission consists of the City Controller, two members appointed by City Council and two members appointed by the Mayor.

PGW is operated by PFMC, pursuant to an agreement between the City and PFMC dated December 29, 1972, as amended, authorized by ordinances of City Council (the "Management Agreement"). Under the Management Agreement, various aspects of PFMC's management of PGW are subject to review and approval by the Gas Commission. The Pennsylvania Public Utility Commission (the "PUC") has the regulatory responsibility for PGW with regard to rates, safety, and customer service.

The City sponsors the Philadelphia Gas Works Pension Plan (the "PGW Pension Plan"), a single employer defined benefit plan, to provide pension benefits for certain current and former PGW employees and other eligible class employees of PFMC and the Gas Commission. As plan sponsor, the City, through its General Fund, could be responsible for plan liabilities if the PGW Pension Plan does not satisfy its payment obligations to PGW retirees. At June 30, 2020, the PGW Pension Plan membership total was 3,677, comprised of: (i) 2,514 retirees and beneficiaries currently receiving benefits and terminated employees entitled to benefits but not yet receiving them; and (ii) 1,163 participants, of which 896 were vested and 267 were nonvested.

PGW Pension Plan

The PGW Pension Plan provides retirement benefits as well as death and disability benefits. Retirement benefits vest after five years of credited service. Retirement payments for vested employees commence: (i) at age 65 and five years of credited service; (ii) age 55 and 15 years of credited service; or (iii) without regard to age, after 30 years of credited service. For covered employees hired prior to May 21, 2011 (union employees) or prior to December 21, 2011 (non-union employees), PGW pays the entire cost of the PGW Pension Plan. Union employees hired on or after May 21, 2011 and non-union employees hired on or after December 21, 2011 have the option to participate in the PGW Pension Plan and contribute 6% of applicable wages, or participate in a plan established in compliance with Section 401(a) of the Internal Revenue Code (deferred compensation plan) and have PGW contribute 5.5% of applicable wages.

PGW is required by statute to contribute the amounts necessary to fund the PGW Pension Plan. The PGW Pension Plan is being funded with contributions by PGW to the Sinking Fund Commission of the City, together with investment earnings and employee contributions required for new hires after December 2011 who elect to participate in the PGW Pension Plan. Benefit and contribution provisions are established by City ordinance and may be amended only as allowed by City ordinance. The pension payments are treated as an operating expense of PGW and are included as a component of PGW's base rate. The PUC approves all items that are to be included in PGW's base rates.

Effective October 2015, payments to beneficiaries of the PGW Pension Plan are made by the PGW Retirement Reserve Fund. Prior to October 2015, payments to beneficiaries of the PGW Pension

Plan were made by PGW through its payroll system. The financial statements for the PGW Pension Plan for the fiscal year ended June 30, 2020, show an amount due to PGW of approximately $0.1 million, which represents the cumulative excess of payments made to the retirees and administrative expenses incurred by PGW, over the sum of PGW's required annual contribution and reimbursements received from the PGW Pension Plan.

Pension Costs and Funding

PGW pays an annual amount that is projected to be sufficient to cover its normal cost and an amortization of the PGW Pension Plan's UAL. The following table shows the normal cost, the amortization payment, and the resulting annual required contribution as of the last five actuarial valuation dates for the PGW Pension Plan. Prior to fiscal year 2016, PGW had been using a 20-year open amortization period (and the payments in Table 34 are on the basis of a 20-year open amortization). Commencing in PGW's fiscal year 2016, PGW calculated an annual required contribution on the basis of both a 20-year open amortization period and a 30-year closed amortization period, and contributed the higher of the two amounts. An open amortization period is one that begins again or is recalculated at each actuarial valuation date. With a closed amortization period, the unfunded liability is amortized over a specific number of years to produce a level annual payment. Because the final amortization date is fixed, if all actuarial assumptions are achieved, the unfunded liability would decline to zero as of the final amortization date. To the extent future experience differs from the assumptions used to establish the 30-year fixed amortization payment schedule, new amortization bases attributable to a particular year's difference would be established and amortized over their own 30-year schedule. Commencing in PGW's fiscal year 2021, PGW's annual contribution is anticipated to be $30,000,000. The contribution amount exceeds the suggested level of funding in the actuarial report that was presented to the Sinking Fund Commission for review and is consistent with the contribution amount in PGW's base rates.

Table 34
PGW Pension – Annual Required Contributions
(Dollar Amounts in Thousands of USD)

Calculation of ARC for the 12-month period ended:	Normal Cost[1] (A)	Amortization Payment[1] (B)	ARC[1], [2] (A + B)	Payments to Beneficiaries[3]
7/1/2016	$7,992	$20,238	$28,230	$50,447
7/1/2017	$7,717	$19,678	$27,395	$51,376
7/1/2018	$7,760	$20,022	$27,782	$52,627
7/1/2019	$7,282	$18,617	$25,899	$53,893
7/1/2020	$6,161	$16,504	$22,665	$55,061

(1) Source: The Actuarial Valuation Report (Funding) for the Plan Year July 1, 2020 – June 30, 2021 for the PGW Pension Plan.

(2) Each ARC is the sum reflected in this table, but the "Calculated Mid-Year Contribution" in Tables 36 and 37 more closely approximates the actual pension contributions made by PGW.

(3) Sources: For 2016, the audited financial statements for PGW for the fiscal years ended August 31, 2016 and 2015. For 2017, the audited financial statements for PGW for the fiscal years ended August 31, 2017 and 2016. For 2018, the audited financial statements for PGW for the fiscal years ended August 31, 2018 and 2017. For 2019, the audited financial statements for PGW for the fiscal years ended August 31, 2019 and 2018. For 2020, the audited financial statements for PGW for the fiscal years ended August 31, 2020 and 2019.

Although PGW has paid its annual required contribution each year, the market value of assets for the PGW Pension Plan is less than the actuarial accrued liability, as shown in the next table.

Table 35
Schedule of Pension Funding Progress
(Dollar Amounts in Thousands of USD)[(1)]

Actuarial Valuation Date	Market Value of Assets	Actuarial Liability	UAL (Market Value)	Funded Ratio
7/1/2016	$483,259	$736,078	$252,819	65.65%
7/1/2017	$521,526	$739,872	$218,346	70.49%
7/1/2018	$543,246	$758,069	$214,823	71.66%
7/1/2019	$553,240	$755,782	$202,542	73.20%
7/1/2020	$543,230	$741,279	$198,049	73.28%

(1) Source: The Actuarial Valuation Report (Funding) for the Plan Year July 1, 2020 – June 30, 2021 for the PGW Pension Plan.

The current significant actuarial assumptions for the PGW Pension Plan are: (i) investment return rate of 7.30% compounded annually; (ii) salaries are assumed to increase by an amount based on years of service (as set forth in The Actuarial Valuation Report (Funding) for the Plan Year July 1, 2020 – June 30, 2021 for the PGW Pension Plan (see table 3 therein)); and (iii) retirements that are assumed to occur at the ages detailed in The Actuarial Valuation Report (Funding) for the Plan Year July 1, 2020 – June 30, 2021 for the PGW Pension Plan (see page 24 therein).

The Actuarial Valuation Report (Funding) for the Plan Year July 1, 2020 – June 30, 2021 for the PGW Pension Plan includes certain changes to the actuarial assumptions, including (i) modifications to mortality tables, turnover rates, disability rates, retirement rates, and salary scales, (ii) increases to assumed participant compensation in the final year of employment prior to retirement, and (iii) modifications to the optional payment form election percentages and the surviving spouse benefit assumptions. Also, for the next actuarial valuation report for the PGW Pension Plan, the investment return rate will be lowered to 7.00% compounded annually.

PGW uses a September 1 – August 31 fiscal year, while the PGW Pension Plan uses a July 1 – June 30 fiscal year (the same as the City's fiscal year). The last five actuarial valuation reports for the PGW Pension Plan utilized a plan year of July 1 to June 30. This is reflected in Table 35 above.

The PGW Pension Plan actuary prepared a separate actuarial valuation report ("GASB 67 Report") for the fiscal year ending June 30, 2020, for purposes of plan reporting information under Governmental Accounting Standards Board Statement No. 67, "Financial Reporting for Pension Plans." The GASB 67 Report shows for the fiscal year ending June 30, 2020, an unfunded liability of approximately $237.6 million (rather than the approximately $198.0 million reflected in Table 35), which results in a funded ratio of 69.57%. In addition, that report provides an interest rate sensitivity, which shows that were the investment rate to be 6.30% (1% lower than the assumed investment rate of 7.30%), the unfunded liability would be approximately $325.9 million.

Projections of Funded Status

The information under this subheading, "Projections of Funded Status," is extracted from tables prepared by Aon, as actuary to the PGW Pension Plan, which were included in their "Contribution and Funded Status Projections Funding Basis – 7.00% Interest Rate As of July, 2020, dated March 19, 2021. The charts show 10-year projections, using both the current amortization method (20-year, open) and the alternative amortization method (30-year, fixed). See "– Pension Costs and Funding" above. Projections are subject to actual experience deviating from the underlying assumptions and methods. **Projections and actuarial assessments are "forward looking" statements and are based upon assumptions that may not be fully realized in the future and are subject to change, including changes based upon the future experience of the PGW Pension Plan.**

Table 36
Schedule of Prospective Funded Status (20-Year Open Amortization)
(Dollar Amounts in Thousands of USD)

Actuarial Valuation Date (July 1)	Actuarial Value of Assets	Actuarial Accrued Liability	UAL (Actuarial Value)	Calculated Mid-Year Contribution[1], [2]	Funded Ratio
2020	$557,972	$741,279	$183,307	$30,000	75.27%
2021	571,643	744,669	173,026	22,172	76.76%
2022	572,249	746,944	174,695	22,032	76.61%
2023	571,101	748,251	177,150	22,211	76.32%
2024	570,808	749,105	178,297	22,412	76.20%
2025	575,701	749,922	174,221	21,926	76.77%
2026	580,102	750,155	170,053	21,291	77.33%
2027	583,905	749,831	165,926	20,935	77.87%
2028	587,452	749,292	161,840	20,633	78.40%
2029	590,824	748,808	157,984	20,394	78.90%

(1) Source: Philadelphia Gas Works Pension Plan – Funding The Alternative Funding Schedules for the Plan Year July 1, 2020 – June 30, 2021.

(2) PGW makes monthly contributions to the PGW Retirement Reserve Fund. The actuary's report assumes contributions at the beginning, middle, and end of the plan year. PGW utilizes the mid-year contribution level to approximate the actual funding methodology.

Table 37
Schedule of Prospective Funded Status (30-Year Closed Amortization)
(Dollar Amounts in Thousands of USD)

Actuarial Valuation Date (July 1)	Actuarial Value of Assets	Actuarial Accrued Liability	UAL (Actuarial Value)	Calculated Mid-Year Contribution[(1), (2)]	Funded Ratio
2020	$557,972	$741,279	$183,307	$30,000	75.27%
2021	571,643	744,669	173,026	21,147	76.76%
2022	571,186	746,944	175,757	21,313	76.47%
2023	569,216	748,251	179,035	21,791	76.07%
2024	568,350	749,105	180,755	22,312	75.87%
2025	572,960	749,922	176,962	22,217	76.40%
2026	577,462	750,155	172,693	21,967	76.98%
2027	581,773	749,831	168,057	21,986	77.59%
2028	586,254	749,292	163,038	22,052	78.24%
2029	591,009	748,808	157,799	22,170	78.93%

(1) Source: Philadelphia Gas Works Pension Plan – Funding The Alternative Funding Schedules for the Plan Year July 1, 2020 – June 30, 2021.

(2) PGW makes monthly contributions to the PGW Retirement Reserve Fund. The actuary's report assumes contributions at the beginning, middle, and end of the plan year. PGW utilizes the mid-year contribution level to approximate the actual funding methodology.

Additional Information

The City issues a publicly available financial report that includes financial statements and required supplementary information for the PGW Pension Plan. The report is not incorporated into this Official Statement by reference. The report may be obtained by writing to the Office of the Director of Finance of the City.

Further information on the PGW Pension Plan, including with respect to its membership, plan description, funding policy, actuarial assumptions and funded status is contained in the Fiscal Year 2020 ACFR.

PGW OTHER POST-EMPLOYMENT BENEFITS

PGW provides post-employment healthcare and life insurance benefits to its participating retirees and their beneficiaries and dependents. The City, through its General Fund, could be responsible for costs associated with post-employment healthcare and life insurance benefits if PGW fails to satisfy its post-employment benefit obligations.

PGW pays the full cost of medical, basic dental, and prescription coverage for employees who retired prior to December 1, 2001. Employees who retire after December 1, 2001 are provided a choice of three plans at PGW's expense and can elect to pay toward a more expensive plan. Union employees hired prior to May 21, 2011 and non-union employees hired prior to December 21, 2011 who retire from active service to immediately begin receiving pension benefits are entitled to receive lifetime post-retirement medical, prescription, and dental benefits for themselves and, depending on their retirement plan elections, their dependents. Employees hired on or after those dates are entitled to receive only five years of post-retirement benefits. Currently, PGW provides for the cost of healthcare and life insurance benefits for retirees and their beneficiaries on a pay-as-you-go-basis.

As part of a July 29, 2010 rate case settlement (the "Rate Settlement"), which provided for the establishment of an irrevocable trust for the deposit of funds derived through a rider from all customer classes to fund OPEB liabilities (the "OPEB Surcharge"), PGW established the trust in July 2010, and began funding the trust in accordance with the Rate Settlement in September 2010. The Rate Settlement provided that PGW was to deposit $15.0 million annually for an initial five-year period towards the ARC, and an additional $3.5 million annually, which represented a 30-year amortization of the OPEB liability at August 31, 2010. These deposits were funded primarily through increased rates of $16.0 million granted in the Rate Settlement. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excesses) over a period of 30 years. In PGW's 2015-2016 Gas Cost Rate ("GCR") proceeding, PGW proposed to continue its OPEB Surcharge. The parties to the GCR proceeding submitted a settlement agreement continuing the OPEB Surcharge at the same level of revenue ($16.0 million annually) and funding ($18.5 million annually). Such settlement agreement was approved by the PUC.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 38 provides detail of actual PGW OPEB payments for the last five PGW Fiscal Years and projected PGW OPEB payments for PGW Fiscal Years 2021-2025. Table 39 is the schedule of PGW OPEB funding progress.

Table 38
PGW OPEB Payments
(Amounts in Thousands of USD)

	Calculation of OPEB Payment for the 12-month period ended:	Healthcare	Life Insurance	OPEB Trust	Total
Actual[1]					
	8/31/2016	$29,251	$1,800	$18,500	$49,551
	8/31/2017	$27,788	$1,777	$18,500	$48,065
	8/31/2018	$26,953	$1,661	$18,500	$47,114
	8/31/2019	$27,419	$1,629	$18,500	$47,548
	8/31/2020	$26,944	$1,661	$18,500	$47,105
Projections[2]					
	12/31/2021	$29,528	$1,700	$18,500	$49,728
	12/31/2022	$30,593	$1,700	$18,500	$50,793
	12/31/2023	$31,875	$1,700	$18,500	$52,075
	12/31/2024	$32,483	$1,700	$18,500	$52,683
	12/31/2025	$33,528	$1,700	$18,500	$53,728

(1) Source: PGW audited financial statements for fiscal year ended August 31, 2020.

(2) The Actuarial Valuation Report for the PGW Health and Life Insurance Plan GASB 75 Projected Costs – Discount Rate = 7.30%.

Table 39
Schedule of OPEB Funding Progress
(Dollar Amounts in Thousands of USD)

Actuarial valuation date	Actuarial value of assets	Actuarial liability	Unfunded actuarial liability	Funded ratio
12/31/2016[1]	$139,624	$489,979	$350,356	28.5%
12/31/2017[1]	$180,743	$559,631	$378,888	32.3%
12/31/2018[1]	$184,455	$520,533	$336,078	35.4%
12/31/2019[1]	$245,361	$493,570	$248,209	49.7%
12/31/2020[2]	$306,097	$491,295	$185,198	62.3%

(1) The Actuarial Valuation Report for the PGW Health and Life Insurance Plan for Retired Employees GASB 75 Financial Disclosure Report for the Fiscal Year Ended August 31, 2020.

(2) The Actuarial Valuation Report for the PGW Health and Life Insurance Plan GASB 75 Projected Costs – Discount rate = 7.30%.

CITY CASH MANAGEMENT AND INVESTMENT POLICIES

General Fund Cash Flow

Because the receipt of revenues into the General Fund generally lags behind expenditures from the General Fund during each Fiscal Year, the City issues notes in anticipation of General Fund revenues and makes payments from the Consolidated Cash Account (described below) to finance its on-going operations.

The timing imbalance referred to above results from a number of factors, principally the following: (i) Real Estate Taxes, BIRT, and Net Profits Taxes are not due until the latter part of the Fiscal Year; and (ii) the City experiences lags in reimbursement from other governmental entities for expenditures initially made by the City in connection with programs funded by other governments.

From time to time, the City issues, or PICA has issued on behalf of the City, tax and revenue anticipation notes. Each issue was repaid when due, prior to the end of the particular Fiscal Year. The City did not issue any tax and revenue anticipation notes in Fiscal Years 2019 or 2020. In September 2020, the City issued $300 million in tax and revenue anticipation notes, which mature on June 30, 2021.

The repayment of the tax and revenue anticipation notes is funded through cash available in the General Fund.

Consolidated Cash

The Act of the General Assembly of June 25, 1919 (Pa. P.L. 581, No. 274, Art. XVII, § 6) authorizes the City to make temporary inter-fund loans between certain operating and capital funds. The City maintains a Consolidated Cash Account for the purpose of pooling the cash and investments of all City funds, except those which, for legal or contractual reasons, cannot be commingled (e.g., the Municipal Pension Fund, sinking funds, sinking fund reserves, funds of PGW, the Aviation Fund, the Water Fund, and certain other restricted purpose funds). A separate accounting is maintained to record the equity of each member fund that participates in the Consolidated Cash Account. The City manages the Consolidated Cash Account pursuant to the procedures described below.

To the extent that any member fund temporarily experiences the equivalent of a cash deficiency, an advance is made from the Consolidated Cash Account, in an amount necessary to result in a zero balance in the cash equivalent account of the borrowing fund. All subsequent net receipts of a member fund that has negative equity are applied in repayment of the advance.

All advances are made within the budgetary constraints of the borrowing funds. Within the General Fund, this system of inter-fund advances has historically resulted in the temporary use of tax revenues or other operating revenues for capital purposes and the temporary use of capital funds for operating purposes. With the movement of the reimbursable component of DHS activities from the General Fund to the Grants Revenue Fund, a similar system of advances has resulted in the use of tax revenues or other operating revenues in the General Fund to make expenditures from the Grants Revenue Fund, which advances may be outstanding for multiple Fiscal Years, but which are expected to be reimbursed by the Commonwealth.

The City, in addition to maintaining an ongoing cash reconciliation process, is reviewing and reconciling certain unidentified variances in the Consolidated Cash Account. The reconciliation process, in short, reconciles the account balance and activity shown on the records of the bank at which the cash balance of the Consolidated Cash Account is maintained to that shown on the City's records. The City's

records were not consistently reconciled for the period of July 1, 2014 – June 30, 2017. The balance in the Consolidated Cash Account on the City's records was higher than the account balance on the bank's records by approximately $40 million, which is attributable principally to unidentified historic variances. The City engaged the services of an auditing firm to undertake a complete reconciliation and resolve the unidentified variances. In January 2019, a final audit report was delivered. The final reported variance was $528,606 and the City has written-off such amount, which completes the reconciliation efforts for the period of July 1, 2014 – June 30, 2017.

Procedures governing the City's cash management operations require the General Fund-related operating fund to borrow initially from the General Fund-related capital fund, and only to the extent there is a deficiency in such fund may the General Fund-related operating fund borrow money from any other funds in the Consolidated Cash Account.

Investment Practices

Cash balances in each of the City's funds are managed to maintain daily liquidity to pay expenses, and to make investments that preserve principal while striving to obtain the maximum rate of return. Pursuant to the City Charter, the City Treasurer is the City official responsible for managing cash collected into the City Treasury. The available cash balances in excess of daily expenses are placed in demand accounts, swept into money market mutual funds, or used to make investments directed by professional investment managers. These investments are held in segregated trust accounts at a separate financial institution. Cash balances related to revenue bonds for water and sewer and the airport are directly deposited and held separately in trust. A fiscal agent manages these cash balances in accordance with the applicable bond documents and the investment practice is guided by administrative direction of the City Treasurer per the Investment Committee and the Investment Policy (as described below). In addition, certain operating cash deposits (such as Community Behavioral Health, Special Gas/County Liquid and "911" surcharge) of the City are restricted by purpose and required to be segregated into accounts in compliance with federal or Commonwealth reporting.

Investment guidelines for the City are embodied in section 19-202 of the Philadelphia Code. In furtherance of these guidelines, as well as Commonwealth and federal legislative guidelines, the Director of Finance adopted a written Investment Policy (the "Policy") that went into effect in August 1994 and was most recently revised in September 2014. The Policy supplements other legal requirements and establishes guiding principles for the overall administration and effective management of all of the City's monetary funds (except the Municipal Pension Fund, the PGW Retirement Reserve Fund, the PGW OPEB Trust and the PGW Workers' Compensation Reserve Fund).

The Policy delineates the authorized investments as authorized by the Philadelphia Code and the funds to which the Policy applies. The authorized investments include U.S. government securities, U.S. treasuries, U.S. agencies, repurchase agreements, commercial paper, corporate bonds, money market mutual funds, obligations of the Commonwealth, collateralized banker's acceptances and certificates of deposit, and collateralized mortgage obligations and pass-through securities directly issued by a U.S. agency or instrumentality, all of investment grade rating or better and with maturity limitations.

U.S. government treasury and agency securities carry no limitation as to the percent of the total portfolio. Repurchase agreements, money market mutual funds, commercial paper, and corporate bonds are limited to investment of no more than 25% of the total portfolio. Obligations of the Commonwealth and collateralized banker's acceptances and certificates of deposit are limited to no more than 15% of the total portfolio. Collateralized mortgage obligations and pass-through securities directly issued by a U.S. agency or instrumentality are limited to no more than 5% of the total portfolio.

U.S. government securities carry no limitation as to the percent of the total portfolio per issuer. U.S. agency securities are limited to no more than 33% of the total portfolio per issuer. Repurchase agreements and money market mutual funds are limited to no more than 10% of the total portfolio per issuer. Commercial paper, corporate bonds, obligations of the Commonwealth, collateralized banker's acceptances and certificates of deposit, and collateralized mortgage obligations and pass-through securities directly issued by a U.S. agency or instrumentality are limited to no more than 3% of the total portfolio per issuer.

The Policy provides for an ad hoc Investment Committee consisting of the Director of Finance, the City Treasurer and one representative each from the Water Department, the Division of Aviation, and PGW. The Investment Committee meets quarterly with each of the investment managers to review each manager's performance to date and to plan for the next quarter. Investment managers are given any changes in investment instructions at these meetings. The Investment Committee approves all modifications to the Policy. The Investment Committee may from time to time review and revise the Policy and does from time to time approve temporary waivers of the restrictions on assets based on cash management needs and recommendations of investment managers.

The Policy expressly forbids the use of any derivative investment product as well as investments in any security whose yield or market value does not follow the normal swings in interest rates. Examples of these types of securities include, but are not limited to: structured notes, floating rate (excluding U.S. Treasury and U.S. agency floating rate securities) or inverse floating rate instruments, securities that could result in zero interest accrual if held to maturity, and mortgage derived interest and principal only strips. The City currently makes no investments in derivatives.

DEBT OF THE CITY

General

Section 12 of Article IX of the Constitution of the Commonwealth provides that the authorized debt of the City "may be increased in such amount that the total debt of [the] City shall not exceed 13.5% of the average of the annual assessed valuations of the taxable realty therein, during the ten years immediately preceding the year in which such increase is made, but [the] City shall not increase its indebtedness to an amount exceeding 3.0% upon such average assessed valuation of realty, without the consent of the electors thereof at a public election held in such manner as shall be provided by law." The Supreme Court of Pennsylvania has held that bond authorizations once approved by the voters need not be reduced as a result of a subsequent decline in the average assessed value of City property. The general obligation debt subject to the limitation described in this paragraph is referred to herein as "Tax-Supported Debt."

The Constitution of the Commonwealth further provides that there shall be excluded from the computation of debt for purposes of the Constitutional debt limit, debt (herein called "Self-Supporting Debt") incurred for revenue-producing capital improvements that may reasonably be expected to yield revenue in excess of operating expenses sufficient to pay interest and sinking fund charges thereon. In the case of general obligation debt, the amount of such Self-Supporting Debt to be so excluded must be determined by the Court of Common Pleas of Philadelphia County upon petition by the City. Self-Supporting Debt is general obligation debt of the City, with the only distinction from Tax-Supported Debt being that it is not used in the calculation of the Constitutional debt limit. Self-Supporting Debt has no lien on any particular revenues.

For purposes of this Official Statement, Tax-Supported Debt and Self-Supporting Debt are referred to collectively as "General Obligation Debt." The term "General Fund-Supported Debt" is

comprised of: (i) General Obligation Debt; and (ii) PAID, PMA, PPA, and PRA bonds, which are secured by agreements with the City to appropriate and pay amounts sufficient to pay principal, interest, or redemption price when due on the bonds.

Using the methodology described above, as of May 31, 2021, the Constitutional debt limitation for Tax-Supported Debt was approximately $11,052,153,000. The total amount of authorized debt applicable to the debt limit was $2,637,247,000, including $1,001,427,000 of authorized but unissued debt, leaving a legal debt margin of $8,767,603,000. Based on the foregoing figures, the calculation of the legal debt margin is as follows:

Table 40
General Obligation Debt Limit
As of May 31, 2021
(Amounts in Thousands of USD)

Authorized, issued and outstanding	$1,635,820
Authorized and unissued	1,001,427
Total	$2,637,247
Less: Self-Supporting Debt	($352,697)
Less: Serial bonds maturing within a year	0
Total amount of authorized debt applicable to debt limit	2,284,550
Legal debt limit	11,052,153
Legal debt margin	$8,767,603

As a result of the implementation of the City's AVI, the assessed value of taxable real estate within the City has increased substantially. See "REVENUES OF THE CITY – Real Property Taxes." The $11.052 billion Constitutional debt limit calculation includes seven years of property values certified under the City's AVI program, and three years of property values under the City's former property valuation process. Assuming no increase or decrease in property values used to calculate the Constitutional debt limit in Table 40, the Constitutional debt limit is estimated to be $16.950 billion by 2028.

The City is also empowered by statute to issue revenue bonds and, as of May 31, 2021, had outstanding $2,227,494,635 aggregate principal amount of Water and Wastewater Revenue Bonds ("Water and Wastewater Bonds"), $1,086,775,000 aggregate principal amount of Gas Works Revenue Bonds, and $1,477,030,000 aggregate principal amount of Airport Revenue Bonds. The City has also enacted ordinances authorizing the issuance of (i) up to $350 million aggregate principal amount in Airport Revenue Commercial Paper Notes for the Division of Aviation, (ii) up to $400 million of Airport Revenue Bonds to finance capital projects for the Division of Aviation, (iii) up to $270 million of Gas Works Revenue Notes to finance working capital and capital projects for PGW, (iv) up to $460 million of Gas Works Revenue Bonds to finance capital projects for PGW, of which approximately $203.2 million has been issued, (v) up to $400 million of Water and Wastewater Commercial Paper Notes for the Philadelphia Water Department, and (vi) up to $800 million of Water and Wastewater Revenue Bonds for the Philadelphia Water Department, of which approximately $250.7 million has been issued. For information on recent and upcoming financings, see "OTHER FINANCING RELATED MATTERS – Recent and Upcoming Financings."

As of May 31, 2021, the principal amount of PICA Bonds outstanding was $56,075,000. The final maturity date for such PICA Bonds is June 15, 2023. For more information on PICA Bonds, see "– PICA Bonds" below.

Short-Term Debt

As provided in the PICA Act, the City's tax and revenue anticipation notes are general obligations of the City, but do not constitute debt of the City subject to the limitations of the Constitutional debt limit. The City did not issue any tax and revenue anticipation notes in Fiscal Years 2019 or 2020. In September 2020, the City issued $300 million in tax and revenue anticipation notes, which mature on June 30, 2021. The City expects to issue tax and revenue anticipation notes in Fiscal Year 2022. See "OTHER FINANCING RELATED MATTERS – Recent and Upcoming Financings" and "CITY CASH MANAGEMENT AND INVESTMENT POLICIES – General Fund Cash Flow."

Long-Term Debt

The following table presents a synopsis of the bonded debt of the City and its component units as of the date indicated. Of the total balance of the City's general obligation bonds issued and outstanding as of May 31, 2021, approximately 31% is scheduled to mature within five Fiscal Years and approximately 64% is scheduled to mature within ten Fiscal Years. When PICA's outstanding bonds are included with the City's general obligation bonds, approximately 63% is scheduled to mature within ten Fiscal Years.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Table 41
Bonded Debt
as of May 31, 2021
(Amounts in Thousands of USD)[1], [2]

General Obligation Debt and PICA Bonds				
General Obligation Bonds		$1,635,820		
PICA Bonds		56,075		
Subtotal: General Obligation Debt and PICA Bonds			**$1,691,895**	
Other General Fund-Supported Debt[3]				
Philadelphia Municipal Authority				
Juvenile Justice Center	$76,565			
Public Safety Campus	59,595			
Energy Conservation	6,800			
		$142,960		
Philadelphia Authority for Industrial Development				
Pension capital appreciation bonds	$168,483			
Pension fixed rate bonds	856,435			
Stadiums	200,120			
Library	2,990			
Cultural and Commercial Corridor	71,370			
One Parkway	19,495			
Affordable Housing	47,430			
400 N. Broad[4]	234,833			
Art Museum	9,240			
Rebuild	73,670			
		$1,684,066		
Philadelphia Parking Authority		8,500		
Philadelphia Redevelopment Authority		172,990		
Subtotal: Other General Fund-Supported Debt			**$2,008,516**	
Revenue Bonds				
Water Fund		$2,227,495		
Aviation Fund[5]		1,477,030		
Gas Works[5]		1,086,775		
Subtotal: Revenue Bonds			**$4,791,300**	
Grand Total				**$8,491,710**

---

(1) Unaudited; figures may not sum due to rounding.

(2) For tables setting forth a ten-year historical summary of Tax-Supported Debt of the City and the School District and the debt service requirements to maturity of the City's outstanding bonded indebtedness as of June 30, 2020, see the Fiscal Year 2020 ACFR.

(3) The principal amount outstanding relating to the PAID 1999 Pension Obligation Bonds, Series B (capital appreciation bonds) is reflected as the accreted value thereon as of May 31, 2021.

(4) Includes (i) sublease payments of approximately $15.2 million annually for the police headquarters renovation; and (ii) an assumption that the City issues approximately $200 million in bonds in 2026 to acquire the project at an assumed interest rate of 5% over the next 20 years.

(5) Does not include any outstanding commercial paper or short-term note issuances for the Division of Aviation or PGW, as applicable.

Table 42
Annual Debt Service on General Fund-Supported Debt
(as of May 31, 2021)
(Amounts in Millions of USD)[1]

Fiscal Year	General Obligation Debt[2]			Other General Fund-Supported Debt[4], [5]			Aggregate General Fund-Supported Debt		
	Principal	Interest[3]	Total	Principal	Interest[6], [7]	Total	Principal	Interest	Total
2021[8]	$0.00	$0.00	$0.00	$1.37	$5.46	$6.83	$1.37	$5.46	$6.83
2022	92.16	75.40	167.56	71.33	133.27	204.60	163.48	208.68	372.16
2023	97.59	70.85	168.44	128.39	106.13	234.51	225.98	176.98	402.96
2024	102.06	66.19	168.25	142.04	108.67	250.71	244.10	174.86	418.96
2025	106.79	61.22	168.01	147.35	103.38	250.72	254.14	164.60	418.74
2026	104.42	56.12	160.54	163.88	86.01	249.90	268.30	142.14	410.44
2027	109.36	50.89	160.25	185.27	60.67	245.94	294.63	111.56	406.19
2028	115.16	45.48	160.64	195.20	53.65	248.85	310.35	99.13	409.48
2029	90.98	40.76	131.74	281.74	35.54	317.28	372.71	76.30	449.01
2030	107.66	36.29	143.94	69.60	25.33	94.93	177.25	61.62	238.87
2031	113.45	31.26	144.71	73.00	21.92	94.92	186.45	53.18	239.63
2032	118.83	25.96	144.78	33.21	18.93	52.13	152.03	44.88	196.91
2033	87.01	21.26	108.27	32.59	17.49	50.07	119.60	38.75	158.35
2034	76.43	17.52	93.94	48.46	16.01	64.47	124.89	33.52	158.41
2035	64.91	14.20	79.10	65.28	14.00	79.28	130.18	28.20	158.38
2036	68.07	11.03	79.09	30.30	11.42	41.71	98.36	22.44	120.80
2037	56.21	8.02	64.23	31.80	9.92	41.71	88.01	17.94	105.94
2038	59.15	5.16	64.31	33.37	8.34	41.71	92.52	13.50	106.02
2039	41.79	2.70	44.49	23.00	6.80	29.79	64.78	9.50	74.28
2040	7.58	0.96	8.54	14.24	5.74	19.98	21.82	6.70	28.51
2041	7.93	0.61	8.54	14.94	5.03	19.97	22.87	5.65	28.51
2042	8.34	0.21	8.54	15.68	4.30	19.97	24.01	4.51	28.52
2043	0.00	0.00	0.00	16.45	3.53	19.98	16.45	3.53	19.98
2044	0.00	0.00	0.00	17.26	2.72	19.98	17.26	2.72	19.98
2045	0.00	0.00	0.00	14.04	1.86	15.90	14.04	1.86	15.90
2046	0.00	0.00	0.00	14.76	1.14	15.90	14.76	1.14	15.90
2047	0.00	0.00	0.00	15.52	0.39	15.90	15.52	0.39	15.90
Total	**$1,635.82**	**$642.11**	**$2,277.93**	**$1,879.99**	**$867.63**	**$2,747.62**	**$3,515.81**	**$1,509.74**	**$5,025.55**

(1) Does not include letter of credit fees. Figures may not sum due to rounding.
(2) Includes both Tax-Supported Debt and Self-Supporting Debt. See "– General." Does not include PICA Bonds.
(3) Assumes interest rate on hedged variable rate bonds to be the associated fixed swap rate.
(4) Includes PAID, PMA, PPA, and PRA bonds, which are secured by agreements with the City to appropriate and pay amounts sufficient to pay principal, interest, or redemption price when due on such bonds, with capital appreciation bonds including only actual amounts payable. The original issuance amount of such capital appreciation bonds is included under the "Principal" column in the Fiscal Year such bonds mature and the full accretion amount at maturity less the original issuance amount is included in the "Interest" column in the Fiscal Year such bonds mature.
(5) Includes (i) sublease payments of approximately $15.2 million annually for the police headquarters renovation; and (ii) an assumption that the City issues approximately $200 million in bonds in 2026 to acquire the project at an assumed interest rate of 5% over the next 20 years.
(6) Assumes interest rate on hedged variable rate bonds to be the associated fixed swap rate, plus any fixed spread.
(7) Net of capitalized interest.
(8) Reflects debt service due for the remainder of the Fiscal Year (June 1-June 30).

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Other Long-Term Debt Related Obligations

The City has entered into other contracts and leases to support the issuance of debt by public authorities related to the City pursuant to which the City is required to budget and appropriate tax or other general revenues to satisfy such obligations, as shown in Table 41. The City budgets all other long-term debt-related obligations as a single budget item with the exception of PPA.

The Hospitals Authority and the State Public School Building Authority have issued bonds on behalf of the Community College of Philadelphia ("CCP"). Under the Community College Act (Pa. P.L. 103, No. 31 (1985)), each community college must have a local sponsor, which for CCP is the City. As the local sponsor, the City is obligated to pay up to 50% of the annual capital expenses of CCP, which includes debt service. The remaining 50% is paid by the Commonwealth. Additionally, the City annually appropriates funds for a portion of CCP's operating costs (less tuition and less the Commonwealth's payment). The amount paid by the City in Fiscal Year 2019 was $32.4 million. The amount paid by the City in Fiscal Year 2020 was $36.1 million. The budgeted amount and current estimate for Fiscal Year 2021 is $44.1 million.

PICA Bonds

PICA has issued 11 series of bonds at the request of the City (the "PICA Bonds"). PICA no longer has authority under the PICA Act to issue bonds for new money purposes, but may refund bonds previously issued. The proceeds of the PICA Bonds were used to: (i) make grants to the City to fund its General Fund deficits, to fund all or a portion of the costs of certain City capital projects, to provide other financial assistance to the City to enhance operational productivity, and to defease certain of the City's general obligation bonds; (ii) refund other PICA Bonds; and (iii) pay costs of issuance.

On December 3, 2019, PICA issued $31,085,000 of its Series 2019 Special Tax Refunding Bonds (the "2019 PICA Bonds") to provide funds, together with other available funds, to defease certain of its PICA Bonds. On March 17, 2020, PICA issued $24,990,000 Series 2020 Special Tax Refunding Bonds (the "2020 PICA Bonds") to provide funds, together with other available funds, to defease certain of its PICA Bonds. Following the issuance of the 2019 PICA Bonds and 2020 PICA Bonds and the related defeasances, PICA has, as of May 31, 2021, $56,075,000 in PICA Bonds outstanding with a final maturity date of June 15, 2023.

The PICA Act authorizes the City to impose a tax for the sole and exclusive purposes of PICA. In connection with the adoption of the Fiscal Year 1992 budget and the execution of the PICA Agreement, as so authorized by the PICA Act, the City reduced the wage, earnings, and net profits taxes on City residents by 1.5% and enacted a new tax of 1.5% on wages, earnings, and net profits of City residents (the "PICA Tax"), which continues in effect. The PICA Tax secures the PICA Bonds. Pursuant to the PICA Act, at such time when no PICA Bonds are outstanding, the PICA Tax will expire. At any time, the City is authorized to increase for its own use its various taxes, including its wage, earnings, and net profits taxes on City residents and could do so upon the expiration of the PICA Tax. Certain taxes, such as sales, liquor, and hotel taxes, among others, cannot be increased by the City without Commonwealth approval.

The PICA Tax is collected by the City's Department of Revenue, as agent of the State Treasurer, and deposited in the Pennsylvania Intergovernmental Cooperation Authority Tax Fund (the "PICA Tax Fund") of which the State Treasurer is custodian. The PICA Tax Fund is not subject to appropriation by City Council or the General Assembly. See "THE GOVERNMENT OF THE CITY OF PHILADELPHIA – Local Government Agencies – *Non-Mayoral-Appointed or Nominated Agencies* – PICA."

The PICA Act authorizes PICA to pledge the PICA Tax to secure its bonds and prohibits the Commonwealth and the City from repealing the PICA Tax or reducing its rate while any PICA Bonds are outstanding. PICA Bonds are payable from PICA revenues, including the PICA Tax, pledged to secure PICA's bonds, the Bond Payment Account (as described below) and any debt service reserve fund established for such bonds and have no claim on any revenues of the Commonwealth or the City.

The PICA Act establishes a "Bond Payment Account" for PICA as a trust fund for the benefit of PICA bondholders and authorizes the creation of a debt service reserve fund for bonds issued by PICA. The State Treasurer is required to pay the proceeds of the PICA Tax held in the PICA Tax Fund directly to the Bond Payment Account. The proceeds of the PICA Tax in excess of amounts required for: (i) debt service; (ii) replenishment of any debt service reserve fund for bonds issued by PICA; and (iii) certain PICA operating expenses, are required to be deposited in a trust fund established exclusively to benefit the City and designated the "City Account." Amounts in the City Account are required to be remitted to the City not less often than monthly, unless PICA certifies the City's non-compliance with the then-current five-year financial plan.

The total amount of PICA Tax remitted by the State Treasurer to PICA (which is net of the costs of the State Treasurer in collecting the PICA Tax), PICA annual debt service and investment expenses, and net PICA tax revenue remitted to the City for Fiscal Years 2017-2020, the budgeted amounts and current estimates for Fiscal Year 2021 are set forth below.

Table 43
Summary of PICA Tax Remitted by the State Treasurer to PICA and Net Taxes Remitted by PICA to the City (Amounts in Millions of USD)[1]

Fiscal Year	PICA Tax[2]	PICA Annual Debt Service and Expenses[2]	Net taxes remitted to the City[3]
2017 (Actual)	$469.2	$59.7	$409.5
2018 (Actual)	$497.0	$42.8	$454.2
2019 (Actual)	$528.7	$35.2	$493.6
2020 (Actual)	$534.4	$38.4	$495.9
2021 (Adopted Budget)	$507.8	$37.2	$470.6
2021 (Current Estimate)	$499.9	$37.2	$462.7

(1) Figures may not sum due to rounding.
(2) Source: The City's Quarterly City Manager's Reports or the budget for the applicable Fiscal Year.
(3) Source: For Fiscal Years 2017-2020, the City's ACFRs for such Fiscal Years. For Fiscal Year 2021, the Fiscal Year 2021 Adopted Budget and the FY 2021 Third Quarter QCMR, as applicable.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

OTHER FINANCING RELATED MATTERS

Swap Information

The City is a party to various swaps related to its outstanding General Fund-Supported Debt as detailed in the table below.

Table 44
Summary of Swap Information
for General Fund-Supported Debt (as of May 31, 2021)

City Entity	City GO	City Lease PAID	City Lease PAID
Related Bond Series	2009B[(1)]	2007B-2 (Stadium)[(3)]	2007B-2 (Stadium)[(4)]
Initial Notional Amount	$313,505,000	$217,275,000	$72,400,000
Current Notional Amount	$100,000,000	$47,036,363	$15,673,637
Termination Date	8/1/2031	10/1/2030	10/1/2030
Product	Fixed Payer Swap	Fixed Payer Swap	Fixed Payer Swap
Rate Paid by Dealer	SIFMA	SIFMA	SIFMA
Rate Paid by City Entity	3.829%	3.9713%	3.9713%
Dealer	Royal Bank of Canada	JPMorgan Chase Bank, N.A.	Merrill Lynch Capital Services, Inc.
Fair Value[(2)]	($22,923,454)	($7,792,626)	($2,596,694)
Additional Termination Events	For Dealer: Rating change below BBB- or Baa3 For City: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)	For Dealer: Rating change below BBB- or Baa3 For PAID: Rating change below BBB- or Baa3 upon insurer event (includes insurer being rated below A- or A3)

(1) On July 28, 2009, the City terminated a portion of the swap in the amount of $213,505,000 in conjunction with the refunding of its Series 2007B bonds with the Series 2009A fixed rate bonds and the Series 2009B variable rate bonds. The City made a termination payment of $15,450,000.

(2) Fair values are as of May 31, 2021, and are shown from the City's perspective and include accrued interest.

(3) On July 15, 2014, PAID terminated a portion of the swap in the amount of $41,555,000 in conjunction with the refunding of a portion of its Series 2007B bonds with the Series 2014B fixed rate bonds. PAID made a termination payment of $4,171,000 to JPMorgan. On September 11, 2019, PAID terminated a portion of the swap in the amount of $33,455,654 in conjunction with the refunding of a portion of its Series 2007B bonds with the Series 2019 fixed rate bonds. PAID made a termination payment of $6,051,000 to JPMorgan.

(4) On July 15, 2014, PAID terminated a portion of the swap in the amount of $13,840,000 in conjunction with the refunding of a portion of its Series 2007B bonds with the Series 2014B fixed rate bonds. PAID made a termination payment of $1,391,800 to Merrill Lynch. On September 11, 2019, PAID terminated a portion of the swap in the amount of $11,149,346 in conjunction with the refunding of a portion of its Series 2007B bonds with the Series 2019 fixed rate bonds. PAID made a termination payment of $1,998,000 to Merrill Lynch.

While the City is party to several interest rate swap agreements, for which there is General Fund exposure and on which the swaps currently have a negative mark against the City, the City has no obligation to post collateral on these swaps while the City's underlying ratings are investment grade.

For more information related to certain swaps entered into in connection with revenue bonds issued for PGW, the Water Department, and the Division of Aviation, see the Fiscal Year 2020 ACFR. In addition, PICA has entered into swaps, which are detailed in the Fiscal Year 2020 ACFR.

Swap Policy

The City has adopted a swap policy for the use of swaps, caps, floors, collars and other derivative financial products (collectively, "swaps") in conjunction with the City's debt management. The swap program managed by the City includes swaps related to the City's general obligation bonds, tax-supported service contract debt issued by related authorities, debt of the Water Department, Division of Aviation, and debt of PGW. Swaps related to debt of the PICA, the School District, and the PPA are managed by those governmental entities, respectively.

The Director of Finance has overall responsibility for entering into swaps. Day-to-day management of swaps is the responsibility of the City Treasurer, and the Executive Director of the Sinking Fund Commission is responsible for making swap payments. The Office of the City Treasurer and the City Solicitor's Office coordinate their activities to ensure that all swaps that are entered into are in compliance with applicable federal, state, and local laws.

The swap policy addresses the circumstances when swaps can be used, the risks that need to be evaluated prior to entering into swaps and on an ongoing basis after swaps have been executed, the guidelines to be employed when swaps are used, and how swap counterparties will be chosen. The swap policy is used in conjunction with the City's Debt Management Policy, reviewed annually, and updated as needed.

Under the swap policy, permitted uses of swaps include: (i) managing the City's exposure to floating interest rates through interest rate swaps, caps, floors and collars; (ii) locking in fixed rates in current markets for use at a later date through the use of forward starting swaps and rate locks; (iii) reducing the cost of fixed or floating rate debt through swaps and related products to create "synthetic" fixed or floating rate debt; and (iv) managing the City's credit exposure to financial institutions and other entities through the use of offsetting swaps.

Since swaps can create exposure to the creditworthiness of financial institutions that serve as the City's counterparties on swap transactions, the City has established standards for swap counterparties. As a general rule, the City enters into transactions with counterparties whose obligations are rated in the A rated category or better from two nationally recognized rating agencies. If counterparty's credit rating is below the double-A rating category, the swap policy requires that the City's exposure be collateralized. If a counterparty's credit is downgraded below the A category, even with collateralization, the swap policy requires a provision in the swap permitting the City to exercise a right to terminate the transaction prior to its scheduled termination date.

Letter of Credit Agreements

The City has entered into various letter of credit agreements related to its General Fund-Supported Debt as detailed in the table below. Under the terms of such letter of credit agreements, following a purchase of the applicable bonds, the City may be required to amortize such bonds more quickly than as originally scheduled at issuance.

Table 45
Summary of Letter of Credit Agreements
for General Fund-Supported Debt
as of May 31, 2021

Variable Rate Bond Series	Amount Outstanding	Bond Maturity Date	Provider	Expiration Date	Rating Thresholds [1]
General Obligation Multi-Modal Refunding Bonds, Series 2009B	$100,000,000	August 1, 2031	Barclays Bank PLC	May 24, 2023	The long-term rating assigned by any one of the rating agencies to any unenhanced long-term parity debt of the City is (i) withdrawn or suspended for credit-related reasons or (ii) reduced below investment grade.
PAID Multi-Modal Lease Revenue Refunding Bonds, Series 2007B-2	$ 62,710,000	October 1, 2030	TD Bank	May 29, 2024	The long-term ratings assigned by at least two of the rating agencies to any unenhanced general obligation bonds of the City is (i) withdrawn or suspended for credit-related reasons, or (ii) reduced below investment grade.

[1] The occurrence of a Rating Threshold event would result in an event of default under the reimbursement agreement with the related bank.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Recent and Upcoming Financings

Recent Financings. The following is a list of financings that the City has entered into since the beginning of Fiscal Year 2021.

- In June 2021, the City issued $368,720,000 in Water and Wastewater Revenue Refunding Bonds.
- In April 2021, PAID issued $136,990,000 in City Service Agreement Revenue Refunding Bonds for the benefit of the City.
- In October 2020, the City issued $253,925,000 in Gas Works Revenue and Revenue Refunding Bonds.
- In October 2020, the City issued $389,215,000 in Airport Revenue and Revenue Refunding Bonds.
- In October 2020, the City issued $127,740,000 in Water and Wastewater Revenue Refunding Bonds pursuant to a Forward Delivery Bond Purchase Agreement signed in February 2019.
- In September 2020, the City issued $300,000,000 in tax and revenue anticipation notes.
- In August 2020, the City issued $296,555,000 in Water and Wastewater Revenue and Revenue Refunding Bonds.

Upcoming Financings. In addition to the financing contemplated by this Official Statement, the following is a list of financings that the City expects to enter into in calendar year 2021.

- In the summer of 2021, the City expects to issue approximately $366 million in General Obligation Bonds.
- In the fall of 2021, PRA expects to issue approximately $100 million in City Service Agreement Revenue Bonds for the benefit of the City.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

CITY CAPITAL PROGRAM

As part of the annual budget process, the Mayor submits for approval a six-year capital program to City Council, together with the proposed operating budget. For more information on the City's budget process, see "DISCUSSION OF FINANCIAL OPERATIONS – Budget Procedure."

Certain Historical Capital Expenditures

Table 46 shows the City's historical expenditures for Fiscal Years 2016-2020 for certain capital purposes, including expenditures for projects related to transit, streets and sanitation, municipal buildings, recreation, parks, museums, and stadia, and economic and community development. The source of funds used for such expenditures are primarily general obligation bond proceeds, but also include federal, state, private, and other government funds and operating revenue. Figures in the table below are generated after the Fiscal Year closes and may not sum due to rounding.

Table 46
Historical Expenditures for Certain Capital Purposes
Fiscal Years 2016-2020

Purpose Category	2016	2017	2018	2019	2020
Transit	$ 3,223,431	$ 378,229	$ 7,284,978	$ 7,511,909	$ 403,832
Streets & Sanitation	76,350,266	43,772,678	27,626,173	51,724,238	55,819,152
Municipal Buildings	50,653,561	45,002,188	75,096,668	76,886,156	115,712,216
Recreation, Parks, Museums & Stadia	35,963,360	37,323,288	61,839,958	42,098,687	23,488,384
Economic & Community Development	16,176,644	4,570,196	18,288,380	17,060,541	19,160,053
TOTAL	**$182,367,262**	**$131,046,579**	**$190,136,157**	**$195,281,531**	**$214,583,636**

Table 47 shows the City's historical expenditures for Fiscal Years 2016-2020 for certain capital purposes from general obligation bond proceeds only and the percentage of the total costs covered by such proceeds in such Fiscal Years. Figures in the table below are generated after the Fiscal Year closes and may not sum due to rounding.

Table 47
Historical Expenditures for Certain Capital Purposes
(General Obligation Bond Proceeds Only)
Fiscal Years 2016-2020

Purpose Category	2016	2017	2018	2019	2020
Transit	$ 3,223,431	$ 414,434	$ 7,227,880	$7,509,010	$ 2,115,963
Streets & Sanitation	23,963,058	21,952,654	19,601,019	27,508,365	30,392,324
Municipal Buildings	40,036,844	43,400,701	70,850,458	70,306,949	86,218,008
Recreation, Parks, Museums & Stadia	25,364,901	29,135,962	54,534,870	35,427,491	10,870,133
Economic & Community Development	12,474,164	4,570,196	18,288,380	17,060,541	19,160,053
TOTAL	**$105,062,398**	**$99,473,947**	**$170,502,607**	**$157,812,356**	**$148,756,480**
Percentage of Total Costs	**58%**	**76%**	**90%**	**81%**	**69%**

Fiscal Year 2021-2026 Adopted Capital Program

The Fiscal Year 2021-2026 Adopted Capital Program contemplates a total budget of $11.29 billion (an increase from $10.92 billion as budgeted in the Fiscal Year 2020-2025 Adopted Capital Program). In the Fiscal Year 2021-2026 Adopted Capital Program, approximately $3.32 billion is expected to be provided from federal, Commonwealth, and other sources and approximately $7.97 billion through City funding. For Fiscal Year 2021, the City has budgeted $3.39 billion for capital projects (an increase from $3.08 billion in Fiscal Year 2020). The following table shows the amounts budgeted each year from various sources of funds for capital projects in the Fiscal Year 2021-2026 Adopted Capital Program.

Table 48
Fiscal Year 2021-2026 Adopted Capital Program
(Amounts in Thousands of USD)

Funding Source	2021	2022	2023	2024	2025	2026	2021-2026
City Funds--Tax Supported							
Carried-Forward Loans	$394,162	-	-	-	-	-	$394,162
Operating Revenue	129,902	$12,200	$12,200	$12,200	$1,700	$700	168,902
New Loans	128,260	199,734	199,944	199,432	190,033	191,058	1,108,461
Prefinanced Loans	4,958	-	-	-	-	-	4,958
PICA Prefinanced Loans	4,279	-	-	-	-	-	4,279
Tax Supported Subtotal	**$661,561**	**$211,934**	**$212,144**	**$211,632**	**$191,733**	**$191,758**	**$1,680,762**
City Funds--Self Sustaining							
Self-Sustaining Carried Forward Loans	$475,968	-	-	-	-	-	$475,968
Self-Sustaining Operating Revenue	228,810	$74,019	$73,907	$72,206	$67,873	$78,887	595,702
Self-Sustaining New Loans	818,600	798,334	969,168	750,958	859,811	941,170	5,138,041
Self-Sustaining Subtotal	**$1,523,378**	**$872,353**	**$1,043,075**	**$823,164**	**$927,684**	**$1,020,057**	**$6,209,711**
Other City Funds							
Revolving Funds	$17,000	$15,000	$13,000	$13,000	$13,000	$5,000	$76,000
Other Than City Funds							
Carried-Forward Other Government	$28,614	-	-	-	-	-	$28,614
Other Government Off Budget	2,257	$2,120	$1,621	$1,681	$1,664	$1,639	10,982
Other Governments/Agencies	3,100	2,100	100	100	100	100	5,600
Carried-Forward State	211,974	-	-	-	-	-	211,974
State Off Budget	205,112	234,393	201,119	210,933	201,948	194,362	1,247,867
State	61,900	51,937	46,029	50,681	47,833	47,881	306,261
Carried-Forward Private	118,108	-	-	-	-	-	118,108
Private	35,220	31,382	28,291	27,442	27,654	27,707	177,696
Carried-Forward Federal	366,520	-	-	-	-	-	366,520
Federal Off-Budget	35,284	77,752	21,212	16,000	8,800	9,600	168,648
Federal	124,950	135,354	99,188	108,707	106,963	106,542	681,704
Other Than City Funds Subtotal	**$1,193,039**	**$535,038**	**$397,560**	**$415,544**	**$394,962**	**387,831**	**$3,323,974**
TOTAL	**$3,394,978**	**$1,634,325**	**$1,665,779**	**$1,463,340**	**$1,527,379**	**$1,604,646**	**$11,290,447**

LITIGATION

Generally, judgments and settlements on claims against the City are payable from the General Fund, except for claims against the Water Department, the Division of Aviation, and PGW, which are paid out of their respective funds or revenues and only secondarily out of the General Fund.

The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act," (the "Tort Claims Act") establishes a $500,000 aggregate limitation on damages for injury to a person or property arising from the same cause of action or transaction or occurrence or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth such as the City. The constitutionality of that aggregate limitation on damages has been upheld by the Pennsylvania appellate courts, including in the recent decision of the Supreme Court of Pennsylvania in *Zauflik v. Pennsbury School District*, 104 A.3d 1096 (Pa. 2014). Under Pennsylvania Rule of Civil Procedure 238, delay damages are not subject to the $500,000 limitation. The limit on damages is inapplicable to any suit against the City that does not arise under state tort law, such as claims made against the City under federal civil rights laws.

General Fund

The following table presents the City's aggregate losses from settlements and judgments paid out of the General Fund for Fiscal Years 2017-2020, and the budgeted amounts for Fiscal Year 2021.

Table 49
Aggregate Losses – General and Special Litigation Claims (General Fund)
Fiscal Years 2017-2020 (Actual) and 2021 (Budget)
(Amounts in Millions of USD)

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Budget 2021
Aggregate Losses	$38.3	$44.6	$45.3	$47.7	$47.6

Sources: The City, Office of Budget and Program Evaluation – Budget Bureau, Indemnity Account, Status Reports.

The current estimate of settlements and judgments from the General Fund for Fiscal Year 2021 is $59.8 million. Such estimate is based on internal calculations using (i) the "Possible Costs" listed in its Quarterly Litigation Reports, (ii) the 3-year average cost for closed cases, and (iii) current year-to-date spending reports. Current year spending includes payments made for settled cases pursuant to payment plans over multiple years. Such payments are generally made at the start of a Fiscal Year, which can result in the current estimate being skewed higher during the early part of such Fiscal Year. By the end of Fiscal Year 2021, the City expects that the actual amount of settlements and judgments paid from the General Fund will be at or near the budgeted amount of $47.6 million.

Based on the Proposed Thirtieth Five-Year Plan, the City expects settlements and judgments from the General Fund for Fiscal Years 2022-2026 to total $49.2 million in each such Fiscal Year.

In budgeting for settlements and judgments in the annual operating budget and projecting settlements and judgments for each five-year plan, the City bases its estimates on past experience and on an analysis of estimated potential liabilities and the timing of outcomes, to the extent a proceeding is sufficiently advanced to permit a projection of the timing of a result. General and special litigation claims

are budgeted separately from back-pay awards and similar settlements relating to labor disputes. Usually, some of the costs arising from labor litigation are reported as part of current payroll expenses.

In addition to routine litigation incidental to performance of the City's governmental functions and litigation arising in the ordinary course relating to contract and tort claims and alleged violations of law, certain special litigation matters are currently being litigated and/or appealed and adverse final outcomes of such litigation could have a substantial or long-term adverse effect on the General Fund. These proceedings involve: (i) environmental-related actions and proceedings in which it has been or may be alleged that the City is liable for damages, including but not limited to property damage and bodily injury, or that the City should pay fines or penalties or the costs of response or remediation, because of the alleged generation, transport, or disposal of toxic or otherwise hazardous substances by the City, or the alleged disposal of such substances on or to City-owned property; (ii) contract disputes and other commercial litigation; (iii) union arbitrations and other employment-related litigation; (iv) potential and certified class action suits; and (v) civil rights litigation. The ultimate outcome and fiscal impact, if any, on the General Fund of the claims and proceedings described in this paragraph are not currently predictable.

In addition, see "REVENUES OF THE CITY – Real Property Taxes" for a discussion of litigation relating to the reassessment of commercial property in tax year 2018.

Water Fund

Various claims have been asserted against the Water Department and in some cases lawsuits have been instituted. Many of these Water Department claims have been reduced to judgment or otherwise settled in a manner requiring payment by the Water Department. The following table presents the Water Department's aggregate losses from settlements and judgments paid out of the Water Fund for Fiscal Years 2017-2020, and the budgeted amount for Fiscal Year 2021. The current estimate for Fiscal Year 2021 is $2.36 million. The Water Fund is the first source of payment for any of the claims against the Water Department.

Table 50
Aggregate Losses – General and Special Litigation Claims (Water Fund)
Fiscal Years 2017-2020 (Actual) and 2021 (Budget)
(Amounts in Millions of USD)

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Budget 2021
Aggregate Losses	$7.0	$6.3	$3.3	$3.9	$7.5

Sources: The City, Office of Budget and Program Evaluation – Budget Bureau, Indemnity Account, Status Reports.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.]

Aviation Fund

Various claims have been asserted against the Division of Aviation and in some cases lawsuits have been instituted. Many of these Division of Aviation claims have been reduced to judgment or otherwise settled in a manner requiring payment by the Division of Aviation. The following table presents the Division of Aviation's aggregate losses from settlements and judgments paid out of the Aviation Fund for Fiscal Years 2017-2020, and the budgeted amount for Fiscal Year 2021. The current estimate for Fiscal Year 2021 is $789,000. The Aviation Fund is the first source of payment for any of the claims against the Division of Aviation.

Table 51
Aggregate Losses – General and Special Litigation Claims (Aviation Fund)
Fiscal Years 2017-2020 (Actual) and 2021 (Budget)
(Amounts in Millions of USD)

	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Budget 2021
Aggregate Losses	$1.6	$1.1	$1.7	$1.3	$2.5

Sources: The City, Office of Budget and Program Evaluation – Budget Bureau, Indemnity Account, Status Reports.

PGW

Various claims have been asserted against PGW and in some cases lawsuits have been instituted. Many of these PGW claims have been reduced to judgment or otherwise settled in a manner requiring payment by PGW. The following table presents PGW's settlements and judgments paid out of PGW revenues, with accompanying reserve information, in PGW Fiscal Years 2016 through 2020. PGW revenues are the first source of payment for any of the claims against PGW. PGW currently estimates approximately $3.8 million in settlements and judgments for PGW Fiscal Year 2021.

Table 52
Claims and Settlement Activity (PGW)
PGW Fiscal Years 2016-2020
(Amounts in Thousands of USD)

Fiscal Year (ending August 31)	Beginning of Year Reserve	Current Year Claims and Adjustments	Claims Settled	End of Year Reserve	Current Liability Amount
2016	$11,512	$2,022	($3,041)	$10,493	$5,307
2017	$10,493	$6,681	($2,797)	$14,377	$4,627
2018	$14,377	$2,910	($3,223)	$14,064	$6,100
2019	$14,064	($1,582)	($2,922)	$9,560	$3,925
2020	$9,560	$1,973	($2,091)	$9,442	$5,435

Sources: For fiscal years ended August 31, 2016 through August 31, 2020, PGW's audited financial statements.

APPENDIX IV
SUMMARY OF CERTAIN AUTHORIZATIONS FOR THE SERIES 2021 BONDS AND THE GENERAL ORDINANCE

(This Page Intentionally Left Blank)

APPENDIX IV
SUMMARY OF CERTAIN AUTHORIZATIONS
FOR THE SERIES 2021 BONDS

The following are summaries of certain provisions and/or definitions of The First Class City Revenue Bond Act (the "Act") and the Amended and Restated General Airport Revenue Bond Ordinance of 1995, as amended and supplemented (the "General Ordinance"). The summaries are not, and should not be regarded as, complete statements of the provisions of these documents and legislation. Reference is made to the Act and the General Ordinance, copies of which are available from the Office of the Director of Finance, 1401 J. F. Kennedy Boulevard, Municipal Services Building, Room 1330, Philadelphia, Pennsylvania 19102, for the complete terms and provisions thereof.

THE FIRST CLASS CITY REVENUE BOND ACT

The Series 2021 Bonds are being issued under the terms of The First Class City Revenue Bond Act, the General Ordinance pursuant to the terms of the Eighteenth Supplemental Ordinance and the Bond Committee Determination. The following summarizes the terms of The First Class City Revenue Bond Act. All capitalized terms used in the following summary of The First Class City Revenue Bond Act are defined as in The First Class City Revenue Bond Act and may be differently referenced in other portions of this Official Statement.

General Authorization; Definition of Project; Bonds to be Special Obligations

The Act is intended to provide a comprehensive authorization to the City and any other Pennsylvania city of the first class to issue revenue bonds ("Bonds") to finance various types of projects.

The Act defines "Project" to include, among other things, any buildings, structures, facilities or improvements of a public nature, the related land, rights or leasehold estates in land and the related furnishings, machinery, apparatus or equipment of a capital nature, which the City is authorized to own, construct acquire, improve, lease, operate or support; any item of construction, acquisition or extraordinary maintenance or repair thereof, the City's share of the cost of any of the foregoing undertaken jointly with others; and any combination of the foregoing or any undivided portion of the cost of any of the foregoing as may be designated a project by the City for financing purposes and in respect of which the City may reasonably be expected to receive "Project Revenues" (as defined in the act), which include, among other things, all revenues generated by the Project financed.

Bonds issued under the Act are required to be payable solely from Project Revenues and to be secured solely by such revenues and by any reserve funds which may be created in connection with the Bonds. The Bonds are not permitted to pledge the credit or taxing power of the City, to create a debt or charge against the tax or general revenues of the City, or to create a lien against any City property other than the Project Revenues pledged therefore and reserve funds established in respect of the Bonds. The Bonds are excluded from the calculation of the City's debt-incurring capacity under the Pennsylvania Constitution.

Estimates of Future Revenues

To establish that Project Revenues will be sufficient to amortize all Bonds outstanding, the Act requires a finding to be made in the ordinance authorizing the issuance of the Bonds that the pledged Project Revenues will be sufficient to pay any prior parity charges on such pledged Project Revenues and the principal of and interest on the Bonds. The finding is to be based on a report of the chief fiscal officer of the City filed with the City Council and supported by appropriate schedules and summaries. The report of

the chief fiscal officer of the city may be based on a report of the airport consultant employed by the City to evaluate the Project.

For the purposes of estimating future Project Revenues, the Act provides that only the following shall be included (i) those rents, rates, tolls or charges to the general public which, under existing authorizations, and in effect as of the date of calculation, will be reasonably collectable during the fiscal year under the rate schedule which is or will be in effect during such fiscal year, or which may be imposed by administrative action without further legislation: (ii) those bulk payments which may be imposed under subsisting legislation or which are provided under subsisting agreements or are the subject of an expression of intent by the prospective obligor deemed reliable by the chief fiscal officer of the City; and (iii) those governmental subsidies or payments which, under subsisting legislation, are subject to reasonably precise calculation and, unless stated in such legislation or authorization to be of an annually or more frequent recurring nature, are payable in such year.

Details of Bonds and City Covenants

The Act provides that the ordinance authorizing the issuance of the Bonds shall fix the aggregate amounts of the Bonds to be issued from time to time and determine, or designate officers of the City to determine, the form and details of the Bonds. The City may include in its Bond ordinance various covenants with Bondholders, including covenants governing the imposition, collection and disbursement of Project Revenues, Project operation and maintenance, the establishment, segregation, maintenance, custody, investment and disbursement of sinking funds and reserves, the issuance of additional priority or parity bonds, the redemption of the Bonds and such other provisions as the City deems necessary or desirable in the interest or for the protection of the City or of such Bondholders. Under the Act the covenants, terms and provisions of the Bond ordinance made for the benefit of Bondholders constitute contractual obligations of the City, but such covenants (within limitations, if any, fixed by the Bond ordinance) may be modified by agreement with a majority in interest of the Bondholders or such larger portion thereof as may be provided in the Bond ordinance.

Sinking Fund

The Act requires that the Bond ordinance shall provide for the establishment of a sinking fund for the payment of the principal of and interest on the Bonds. Payment into such sinking fund shall be made in annual or more frequent installments and shall be sufficient to pay or accumulate for payment all principal of and interest on the Bonds for which the sinking fund is established as and when the same shall become due and payable. The sinking fund shall be managed by the chief fiscal officer of the City and moneys therein to the extent not currently required, shall be invested, subject to limitations established by the Bond ordinance and the Act. Interest and profits from investment of moneys in the sinking fund shall be added to such fund and may be applied in reduction of or to complete required deposits into the sinking fund. Excess moneys in the sinking fund shall be repaid to the City for its general purposes or may be applied as may be provided in the Bond ordinance. All moneys deposited in the sinking fund are subjected to a perfected security interest for the benefit of the holders of the Bonds, for which the fund is established, until properly disbursed. This perfected security interest also applies, under the terms of the Act, to moneys in the sinking fund reserve created as part of the sinking fund by the General Ordinance.

Refunding

Any outstanding Bonds issued under the Act or other bonds issued for purposes for which bonds are issuable under the Act, whether issued before or after the effective date of the Act, may from time to time be refunded by Bonds issued under the Act and are subject to the same protections and provisions required for the issuance of an original issue of Bonds. The last stated maturity date of the refunding Bonds may

not be later than ten years after the last stated maturity date of the Bonds to be refunded. If outstanding Bonds are refunded in advance of their maturity or redemption date, the principal thereof and interest thereon to payment or redemption date, and redemption premium payable, if any, will no longer be deemed to be outstanding obligations when the City shall have deposited with a bank, bank and trust company or trust company, funds irrevocably pledged to the purpose, which are represented by demand deposits, interest bearing time accounts, savings deposits, certificates of deposit (insured or secured as public funds) or specified obligations of the United States or of the Commonwealth of Pennsylvania to effect such redemption or payment or, if interest on the deposited funds to the time of disbursement is also pledged, sufficient, together with such interest, for such purpose and, in the case of redemption, shall have duly called the Bonds for redemption or given irrevocable instructions to give notice of such call.

Validity of Proceedings; Suits and Limitations Thereon

Prior to delivery of any Bonds, the City must file with the Court of Common Pleas a transcript of the proceedings authorizing the issuance of the Bonds. If no action is brought on or before the twentieth day following the date of recording of the transcript, the validity of the proceedings, the City's right to issue the Bonds, the lawful nature of the purpose for which the Bonds are issued, and the validity and enforceability of the Bonds in accordance with their terms may not thereafter be inquired into judicially, in equity, at law, or by civil or criminal proceedings, or otherwise, either directly or collaterally, except where a constitutional question is involved.

Negotiable Instrument

The Act provides that Bonds issued thereunder shall have the qualities and incidents of securities under article 8 of the Uniform Commercial Code of the Commonwealth and shall be negotiable instruments.

Exemption from State Taxation

The Commonwealth pledges with the holders from time to time of Bonds issued under the Act that such Bonds, and the interest thereon, shall at all times be free from taxation within and by the Commonwealth, but this exemption does not extend to gift, succession or inheritance taxes or any other taxes not levied directly on the Bonds and the receipt of interest thereon.

Defaults and Remedies

If the City should fail to pay the principal of or interest on any Bond when the same shall be due and payable, the remedy provisions of the Act permit the holder of such Bond, subject to the limitations described below, to recover the amount due in an action in Philadelphia Common Pleas Court; but a judgment rendered in favor of the Bondholder in such an action is collectible only from Pledged Amounts. The holders of 25% or more in aggregate principal amount of the Bonds of such series then outstanding which are in default, whether because of failure of timely payment which is not cured in 30 days, or failure of the City to comply with any other provisions of the Bonds or any Bond ordinance, may appoint a trustee to represent them. On being appointed, the trustee shall be the exclusive representative for the affected Bondholders and the individuals rights of action described above shall no longer be available. The trustee may, and upon written request of the holders of 25% or more in aggregate principal amount of Bonds in default, and on being furnished with indemnity satisfactory to it, shall, take one or more of the following actions, which, if taken, shall preclude similar action, whether previously or subsequently initiated, by individual holders of Bonds; enforce, by proceedings at law or in equity, all rights of the holders of the Bonds; bring suit on the Bonds; bring suit in equity to require the City to make an accounting for all pledged Project Revenues received and to enjoin unlawful action or action in violation of the holders' rights; and, after 30 days' written notice to the City, and subject to any limitations in the

Bond ordinance, declare the unpaid principal of the Bonds to be immediately due and payable, together with interest thereon at the rates stated in the Bonds until final payment, and upon the curing of all defaults, to annual such declaration. In any suit, action or proceeding by or on behalf of holders of defaulted Bonds, trustee fees and expenses, including operating costs of a project and reasonable counsel fees, shall constitute taxable costs, and all such costs and expenses allowed by the Court shall be deemed additional principal due on the Bonds and shall be paid in full from any recovery prior to any distribution to the holders of the Bonds. The General Ordinance limits any such recovery to Pledged Amounts. The trustee shall make distribution of any sums so collected in accordance with the Act.

Refunding with General Obligation Bonds

Upon certification by the City's chief fiscal officer that Project Revenues pledged for the payment of Series 2021 Bonds have become insufficient to meet the requirements of the ordinance or ordinances under which the Series 2021 Bonds were issued, the City Council is empowered, subject to applicable Pennsylvania constitutional debt limitations, to authorize the issuance and sale of general obligation refunding bonds of the City, without limitations as to rate of interest, in such principal amount (subject to the aforesaid limitations on indebtedness) as may be required, together with other available funds, to pay and redeem such Bonds, together with interest to the payment or redemption date and redemption premium, if any.

THE AMENDED AND RESTATED GENERAL AIRPORT REVENUE BOND ORDINANCE

The Bonds are being issued under the terms of the General Ordinance. The Eighteenth Supplemental Ordinance sets forth the specific terms of the Bonds. The following summarizes the terms of the General Ordinance. All capitalized terms used in the following summary of the General Ordinance are defined as in the General Ordinance and may be differently referenced in other portions of this Official Statement.

Certain Definitions

The following is a summary of certain terms defined in the General Ordinance and used in this Official Statement. Reference should be made to the General Ordinance for a full and complete statement of its terms and any capitalized terms used herein but not otherwise defined.

"Accreted Value" means, with respect to Capital Appreciation Bonds, the amount to which, as of any specified time, the Original Value of any such Capital Appreciation Bond has been increased by accretion, all as may be provided in an applicable Supplemental Ordinance.

"Act" means The First Class City Revenue Bond Act, approved October 18, 1972 (Act No. 234, 53 P.S. §15901 to 15924), as from time to time amended.

"Airport System" means the Airport and Northeast Philadelphia Airport, as such system currently exists or hereafter may be developed, expanded, extended or improved from time to time.

"Amended and Restated General Airport Revenue Bond Ordinance" or "General Ordinance" means the Amended and Restated General Airport Revenue Bond Ordinance, as amended from time to time by one or more Supplemental Ordinances in accordance with Article V or Article X of the Amended and Restated General Airport Revenue Bond Ordinance.

"Amounts Available for Debt Service" means for any particular period, Project Revenues for that period plus: (a) Passenger Facility Charges which are legally available to pay Debt Service Requirements

with respect to such particular period to the extent such Passenger Facility Charges have been pledged under a Supplemental Ordinance, (b) grants or moneys received from private persons or public agencies, either federal, state or local, directly or indirectly for the benefit of the Airport System, to the extent deposited in the Sinking Fund to be used for Debt Service Requirements, and (c) that portion of the Aviation Operating Fund attributable to Amounts Available for Debt Service.

Notwithstanding the foregoing, such period shall not be in excess of (i) the maximum amortization period permitted by the Act, or (ii) the useful life of the assets to be financed, or the remaining useful life of the assets being refinanced.

"Authority" shall mean a municipal authority created pursuant to the Municipal Authorities Act of 1945, as amended, or an authority created pursuant to any other applicable statute or to another entity.

"Aviation Capital Fund" means the Aviation Capital Fund established in Section 4.04 of the General Ordinance.

"Aviation Funds" means, collectively, the Aviation Operating Fund, the Aviation Capital Fund, the Sinking Fund (including the Sinking Fund Reserve Account), the Subordinate Obligations Fund, and the Renewal Fund.

"Aviation Operating Fund" means the operating fund of the Division of Aviation which is so designated in the City's books and records and which is established in Section 4.04 of the General Ordinance and described in Sections 4.05 and 4.06 of the General Ordinance.

"Balloon Bonds" means any Series of Bonds, or any portion of a Series of Bonds, designated by a Determination as Balloon Bonds, (a) 25% or more of the principal payments (including mandatory sinking fund payments) of which are due in a single year, or (b) 25% or more of the principal of which may, at the option of the holder or holders thereof, be redeemed at one time; *provided, however* that a Variable Rate Bond which is able to be redeemed at the option of the Holder shall not constitute a Balloon Bond.

"Bond" or "Bonds" means any airport revenue bond, note, commercial paper or obligation of the City, authorized and issued, or assumed, under one or more supplemental ordinances amending and supplementing the General Airport Revenue Bond Ordinance of 1978, or the General Ordinance.

"Bond Committee" means the Mayor, City Controller and City Solicitor or a majority thereof.

"Bond Counsel" means a firm of nationally recognized bond counsel selected by the City.

"Bondholder" or "Holder" means any registered owner of Bonds or holder of Bonds issued in coupon form at the time Outstanding.

"Capital Appreciation Bonds" means any Bonds issued under the General Ordinance which do not pay interest either until maturity or until a specified date prior to maturity, but whose Accreted Value increases periodically by accretion to a final Maturity Value.

"City" means the City of Philadelphia, Pennsylvania.

"City Controller" means the head of the City's auditing department as provided by the Philadelphia Home Rule Charter.

"City Solicitor" means the head of the City's law department as provided by the Philadelphia Home Rule Charter.

"Code" means the Internal Revenue Code of 1986, as amended.

"Consultants" means nationally recognized Independent registered consulting engineers, registered architects, certified public accountants or other Independent qualified experts having broad experience in the operation of airport systems of the magnitude and scope of the Airport System.

"Cost Accounting System" means the system for accounting for the collection, allocation, and reporting of revenues, expenses and debt service associated with the operation of the Airport System in accordance with Cost Centers as provided for in the Airline Agreements, or if none of the Airline Agreements is in effect, as determined by the City, from time to time.

"Cost Centers" means the cost areas to be used in the Cost Accounting System as set forth in the Airline Agreements, or if none of the Airline Agreements is in effect, then as determined by the City from time to time. Such Cost Centers shall initially consist of the Airport Area Cost Center, the Terminal Area Cost Center, the Other Buildings and Area Cost Center, the Northeast Philadelphia Airport Cost Center, the Outside Terminal Area Cost Center and the Airport Services Cost Center, all as defined in the Airline Agreements.

"Credit Facility" means any letter of credit, standby bond purchase agreement, line of credit, surety bond, insurance policy or other insurance commitment or similar agreement (other than a Qualified Swap or an Exchange Agreement) that is provided by a commercial bank, insurance company or other institution, with a current long term rating in at least the "A" category by a Rating Agency at the time the Credit Facility is obtained by the City.

"Debt Service Account" means the Debt Service Account of the Sinking Fund established in Section 4.04 of the General Ordinance.

"Debt Service Requirements," with reference to a specified period, means:

A. amounts required to be paid into any mandatory sinking fund established for the Bonds, for the benefit of Bondholders during the period;

B. amounts needed to pay the principal or redemption price of Bonds maturing during the period and not to be redeemed at or prior to maturity through any sinking fund established for the Bonds, for the benefit of the Bondholders;

C. interest payable on Bonds during the period, with adjustments for (i) capitalized interest and accrued interest, (ii) any investment income realized from investments in the Aviation Capital Fund, Sinking Fund Reserve Account and Renewal Fund to the extent that such investment proceeds are deposited in or credited to the Debt Service Account of the Sinking Fund, and (iii) all net amounts payable to the City under a Qualified Swap during such period (other than termination amounts payable by a Qualified Swap Provider due as a result of termination of a Qualified Swap); and

D. all net amounts, if any, due and payable by the City under a Qualified Swap (other than termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap), a Credit Facility, or a Standby Agreement for Bonds during such period secured by a parity pledge of Project Revenues as set forth in a Determination or Supplemental Ordinance pursuant to which the related Bonds were issued.

For purposes of estimating Debt Service Requirements for any future period, (i) any Option Bond outstanding during such period shall be assumed to mature on the stated maturity date thereof, except that the principal amount of any Option Bond that has been tendered for payment before its stated maturity date and has not at the time of such estimate been remarketed, shall be deemed to accrue on the date required for payment pursuant to the terms of the Standby Agreement; and (ii) Debt Service Requirements on Bonds for which the City has entered into a Qualified Swap shall be calculated assuming that the interest rate on such Bonds shall equal the stated fixed or variable rate payable by the City on the Qualified Swap or, if applicable and if greater than such stated rate, the applicable rate for any Bonds issued in connection with the Qualified Swap adjusted, in the case of a variable rate obligation, as provided in Section 5.01 of the General Ordinance; provided that if the Qualified Swap Provider's payments under the Qualified Swap are based on an index, then, Debt Service Requirements on such Bonds shall be calculated using the sum of (i) the interest rate on the Bonds, and (ii) the difference between the fixed rate obligation of the City under the Swap Agreement and such index; provided, further that, for purposes of projecting the difference in (ii) above, the City shall be entitled to assume that the difference will be equal to the average differential during the period of twenty-four (24) consecutive calendar months preceding the date of calculation or, if the Swap Agreement was entered into less than twenty-four (24) months prior thereto, the average differential since the date the Swap Agreement was entered into.

Calculation of Debt Service Requirements with respect to Variable Rate Bonds and Balloon Bonds shall be subject to adjustment as permitted by Section 5.01(b) of the General Ordinance.

"Customer Facility Charges" means all customer facility charges collected pursuant to applicable law.

"Designated PFC Revenues for Debt Service" mean Passengers Facility Charges made available to pay the Debt Service Requirements on one or more Series of Bonds during any period pursuant to the General Ordinance.

"Determination" means a determination by the Bond Committee regarding certain matters relating to the issuance of a Series of Bonds, made pursuant to the General Ordinance or the Supplemental Ordinance providing for the issuance of such Series of Bonds.

"Director of Finance" means the chief financial officer of the City as established by the Philadelphia Home Rule Charter.

"Division of Aviation" means the division of the Department of Commerce of the City responsible for the maintenance, improvement, repair and operation of the Airport System and for the construction of additional facilities for the Airport System or any successor division or Department of the City which is charged by law with such responsibility.

"Effective Date" shall have the meaning set forth in Article I of the General Ordinance.

"Exchange Agreement" means, to the extent from time to time permitted by applicable law, any interest exchange agreement, interest rate swap agreement, currency swap agreement or other contract or agreement, other than a Qualified Swap that has not been deemed to be an Exchange Agreement pursuant to Section 3.12 of the General Ordinance, authorized, recognized and approved by a Supplemental Ordinance or Determination as an Exchange Agreement and providing for (i) certain payments by the City, and (ii) payments by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, or whose obligations under an Exchange Agreement are

guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability are rated at all times in one of the three highest rating categories (without regard to gradation) by Moody's and S&P (however, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance) or the equivalent thereof by any successor thereto as of the date the Exchange Agreement is entered into; which payments by the City and counterparty are calculated by reference to fixed or variable rates.

"Existing Bonds" means any Bonds to the extent the lien of such bonds is not defeased on or prior to the Effective Date of the General Ordinance, which Existing Bonds shall be specified in a certificate of the Director of Finance on the Effective Date and thereafter shall be secured by the General Ordinance.

"Financial Consultant" means a firm of investment bankers, a financial consulting firm, a firm of certified public accountants or any other firm which is qualified to calculate amounts required to be rebated to the United States pursuant to Section 148(f) of the Code.

"Fiscal Agent" means a bank or other entity designated as such pursuant to Section 7.01 of the General Ordinance or its successor.

"Fiscal Year" means the fiscal year of the City.

"Fitch" means Fitch Investors Service and any successor thereto.

"General Airport Revenue Bond Ordinance of 1978" means the General Airport Revenue Bond Ordinance of 1978, approved March 16, 1978, as amended and supplemented from time to time.

"General Obligation Bonds" means the general obligation bonds of the City issued and outstanding from time to time to finance, in whole or in part, improvements to the Airport System and adjudged, pursuant to the Constitution and laws of the Commonwealth of Pennsylvania, to be self-sustaining on the basis of expected Project Revenues.

"Government Obligations" means direct noncallable obligations of, or obligations of the principal of and interest on which are fully and unconditionally guaranteed as to full and timely payment by, the United States of America.

"Interdepartmental Charges" means the actual charges for services performed for the Division of Aviation by all officers, departments, boards or commissions of the City which are included in the computation of Operating Expenses of the Division of Aviation and allocable to the Airport System.

"Independent" means a person who is not a salaried employee or elected or appointed official of the City; provided, however, that the fact that such person is retained regularly by or transacts business with the City shall not make such person an employee within the meaning of this definition.

"Maturity Value" with respect to Capital Appreciation Bonds means the amount due on the maturity date.

"Moody's" means Moody's Investors Service and any successor thereto.

"Net Operating Expenses" means Operating Expenses exclusive of Interdepartmental Charges. On and after the date on which a transaction described in Section 9.01 of the General Ordinance is

completed, Net Operating Expenses may include Interdepartmental Charges at the written direction of the City.

"Non-Parity Sinking Fund Reserve Requirement" means any Sinking Fund Reserve Requirement referred to in clause (ii) of the definition of "Sinking Fund Reserve Requirement" as specified in a Supplemental Ordinance.

"Non-Parity Sinking Fund Reserve Account" means any account of the Sinking Fund Reserve Account created pursuant to a Supplemental Ordinance for a particular Series of Bonds that will not be secured by the Parity Sinking Fund Reserve Account, and for which a Non-Parity Sinking Fund Reserve Requirement applies.

"Northeast Philadelphia Airport" means the airport facility operated by the Division of Aviation, and located in the northeast portion of the City as such facility currently exists or hereafter may be developed, extended or improved from time to time.

"NSS General Obligation Bonds" means the general obligation bonds of the City issued and outstanding from time to time to finance, in whole or in part, improvements to the Airport System that have not been adjudged to be self-sustaining on the basis of expected Project Revenues.

"Operating Expenses" means all costs and expenses of the Airport System paid from Project Revenues to operate and maintain in good operating condition during each Fiscal Year those portions of the Airport System from which revenues are derived and which are included within the definition of Project Revenues, and shall include, without limitation, salaries and wages, purchases of services, interest on temporary borrowings to be paid from Bonds, costs of materials, supplies and equipment that can be expensed, maintenance costs, costs of any property or the replacement thereof or for any work or project, related to the Airport System having an estimated life or usefulness and a cost less than minimum standards for capitalization established by the Division of Aviation's accounting policies (provided such minimum standards shall in no event be less than the standards set forth in the City Charter of the City), pension and welfare plan and worker's compensation requirements, unemployment compensation requirements, taxes and payments in lieu of taxes, insurance premiums, provisions for claims, refunds and uncollectible receivables and Interdepartmental Charges, all consistently determined in accordance with the accrual basis of accounting adjusted to meet the particular requirements of the Airline Agreements and the Ordinance, consistently applied, but Operating Expenses shall exclude depreciation, amortization, and except as expressly set forth above, Debt Service Requirements and amounts due under Subordinate Obligations and Exchange Agreements. Operating Expenses shall also exclude debt service on General Obligation Bonds and NSS General Obligation Bonds. Aggregate financing payments under capitalized lease agreements shall be payable as Operating Expenses to the extent payments under such capitalized lease agreements either (i) do not constitute Capital Expenditures under the Airline Agreements, or (ii) constitute Capital Expenditures under the Airline Agreements and have not been disapproved by the Majority-in-Interest under the Airline Agreements. Any financing payments on capitalized lease agreements not satisfying the requirements of either clause (i) or (ii) above, may be payable in accordance with Section 4.06(i) of the General Ordinance.

"Option Bond" means any Bond which by its terms may be tendered by and at the option of the Holder thereof for payment by the City prior to its stated maturity date or the maturity date of which may be extended by and at the option of the Holder thereof.

"Ordinance" means the General Ordinance, as amended from time to time by one or more Supplemental Ordinances in accordance with Article V or Article X of the General Ordinance.

"Original Value" with respect to Capital Appreciation Bonds means the principal amount paid by the initial purchasers on the date of original issuance.

"Outside Terminal Area" shall have the meaning ascribed in the Airline Agreements.

"Outstanding" when used with reference to Bonds, means, as of any date, all Bonds theretofore or thereupon being issued and delivered subject to the General Airport Revenue Bond Ordinance of 1978 or the General Ordinance except (i) any Bonds canceled by the Fiscal Agent at or prior to such date; (ii) Bonds (or portion of Bonds) for the payment or redemption of which moneys, equal to the principal amount, Accreted Value or redemption price thereof, as the case may be, with interest (except to the extent of any Capital Appreciation Bonds) to the date of maturity or redemption date, shall be held in trust under the General Ordinance and set aside for such payment or redemption, provided that if such Bonds (or portions of Bonds) are to be redeemed, notice of such redemption shall have been given as provided in Article VI of the General Ordinance or provision satisfactory to the Fiscal Agent shall have been made for the giving of such notice; (iii) Bonds in lieu of or in substitution for which other Bonds shall have been authenticated and delivered pursuant to Article III or Section 6.06 of the General Ordinance; and (iv) Bonds deemed to have been paid as provided in Section 11.01 of the General Ordinance.

"Parity Sinking Fund Reserve Requirement" means the Sinking Fund Reserve Requirement described in clause (i) of the definition of " Sinking Fund Reserve Requirement."

"Parity Sinking Fund Reserve Account" means the Sinking Fund Reserve Account created pursuant to the first paragraph of Section 4.09 of the General Ordinance.

"Passenger Facility Charges" means all passenger facility charges collected pursuant to applicable law.

"Payments-in-Aid of Outside Terminal Area" means the payment-in-aid of the Outside Terminal area required to be made by the Signatory Airlines pursuant to the Airline Agreements.

"Permitted Investments" shall mean any of the following obligations, but only to the extent the same are legal for investment of funds of the City at the time, under applicable law:

(a) Government Obligations;

(b) Qualified Rebate Fund Securities;

(c) Bonds, notes or other obligations of United States government agencies issued by the Farmers Home Administration, Federal Financing Bank, Federal Housing Administration, General Services Administration, Government National Mortgage Association, Resolution Funding Corporation, U.S. Maritime Administration, Small Business Administration, Federal Home Loan Banks, Federal Home Loan Mortgage Corporation, Federal National Mortgage Association, and Student Loan Marketing Association;

(d) Interest-bearing time or demand deposits, or certificates of deposit with a maturity date of no longer than twenty four months from the date of the investment, or other similar arrangements with any institution (including the Fiscal Agent or its affiliates) with a bond or deposit rating at all times in the higher of (i) the rating on the Bonds Outstanding under the General Ordinance, or (ii) one of the three highest rating categories (without regard to gradation), by S&P and Moody's (however, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance); with a maturity date of no longer than twenty

four months from the date of the investment, provided that such deposits, certificates, and other arrangements are fully insured by the Federal Deposit Insurance Corporation through the Bank Insurance Fund or Savings Association Insurance Fund, or to the extent not insured, are secured by a pledge of collateral as provided by laws applicable to funds of the City of Philadelphia;

(e) Commercial paper (having original maturities of not more than 270 days) rated at all times P-1 or A-1+ by Moody's and S&P, respectively, however, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance;

(f) Investments in money market funds rated at all times in one of the two highest rating categories (without regard to gradation) by S&P and Moody's (however, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance);

(g) Repurchase agreements with a term not exceeding twenty four months with the Fiscal Agent or any bank with a capital and surplus of at least $100,000,000 and a bond or deposit rating at all times in the higher of (i) the rating on the Bonds Outstanding under the General Ordinance, or (ii) one of the three highest rating categories of S&P and Moody's (provided that, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance) which bank is a member of the Federal Reserve System, or with government bond dealers recognized as primary dealers by the Federal Reserve Bank of New York, that are collateralized with Permitted Investments described in (a) or (b) above, having a market value at the time of purchase (inclusive of accrued interest) at least equal to 102% of the full amount of the repurchase agreement and which Permitted Investments shall be held by a third party custodian which is a bank or trust company pursuant to a third party custodial agreement;

(h) General Obligation bonds of corporations rating in one of the two highest rating categories (without regard to gradation) by Moody's and S&P, provided that, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance;

(i) Collateralized mortgage obligations which are rated in one of the two highest rating categories (without regard to gradation) by Moody's and S&P, with a maturity date no later than two years from the date of investment; provided that the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance;

(j) Obligations of the Commonwealth or any municipality or other political subdivision of the Commonwealth with a maturity date no later than two years from the date of investment, rated by Moody's and S&P in one of the three highest rating categories (without regard to gradation); provided that, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bond Outstanding under the General Ordinance; and

(k) Any other obligation approved in writing by S&P and Moody's to the extent that either is rating Bonds Outstanding under the General Ordinance at the time.

"Philadelphia Home Rule Charter" means the Philadelphia Home Rule Charter, as amended or superseded by any new home rule charter, adopted pursuant to authorization of the First Class City Home Rule Act approved April 21, 1949, P. L. 665 §1, *et seq*. (53 P. S. § 13101, *et seq*.).

"Pledged Amounts" shall have the meaning set forth in Section 4.02 of the General Ordinance.

"Prior Bonds" means the bonds issued under the General Airport Revenue Bond Ordinance of 1978 designated as Airport Revenue Bonds, Series 1978, 1984, 1985 and 1988.

"Project" shall have the meaning assigned to it in the Act, as the same may be amended from time to time.

"Project Revenues" means all of the revenues, rents, rates, tolls or other charges imposed upon all lessees, occupants and users of the Airport System and all moneys received by or on behalf of the City from all sources during any Fiscal Year (except as hereinafter excluded) from or in connection with the ownership, operation, improvements and enlargements of the Airport System, or any part thereof and the use thereof, including, without limitation, revenues pledged or appropriated for the benefit of the Airport System, all rentals, rates, charges, landing fees, use charges, concession revenues, income derived from the City's sale of services, fuel, oil, and other supplies or commodities, and all other charges received by the City or accrued by it from the Airport System, and any investment income realized from the investment of the foregoing, except as provided below, and all accounts, contract rights and general intangibles representing the Project Revenues all consistently determined in accordance with the accrual basis of accounting adjusted to meet the particular requirements of the Airline Agreements (if any of the Airline Agreements are in effect) and the General Ordinance.

Project Revenues as defined in the preceding paragraph shall not include (a) (i) any and all Passenger Facility Charges, or any taxes which the City may from time to time impose upon users of the Airport System, and (ii) Designated PFC Revenues for Debt Service, (b) any governmental grants and contributions in aid of capital projects, (c) such rentals as may be received pursuant to Special Facility Agreements for Special Purpose Facilities, (d) unless pledged pursuant to a Supplemental Ordinance pursuant to Section 4.02 of the General Ordinance, Customer Facility Charges, (e) proceeds of the sale of Bonds and any income realized from the investment of proceeds of the sale of Bonds maintained in the Aviation Capital Fund and income realized from investments of amounts maintained in the Renewal Fund and Sinking Fund Reserve Account, (f) except as required by applicable laws, rules or regulations, net proceeds from the sale of Airport assets, including the sale or transfer of all or substantially all of the assets of the Airport System under Section 9.01 of the General Ordinance unless the Division of Aviation determines to include any such net proceeds as Project Revenues and such determination is evidenced by written notification by the City to the Fiscal Agent, (g) proceeds of insurance or eminent domain (other than proceeds that provide for lost revenue due to business interruption or business loss), and (h) net amounts payable to the City under a Qualified Swap (other than termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap).[1]

[1] Upon the consent of Holders of one hundred percent (100%) of the Outstanding Bonds, the second paragraph of the definition of "Project Revenues" will be amended to read as follows:

> Project Revenues as defined in the preceding paragraph shall not include (a) (i) any and all Passenger Facility Charges, or any taxes which the City may from time to time impose upon users of the Airport System, and (ii) Designated PFC Revenues for Debt Service, (b) any governmental grants and contributions in aid of capital projects, (c) such rentals as may be received pursuant to Special Facility Agreements for Special Purpose Facilities, (d) unless pledged pursuant to a Supplemental Ordinance pursuant to Section 4.02 of the General Ordinance, Customer Facility Charges, (e) Released Revenues, (f) proceeds of the sale of Bonds and any income realized from the investment of proceeds of the sale of Bonds maintained in the Aviation Capital Fund and income realized from investments of amounts maintained in the Renewal Fund and Sinking Fund Reserve Account, (g) except as required by applicable laws, rules or regulations, net proceeds from the sale of Airport assets, including the sale or transfer of all or substantially all of the assets of the Airport System under Section 9.01 of the General Ordinance unless the Division of Aviation

"Qualified Escrow Securities" means funds which are represented by (a) demand deposits, interest-bearing time accounts, savings deposits or certificates of deposit, but only to the extent such deposits or accounts are fully insured by the Federal Deposit Insurance Corporation or any successor United States governmental agency, or to the extent not insured, fully secured and collateralized by Government Obligations having a market value (exclusive of accrued interest) at all times at least equal to the principal amount of such deposits or accounts, (b) if at the time permitted under the Act, noncallable obligations of the Commonwealth of Pennsylvania or any political subdivision thereof or any agency or instrumentality of the Commonwealth of Pennsylvania or any political subdivision thereof for which cash, Government Obligations or a combination thereof have been irrevocably pledged to or deposited in a segregated escrow account for the payment when due of principal or redemption price of and interest on such obligations, and any such cash or Government Obligations pledged and deposited are payable as to principal or interest in such amounts and on such dates as may be necessary without reinvestment to provide for the payment when due of the principal or redemption price of and interest on such obligations, and such obligations are rated by Moody's and S&P (however, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is then rating Bonds Outstanding under the General Ordinance) in the highest rating category (without regard to gradations) assigned by each such rating service to obligations of the same type, or (c) noncallable Government Obligations. In each case such funds (i) are subject to withdrawal, maturing or payable at the option of the holder, at or prior to the dates needed for disbursement, provided such deposits or accounts, whether deposited by the City or by such depository, are insured or secured as public deposits with securities having at all times a market value exclusive of accrued interest equal to the principal amount thereof, (ii) are irrevocably pledged for the payment of such obligations and (iii) are sufficient, together with the interest to disbursement date payable with respect thereto, if also pledged, to meet such obligations in full.

"Qualified Rebate Fund Securities" means either:

(a) Government Obligations; or

(b) rights to receive the principal of or the interest on Government Obligations through (i) direct ownership, as evidenced by physical possession of such Government Obligations or unmatured interest coupons or by registration as to ownership on the books of the issuer or its duly authorized paying agent or transfer agent, or (ii) purchase of certificates or other instruments evidencing an undivided ownership interest in payments of the principal of or interest on Government Obligations held under book-entry with the New York Federal Reserve Bank; or

(c) Pre-refunded Municipal Obligations defined as follows: Any bonds or other obligations of any state of the United States of America or of any agency, instrumentality or local governmental unit of any such state which are not callable at the option of the obligor prior to maturity or as to which irrevocable instructions have been given by the obligor to call on the date specified in the notice; and which are rated at the time purchased, based on the escrow, in the highest rating category of S&P and Moody's.

---

determines to include any such net proceeds as Project Revenues and such determination is evidenced by written notification by the City to the Fiscal Agent, (h) proceeds of insurance or eminent domain (other than proceeds that provide for lost revenue due to business interruption or business loss), and (i) net amounts payable to the City under a Qualified Swap (other than termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap).

"Qualified Swap" or "Swap Agreement" means, with respect to a Series of Bonds, any financial arrangement that (i) is entered into by the City with an entity that is a Qualified Swap Provider at the time the arrangement is entered into; (ii) provides that (a) the City shall pay to such entity an amount based on the interest accruing at a fixed rate on an amount equal to the principal amount of all or any portion of the Outstanding Bonds of such Series, and that such entity shall pay to the City an amount based on the interest accruing on a principal amount initially equal to the same principal amount of such Bonds, at either a variable rate of interest or a fixed rate of interest computed according to a formula set forth in such arrangement (which need not be the same as the actual rate of interest borne by the Bonds) or that one shall pay to the other any net amount due under such arrangement, (b) the City shall pay to such entity an amount based on the interest accruing on the principal amount of all or any portion of the Outstanding Bonds of such Series at a variable rate of interest as set forth in the arrangement and that such entity shall pay to the City an amount based on interest accruing on a principal amount equal to the same principal amount of such Bonds at an agreed fixed rate or that one shall pay to the other any net amount due under such arrangement or, (c) the City shall be paid by a Qualified Swap Provider an amount, based on a notional amount equal to the principal amount of all or any portion of the Outstanding Variable Rate Bonds of such Series, if the interest rate on such Series of Variable Rate Bonds exceeds a previously agreed upon rate, and/or the City shall pay to the Qualified Swap Provider an amount, based on a notional amount equal to the principal amount of all or any portion of the Outstanding Variable Rate Bonds of such Series, if the interest rate on such Series of Variable Rate Bonds is less than a previously agreed upon rate; (iii) has been approved of in writing by the Signatory Airlines; and (iv) which has been designated in writing to the Fiscal Agent by the City as a Qualified Swap with respect to the Bonds.

"Qualified Swap Provider" means, with respect to a Series of Bonds, an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, or whose payment obligations under a Qualified Swap are guaranteed by an entity whose senior long term debt obligations, other senior unsecured long term obligations or claims paying ability, are rated (at the time the subject Qualified Swap is entered into) at the higher of (i) A by Moody's and A by S&P, or the equivalent thereof by any successor thereto, or (ii) the then current rating on Bonds outstanding under the General Ordinance, without taking into account Bonds the rating on which is based upon a Credit Facility for such Bonds, provided if all Bonds Outstanding under the General Ordinance are rated based upon one or more Credit Facilities, then the senior unsecured long term obligations or claims paying ability of the provider shall be at least equal to A by Moody's and S&P.

"Rate Covenant" means the rate covenant applicable pursuant to Section 5.01 of the General Ordinance.

"Rating Agency" means any rating service which has issued a credit rating on Bonds which is in effect at the time in question or, upon discontinuance of any of such rating services, such other nationally recognized rating service or services if any such rating service has issued a credit rating on the Bonds at the request of the City and such credit rating is in effect at the time in question.

"Rebate Bond Year," for purposes of Section 4.14 of the General Ordinance and in order to facilitate compliance with the arbitrage rebate requirements of the Code, shall mean the period or periods specified in a Supplemental Ordinance or Determination for a Series of Bonds.

"Rebate Fund" means the Rebate Fund established in Section 4.04 of the General Ordinance.

"Record Date" means (i) with respect to any Variable Rate Bond, the Business Day immediately preceding an interest payment date or a redemption date or the maturity date, or such other date as set forth in the related Supplemental Ordinance, and (ii) with respect to Bonds bearing interest in a fixed rate mode or Bonds bearing interest at a prescribed fixed rate, the fifteenth (15th) day (regardless of whether it

is a Business Day) of the calendar month next preceding an interest payment date, a redemption date or maturity date, or such other date as set forth in the related Supplemental Ordinance.

"Remarketing Agent" means a Remarketing Agent appointed in the manner provided in the applicable Supplemental Ordinance or Determination authorizing the issuance of Variable Rate Bonds.

"Remarketing Agreement" means an agreement providing for the remarketing of tendered Variable Rate Bonds by a Remarketing Agent, as more fully set forth and defined in the Supplemental Ordinance authorizing any Series of Variable Rate Bonds.

"Renewal Fund" means the Renewal Fund established in Section 4.04 of the General Ordinance.

"Renewal Fund Requirement" means $2,500,000 or such other amount as determined by the Consultant from time to time to be appropriate taking into account the size and operations of the Airport System.

"Required Rebate Fund Balance" shall have the meaning set forth in Section 4.14 of the General Ordinance.

"Second Supplemental Ordinance" means the Second Supplemental Ordinance to the General Ordinance.

"Series" when applied to Bonds means, collectively, all of the Bonds of a given issue authorized by Supplemental Ordinance, as provided in the General Ordinance, and may also mean, if appropriate, a subseries of any Series if, for any reason, the City should determine to divide any Series into one or more subseries of Bonds, or multiple series of Bonds, as the case may be.

"S&P" means Standard & Poor's Ratings Group, a division of McGraw Hill and any successor thereto.

"Signatory Airlines" means the airlines that are signatories to the Use and Lease Agreements.

"Sinking Fund" means the Sinking Fund established in Section 4.04 of the General Ordinance.

"Sinking Fund Depositary" means the bank named as such in Section 7.01 of the General Ordinance.

"Sinking Fund Installment" means an amount so designated which is established pursuant to Section 3.01 of the General Ordinance.

"Sinking Fund Reserve Account" means the Sinking Fund Reserve Account established in Section 4.04 of the General Ordinance.

"Sinking Fund Reserve Requirement" means (i) with respect to all Bonds (whether interest thereon is includable in, or excludable from, gross income for Federal income tax purposes) which the City determines will be secured by the Parity Sinking Fund Reserve Account, an amount equal to the lesser of (A) the greatest amount of Debt Service Requirements on Bonds payable in any one Fiscal Year, determined as of any particular date, or (B) the maximum amount permitted by the Code to be maintained without yield restriction for bonds, the interest on which is not includable in gross income for federal income tax purposes, and (ii) with respect to all Bonds which the City determines to secure with a Non-Parity Sinking Fund Reserve Account (whether interest thereon is includable in, or excludable from, gross

income for Federal income tax purposes), the amount, if any, required to be deposited or maintained in the subaccount of the Sinking Fund Reserve Account as specified in a Supplemental Ordinance. For purposes of determining the Sinking Fund Reserve Requirement, Debt Service Requirements will be computed without regard to any Qualified Swap, Credit Facility or Standby Agreement, and the Debt Service Requirements attributable to any (i) Balloon Bonds, or Variable Rate Bonds shall be calculated in the manner set forth in Section 5.01(b) of the General Ordinance, or based upon the assumed fixed rate of interest as set forth in the Supplemental Ordinance or Determination for such Bonds, and (ii) Option Bonds shall be calculated in the manner set forth in the last paragraph under the definition of Debt Service Requirements.[2]

"Special Facility Agreement" means an agreement entered into by the City and one or more other parties, relating to the design, construction, and/or financing of any facility, improvement, structure, equipment, or assets acquired or constructed on any land or in or on any structure or buildings that is or are part of the Airport System, all or a portion of the payments to the City under which (a) are intended to be excluded from Amounts Available for Debt Service, and (b) may be pledged to the payment of Special Facility Revenue Bonds.

"Special Facility Revenue Bonds" means any City revenue bonds or notes authorized and issued for the purpose of acquiring, constructing, or improving a Special Purpose Facility leased to, or contracted for operation by, any person or persons, under a specific lease or contract requiring the user or users thereof to provide for the payment of rentals or sums adequate to pay all principal, interest, redemption price, reserve requirements, if any, as required in the legislation authorizing the Special Facility Revenue Bonds (the "debt service charges") on the Special Facility Revenue Bonds.

"Special Purpose Facility" means any facility acquired or constructed for the benefit or use of any person or persons and the costs of construction and acquisition of which are paid for (a) by the obligor under a Special Facility Agreement, (b) from the proceeds of Special Facility Revenue Bonds, or (c) both.

"Standby Agreement" with respect to a Series of Bonds, means an irrevocable letter of credit and related reimbursement agreement, line of credit, standby bond purchase agreement or similar agreement providing for the purchase of all or a portion of the Bonds of such Series, as amended, supplemented or extended from time to time.

---

[2] Upon the consent of Holders of one hundred percent (100%) of the Outstanding Bonds, the definition of "Sinking Fund Revenue Requirement" will be amended to read as follows:

> "Sinking Fund Reserve Requirement" means (i) with respect to all Bonds (whether interest thereon is includable in, or excludable from, gross income for Federal income tax purposes) which the City determines will be secured by the Parity Sinking Fund Reserve Account, an amount equal to the least of: (a) 10% of the outstanding principal amount of the Bonds, or if any series of Bonds are issued with original issue discount, 10% of the proceeds of such Bonds, (b) the maximum annual debt service on the Bonds, or (c) 125% of the average annual debt service on the Bonds, provided, however, in calculating the maximum annual debt service on the final maturity date for the Bonds Outstanding, an amount equal to the Sinking Fund Reserve Requirement may be subtracted from the debt service requirements amount for said year. For purposes of determining the Sinking Fund Reserve Requirement, Debt Service Requirements will be computed without regard to any Qualified Swap, Credit Facility or Standby Agreement, and the Debt Service Requirements attributable to any (i) Balloon Bonds, or Variable Rate Bonds shall be calculated in the manner set forth in Section 5.01(b) of the General Ordinance, or based upon the assumed fixed rate of interest as set forth in the Supplemental Ordinance or Determination for such Bonds, and (ii) Option Bonds shall be calculated in the manner set forth in the last paragraph under the definition of Debt Service Requirements.

"Standby Purchaser," with respect to a Series of Bonds, means the provider of the Standby Agreement for such Series of Bonds.

"Subordinate Obligation" means any obligation referred to in, and complying with the provisions of, Section 5.04(h) of the General Ordinance.

"Subordinate Obligation Fund" means the Subordinate Obligation Fund established in Section 4.04 of the General Ordinance.

"Subordinate Obligation Ordinance" means the ordinance, and any supplements or amendments thereto authorizing the issuance of a series of Subordinate Obligations.

"Substitute Credit Facility" means any letter of credit, standby bond purchase agreement, line of credit, surety bond, insurance policy or other insurance commitment or similar agreement (other than a Qualified Swap or an Exchange Agreement) that replaces a Credit Facility and is provided by a commercial bank, insurance company or other financial institution with a then current long term credit rating (or whose obligations thereunder are guaranteed by a financial institution with a long term rating) from Moody's and S&P (however, the rating by Moody's and S&P, or either of them, shall only be required to the extent such Rating Agency is, at the time in question, then rating Bonds Outstanding under the General Ordinance) not lower than the credit rating of any Series of Bonds which has no Credit Facility; provided that in no event shall such substitution take place unless Moody's and S&P acknowledge in writing that such substitution, in and of itself, will not result in a lowering, suspension or withdrawal of the rating on the Bonds secured by such Credit Facility.

"Supplemental Ordinance" means an ordinance supplemental to the General Ordinance enacted pursuant to the Act and the General Ordinance by the Council of the City.

"Tender Agent," with respect to a Series of Bonds, means any commercial bank or trust company organized under the laws of any state of the United States or any national banking association designated as a tender agent for such Series of Bonds, and its successor or successors hereafter appointed in the manner provided in the applicable Supplemental Ordinance or Determination.

"Uncertificated Bond" means any Bond which is fully registered as to principal and interest and which is not represented by an instrument.

"Use and Lease Agreements" mean the Airline - Airport Use and Lease Agreements (the "Airline Agreements") currently in effect, if any and, as amended from time to time, between the City and the Signatory Airlines providing for the construction of capital improvements to the Airport System, the financing of such improvements, the use and occupancy of portions of the Airport System by the Signatory Airlines and the rates, rents and charges to be paid by the Signatory Airlines for such use and occupancy as therein provided.

"Variable Rate Bond" means any Bond, the rate of interest on which is subject to change prior to maturity and cannot be determined in advance of such change.

Upon the consent of Holders of one hundred percent (100%) of the Outstanding Bonds, the definition of "Released Revenues" will be included to read as follows:

> "Released Revenues" means revenues in respect of which the following have been filed as part of a Supplemental Ordinance: (a) documentation of the City

describing a specific identifiable portion of revenues and approving that such revenues be excluded from the term Project Revenues; (b) either (i) a certificate prepared by the City showing that revenues for each of the two most recent completed Fiscal Years, after the specific identifiable portion of revenues covered by the City's documentation described in (a) above are excluded, were at least sufficient to satisfy the provisions of Section 5.01 of the General Ordinance; or (ii) a certificate prepared by a Consultant showing that the estimated revenues (excluding the specific identifiable portion of revenues covered in (a) above) for each of the first three complete Fiscal Years immediately following the Fiscal Year in which the documentation described in (a) above is provided by the City, will not be less than the amounts sufficient to satisfy the provisions of Section 5.01 of the General Ordinance; (c) an opinion of Bond Counsel to the effect that the exclusion of such specific identifiable portion of revenues from the definition of Project Revenues and from the pledge and lien of the Amended and Restated General Airport Revenue Bond Ordinance will not, by itself, cause the interest on any Outstanding Bonds to be included in gross income for purposes of federal income tax; and (d) written confirmation from each Rating Agency that has been requested by the City to maintain a rating on the Bonds and are then maintaining a rating on any of the Bonds to the effect that the exclusion of such specific identifiable portion of revenues from the definition of Project Revenues will not cause a withdrawal or reduction in any unenhanced rating then assigned to the Bonds.

Additionally, the City shall give written notice to each Rating Agency that has been requested by the City to maintain a rating on the Bonds and that is then maintaining a rating on any of the Bonds at least 15 days prior to any specific identifiable portion of revenues being excluded from the definition of Project Revenues as provided in this definition of "Released Revenues."

Upon filing of such documents, the specific identifiable portion of revenues described in the Supplemental Ordinance shall no longer be included in the definition of Project Revenues and shall be excluded from the pledge and lien of the Amended and Restated General Airport Revenue Bond Ordinance, unless otherwise included in the definition of Project Revenues in a future Supplemental Ordinance.

SUMMARY OF OPERATIVE PROVISIONS OF THE GENERAL ORDINANCE

The following is a summary of certain operative provisions of the General Ordinance. Reference should be made to the General Ordinance for a full and complete statement of its provisions and the meaning of any capitalized terms used herein but not otherwise defined.

Authorization, Scope and Purpose; Effective Date

The General Ordinance was enacted pursuant to the provisions of The First Class City Revenue Bond Act for the purpose of amending and restating in full, the General Airport Revenue Bond Ordinance of 1978, approved on March 16, 1978, as supplemented and amended. The General Ordinance became effective immediately and without any further action by City Council upon the consent of the Holders of at least 67 percent of the Outstanding Bonds (the "Effective Date"). On the Effective Date, the General Airport Revenue Bond Ordinance of 1978 and all supplements thereto were no longer in force or with any

effect; provided that supplements to the General Airport Revenue Bond Ordinance of 1978 relating to Existing Bonds were deemed to be supplements to the General Ordinance on and after the Effective Date, to the extent such supplements were not inconsistent with the General Ordinance.

Concerning the Bonds

Form and Terms of Bonds. The aggregate principal amount of Bonds which may be issued or assumed, authenticated and delivered under the General Ordinance is unlimited, but prior to the issuance or assumption of such Series of Bonds, the City shall enact a Supplemental Ordinance authorizing such Series and the maximum aggregate principal amount of such Series and comply with all conditions in Section 5.04 of the General Ordinance (described under "Conditions and Provisions Relating to Issuing Bonds" hereinafter) and all conditions in the Act pertaining to the issuance or assumption of Airport System revenue bonds.

A Series of Bonds may be secured by a Credit Facility or Standby Agreement meeting the requirements of the General Ordinance and the applicable Supplemental Ordinance. In connection with the issuance of its Bonds or at any time thereafter so long as a Series of Bonds remains Outstanding, the City also may enter into Qualified Swaps or Exchange Agreements if the Bond Committee determines that any such Qualified Swap or Exchange Agreement will assist the City in more effectively managing its interest costs. The City's payment obligation under any Qualified Swap (other than termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap) shall be made from the Sinking Fund and its payment obligation under any such Exchange Agreement shall be made in accordance with Section 4.06(e) of the General Ordinance. Unless otherwise acknowledged in writing by S&P, that execution and delivery of such Qualified Swap Agreement or Exchange Agreement will not, in and of itself, result in a downgrade, suspension or withdrawal of the credit ratings on any Bonds Outstanding under the General Ordinance, the City will not enter into any Qualified Swap or Exchange Agreement.

Notwithstanding anything to the contrary in the General Ordinance, any Qualified Swap or Exchange Agreement entered into after June 15, 2005, may only be executed if authorized by Resolution of the City Council.

Issuance of Bonds

Purpose of Bonds; Combination of Projects for Financing Purposes. The Bonds issued or assumed under the General Ordinance shall be issued or assumed for the purpose (i) of paying the costs of Projects relating to the Airport System of the City, (ii) of reimbursing any fund of the City from which such costs shall have been paid or advanced together with interest thereon, (iii) of funding any of such costs for which the City shall have outstanding bond anticipation notes or other obligations, (iv) of refunding any Bonds or bonds of the City issued for the foregoing purposes, or (v) of refunding any General Obligation Bonds or NSS General Obligation Bonds.

Pledge of Revenues; Grant of Security Interest; Limitation on Recourse

The City pursuant to the General Ordinance pledges for the security and payment of all Bonds and thereby grants to Bondholders a lien on and security interest in: (i) all Project Revenues, (ii) amounts payable to the City under a Qualified Swap, (iii) except as provided in Section 4.09 of the General Ordinance (with respect to a non-parity reserve fund), all amounts on deposit in or credited to the Aviation Funds and (iv) proceeds of the foregoing ((i)-(iv) collectively are referred to herein as, the "Pledged Amounts"). The City may pledge Passenger Facility Charges pursuant to a Supplemental Ordinance and such Passenger Facility Charges, and proceeds thereof, shall constitute Pledged Amounts;

provided, however, that if as a result of applicable law, rules and regulations, such Passenger Facility Charges may only be pledged to secure one or more specified Series of Bonds, such pledged Passenger Facility Charges, and proceeds thereof, shall constitute Pledged Amounts solely with respect to such Series of Bonds; provided, further, that Passenger Facility Charges shall not constitute Pledged Amounts or Amounts Available for Debt Service under the General Ordinance unless the City first receives written confirmation from all Rating Agencies then rating any Bonds Outstanding under the General Ordinance, that the pledge of Passenger Facility Charges in and of itself will not result in a downgrade, suspension or withdrawal of rating on any Bonds Outstanding under the General Ordinance, without taking into account Bonds the rating on which is based upon one or more Credit Facilities for such Bonds, provided that if all Bonds Outstanding under the General Ordinance are rated based upon a Credit Facility, then Passenger Facility Charges may be pledged only upon receipt by the City of written consent by the providers of all such Credit Facilities. To the extent that the Fiscal Agent maintains such Pledged Amounts, the Fiscal Agent shall hold and apply the security interest granted by the General Ordinance in the Pledged Amounts, in trust, for the equal and ratable benefit and security of all present and future Holders of Bonds issued pursuant to the provisions of the General Ordinance and each Supplemental Ordinance, without preference, priority or distinction of any one Bond over any other Bond; provided however, that the pledge of the General Ordinance may also be for the benefit of the provider of a Credit Facility, Standby Agreement or Qualified Swap (other than with respect to termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap), or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price of and interest on any Series of Bonds, on an equal and ratable basis with Bonds, to the extent provided by any Supplemental Ordinance or Determination.

Amounts constituting revenues, rents, rates, tolls or other charges generated or allocable to the Outside Terminal Area may be pledged under the General Ordinance as Project Revenues, only if there shall be delivered to the Fiscal Agent: (i) a written statement supported by appropriate schedules and summaries, that on the basis of historical, and estimated future annual financial operations of the Airport System, from which Amounts Available for Debt Service are to be derived, the Airport System will, in the opinion of the Consultant, yield Amounts Available for Debt Service for each of the five Fiscal Years (or three Fiscal Years in the event that the Consultant is professionally unable to provide an opinion for a period in excess of three Fiscal Years) ended immediately following the pledge of amounts described above, sufficient to comply with the Rate Covenant, and (ii) for so long as any of the Airline Agreements are in effect, with the prior written consent of the Signatory Airlines to amend the Airline Agreements so that they reflect the foregoing modifications. For purposes of the statement in clause (i) above, the definition of "Operating Expenses" shall be deemed to include projected operating expenses of the Outside Terminal Area and Debt Service Requirements shall be deemed to include the debt service on any Bonds assumed or to be assumed under the General Ordinance, and any Qualified Swap, Credit Facility or Standby Agreement related thereto which is secured by a parity pledge of Project Revenues.

Neither the Bonds nor the City's reimbursement or other contractual obligations under any Credit Facility, Standby Agreement, Qualified Swap or Exchange Agreement shall constitute a general indebtedness or a pledge of the full faith and credit of the City within the meaning of any Constitutional or statutory provision or limitation of indebtedness. No Bondholder or beneficiary of any of the foregoing agreements shall ever have the right, directly or indirectly, to require or compel the exercise of the ad valorem taxing power of the City for the payment of the principal and redemption price of or interest on the Bonds or the making of any payments under the General Ordinance. The Bonds and the obligations evidenced thereby and by the foregoing agreements, shall not constitute a lien on any property of or in the City, except as set forth in this section.

Designated PFC Revenues for Debt Service

The City may for any period elect to designate any available Passenger Facility Charges as "Designated PFC Revenues for Debt Service" by filing with the Fiscal Agent a certificate signed by the Director of Finance that includes (a) a representation by the City that such PFCs, when received by the City, may be validly designated as and included in "Designated PFC Revenues for Debt Service" under the General Ordinance and are legally available to pay the Debt Service Requirements on all or a portion of the Bonds, (b) the amount of PFCs that are being designated as and included in "Designated PFC Revenues for Debt Service," (c) the appropriate account(s) of the Sinking Fund such Designated PFC Revenues for Debt Service are to be deposited to, and (d) the time period during which such Designated PFC Revenues for Debt Service will be designated as and included in "Designated PFC Revenues for Debt Service." After the filing of such certificate with the Fiscal Agent, the City shall cause the Designated PFC Revenues for Debt Service designated therein to be deposited to the account(s) of the Sinking Fund and used to pay the Debt Service Requirements on the applicable Series of Bonds. Notwithstanding any other provision hereof, if such Designated PFC Revenues for Debt Service are subject to any prior pledge or lien or irrevocable commitment, the application thereof to the payment of Debt Service Requirements on the Bonds shall be subordinate to the terms of such prior pledge or lien or irrevocable commitment and the certificate of the Director of Finance designating the Designated PFC Revenues for Debt Service shall indicate the amount of the obligation payable in such Fiscal Year from the Designated PFC Revenues for Debt Service pursuant to such prior pledge or lien or irrevocable commitment.

Bonds to be Parity Bonds

All Bonds issued under the General Ordinance shall be parity Bonds equally and ratably secured by the pledge of and grant of the security interest described in the preceding section, except as provided for in the preceding section and the section below entitled "Sinking Fund Reserve Account" without preference, priority or distinction as to lien or otherwise, except as otherwise hereinafter provided, of any one Bond over any other Bond or as between principal and interest.

Subordinate Obligations issued pursuant to a Subordinate Obligation Ordinance shall be secured (i) by a pledge of and grant of the security interest in Project Revenues to the extent required to be deposited in the Subordinate Obligations Fund and (ii) the amounts on deposit in or credited to the Subordinate Obligations Fund subject and subordinate to the payment of the amounts described in clauses (a) through (d) of the section below entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts" from Amounts Available for Debt Service and subject to the elimination of any deficiency in any fund or account established under the General Ordinance or under any Supplemental Ordinance.

Pursuant to the General Ordinance, the City reserves the right, and nothing in the General Ordinance shall be construed to impair such right, to finance improvements to the Airport System by the issuance of its General Obligation Bonds, NSS General Obligation Bonds, Special Facility Revenue Bonds or Subordinate Obligations under ordinances other than Supplemental Ordinances; provided that in the case of any Airport System revenue bonds or notes for the payment of which Project Revenues shall be used or pledged, payment of such Airport System revenue bonds shall be subject and subordinate to the payment from such Project Revenues of the payments described in the section below entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts" and subject to the elimination of any deficiency in any fund or account established under the General Ordinance or under any Supplemental Ordinance.

Establishment of Funds and Accounts

The following funds and accounts are established pursuant to the General Ordinance and shall be held by the City: (a) Aviation Operating Fund; (b) Aviation Capital Fund; and (c) Rebate Fund.

The following funds and accounts are established pursuant to the General Ordinance or, have heretofore been established and shall be maintained by the Fiscal Agent: (a) Sinking Fund and within such Sinking Fund, a Sinking Fund Reserve Account, a Debt Service Account and a Charges Account; (b) Subordinate Obligation Fund; and (c) Renewal Fund.

On the Effective Date of the General Ordinance, the City transferred or caused to be transferred or credited on its books and records all amounts maintained in or credited to the funds and accounts created under the General Airport Revenue Bond Ordinance of 1978 as set forth in the General Ordinance.

Nothing in the General Ordinance shall be construed to prevent the City from establishing, in connection with the issuance of one or more Series of Bonds, additional funds or accounts to be held for the benefit of one or more Series of Bonds issued under the General Ordinance, as set forth in Supplemental Ordinances; provided that, no such additional funds or accounts shall be established unless, in the opinion of Bond Counsel, establishment of additional funds or accounts would not (i) adversely affect the exclusion of interest on Bonds, if any, from gross income for federal income tax purposes, or (ii) materially adversely affect the security or interests of Bondholders. If required by law, rules or regulations, the City shall establish and maintain a separate account within the Sinking Fund for pledged Passenger Facility Charges.

Segregation of Aviation Funds; Deposit of Project Revenues into Aviation Operating Fund.

(a) The Aviation Funds shall be held separate and apart from all other funds and accounts of the City and the Fiscal Agent and the funds and accounts therein shall not be commingled with, loaned or transferred among themselves or to any other City funds or accounts except as expressly permitted in the General Ordinance.

(b) The City shall, upon receipt of any Project Revenues, deposit such Project Revenues into the Aviation Operating Fund. Any Passenger Facility Charges that constitute Amounts Available for Debt Service under the General Ordinance, shall be deposited directly into the appropriate account or subaccount of the Sinking Fund to the extent required to pay debt service on Bonds. The City and Fiscal Agent also shall cause to be deposited into the Aviation Operating Fund, Sinking Fund Reserve Account, Sinking Fund, and Renewal Fund proceeds of Bonds as designated by Supplemental Ordinance or Determination and any other funds directed to be deposited into the Aviation Operating Fund, Sinking Fund Reserve Account, Sinking Fund, or Renewal Fund by the City. The Fiscal Agent shall, at the written direction of the City, disburse from the Aviation Operating Fund the amounts and at the times specified below in the section entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts."

(c) (i) If at any time sufficient moneys are not available in the Aviation Operating Fund to pay Operating Expenses and to make the transfers required by the section below entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts", or if a deficiency exists in the Aviation Capital Fund, then, subject to the requirements of (ii) and (iii) below, amounts on deposit in the Aviation Capital Fund and Renewal Fund may be loaned, at the written direction of the City, to the Aviation Operating Fund for the payment of such Operating Expenses and to make transfers required by the section below entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts", to the extent of

the deficiency, and amounts on deposit in the Aviation Operating Fund and Renewal Fund may be loaned, at the written direction of the City, to the Aviation Capital Fund, to the extent of the deficiency. Notwithstanding anything to the contrary in this subparagraph (c), during any Fiscal Year, loans from the Aviation Capital Fund and loans from the Aviation Operating Fund pursuant to this section at any time shall not exceed in the aggregate 5% of the Division of Aviation's budgeted Operating Expenses net of Debt Service Requirements for such Fiscal Year.

(ii) Loans from the Aviation Capital Fund to the Aviation Operating Fund shall be made only

to the extent of unencumbered capital amounts in the Aviation Capital Fund, and may be spent only for purposes authorized under applicable federal, state and local law. Any amounts borrowed from the Aviation Capital Fund shall be repaid on the earlier to occur of: (1) the date the funds are required by the Division of Aviation for purposes of the Aviation Capital Fund, (2) the date proceeds of Bonds, bonds or notes become available to the City for reimbursement of the expenditures made with the money borrowed, or (3) the last day of the twelve-month period beginning on the date the loan was made, in which case repayment may be made from the Renewal Fund;

(iii) Loans from the Aviation Operating Fund to the Aviation Capital Fund shall be made only

to the extent of any surplus in the Aviation Operating Fund; provided that a Consultant delivers a written certification to the Fiscal Agent that the Division of Aviation will have, after making the loan, sufficient funds in the Aviation Operating Fund to pay all Operating Expenses when payable and the Debt Service Requirements up to and including the later of: the last day of the Fiscal Year in which the loan takes place or, the next interest payment date. Amounts loaned to the Aviation Capital Fund shall be used for the following purposes: (1) capital projects previously approved by the Signatory Airlines in accordance with the Airline Agreements, or (2) capital projects for which an appropriation has been made. Any amounts borrowed shall be repaid no later than the date the funds are required by the Division of Aviation for purposes of the Aviation Operating Fund.

Transfer from Aviation Operating Fund to Other Funds and Accounts. Amounts on deposit in the Aviation Operating Fund Operating Fund shall be applied by the City or the Fiscal Agent, as the case may be, in the following manner and in the following order of priority:

(a) to pay such sums constituting Net Operating Expenses in a timely manner;

(b) for deposit in the appropriate accounts of the Sinking Fund, the amount necessary to provide for the timely payment of Debt Service Requirements;

(c) for deposit in the Sinking Fund Reserve Account or the appropriate subaccount thereof, the amount, if any, required to eliminate any deficiencies therein; provided, however, in the event there are insufficient amounts available to replenish all of the accounts or subaccounts within the Sinking Fund Reserve Account, the amount to be deposited in each Sinking Fund Reserve Account or subaccount shall be determined by dividing the Sinking Fund Reserve Requirement on the Outstanding Bonds secured thereby by the sum of the Sinking Fund Reserve Requirements on all Bonds Outstanding under the General Ordinance and multiplying that result by the total amount available to be deposited under this clause (c);

(d) for deposit in the Renewal Fund, the amount, if any, required to eliminate any deficiency therein, and to pay amounts due and payable under Exchange Agreements;

(e) to pay termination amounts to a Qualified Swap Provider due as a result of the termination of a Qualified Swap and termination amounts payable to JP Morgan Chase Bank – New York with respect to Payments upon Early Termination on the Interest Rate Swap Transaction effective June 15, 2005;

(f) for deposit in the Subordinate Obligation Fund (i) the amount necessary to provide for the timely payment of the principal or redemption price of and interest on Subordinate Obligations, (ii) on or before the dates that other payments are due under any credit facility, liquidity facility or swap agreement constituting Subordinate Obligations, to deposit the amount necessary to make such payments, (iii) forward to the paying agent in respect of bond anticipation notes (payable by exchange for, or out of the proceeds of the sale of Subordinate Obligations) the amount necessary to provide for the timely payment of interest thereon (to the extent not capitalized), and (iv) deposit in the applicable subaccount of the sinking fund reserve account for a series of Subordinate Obligations the amounts, if any, required to eliminate any deficiency in such account;

(g) to pay to the City the amount necessary to provide for the timely payment of the principal or redemption price of and interest on General Obligation Bonds; [3]

(h) to pay any Interdepartmental Charges;

(i) to pay to the City the amount necessary to provide for the timely payment of the principal or redemption price of and interest of NSS (non-self-sustaining) General Obligation Bonds;[2] and

(j) Any amounts remaining in the Aviation Operating Fund following any transfer then required to be made pursuant to subparagraphs (a)-(i) above, may be used at the written direction of the City for any Airport System purposes. In the Airline Agreement, the City has provided its written direction to use such remaining amounts as provided in subparagraphs (k)-(m) below.

So long as any Bonds or bonds are outstanding, the deposit and application of Project Revenues for each Fiscal Year during the term of the Airline Agreement shall be governed by the General Ordinance. The City is expressly permitted in the General Ordinance to use amounts remaining in the Aviation Operating Fund following any transfers pursuant to subparagraphs (a)-(i) above for the Bond Redemption and Improvement Requirement, the O&M Requirement, the Airline Revenue Allocation, and City Revenue Allocation. Pursuant to Section 4.06 of the General Ordinance, any amounts remaining in the Aviation Operating Fund following any transfer then required to be made pursuant to subparagraphs (a)-(i) above may be used for any Airport System purposes at the written direction of the City. The City has directed that such amounts remaining will be applied or credited in the following manner:

(k) Bond Redemption and Improvement Account. The Bond Redemption and Improvement Account is available for use by City for the payment of deficiencies with respect to the Debt Service Requirements or deficiencies with respect to the Sinking Fund Reserve Requirement as provided under the General Ordinance. If no such deficiencies exist, City is not in default under the General Ordinance and a Majority-in Interest of the Eligible Signatory Airlines, determined pursuant to the Airfield Area MII Formula, mutually agree (whose agreement will not be unreasonably withheld), the Division of Aviation can use such amounts for repair, renewals, replacements or alterations to the Airport System; redemption of Bonds; costs of Capital Projects or equipment; purchase of Bonds; arbitrage rebate pursuant to Section 148(f) of the Code or for any lawful Airport System purposes. The Bond Redemption and Improvement Requirement shall mean an amount not to exceed the lesser of (i) the amount of Debt Service Reserve

[3] No general obligation debt of the City described in paragraphs (g) and (i) above are currently outstanding.

Surety Bonds fulfilling the City's Sinking Fund Reserve Requirements, or (ii) such dollar amount required to maintain a dollar balance in the Bond Redemption and Improvement Account equal to twenty five percent (25%) of the Debt Service Requirement. The Bond Redemption and Improvement Account may be funded with amounts remaining, if any, following any and all transfers required by subparagraphs (a)-(i) above.

(1) Notwithstanding the foregoing, for each and every Fiscal Year during the term of Airline Agreement, the interest earned on the balance of the Bond Redemption and Improvement Account shall first be used to reduce the Bond Redemption and Improvement Requirement for the following Fiscal Year and the remaining interest and any excess balance in the Bond Redemption and Improvement Account due to a reduction in the Debt Service Requirement, if any, shall be transferred to the Aviation Operating Fund and then allocated to the Airport Cost Centers in proportion to the Debt Service Requirement for each such Airport Cost Center as a Non-Airline Revenue.

(2) The net Bond Redemption and Improvement Requirement shall be allocated on the basis of Debt Service Requirements to the Airport Cost Centers.

(l) O&M Account. The O&M Account is available for use by City for the payment of Operating Expenses in City's sole discretion in the event the then current Airport Revenues allocated to Operating Expenses in the Annual Budget are deemed to be insufficient. If a Majority-in Interest of the Eligible Signatory Airlines, determined pursuant to the Airfield Area MII Formula, and City mutually agree (whose agreement will not be unreasonably withheld), any balance then can be used for repairs, renewals, replacements, alterations, the redemption of Bonds or bonds or for any Airport System purposes. Notwithstanding the foregoing, City has no reasonable expectation that funds in the O&M Account will be used to pay Debt Service since the account is being created to pay Operating Expenses. The O&M Account may be funded with amounts remaining, if any, following any and all transfers required by subparagraphs (a)-(j) above. Thereafter, the O&M Requirement shall mean an amount not to exceed one million dollars ($1,000,000) per Fiscal Year to be deposited in the O&M Account to maintain a balance equal to ten percent (10%) of Operating Expenses.

(1) Notwithstanding the foregoing, for each and every Fiscal Year during the term of the Agreement, the interest earned on the balance of the O&M Account shall first be used to reduce the O&M Requirement for the following Fiscal Year and the remaining interest and any excess balance in the O&M Account due to a reduction in Operating Expenses, if any, shall be transferred to the Aviation Operating Fund, then allocated to the Airport Cost Centers in proportion to the Operating Expenses for each such Airport Cost Center as a Non-Airline Revenue.

(2) The net O&M Requirement shall be allocated on the basis of Operating Expenses to the Airport Cost Centers.

(m) Airline Revenue Allocation. The Airline Revenue Allocation shall be calculated from any amounts remaining in the Aviation Operating Fund if any, following any and all transfers required by subparagraphs (a)-(k) above. During the term of the Airline Agreement, the Airline Revenue Allocation shall be equal to fifty percent (50%) of the prior Fiscal Year's total net revenue from the Outside Terminal Areas Cost Center reduced by an amount of up to seven million dollars ($7,000,000), to the extent net revenue from the Outside Terminal Areas Cost Center equals or exceeds seven million dollars ($7,000,000). The Airline Revenue Allocation, if any, shall first be credited to the Other Buildings and Areas Cost Center to determine the Airfield Area Requirement for such Fiscal Year and then, if the Airline Revenue Allocation exceeds the deficit of the Other Buildings and Areas Cost Center, the excess

shall be allocated pro rata to the Airfield Area Cost Center and Terminal Area Cost Center based on airline revenue allocable to such cost center.

(n) Discretionary Account. Following any and all transfers required by subparagraphs (a)-(l) above, any amounts remaining in the Aviation Operating Fund, less the Airline Revenue Allocation shall be deposited in the Discretionary Account to be used at the written direction of the City for any Airport System purposes.

Sinking Fund. Except as set forth in Sections 4.02, 4.04 and 4.09 of the General Ordinance, the Sinking Fund shall be a consolidated fund for the equal and proportionate benefit of the Holders of all Bonds from time to time Outstanding, Credit Facilities, Standby Agreements, and Qualified Swap Agreements secured by a parity pledge of Project Revenues and payable pursuant to subparagraph (c) of the section above entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts", and each account therein may be invested and reinvested on a consolidated basis in accordance with Section 9 of the Act.

The Fiscal Agent, as directed by the City by Supplemental Ordinance, Determination or other written direction, shall pay out of the Debt Service Account of the Sinking Fund to the designated paying agent or agents (i) on or before each interest payment date for any of the Bonds the amount required for the interest payable on such date; and (ii) on or before each principal, redemption or prepayment date for any Bonds, the amount required for the principal, redemption or prepayment payable on such date, and (iii) on or before the respective due dates the amounts, if any, due under any Swap Agreements (other than termination amounts payable to a Qualified Swap Provider due as a result of termination of a Qualified Swap). Such amounts shall be applied by the designated paying agent or agents on the due dates thereof. The Fiscal Agent shall also pay out of the Debt Service Account of the Sinking Fund the accrued interest included in the purchase price of Bonds purchased for retirement and on or before the due dates any amounts owing by the City under any Credit Facility or Standby Agreement, payable from the Debt Service Account, on account of advances to pay principal of or interest or redemption premium on Bonds.

Amounts accumulated in the Debt Service Account with respect to any Sinking Fund Installment (together with amounts accumulated therein with respect to interest on the Bonds for which such Sinking Fund Installment was established) if so directed by the City, shall be applied by the Fiscal Agent, on or prior to the 60th day preceding the due date of such Sinking Fund Installment, to the purchase of Bonds of the Series, maturity and interest rate within each maturity for which such Sinking Fund Installment was established. All purchases of Bonds pursuant to this paragraph shall be made at prices not exceeding the applicable sinking fund redemption price of such Bonds plus accrued interest, and such purchases shall be made by the Fiscal Agent as directed by the City. As soon as practicable after the 42nd day preceding the due date of any such Sinking Fund Installment, the Fiscal Agent shall proceed to call for redemption, by giving notice as provided in Section 6.03 of the General Ordinance, on such due date Bonds of the Series, maturity and interest rate within each maturity for which such Sinking Fund Installment was established (except in the case of Bonds maturing on a Sinking Fund Installment date) in such amount as shall be necessary to complete the retirement of the unsatisfied balance of such Sinking Fund Installment after making allowance for any Bonds purchased pursuant to Section 4.10 of the General Ordinance which the City has directed the Fiscal Agent to apply as a credit against such Sinking Fund Installment as provided in Section 4.08 thereof. The Fiscal Agent shall pay out of the Sinking Fund to the appropriate paying agent or agents, on or before such redemption date (or maturity date) the amount required for the redemption of the Bonds so called for redemption (or for the payment of such Bonds then maturing) and such amount shall be applied by such paying agent or agents to such redemption (or payment). All expenses in connection with the purchase or redemption of Bonds shall be paid by the City from Amounts Available for Debt Service, or other amounts available therefor.

In the event of the refunding of any Bonds, the Fiscal Agent shall, if the City so directs in writing, withdraw from the Sinking Fund all, or any portion of, the amounts accumulated therein with respect to principal or interest on the Bonds being refunded and deposit such amounts with itself or another financial institution serving as escrow agent to be held for the payment of the principal or redemption price, if applicable, and interest on the Bonds being refunded; provided that such withdrawal shall not be made unless immediately thereafter the Bonds being refunded shall be deemed to have been paid pursuant to Section 11.01 of the General Ordinance. In the event of a refunding, the City may also direct the Fiscal Agent to withdraw from the Sinking Fund all, or a portion of, the amounts accumulated therein with respect to principal and interest on the Bonds being refunded and deposit such amounts in any fund or account established under the General Ordinance.

If any Bond shall not be presented for payment when the principal thereof becomes due, either at maturity or otherwise or at the date fixed for redemption thereof, if moneys sufficient to pay such Bond shall have been deposited with the Fiscal Agent, it shall be the duty of the Fiscal Agent to hold such moneys, without liability to the City, any Bondholder or any other person for interest thereon, for the benefit of the owner of such Bond. Notwithstanding the foregoing, any moneys in the Sinking Fund for the payment of the interest, principal or redemption premium of Bonds unclaimed for two (2) years after the due date shall be repaid to the Aviation Operating Fund but such repayment shall not discharge the obligation, if any, for which such moneys were previously held in the Sinking Fund; provided, however, that such repayment shall not be made unless, at the time of such repayment, there shall exist no deficiency in any fund or account established under the General Ordinance or any Supplemental Ordinance.

The Fiscal Agent shall pay, solely out of the Charges Account to the appropriate payees any fees, expenses and other amounts due and payable from the Charges Account, under any Credit Facility or Standby Agreement, with respect to Bonds, to the extent such amounts are not paid from the Debt Service Account.

Credits Against Sinking Fund Installments. If at any time Bonds of any Series or maturity for which Sinking Fund Installments shall have been established are purchased or redeemed other than pursuant to the third paragraph of the section above entitled "Sinking Fund" or are deemed to have been paid pursuant to Section 11.01 of the General Ordinance and, with respect to such Bonds which have been deemed paid, irrevocable instructions have been given to the Fiscal Agent to redeem or purchase the same on or prior to the due date of the Sinking Fund Installment to be credited under this section, the City may from time to time and at any time by written notice to the Fiscal Agent specify the portion, if any, of such Bonds so purchased, redeemed or deemed to have been paid and not previously applied as a credit against any Sinking Fund Installment which are to be credited against future Sinking Fund Installments. Such notice shall specify the amounts of such Bonds to be applied as a credit against such Sinking Fund Installment or Sinking Fund Installments and the particular Sinking Fund Installment or Installments against which such Bonds are to be applied as a credit; provided, however that none of such Bonds may be applied as a credit against a Sinking Fund Installment to become due less than forty-two (42) days after such notice is delivered to the Fiscal Agent. All such Bonds to be applied as a credit shall be surrendered to the Fiscal Agent for cancellation on or prior to the due date of the Sinking Fund Installment against which they are being applied as a credit. The portion of any such Sinking Fund Installment remaining after the deduction of any such amounts credited toward the same (or the original amount of any such Sinking Fund Installment if no such amounts shall have been credited toward the same) shall constitute the unsatisfied balance of such Sinking Fund Installment for the purpose of calculation of Sinking Fund Installments due on a future date.

Sinking Fund Reserve Account. There is created under the General Ordinance a parity Sinking Fund Reserve Account within the Sinking Fund to be known as the "Parity Sinking Fund Reserve Account." Unless the applicable Supplemental Ordinance designates a Non-Parity Sinking Fund Reserve Requirement, the City shall deposit, or cause to be deposited in the Parity Sinking Fund Reserve Account from the proceeds of the sale of each Series of Bonds, or from other amounts available therefor, an amount which, when added to the existing balance in the Parity Sinking Fund Reserve Account, will be equal to the Parity Sinking Fund Reserve Requirement immediately after the issuance of such Series of Bonds. All amounts in the Parity Sinking Fund Reserve Account shall be available to pay the principal, redemption price or interest on any other Series of Bonds secured by the Parity Sinking Fund Reserve Account.

If a Supplemental Ordinance for a Series of Bonds designates a Non-Parity Sinking Reserve Requirement for such Series of Bonds, the Supplemental Ordinance pursuant to which such Bonds were issued shall either create a separate Non-Parity Sinking Fund Reserve Subaccount, or create or designate a previously created subaccount within the Sinking Fund Reserve Account. Notwithstanding anything to the contrary in Section 4.09 of the General Ordinance, the City shall not create a Non-Parity Sinking Fund Reserve Account or designate a Non-Parity Sinking Fund Reserve Requirement unless the City first obtains written confirmation from any one Rating Agency then rating the Bonds that such action, in and of itself, will not result in a downgrade, suspension or withdrawal of the credit rating on any Bonds Outstanding thereunder. The City shall, under direction of the Director of Finance, deposit in the specified Non-Parity Sinking Fund Reserve Subaccount created pursuant to any Supplemental Ordinance, the amount required to be deposited pursuant to the Supplemental Ordinance for such Series of Bonds. The money and investments in each Non-Parity Sinking Fund Reserve Subaccount shall be held and maintained in an amount equal at all times to the applicable Non-Parity Sinking Fund Reserve Requirement for such Series secured thereby, as provided in the Supplemental Ordinance authorizing such Series of Bonds. All amounts in each Non-Parity Sinking Fund Reserve Subaccount shall be available solely to secure the Bonds specified in the Supplemental Ordinance pursuant to which such subaccount was created.

If at any time and for any reason, the moneys in the Debt Service Account of the Sinking Fund shall be insufficient to pay as and when due, the principal of (and premium, if any) or interest on any Bond or Bonds or other obligations payable from the Debt Service Account then due (including any amounts payable out of the Sinking Fund under Swap Agreements), the Fiscal Agent is authorized and directed (i) with respect to Bonds secured by the Parity Sinking Fund Reserve Account, to withdraw an amount equal to the deficiency from the Parity Sinking Fund Reserve Account, and use such amount to pay debt service on the Bonds secured thereby, and (ii) with respect to Bonds secured by a Non-Parity Sinking Fund Reserve Subaccount, to withdraw an amount equal to the deficiency from such Non-Parity Sinking Fund Reserve Subaccount and use such amount to pay debt service on the Bonds secured thereby. If by reason of such withdrawal or for any other reason there shall be a deficiency in the Sinking Fund Reserve Account or any subaccount thereof, the City covenants to restore such deficiency promptly from Project Revenues, in no event later than the next interest payment date for Bonds Outstanding under the General Ordinance.

Any money in the Sinking Fund Reserve Account or any subaccount thereof in excess of the applicable Sinking Fund Reserve Requirement shall be transferred on an annual basis to the Debt Service Account of the Sinking Fund at the written direction of the City.

Notwithstanding the foregoing provisions, in lieu of the required deposits into the Sinking Fund Reserve Account or any subaccount thereof, the City may cause to be deposited into any account or subaccount of the Sinking Fund Reserve Account an unconditional and irrevocable surety bond or an insurance policy payable to the Fiscal Agent for the account of the Holders of the Series of Bonds in

question or an irrevocable letter of credit in an amount equal to the difference between the Sinking Fund Reserve Requirement for the related Series of Bonds and the remaining sums, if any, then on deposit in the applicable account or subaccount of the Sinking Fund Reserve Account. The surety bond, insurance policy or letter of credit (each, a "Sinking Fund Reserve Facility") shall be payable (upon the giving of notice as required thereunder) on any payment date on which moneys will be required to be withdrawn from the applicable account or subaccount of the Sinking Fund Reserve Account and applied to the payment of debt service on the related Series of Bonds and such withdrawal cannot be met by amounts on deposit in the applicable account or subaccount of the Sinking Fund Reserve Account or provided from amounts held in any other Fund under the General Ordinance that are available to pay debt service on such Series of Bonds.

The insurer providing such surety bond or insurance policy shall be an insurer whose municipal bond insurance policies insuring the payment, when due, of the principal of and interest on municipal bond issues results in such issues being rated in not lower than the "A" category (without regard to gradations) by any one Rating Agency. The letter of credit issuer shall be a bank or trust company which is rated not lower than the "A" category (without regard to gradations) by any one Rating Agency, and the letter of credit itself shall be rated in at least "A" category of such Rating Agency. If a disbursement is made pursuant to a Sinking Fund Reserve Facility provided pursuant to this subsection, the City shall be obligated either (i) to reinstate the maximum limits of such Sinking Fund Reserve Facility or (ii) to deposit into the applicable account or subaccount of the Sinking Fund Reserve Account, funds in the amount of the disbursement made under such Sinking Fund Reserve Facility, or a combination of such alternatives, as shall provide that the amount in the applicable account or subaccount of the Sinking Fund Reserve Account equals the Sinking Fund Reserve Requirement for the related Series of Bonds within a time period not longer than would be required to restore the applicable account or subaccount of the Sinking Fund Reserve Account by operation of Section 4.09 of the General Ordinance and from the same source of funds as provided herein. Upon the occurrence of any reduction or suspension of any credit rating with respect to such Sinking Fund Reserve Facility (or the provider thereof) required by Section 4.09 of the General Ordinance, the City shall replace the Sinking Fund Reserve Facility with a new one that meets the aforesaid rating requirements; provided however that with respect to any letter of credit that is a Sinking Fund Reserve Facility, the City may in lieu of replacing such Sinking Fund Reserve Facility, cause the Sinking Fund Reserve Facility to be drawn upon to the full extent possible and deposit such monies in the subaccount of the Sinking Fund Reserve Account in which the Sinking Fund Reserve Facility was held. In addition, 30 days prior to the expiration date of any Sinking Fund Reserve Facility, that is a letter of credit the City shall either extend the term of such Sinking Fund Reserve Facility by at least one year or deposit cash in the face amount of the Sinking Fund Reserve Facility in question in the appropriate account or subaccount of the Sinking Fund Reserve Account in replacement of such Sinking Fund Reserve Facility, and if the City fails to take either of such actions by such date, the Fiscal Agent shall within five Business Days thereafter draw down upon the Sinking Fund Reserve Facility that is a letter of credit to the full extent possible and deposit the proceeds of such draw in the appropriate subaccount of the Sinking Fund Reserve Account.

Subordinate Obligation Fund. Subject to the third paragraph of this section, the Fiscal Agent upon direction of the Director of Finance, shall apply amounts in the Subordinate Obligation Fund to the payment of the principal of, redemption premium, if any, and interest on Subordinate Obligations and to payments due under any credit facility, qualified swap or standby agreement in accordance with the provisions of, and subject to the priorities and limitations and restrictions provided, in the Subordinate Obligation Ordinance or Supplemental Ordinance or Determination.

At any time and from time to time the City may deposit in the Subordinate Obligation Fund for the payment of Subordinate Obligations amounts received from any source other than Project Revenues

which is not inconsistent with the General Ordinance, any Supplemental Ordinance or any Subordinate Obligation Ordinance or Determination.

If at any time the amounts in the Sinking Fund shall be less than the current requirement of such fund pursuant to subparagraphs (a) and (b) of Section 4.06 of the General Ordinance and there shall not be on deposit in the Sinking Fund Reserve Account, the Aviation Operating Fund or the Renewal Fund available moneys sufficient to cure such deficiency, then the Fiscal Agent shall withdraw from the Subordinate Obligation Fund and deposit in the Sinking Fund the amount necessary (or all the moneys in said fund, if less than the amount necessary) to eliminate such deficiency.

Any moneys in the Subordinate Obligation Fund for the payment of Subordinate Obligations, unclaimed for two (2) years after the due date shall be repaid to the City but such repayment shall not discharge the obligation, if any, for which such moneys were previously held in the Subordinate Obligation Fund; provided, however, that such repayment shall not be made unless, at the time of such repayment, there shall exist no deficiency in any fund or account established under the General Ordinance, any Supplemental Ordinance or any Subordinate Obligation Ordinance.

Aviation Capital Fund. Proceeds of Bonds issued for capital purposes shall be deposited into the Aviation Capital Fund and disbursed according to established procedures of the City for purposes permitted by the Act, other applicable law and the Bonds and such other purposes as are permitted under the General Ordinance.

Renewal Fund. All amounts credited to the Renewal Fund on or after the Effective Date shall be maintained in accordance with this section. Payments from the Renewal Fund shall be made only for the following purposes: (a) to pay the cost of major repairs, renewals and replacements of Airport System facilities for purposes of meeting unforeseen contingencies and emergencies arising from the operation of the Airport System, or (b) to pay expenses chargeable as Operating Expenses if Project Revenues are insufficient, for whatever reason to cover such Operating Expenses in any Fiscal Year, (c) to pay debt service on the Bonds, or (d) to repay any loan in accordance with Section 4.05(c)(ii)(3) of the General Ordinance.

The City shall withdraw from the Renewal Fund the sum or sums necessary to make such payments and shall apply the same to such purpose. If by reason of such withdrawal or any other reason, funds on deposit in the Renewal Fund are less than the Renewal Fund Requirement, the City shall deposit in the Renewal Fund the amount of such deficiency, but only from Project Revenues as the same shall become available, by regular quarterly deposits which shall not be required to exceed the total of $500,000 in any Fiscal Year, and the availability of which shall be determined in accordance with the priorities specified in the section herein entitled "Transfer from Aviation Operating Fund to Other Funds and Accounts."

If at any time the moneys and investments in the Renewal Fund are in excess of the Renewal Fund Requirement, the amount of such excess on order of the Director of Finance, shall be paid over by the City to the Debt Service Account of the Sinking Fund, to be used and applied as are all other moneys deposited in or on deposit therein.

Rebate Fund. The Rebate Fund shall be maintained by the City for so long as any Series of Bonds is Outstanding, and for sixty (60) days thereafter (or such other period as may be specified by the Code and applicable regulations), for the purpose of paying to the United States Treasury the amount required to be rebated pursuant to Section 148(f) of the Code. All amounts in the Rebate Fund, including income earned from investment of amounts in the Rebate Fund, shall be held by the City free and clear of the lien created by the General Ordinance.

Management of Funds and Accounts. The moneys on deposit in the funds and accounts established under the General Ordinance, to the extent not currently required, shall be invested and secured as required by Section 9 of the Act, all at the direction and under the management of the Director of Finance or such other chief fiscal officer of the City as may hereinafter be established.

Investment of Funds and Accounts. All moneys deposited in any fund or account established under the General Ordinance or under any Supplemental Ordinance may be invested by the City or by the Fiscal Agent, at the oral (confirmed in writing promptly thereafter) or written direction of the City, in any Permitted Investments (except as otherwise provided in the General Ordinance with respect to the Sinking Fund, Sinking Fund Reserve Account and Rebate Fund); provided that any investments with respect to amounts on deposit in the Sinking Fund (other than the Sinking Fund Reserve Account) shall mature or shall be subject to redemption by the holder thereof upon demand at par no later than the date when such amounts are needed for the purposes of such funds or accounts.

Interest earnings on amounts on deposit (i) in the Aviation Operating Fund shall be credited to the Aviation Operating Fund; (ii) in the Sinking Fund shall be credited to the Sinking Fund to the extent needed to meet Debt Service Requirements and additional interest earnings may be credited to the Aviation Operating Fund so long as such credit will not adversely impact the tax-exempt status of tax-exempt Bonds Outstanding under the General Ordinance; (iii) in the Sinking Fund Reserve Account shall be credited to the Sinking Fund Reserve Account to the extent needed to satisfy the Sinking Fund Reserve Requirements and additional interest earnings shall be credited to the Debt Service Account of the Sinking Fund; (iv) in the Subordinate Obligation Fund shall be credited to the Subordinate Obligation Fund to the extent needed to satisfy payment provisions for the Subordinate Obligations and additional interest earnings may be credited to the Aviation Operating Fund; (v) in the Renewal Fund, shall be credited to the Renewal Fund to the extent needed to meet the Renewal Fund Requirements and any additional interest earnings shall be credited to the Debt Service Account of the Sinking Fund; (vi) in the Aviation Capital Fund shall be credited to the appropriate account of the Aviation Capital Fund; and (vii) in the Rebate Fund shall be credited to the Rebate Fund.

Valuation of Funds and Accounts. In computing the assets of any fund or account established under the General Ordinance, investments and accrued interest thereon shall be deemed a part thereof. Such investments shall be valued on June 30 of each Fiscal Year at the lower of the cost or current market value thereof if the applicable maturity is more than one (1) year and at par if the applicable maturity is equal to or less than one (1) year plus accrued interest, or at the redemption price thereof, if then redeemable at the option of the holder; provided that investments in any reserve fund or reserve account of the Sinking Fund established pursuant to a Supplemental Ordinance may be valued as provided in the Supplemental Ordinance establishing it. The annual valuation shall apply for all purposes of the General Ordinance except if Bonds are issued or a fund deficit occurs based on the annual valuation, in which cases a valuation shall be made on the date Bonds are issued or the deficit is eliminated, as the case may be.

Covenants of City

Rate Covenant.

(a) The City covenants with Bondholders that it will, at a minimum, impose, charge and recognize as revenues in each Fiscal Year such rentals, charges and fees as shall, together with that portion of the Aviation Operating Fund balance attributable to Amounts Available for Debt Service and carried forward at the beginning of such Fiscal Year and together with all other Amounts Available for Debt Service to be received in such Fiscal Year, equal not less than the greater of:

(1) The sum of:

(i) all Net Operating Expenses payable during such Fiscal Year;

(ii) 150% of the amount required to pay the Debt Service Requirements during such Fiscal Year;

(iii) the amount, if any, required to be paid into the Sinking Fund Reserve Account during such Fiscal Year; and

(iv) the amount, if any, required to be paid into the Renewal Fund during such Fiscal Year; or

(2) The sum of:

(i) all Operating Expenses payable during such Fiscal Year; and

(ii) (A) all Debt Service Requirements during such Fiscal Year (B) all debt service requirements during such Fiscal Year in respect of all outstanding General Obligation Bonds issued for improvements to the Airport System and all outstanding NSS General Obligation Bonds issued for improvements to the Airport System; (C) all debt service requirements during such Fiscal Year on Subordinate Obligations and any other subordinate indebtedness secured by any Amounts Available for Debt Service, (D) all amounts required to repay loans among funds made pursuant to Section 4.05(c) of the General Ordinance, (E) the amount, if any, required to be paid into the Sinking Fund Reserve Account or Renewal Fund during such Fiscal Year and (F) all amounts required to be paid under Exchange Agreements.

Provided, however, if (i) the written election of the City is obtained and filed with the Fiscal Agent, and (ii) so long as any Airline Agreements is in effect, the prior written consent of the Signatory Airlines to amend the Airline Agreements is obtained, then the foregoing rate covenant shall no longer be effective, and the rate covenant in the section below entitled "Alternative Rate Covenant" shall be substituted in lieu of the foregoing for all purposes.

(b) (1) In the event that any Bonds Outstanding are, or any proposed series of Bonds, are to be Balloon Bonds, then Debt Service Requirements on such Balloon Bonds shall be calculated for purposes of projecting compliance with the General Ordinance, or for purposes of determining the Sinking Fund Reserve Requirement for a particular series of Balloon Bonds, whether for any period prior to or after the date of calculation, as follows:

(A) If such Balloon Bonds are not Capital Appreciation Bonds, then, for purposes of determining Debt Service Requirements, each maturity that constitutes Balloon Bonds shall, unless otherwise provided in a Supplemental Ordinance under which such Balloon Bonds are issued, be treated as if it were to be amortized over a period of no more than 30 years and with substantially level annual debt service funding payments commencing not later than the year following the year in which such Balloon Bonds were issued, and extending not later than the stated or deemed, as the case may be, final maturity of such Balloon Bonds, but in no event later than 30 years from the date such Balloon

Bonds were originally issued; and the interest rate used for such computation shall be that rate quoted in The Bond Buyer 25 Revenue Bond Index, or its successor or replacement index, for the last week of the month preceding the date of calculation as published by *The Bond Buyer*, or if that index is no longer published, another similar index designated in a Determination, or if a Determination fails to select a replacement index, that rate determined by a banking institution or an investment banking institution knowledgeable in airport finance as the interest rate or rates at which the City could reasonably expect to borrow by incurring indebtedness with the same term as assumed above, with no credit enhancement and taking into consideration whether such Bonds bear interest which is or is not excluded from gross income for federal income tax purposes; with respect to any Bonds only a portion of which constitutes Balloon Bonds, the remaining portion shall be treated as described in such other provision of the definition of Debt Service Requirements as shall be applicable and, with respect to any Bonds or that portion of a series thereof which constitutes Balloon Bonds, all Debt Service Requirements becoming due prior to the year of the stated maturity of the Balloon Bonds shall be treated as described in such other provision of Debt Service Requirements as shall be applicable; and

(B) If such Balloon Bonds are Capital Appreciation Bonds, by assuming that the Accreted Value of such Bonds for purposes of determining Debt Service Requirements, each maturity that constitutes Balloon Bonds shall, unless otherwise provided in a Supplemental Ordinance under which such Balloon Bonds are issued, be treated as if it were to be amortized over a period of no more than 30 years and with substantially level annual debt service funding payments commencing not later than the year following the year in which such Balloon Bonds were issued, and extending not later than the stated or deemed, as the case may be, final maturity of such Balloon Bonds, but in no event later than 30 years from the date such Balloon Bonds were originally issued; and the interest rate used for such computation shall be that rate quoted in The Bond Buyer 25 Revenue Bond Index, or its successor or replacement index, for the last week of the month preceding the date of calculation as published by *The Bond Buyer*, or if that index is no longer published, another similar index designated in a Determination, or if a Determination fails to select a replacement index, that rate determined by a banking institution or an investment banking institution knowledgeable in airport finance as the interest rate or rates at which the City could reasonably expect to borrow by incurring indebtedness with the same term as assumed above, with no credit enhancement and taking into consideration whether such Bonds bear interest which is or is not excluded from gross income for federal income tax purposes; with respect to any Bonds only a portion of which constitutes Balloon Bonds, the remaining portion shall be treated as described in such other provision of the definition of Debt Service Requirements as shall be applicable and, with respect to any Bonds or that portion of a series thereof which constitutes Balloon Bonds, all Debt Service Requirements becoming due prior to the year of the stated maturity of the Balloon Bonds shall be treated as described in such other provision of Debt Service Requirements as shall be applicable.

(2) The City shall be entitled to assume, in calculating Debt Service Requirements on any Variable Rate Bonds for purposes of projecting compliance with this section or funding the Sinking Fund Reserve Account, that such Variable Rate Bonds will bear interest at a rate equal to (i) the average interest rate on the Variable Rate Bonds during the period of twenty-four (24) consecutive calendar months preceding the date of calculation or (ii) if the Variable Rate Bonds were not Outstanding during the entire twenty-four (24) month period, the average interest

rate on the Variable Rate Bonds since their date of issue or (iii) such other rate as may be specified in a Supplemental Ordinance or Determination.

(3) If a series of Bonds to be issued will be Variable Rate Bonds, then for purposes of calculating the Debt Service Requirements on the proposed series of Bonds under this section or the section below entitled "Conditions of and Provisions Relating to Issuing Bonds", the rate of interest to be borne by such Variable Rate Bonds shall be deemed to be the Bond Buyer's 25 Bond Revenue Index, or any successor standard index for long-term, tax exempt, investment grade revenue bonds for a date within 90 days of the issuance of such Variable Rate Bonds.

The City represents that it has, by its Code of Ordinances, as amended, authorized the imposition of rents, rates, fees and charges by the Department of Commerce by contract, lease or otherwise sufficient from time to time to comply with the Rate Covenant and covenants with the Holders of Bonds that it will not repeal or materially adversely dilute or impair such authorization.

Operation of System

The City covenants with the Holders of all Bonds Outstanding under the General Ordinance that so long as such Bonds shall remain Outstanding it will continuously maintain the Airport System or cause the Airport System to be maintained in good condition and will continuously operate the Airport System or cause the Airport System to be operated; provided that the City may dispose of such portions of the Airport System which are no longer necessary or required for Airport purposes; and provided further that this covenant shall not apply to any portion of the Airport System assigned or conveyed pursuant to Article IX of the General Ordinance.

Conditions and Provisions Relating to Issuing Bonds

The City covenants with the Holders of all Bonds Outstanding under the General Ordinance that so long as any such Bonds shall remain Outstanding it will not issue or assume any Series of Bonds thereunder without first complying with the conditions set forth in subparagraphs (a) through (d) below and further covenants to comply with the provisions of subparagraphs (e) through (h) below:

(a) *Enactment of Supplemental Ordinance*. Prior to the issuance or assumption of any Series of Bonds (but only following the filing of the report and opinion required by Section 8 of the Act) the City shall enact a Supplemental Ordinance meeting the requirements of Section 5.04(a) of the General Ordinance.

(b) *Filing of Transcript*. Prior to the issuance or assumption of any Series of Bonds, the Director of Finance shall, in addition to the filing requirements of Section 12 of the Act, file with the Fiscal Agent a transcript of the proceedings authorizing the issuance of such Series of Bonds meeting the requirements of Section 5.04(b) of the General Ordinance.

(c) *Delivery of Consultant's Report*. Prior to the issuance or assumption of any Series of Bonds pursuant to a Supplemental Ordinance (except that no Consultant's report shall be required in the case of issuance of any Series of Bonds for the purpose of refunding another Series of Bonds so long as the City certifies in writing that the Debt Service Requirements in any year on the proposed refunding Bonds do not exceed the Debt Service Requirements in any such year on the Bonds to be refunded), the City shall cause to be filed with the Fiscal Agent a report of Consultants setting forth the qualifications of the Consultants and containing, among other things, a statement, supported by appropriate schedules and summaries, that, on the basis of historical and estimated future annual financial operations of the Aviation System from which pledged Amounts Available for Debt Service are to be derived, (1) for either the

immediately preceding Fiscal Year of the City, or any period of 12 full consecutive months during the 18-month period preceding the delivery of the Consultant's report, the Aviation System yielded pledged Amounts Available for Debt Service sufficient to satisfy the Rate Covenant, (2) no deficiency exists in the Sinking Fund Reserve Account and (3) the Airport System will, in the opinion of the Consultants, yield pledged Amounts Available for Debt Service for each of the five Fiscal Years (or three Fiscal Years in the event that the Consultant is professionally unable to provide an opinion for a period in excess of three Fiscal Years) ended immediately following the issuance or assumption of the Bonds, sufficient to comply with the Rate Covenant.

(d) *Opinions of Counsel*. Upon the issuance of any Series of Bonds, the City shall cause to be filed with the Fiscal Agent (i) an opinion of Bond Counsel to the effect that (1) the Bonds have been duly issued or assumed for a permitted purpose under the Act and the General Ordinance and (2) all conditions precedent to the issuance or assumption of the Bonds pursuant to the Act and the General Ordinance have been satisfied, and (ii) an opinion of the City Solicitor to the effect that (1) all documents delivered by the City in connection with the issuance of the Bonds have been duly and validly authorized, executed and delivered, (2) such execution and delivery and all other actions taken by the City in connection with the issuance of the Bonds have been duly authorized by all necessary actions of City Council, and (3) nothing has come to their attention that would lead them to believe that an event of default under the General Ordinance has occurred, and is continuing. The Fiscal Agent may conclusively rely upon such opinions.

(e) *Execution of Documents*. The Mayor, the City Solicitor, the City Controller, the Director of Finance and such other officers of the City as may be appropriate are authorized in connection with the issuance or assumption of any Series of Bonds under the General Ordinance to prepare, execute and file on behalf of the City such statements, documents, certificates or other material as may accurately and properly reflect the financial condition of the City or other matters relevant to the issuance or payment of such Bonds and as may be required or appropriate to comply with applicable State or Federal laws or regulation.

(f) *Disposition of Proceeds*. Unless otherwise provided in the applicable Supplemental Ordinance or Determination, accrued interest on Bonds shall be deposited in the Sinking Fund, an amount sufficient to satisfy the requirements of Section 4.09 of the General Ordinance shall be deposited in the Sinking Fund Reserve Account and the balance of the proceeds of the Bonds shall be deposited in the Bond Proceeds Account of the Aviation Capital Fund and shall be disbursed therefrom, in accordance with established procedures of the City, as provided in Section 4.11 of the General Ordinance, provided, however, that if such Bonds shall be issued for the purpose of funding or refunding Bonds previously issued by the City such proceeds shall, unless otherwise directed by the Supplemental Ordinance, be deposited in a special fund or account to be established with and held by the Fiscal Agent or another entity acting as an escrow agent and invested (if appropriate) and disbursed under the direction of the Director of Finance for the purpose of retiring the Bonds being funded or refunded.

(g) *Refunding Bonds*. If the City shall, by Supplemental Ordinance, authorize the issuance of refunding Bonds pursuant to Section 10 of the Act, in the absence of specific direction or inconsistent authorization in the Supplemental Ordinance, the Director of Finance is authorized by the General Ordinance in the name and on behalf of the City to take all such action, including the irrevocable pledge of proceeds and the income and profit from the investment thereof for the payment and redemption of the refunded Bonds, bonds or notes including the publication of all required redemption notices or the giving of irrevocable instructions therefor, as may be necessary or appropriate to accomplish the funding or refunding and to comply with the requirements of Section 10 of the Act.

(h) *Subordinate Obligations*. The City may, at any time, or from time to time, issue Subordinate Obligations for any purpose permitted under the Act pursuant to a Subordinate Obligation Ordinance. Subordinate Obligations shall be payable out of, and may be secured by a security interest in and a pledge and assignment of Project Revenues; provided, however, that any such security interest in and pledge and assignment of Project Revenues and amounts on deposit in the Subordinate Obligation Fund shall be, and shall be expressed to be, subordinate in all respects to the security interest in, and pledge and assignment of the Pledged Amounts for the security of Bonds.

Delivery of Reports

The City covenants with the Holders of all Bonds Outstanding under the General Ordinance that so long as such Bonds shall remain Outstanding it will, within one hundred twenty (120) days following the close of each Fiscal Year of the City or as soon thereafter as is practicable (not exceeding one hundred fifty (150) days following the close of each Fiscal Year), file with the Fiscal Agent a report of the operation of the Airport System for such Fiscal Year, including a statement of revenue, expenses, and net revenue (in each case not inconsistent with the statement of income, expenses, and other accounts of the City audited by the City Controller) prepared by the City or its Division of Aviation in accordance with the accrual basis of accounting adjusted to meet the particular requirements of the Airline Agreements and the General Ordinance consistently applied, showing compliance with the Rate Covenant and containing any required information as to the Cost Centers prepared in accordance with the Cost Accounting System, accompanied by a certificate of the Director of Commerce that the Airport System is in good operating condition and by a certificate of the Director of Finance that as of the date of such report the City has complied with all of the covenants in the General Ordinance and in all Supplemental Ordinances on its part to be performed. Such report shall be furnished to the Fiscal Agent in such reasonable number of copies as shall be required to meet the written requests of Bondholders therefor on a first come first served basis.

Disposition of Insurance Proceeds and Proceeds from the Sale of Assets

In the event that any assets of the Airport System are destroyed or the City shall sell any assets of the Airport System (except in the event of the sale or transfer of all or substantially all of the assets of the Airport System under Section 9.01 of the General Ordinance), the City shall apply such amounts, at the direction of the Director of Finance or such other chief fiscal officer of the City as may hereinafter be established (i) to the retirement of the principal amount of debt incurred in respect to the Airport System; (ii) to the reconstruction, repair or replacement of assets of the Airport System; (iii) to the making of capital additions or improvements to the Airport System or (iv) to the deposit in one of the Aviation Funds for any other Airport System purpose; provided that, if the insurance proceeds or the proceeds from the sale of assets are less than or equal to one and five-tenths percent (1.5%) of the depreciated value of property, plant and equipment of the Airport System, as shown on the financial statements of the City for the preceding Fiscal Year, such amounts may be used for any Airport System purpose.

Bonds Not to Become Arbitrage Bonds

The City covenants for the benefit of the Bondholders that, notwithstanding any other provision of the General Ordinance or any other instrument, it will neither make nor instruct the Fiscal Agent to make any investment or other use of amounts on deposit in the funds and accounts established under the General Ordinance or other proceeds of the Bonds which would cause any Series of Bonds issued under the General Ordinance as tax-exempt to be arbitrage bonds under Section 148 of the Code and the regulations thereunder to the extent that the same are applicable at the time of such investment; it will file any reports required to be filed pursuant to the Code; and it will not take or fail to take any action so as to

render any Series of Bonds issued under the General Ordinance as tax-exempt to be arbitrage bonds under Section 148 of the Code.

Prohibition Against Certain Uses of Funds; Enforcement

(a) The City covenants that while any Bonds are Outstanding under the General Ordinance, it will not direct the Fiscal Agent to transfer, loan or advance proceeds of the Bonds or Amounts Available for Debt Service from the Aviation Funds to any City account for application other than for Airport System purposes.

(b) If, on any date when a deposit is required to be made of the Project Revenues, the City fails to comply with any provision of the General Ordinance, the Fiscal Agent is authorized to and shall seek, by mandamus or other suit, action or proceeding at law or in equity, the specific enforcement or performance of the obligation of the City to cause the Project Revenues to be transferred to the Aviation Operating Fund, and still have any and all other rights and remedies of a fiscal agent under the General Ordinance, any Supplemental Ordinance, the Act or otherwise at law or in equity.

Credit Facilities, Standby Agreements and Qualified Swaps

All or any of the foregoing covenants of the City for the benefit of the Bondholders may also be for the benefit of the providers of any Credit Facility, Standby Agreement and any Qualified Swap to the extent provided in a Supplemental Ordinance or Determination.

Fiscal Agent

Fiscal Agent. The Fiscal Agent under the General Airport Revenue Bond Ordinance of 1978 or its successor, shall be Fiscal Agent as of the Effective Date for the General Ordinance. The City may appoint a successor Fiscal Agent by Supplemental Ordinance to act as Fiscal Agent under the General Ordinance, and in connection with the Bonds issued thereunder. The Fiscal Agent shall also act as depository of the Sinking Fund and the Subordinate Obligation Fund, and may act as paying agent and Bonds Registrar.

Nothing in the General Ordinance shall be construed to prevent the City, in accordance with law, from engaging other Fiscal Agents from time to time or to engage other paying agents of the Bonds or any Series thereof in addition to, or as a successor to the Fiscal Agent. Any entity appointed by the City as Fiscal Agent under the General Ordinance shall be a trust company or national or state bank having trust powers and combined capital and surplus of at least fifty million ($50,000,000) dollars and be qualified to serve pursuant to the Act. Any entity appointed by the City as Fiscal Agent under the General Ordinance as a successor to the Fiscal Agent shall assume all rights and obligations of the Fiscal Agent thereunder.

Subject to the foregoing, the proper officers of the City are authorized to enter into contracts or to confirm existing agreements governing the maintenance of funds and accounts and records, the disposal of canceled Bonds, the rights, duties, privileges and immunities of the Fiscal Agent, and such other matters as are authorized by the Act and as are customary and appropriate and to confirm the agreement of the Fiscal Agent, in its several capacities, to comply with the provisions of the Act and of the General Ordinance.

The Fiscal Agent shall keep on file a copy of each report and its accompanying certificates delivered to it pursuant to the General Ordinance for a period of ten (10) years and shall exhibit the same

to, and permit the copying thereof by, any Bondholder, or his authorized representative at all reasonable times.

Resignation of Fiscal Agent. The Fiscal Agent may resign and be discharged of the duties created by the General Ordinance by written resignation filed with the Director of Finance not less than sixty (60) days before the date when such resignation is to take effect. Such resignation shall take effect on the day specified in such notice provided that a successor Fiscal Agent has been appointed and has accepted its role as Fiscal Agent. If a successor Fiscal Agent is appointed prior to the date specified in the notice, the resignation shall take effect immediately on the appointment and acceptance of such successor, and the City shall give the notices required in the following section.

Appointment of Successor Fiscal Agent. If the Fiscal Agent or any successor Fiscal Agent resigns, is replaced, or is dissolved or if its property or business is taken under the control of any state or Federal court or administrative body, a vacancy shall exist in the office of the Fiscal Agent, and the City shall appoint a successor within thirty (30) days of such vacancy and shall mail notice of such appointment to the Bondholders and to the registered depositories at their registered addresses by first class mail, postage prepaid, within thirty (30) days of such appointment. If no successor is appointed within such thirty (30) day period, the Fiscal Agent and any Bondholder may petition any court of competent jurisdiction to appoint a successor.

Defaults and Remedies

Defaults and Statutory Remedies: Notice to Bondholders. If the City shall fail or neglect to pay or to cause to be paid the principal of, redemption premium, if any, or interest on any Bond or any Series of Bonds issued under the General Ordinance, whether at stated maturity or upon call for prior redemption or if the City, after written notice to it, shall fail or neglect to make any payment owed by it as a result of a Credit Facility or Standby Agreement and secured by a parity pledge of Project Revenues entered into with respect to Bonds and the provider of the Credit Facility or Standby Agreement provides written notification to the Fiscal Agent of such failure or neglect, or if the City shall fail to comply with any provision of any Bonds or with any covenant of the City contained in the General Ordinance, then, under and subject to the terms and conditions stated in the Act, the Holder or Holders of any Bond or Bonds shall be entitled to all of the rights and remedies, including the appointment of a trustee, provided in the Act; provided, however, that the remedy provided in Section 20(b)(4) of the Act may be exercised only upon the failure of the City to pay, when due, principal and redemption price (including principal due as a result of a scheduled mandatory redemption) and interest on a Series of Bonds.

Upon the occurrence of an event of default specified in this section, or if an event occurs which could lead to a default with the passage of time and of which the Fiscal Agent has actual notice, the Fiscal Agent shall, within thirty (30) days, given written notice thereof by first-class mail to all Bondholders.

Remedies Not Exclusive; Effect of Delay in Exercise of Remedies. No remedy in the General Ordinance or in the Act conferred upon or reserved to the trustee, if any, or to the Holder of any Bond is intended to be exclusive (except as specifically provided in the Act) of any other remedy or remedies, and each and every such remedy shall be cumulative, and shall be in addition to every other remedy given under the General Ordinance or now or hereafter existing at law or in equity or by statute.

No delay or omission of a trustee, if one be appointed pursuant to Section 20 of the Act, or of any Holder of the Bonds to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default, or an acquiescence therein; and every power and remedy given by Article VIII of the General Ordinance, by the Act or otherwise may be exercised from time to time, and as often as may be deemed expedient.

Remedies to be Enforced Only Against Pledged Amounts. Any decree or judgment for the payment of money against the City by reason of default under the General Ordinance shall be enforceable only against the Pledged Amounts, and no decree or judgment against the City upon an action brought under the General Ordinance shall order or be construed to permit the occupation, attachment, seizure, or sale upon execution of any other property of the City.

Conveyance of System and Assignment, Assumption and Release of Obligations

Conveyance and Assignment, Assumption and Release. Nothing in the General Ordinance shall prevent the City from conveying and assigning to a municipal authority created pursuant to the Municipality Authorities Act, 53 Pa. C. S. ch. 56, or an authority created pursuant to any other applicable statute or to another entity (the "Authority") all or substantially all (or less than substantially all, as provided below) of its right, title and interest in the Airport System and thereupon becoming released from all of its obligations under the General Ordinance, under any Supplemental Ordinance and under the Bonds and related obligations, including, but not limited to Credit Facilities, Standby Agreements, Qualified Swaps and Exchange Agreements, (i) if the Authority assumes in writing the City's obligations (1) to operate or cause the Airport System to be operated and to maintain or cause the Airport System to be maintained in good condition; and (2) to pay the principal, redemption premium, if any, and interest on all Outstanding Bonds and Subordinate Obligations, and all payments due under Credit Facilities, Standby Agreements, Qualified Swaps and Exchange Agreements entered into pursuant to the General Ordinance and then outstanding according to the terms thereof; and (ii) if the instrument of assumption provides the Bondholders or the trustee or entity serving in a similar capacity and acting on behalf of the Bondholders with the substantial equivalent of all of the rights and remedies provided in the General Ordinance and the Act; provided, however, that before the City may consummate such a conveyance and assignment and obtain a release of its obligations under the General Ordinance, under any Supplemental Ordinance and under the Bonds and related obligations, including but not limited to Credit Facilities, Standby Agreements, Qualified Swaps, and Exchange Agreements, the following conditions shall have been satisfied:

(a) the City and the Fiscal Agent shall have received an opinion of the City Solicitor substantially to the effect that the conveyance to the Authority of all or substantially all of the City's right, title and interest in the Airport System, the assignment to the Authority of the obligations of the City under the General Ordinance, any Supplemental Ordinance, the Bonds and any Subordinate Obligations to make payments of principal, redemption premium, if any, and interest on the Bonds, and the release of the City from all of its obligations under the General Ordinance, under any Supplemental Ordinance, under the Bonds or any Subordinate Obligations, and under related obligations, including, but not limited to, Credit Facilities, Standby Agreements, Qualified Swaps and Exchange Agreements, have been duly authorized by the City and do not violate any applicable law, ordinance, resolution or regulation of the City or any applicable court decision;

(b) the City and the Fiscal Agent shall have received an opinion of the solicitor of the Authority substantially to the effect that (i) the acquisition by the Authority of all or substantially all of the City's right, title and interest in the Airport System and the assumption by the Authority of the City's obligations under the General Ordinance, under any Supplemental Ordinance, under the Bonds, and any Subordinate Obligations to make payments of principal, redemption premium, if any, and interest on the Bonds and any Subordinate Obligations and related obligations, including, but not limited to, Credit Facilities, Standby Agreements, Qualified Swaps and Exchange Agreements, have been duly authorized by the Authority and do not violate any law, ordinance, resolution or regulation applicable to the Authority or any applicable court decision; (ii) the instrument under which the Authority assumes the obligations of the City under the General Ordinance, under any Supplemental Ordinance and under the

Bonds, and any Subordinate Obligations to make payments of principal, redemption premium, if any, and interest on the Bonds and any Subordinate Obligations constitutes a valid and binding obligation of the Authority enforceable in accordance with its terms except as enforcement may be limited by bankruptcy, insolvency or other similar laws or equitable principles affecting the enforcement of creditors' rights; (iii) the security interest granted by the Authority pursuant to subparagraph (d) creates a valid and effective lien in favor of Holders of Bonds and security interest in the Pledged Amounts to be generated by the Airport System; and (iv) the rates and charges established by the Authority and referred to below in subparagraph (e) have been duly authorized and enacted in accordance with applicable law;

(c) the City and the Fiscal Agent shall have received an opinion of Bond Counsel substantially to the effect that (i) the conveyance of all or substantially all of the City's right, title and interest in the Airport System to the Authority; the release of the City from its obligations under the General Ordinance, under any Supplemental Ordinance and under the Bonds and any Subordinate Obligations; and the assumption by the Authority of the City's obligations under the General Ordinance, under any Supplemental Ordinance, under the Bonds and Subordinate Obligations to make payments of principal, redemption premium, if any, and interest on the Bonds and Subordinate Obligations, and under related obligations, including, but not limited to, Credit Facilities, Standby Agreements, Qualified Swaps and Exchange Agreements, will not have an adverse effect on the exemption of interest on any series of Bonds issued as tax-exempt Bonds; (ii) the instrument under which the Authority assumes the obligations of the City under the General Ordinance, under any Supplemental Ordinance and under the Bonds to make payments of principal, redemption premium, if any, and interest on the Bonds constitutes a valid and binding obligation of the Authority enforceable in accordance with its terms except as enforcement may be limited by bankruptcy, insolvency or other similar laws or equitable principles affecting the enforcement of creditors' rights, and (iii) the security interest granted by the Authority pursuant to subparagraph (d) creates a valid and effective lien in favor of the Holders of Bonds and security interest in the Pledged Amounts;

(d) the Authority shall, concurrently with the conveyance, assignment, assumption and release described above, grant to the trustee or entity serving in a similar capacity and acting on behalf of Bondholders a security interest in Pledged Amounts following the conveyance, assignment, assumption and release;

(e) the City and the Fiscal Agent shall have received a report of a Consultant, concluding that for each of the three (3) twelve (12) month periods following the conveyance, assignment, assumption and release described above, or for each of the three (3) fiscal years of the Authority commencing with the first full fiscal year of the Authority following the conveyance, assignment, assumption and release described above, the Airport System is projected to generate Amounts Available for Debt Service in an amount which is sufficient to enable the Authority to comply with the Rate Covenant determined in accordance with consistently applied accounting principles for each of the three twelve (12) month periods or three (3) fiscal years, as the case may be;

(f) the Authority shall have the authority, so long as Bonds remain Outstanding, to establish, and shall have established and shall have agreed to maintain rates and charges in connection with the operation of the Airport System at a level sufficient, in the opinion of a Consultant, as contained in a report filed with the Fiscal Agent, to generate Amounts Available for Debt Service in an amount which is sufficient to enable the Authority to comply with the Rate Covenant determined in accordance with consistently applied accounting principles;

(g) the Authority shall have agreed, so long as Bonds remain Outstanding, to incur or assume no parity debt payable from Amounts Available for Debt Service following the conveyance, assignment, assumption and release unless (1) in the case of debt incurred or assumed for the purpose of financing

capital improvements, extensions, or expansions to the Airport System, or acquisition or assumption of such other assets for use in the operation, maintenance, and administration of the Airport System, or (2) in the case of debt incurred or assumed for the purpose of refinancing existing debt, the Authority first shall have obtained a report of a Consultant, concluding that on the basis of historical and estimated future annual financial operations of the Airport System from which Amounts Available for Debt Service are to be derived, (A) for either the immediately preceding Fiscal Year of the City, or any period of 12 full consecutive months during the 18-month period preceding the delivery of the Consultant's report, the Airport System yielded Amounts Available for Debt Service sufficient to satisfy the Rate Covenant, (B) no deficiency exists in the Sinking Fund Reserve Account and (C) the Airport System will, in the opinion of the Consultants, yield Amounts Available for Debt Service for each of the five Fiscal Years (or, if interest on all or a portion of the proposed debt is to be capitalized, following the Fiscal Year up to which interest has been capitalized on the debt or a portion thereof; provided that in the event that the Consultant is professionally unable to provide an opinion for a period in excess of three Fiscal Years, then such opinion may be for such three year period) ended immediately following the issuance or assumption of the Bonds, sufficient to comply with the Rate Covenant; provided, however, no Consultant's report is required to be delivered in the case of debt incurred or assumed for the purpose of refinancing existing debt, so long as the Authority certifies in writing that the Debt Service Requirements in any year on the proposed refinancing obligations do not exceed the Debt Service Requirements in any such year on the obligations to be refinanced. For purposes of the foregoing sentence and subparagraphs (e) and (f), the phrases "Amounts Available for Debt Service" and "Debt Service Requirements" shall have the meaning assigned in Section 2.01 of the General Ordinance with the exception that references therein to Bonds shall be deemed to include reference to Subordinate Obligations, General Obligation Bonds or NSS General Obligation Bonds which continue to be Outstanding after such transfer, additional debt of the Authority payable from revenues of the Airport System and the debt, if any, which the Authority proposes to incur or assume; and

(h) the Authority shall have agreed to incur or assume no obligation secured, or to be secured, by a pledge of Pledged Amounts senior to the pledge securing the Bonds.

In consideration of such conveyance and transfer, the Authority may finance and pay to the City compensation in an amount agreed upon between the City and Authority. Any such financing and payment of compensation to the City shall be disregarded in determining whether the Authority's instrument of assumption provides the Bondholders or the trustee or entity serving in a similar capacity on behalf of the Bondholders with the substantial equivalent of all of the rights and remedies provided in the General Ordinance and the Act.

Notwithstanding the foregoing, the City may convey to the Authority less than substantially all of its right, title and interest in the Airport System if a Consultant shall first have certified that the assets of and/or rights and interest in the Airport System which the City proposes to exclude from the conveyance to the Authority are not material to the ability of the Airport System to generate revenues following the conveyance. If less than substantially all of the assets of and/or rights and interest in the Airport System are conveyed to the Authority pursuant to this paragraph, references in the preceding paragraphs of this section to "all or substantially all of the City's right, title and interest in the Airport System" shall be deemed modified to reflect a conveyance of less than substantially all of the City's right, title and interest in the Airport System.

In connection with the conveyance to the Authority of all or substantially all of the City's right, title and interest in the Airport System, the City shall convey and assign to the Authority all amounts on deposit in the funds and accounts established under the General Ordinance, provided that any reserve funds shall be transferred as trust funds established for the benefit of the Series of Bonds for which such reserve funds were initially established. The Fiscal Agent shall take such actions as are necessary to

terminate its security interest in the Project Revenues and funds and accounts established under the General Ordinance. If the City transfers less than substantially all of its right, title and interest in the Airport System then the City shall convey and assign to the Authority an amount of the balances on deposit in funds and accounts established under the General Ordinance proportionate to the amount of Bonds assumed or defeased. The City Controller shall certify the balances on deposit in the funds and accounts established under the General Ordinance as of the date of the conveyance. To the extent permitted by law, the City Controller will have the right to audit the books of any public Authority created by the City of Philadelphia pursuant to the laws of the Commonwealth of Pennsylvania, and the City Controller will be compensated by such public Authority for reasonable costs incurred in connection with the audit of such books.

Anything in the General Ordinance to the contrary notwithstanding, upon conveyance of all or substantially all of the assets of the Airport System to the Authority pursuant to Article IX of the General Ordinance, the provisions of the General Ordinance shall no longer be enforceable against the City.

Nothing contained in Article IX of the General Ordinance shall be construed to prohibit the City from conveying and assigning all or substantially all (or less than substantially all, as provided in Article IX) of its right, title and interest in the Airport System to an entity owned by private persons provided that the requirements of Article IX of the General Ordinance are otherwise satisfied.

Alternative Rate Covenant.

(i) The Authority may elect, upon conveyance of all or substantially all of the City's right, title and interest in the Airport System, to include in the resolution of the Authority the following rate covenant in lieu of the Rate Covenant contained in Article V of the General Ordinance, and such election shall state whether such election shall become effective as of the date of conveyance, or as of the first day of the immediately succeeding Fiscal Year. If such election states that it shall become effective beginning on the first day of the immediately succeeding Fiscal Year, then the Rate Covenant in Section 5.01 of the General Ordinance shall remain in effect from the date of conveyance until the last day of the Fiscal Year in which the conveyance took place.

The Authority covenants with the Bondholders that it will, at a minimum, impose, charge and collect in each Fiscal Year such rents, rates, fees and charges, together with any Amounts Available for Debt Service carried forward at the beginning of such Fiscal Year, as shall yield Amounts Available for Debt Service which shall be equal to the greater of the following amounts:

(A) the lesser of (1) The sum of: (i) all Net Operating Expenses incurred during such Fiscal Year; (ii) 150% of Debt Service Requirements payable during the Fiscal Year; (iii) the amount, if any, required to be paid into the Sinking Fund Reserve Account during such Fiscal Year; and (iv) the amount, if any, required to be paid into the Renewal Fund during the Fiscal Year, or (2) The sum of: (i) all Operating Expenses incurred during such Fiscal Year; (ii) 125% of Debt Service Requirements payable during the Fiscal Year; (iii) the amount, if any, required to be paid into the Sinking Fund Reserve Account during such Fiscal Year; and (iv) the amount, if any, required to be paid into the Renewal Fund during the Fiscal Year; or

(B) (1) The sum of: (i) all Operating Expenses incurred during such Fiscal Year, (ii) all Debt Service Requirements during such Fiscal Year, (iii) all debt service requirements during such Fiscal Year in respect of all outstanding General Obligation Bonds or NSS General Obligation Bonds issued for improvements to the Airport System; (iv) all debt service requirements during such Fiscal Year on Subordinate Obligations and

any other subordinate indebtedness secured by any Amounts Available for Debt Service, (v) all amounts required to repay loans among funds made pursuant to Section 4.05(c) of the General Ordinance, (vi) the amount, if any, required to be paid into the Sinking Fund Reserve Account or Renewal Fund during such Fiscal Year and (vii) all amounts required to be paid under Exchange Agreements.

(j) Promptly upon any material change in the circumstances which were contemplated at the time such rents, rates, fees and charges were most recently reviewed, but not less frequently than once in each Fiscal Year, the Authority shall review the rents, rates, fees and charges as necessary to enable the Authority to comply with the foregoing requirements; provided that such rents, rates, fees and charges shall in any event produce moneys sufficient to enable the Authority to comply with its covenants in the resolution.

Amendments and Modifications

Amendments and Modifications. In addition to the enactment of Supplemental Ordinances supplementing or amending the General Ordinance in connection with the issuance of successive Series of Bonds, the General Ordinance and any Supplemental Ordinance may be further supplemented, modified or amended: (a) to cure any ambiguity, formal defect or omission herein or therein or to make such provisions in regard to matters or questions arising hereunder or thereunder which shall not be inconsistent with the provisions hereof or thereof and which shall not adversely affect the interests of Bondholders; (b) to grant to or confer upon Bondholders, or a trustee, if any, for the benefit of Bondholders any additional rights, remedies, powers, authority, or security that may be lawfully granted or conferred; (c) to incorporate modifications requested by any Rating Agency or Credit Facility provider to obtain or maintain a credit rating on any Series of Bonds; (d) to comply with any mandatory provision of state or federal law or with any permissive provision of such law or regulation which does not substantially impair the security or right to payment of the Bonds; provided however that no amendment or modification discussed in parts (a)-(d) shall be made with respect to any Outstanding Bonds to alter the amount, rate or time of payment, respectively, of the principal thereof or the interest thereon or to alter the redemption provisions thereof without the written consent of the Holders of all affected Outstanding Bonds; and (e) except as aforesaid, in such other respect as may be authorized in writing by the Holders of fifty-one percent (51%) in principal amount or Original Value in the case of Capital Appreciation Bonds of the Bonds Outstanding and affected. In the case of a Credit Facility, Standby Agreement or Qualified Swap, if and to the extent provided in the Supplemental Ordinance and Determination of Bonds related thereto, the provider thereof may be the representative of the Bondholders of such Series or portion of such Series for purposes of Bondholder consent, approval or authorization. The written authorization of Bondholders of any supplement to or modification or amendment of the General Ordinance or any Supplemental Ordinance need not approve the particular form of any proposed supplement, modification or amendment but only the substance thereof. Bonds, the payment for which has been provided for in accordance with Section 6.04 the General Ordinance, shall be deemed to be not Outstanding.

Miscellaneous

Deposit of Funds for Payment of Bonds. When interest on, and principal or redemption price (as the case may be) of, all Bonds issued under the General Ordinance, and all amounts owed under any Credit Facility and Standby Agreement entered into under the General Ordinance, have been paid, or there shall have been deposited with the Fiscal Agent or an entity which would qualify as a Fiscal Agent under Section 7.01 thereof an amount, evidenced by moneys or Qualified Escrow Securities the principal of and interest on which, when due, will provide sufficient moneys to fully pay the Bonds at the maturity date or date fixed for redemption thereof, and all amounts owed under any Credit Facility and Standby Agreement entered into under the General Ordinance, the pledge and grant of a security interest in the

Pledged Amounts under the General Ordinance shall cease and terminate, and the Fiscal Agent and any other depository of funds and accounts established thereunder shall turn over to the City or to such person, body or authority as may be entitled to receive the same all balances remaining in any funds and accounts established under the General Ordinance.

If the City deposits with the Fiscal Agent or such other qualified entity moneys or Qualified Escrow Securities sufficient to pay, together with interest thereon, the principal or redemption price of any particular Bond or Bonds becoming due, either at maturity or by call for redemption or otherwise, together with all interest accruing thereon to the due date, interest on the Bond or Bonds shall cease to accrue on the due date and all liability of the City with respect to such Bond or Bonds shall likewise cease, except as provided in the following paragraph. Thereafter such Bond or Bonds shall be deemed not to be outstanding under the General Ordinance and shall have recourse solely and exclusively to the funds so deposited for any claims of whatsoever nature with respect to such Bond or Bonds, and the Fiscal Agent or such other qualified entity shall hold such funds in trust for such Holder or Holders.

Moneys deposited with the Fiscal Agent or such other qualified entity pursuant to the preceding paragraphs which remain unclaimed two (2) years after the date payment thereof becomes due shall, upon written request of the City, if the City is not at the time to the knowledge of the Fiscal Agent or such other qualified entity (the Fiscal Agent having no responsibility to independently investigate), in default with respect to any covenant in the General Ordinance or the Bonds contained, be paid to the City; and the Holders of the Bond for which the deposit was made shall thereafter be limited to a claim against the City; provided, however, that before making any such payment to the City, the Fiscal Agent or such other qualified entity shall, at the expense of the City, publish in a newspaper of general circulation published in Philadelphia, Pennsylvania, a notice of said moneys remain unclaimed and that, after a date named in said notice, which date shall be not less than thirty (30) days after the date of publication of such notice, the balance of such moneys then unclaimed will be paid to the City.

This section shall not be construed to limit the procedure set forth in Section 10 of the Act for calculating the principal or redemption price of and interest on any Bonds for the purpose of ascertaining the sufficiency of revenues for the purpose of Sections 7(a)(5) and 8(a)(iii) of the Act for the purpose of determining the outstanding net debt of the City if General Obligation Bonds of the City are refunded pursuant to the Act.

No deposit of funds shall be made pursuant to Section 11.01 of the General Ordinance if, in the opinion of Bond Counsel, such action shall cause the interest on any Series of Bonds initially issued as tax exempt Bonds, to become subject to Federal income tax.

Ordinances are Contracts With Bondholders. The General Ordinance and Supplemental Ordinances adopted pursuant thereto are contracts with the Holders of all Bonds from time to time Outstanding under the General Ordinance and thereunder and shall be enforceable in accordance with the provisions thereof and the laws of Pennsylvania.

THE SIXTEENTH SUPPLEMENTAL ORDINANCE

The Sixteenth Supplemental Ordinance supplements the provisions of the General Ordinance. All capitalized and defined terms used in the following summary of the Sixteenth Supplemental Ordinance which are not otherwise defined in this Official Statement are defined as in the General Ordinance.

The Sixteenth Supplemental Ordinance provides that the City, through the Director of Finance, will publish notice of those amendments to the General Ordinance that become effective upon the consent

of the Holders of one hundred percent (100%) of the Outstanding Bonds to all Holders upon the occurrence of the consent of one hundred percent (100%) of the Outstanding Bonds. Publication through the Electronic Municipal Market Access System (EMMA) or such other nationally recognized municipal securities information repository constitutes an acceptable mode of publication.

THE EIGHTEENTH SUPPLEMENTAL ORDINANCE

The Series 2021 Bonds will be issued under and are subject to the Eighteenth Supplemental Ordinance which supplements the provisions of the General Ordinance. Reference is made to the Eighteenth Supplemental Ordinance and the General Ordinance for complete details of the terms of the Series 2021 Bonds. All capitalized and defined terms used in the following summary of the Eighteenth Supplemental Ordinance which are not otherwise defined in this Official Statement are defined as in the General Ordinance.

The Eighteenth Supplemental Ordinance authorizes the Mayor, the City Controller and the City Solicitor, or a majority of them (the "Bond Committee"), on behalf of the City of Philadelphia (the "City"), to borrow, by the issuance and sale of one or more series of Airport Revenue Bonds of the City (the "Series 2021 Bonds"). The Series 2021 Bonds are to be issued under and pursuant to The First Class City Revenue Bond Act of October 18, 1972, Act No. 234 (the "Act"), and are to be secured by the General Ordinance. The aggregate principal amount of the Series 2021 Bonds shall not exceed One Billion One Hundred Million Dollars ($1,100,000,000) exclusive of costs of issuance (including underwriters' discount), original issue discount, capitalized interest, funding of deposits to the Sinking Fund Reserve Account and similar items, and in the event the Series 2021 Bonds are issued with such items, the Bond Committee is authorized to increase the aggregate principal amount of the Series 2021 Bonds so issued, by the amount of such items (the "Additions").

As indicated in the Eighteenth Supplemental Ordinance, the Series 2021 Bonds shall bear interest from the dated date thereof to maturity or prior redemption, if any, at prescribed fixed or variable rates (not exceeding any limitation prescribed by law) as specified or provided in the Determination. The Series 2021 Bonds shall contain series or subseries designations, terms and provisions (including without limitation, interest payment dates, record dates, redemption provisions, denominations, provisions for payments by wire transfer and provision for issuance of the Series 2021 Bonds in book entry form) as the Bond Committee shall determine to be in the best interest of the City and which are not inconsistent with the provisions of the Eighteenth Supplemental Ordinance, of the Act or of the General Ordinance. In connection with the issuance of the Series 2021 Bonds, the Bond Committee is authorized by the Eighteenth Supplemental Ordinance to enter into such Qualified Swaps, Exchange Agreements or similar instruments as it may determine and as are permitted by the General Ordinance.

The Eighteenth Supplemental Ordinance provides that the Series 2021 Bonds shall not pledge the credit or taxing power of the City, or create any debt, charge or lien against the tax, general revenues or property of the City other than the revenues pledged by the General Ordinance. The Bond Committee is authorized on behalf of the City to enter into agreements (the "Enhancement Agreements") with any bank, insurance company or other appropriate entity providing credit enhancement or payment or liquidity sources for the account of the City for the Series 2021 Bonds, including, without limitation, letters of credit, lines of credit and insurance. Such Enhancement Agreements may provide for payment or acquisition of the Series 2021 Bonds if the City does not pay the Series 2021 Bonds when due and may provide for repayment with interest to the bank or other institution from the date of such payment or acquisition. The Bond Committee is authorized to make all such covenants and to take any and all necessary or appropriate or other actions in connection with the consummation of the transactions contemplated by the Eighteenth Supplemental Ordinance.

The Eighteenth Supplemental Ordinance provides that the Series 2021 Bonds shall be issued in one or more series at the same or different times for the following purposes: (i) capital projects at the Airport System and/or for the payment or defeasance of all or a portion of the notes issued in connection with the City's Airport Revenue Note Commercial Paper Program established under the Seventeenth Supplemental Ordinance to the Amended and Restated Ordinance (collectively, the "New Money Bonds"), and/or (ii) one or more series of tax-exempt or taxable Airport Revenue Refunding Bonds of the City that are issued and sold with the proceeds thereof being used to retire prior bonds and notes of the Airport System and to pay costs associated with termination amounts, if any, payable to JP Morgan Chase Bank – New York with respect to payments upon early termination on the City's interest rate swap transaction effective June 15, 2005 (collectively, the "Refunding Obligations").

The Eighteenth Supplemental Ordinance provides that the New Money Bonds, which shall not exceed Four Hundred Million Dollars ($400,000,000) in aggregate principal amount plus Additions, shall be issued to pay for some or all of the projects which consist of such capital improvements to the Airport System as may, from time to time, heretofore have been, or hereafter be, included in the capital budget of the City; the construction of such other improvements to, and facilities in, the Airport System, and the acquisition, demolition or replacement of such other real property or property of a capital nature for use in the operation, maintenance and administration of the Airport System as the Director of Commerce may, from time to time, deem necessary or desirable for the prudent management of the Airport System and secure, to the extent required by the Home Rule Charter, the approval of this Council therefor; and the permanent funding of the cost, if any, of any of the foregoing projects that have been, or hereafter may be, temporarily funded by advances from other funds of the City, or by the Airlines, or by notes (including commercial paper) issued in anticipation of the issuance of the New Money Bonds, together with interest thereon; and/or for the payment or defeasance of all or a portion of the notes issued in connection with City's Airport Revenue Note Commercial Paper Program established under the Seventeenth Supplemental Ordinance to the Amended and Restated Ordinance.

The Eighteenth Supplemental Ordinance provides that the Refunding Obligations, which shall not exceed Seven Hundred Million Dollars ($700,000,000) in aggregate principal amount plus Additions, shall be issued to refund, defease, prepay and/or redeem all or any portion of: (i) the City's outstanding Airport Revenue Bonds, Series 2005C; (ii) the City's outstanding Airport Revenue Bonds, Series 2010A; (iii) the City's outstanding Airport Revenue Bonds, Series 2010D; (iv) the City's outstanding Airport Revenue Bonds, Series 2011A; (v) the City's outstanding Airport Revenue Bonds, Series 2011B; (vi) costs associated with termination amounts, if any, payable to JP Morgan Chase Bank – New York with respect to payments upon early termination on the City's interest rate swap transaction effective June 15, 2005; all upon such terms and in such amounts as shall be determined by the Director of Finance.

The proceeds of the Series 2021 Bonds required for the defeasance of obligations to be refunded or otherwise defeased, as specified in the Eighteenth Supplemental Ordinance, may be deposited in an escrow fund or account to be established pursuant to the Escrow Agreement.

The proceeds of the sale of the Series 2021 Bonds shall be used to pay all "Project Costs" as such term is defined in the Act, including, but without limitation, the establishment of the sinking fund reserve required by, and other funds permitted by, the General Ordinance, and the payment of the costs of the issuance of the Series 2021 Bonds.

The City covenants in the Eighteenth Supplemental Ordinance that, so long as any Bond shall remain unpaid, it will make payments or cause payments to be made out of the Sinking Fund established pursuant to the General Ordinance or any of the other Aviation Funds available therefor, at such times and in such amounts as shall be sufficient for the payment of the interest thereon and the principal thereof when due. Prior to approval of the Eighteenth Supplemental Ordinance by City Council, the City

delivered to the Chief Clerk of City Council an opinion of the City Solicitor to the effect, *inter alia,* that the holders of the Series 2021 Bonds have no claim upon the taxing power or general revenues of the City nor any lien upon any of the property of the City other than the Pledged Amounts pledged for the Bonds.

The City covenants in the Eighteenth Supplemental Ordinance that it will make no investment or other use of the proceeds of the Series 2021 Bonds which would cause the Series 2021 Bonds to be "arbitrage bonds" under Section 148 of the Internal Revenue Code of 1986, as amended, and Treasury Regulations promulgated thereunder (the "Code"), and that the City will comply with the requirements of Section 148 of the Code throughout the term of the Series 2021 Bonds as more fully described in the determination of the Bond Committee. The Director of Finance is authorized to execute on behalf of the City a report of the issuance of the Series 2021 Bonds as required by Section 149(e) of the Code.

The Eighteenth Supplemental Ordinance authorizes the Director of Finance to execute and deliver a continuing disclosure agreement relating to the Series 2021 Bonds, meeting the requirements of Securities and Exchange Commission Rule 15c2-12(b)(5). The City covenants and agrees that it will comply with and carry out all of the provisions of such continuing disclosure agreement.

(This Page Intentionally Left Blank)

APPENDIX V
SUMMARY OF CERTAIN PROVISIONS OF THE AIRLINE AGREEMENT

(This Page Intentionally Left Blank)

SUMMARY OF CERTAIN PROVISIONS OF THE AIRLINE AGREEMENT

In June 2015, the City approved an Airport-Airline Use and Lease Airline Agreement (the "Airline Agreement") which went into effect as of July 1, 2015, and is currently in effect (after two (2) one-year extensions) through June 30, 2022 (the "Term"). The Airline Agreement sets forth the operational and financial relationship between the City and the Airlines executing the Airline Agreement (the "Signatory Airlines"). Set forth below are summaries of certain provisions of the Airline Agreement. Such summaries do not purport to be complete and are qualified in their entirety by reference to the Airline Agreement, copies of which are available from the City.

DEFINITIONS

Any terms not specifically set forth in this Appendix shall have the meanings ascribed to them in the body of this Official Statement, in the Airline Agreement and in the Ordinances, if related thereto.

"Air Transportation Business" shall mean the carriage by aircraft of persons, cargo or property as a common airline for compensation or hire, or the carriage of mail, by aircraft, in commerce as defined in the Federal Aviation Act of 1958, as amended.

"Air Transportation Company" shall mean an entity conducting an Air Transportation Business at the Airport.

"Airline Equipment" shall mean those moveable trade fixtures, furniture and equipment located on or affixed to Airline's Leased Premises, or elsewhere at the Airport, purchased and/or constructed at the sole cost and expense of Airline which are considered the personal property of Airline.

"Airline Improvements" shall mean those fixtures and construction related additions, modifications and improvements located on or affixed to Airline's Leased Premises, or elsewhere at the Airport, which have been purchased and/or constructed at the sole cost and expense of Airline.

"Airline's Leased Premises" shall mean the areas of Airline Space that are directly leased to Airline under the Airline Agreement, together with Airline's Ramp Premises.

"Airline Revenues" shall mean all Rents, Additional Rents, fees and other operating revenues paid by Signatory Airlines and their Affiliates in the Airline Cost Centers under the Airline Agreement.

"Airline's Terminal Area Leased Premises" shall mean the total square footage in the Terminal Area attributable to an individual Signatory Airline in any given Fiscal Year during the Term of the Airline Agreement, which is the sum of the Airline's Exclusive Use, Preferential Use, and Joint Use Space.

"Airline Space" shall mean Exclusive Use Space, Preferential Use Space, Joint Use Space, and International Common Use Areas in the Terminal Area leased to any Airline, as same may be modified from time to time by the parties without formal amendment hereto.

"Airport Cost Centers" or "Cost Centers" shall mean collectively the following cost centers:

(a) "Airfield Area" or "Airfield Area Cost Center" shall include all existing and future City owned and operated airfield areas at the Airport;

(b) "Terminal Area" or "Terminal Area Cost Center" shall include the Airport passenger terminal buildings, including the areas available for use as baggage make-up, the sidewalk and curb adjacent to the landside of the terminal buildings, the boarding bridges and all pedestrian bridges connecting the terminal buildings with the landside vehicular parking garages, as such areas now exist or may be developed, extended or improved from time to time;

(c) "Ramp Area" or "Ramp Area Cost Center" shall mean those outside airport operations areas of the Airport designated for the Terminal Area consisting of the aircraft parking positions, ramp space and canopy space (and including any other equipment located on the Ramp Area that are owned by City and provided for the use by Air Transportation Companies);

(d) "Other Buildings and Areas" or "Other Buildings and Areas Cost Center" shall include those Airport facilities including but not limited to: airline, general aviation and corporate hangars; commissary; fueling facilities; industrial facilities, airline freight, express and mail handling facilities; the former hangars, renovated and improved by City in 1972 and the north and south international terminal aprons associated with the area formerly known as the Overseas Terminal; and certain non-airline facilities (including office, retail, warehouses, etc.) including any property purchased for indirect aviation purposes, such as concurrent commercial development as they now exist or may be developed, demolished, extended, expanded or improved from time to time;

(e) Northeast Philadelphia Airport; and

(f) "Outside Terminal Area" or "Outside Terminal Area Cost Center" shall include the roadway, hotel, service station, vehicular parking and car rental facilities appurtenant, adjacent to or used in connection with the Airport as they now exist or may be developed, extended, or improved from time to time.

Such Airport Cost Centers shall be used for purposes of accounting for Project Revenues and Airport Expenses and for calculating and adjusting certain rentals, fees and charges as specified in the Airline Agreement:

"Airport Expenses" shall mean the Operating Expenses, Debt Service, and Fund Requirements associated with the operation of the Airport System or any part thereof for any Fiscal Year.

"Annual Budget" shall mean the capital and operating budget and annual rates and charges report of the Airport System, prepared and adopted by City for each Fiscal Year during the Term of the Airline Agreement.

"Bond Documents" shall mean those contracts, Airline Agreements, certificates, resolutions or other materials, ancillary to and including the Ordinances, evidencing the issuance of Airport Revenue Bonds.

"Capital Expenditure" shall mean: (i) a single item of equipment, vehicles, nonrecurring capital outlays, and other items of personal property purchased, leased or constructed at a cost to City, net of PFC, AIP, Federal, State, or City's Discretionary Account funds, in excess of five hundred thousand dollars ($500,000), which City determines to have a useful life in excess of five (5) years, which, along with all other equipment, vehicles, non-recurring capital outlays, and other items of personal property exceed an aggregate net cost of five million dollars ($5,000,000) in any Fiscal Year or (ii) any other Capital Improvement Project(s) purchased, leased, or constructed at an aggregate cost to City, net of PFC, AIP, Federal, State, or City's Discretionary Account funds, in excess of one million two hundred fifty thousand dollars ($1,250,000) in any Fiscal Year, which City determines to have a useful life of more than five (5) years.

"Capital Improvement Project" shall mean a project under which an asset is purchased, leased or constructed by City for the Airport System which City determines to have a useful life of more than five (5) years and a capital cost of more than ten thousand dollars ($10,000).

"Code" shall mean the Internal Revenue Code of 1986, as amended, supplemented, or replaced, and the regulations and rulings issued thereunder.

"Default Rate" shall mean five percent (5%) plus the Prime Rate.

"Fiscal Year" shall mean the twelve-month period commencing on July 1st of each year, or such other twelve-month period as may be established by City from time to time.

"Majority in Interest" or "MII" shall mean the mechanism by which the Signatory Airlines may disapprove a Capital Expenditure, as set forth in the Airline Agreement.

"Majority in Interest Formula" or "MII Formula" shall mean the formulas as set forth in the Airline Agreement.

"Non-Airline Revenues" shall mean all rentals, charges, fees, ground handling fees, user charges, concession and other operating revenues received by or on behalf of City from the operation of the Airline Cost Centers or any part thereof; but excluding however, all Airline Revenues, and also excluding all gifts, grants, reimbursements, restricted funds or payments received from governmental units or public agencies or any other source, passenger facility charges, customer facility charges, and federal, state or City subsidies or incentives deposited in the Aviation Capital Fund.

"Ordinances" shall mean the Amended and Restated General Airport Revenue Ordinance, approved June 16, 1995, as amended and supplemented.

"Rents" shall mean all Terminal Rentals, Ramp Area Rentals, Other Fees, other rents, charges, fines, costs, reimbursements, penalties, taxes, late charges, liquidated damages, and interest of all types and of all nature that Signatory Airline is required to pay pursuant to this Airline Agreement.

BOND DOCUMENTS AND FLOW OF FUNDS

Subordination to Ordinances

The Airline Agreement and all rights granted to the Signatory Airlines thereunder are expressly subordinated and subject to the lien and provisions of the pledges, transfer, hypothecation or assignment made by the City in the Ordinances. The City expressly reserves the right to make such pledges and grant such liens and enter into covenants as it may deem necessary or desirable to secure and provide for the payment of Airport Revenue Bonds, including the creation of reserves therefore, provided that the City shall not take any actions that would be inconsistent with the terms and conditions of the Airline Agreement. Notwithstanding the foregoing, nothing contained in the Airline Agreement shall be deemed a pre-approval by an Airline of a future Ordinance that changes the terms and conditions of the Airline Agreement.

Internal Revenue Code of 1986

With respect to Airport Revenue Bonds that may be issued, the interest on which is intended to be excludable from gross income of the holders for Federal income tax purposes under the Code, the Signatory Airlines agree to not act, or fail to act (and will immediately cease and desist from any action, or failure to act) with respect to the use of the Airline Leased Premises, if the act or failure to act may cause the City to be in noncompliance with the provisions of the Code, and the Signatory Airlines will not take or persist in any action or omission which may cause the interest on such Airport Revenue Bonds to be includable in the gross income of the holders thereof for Federal income tax purposes.

SEC Rule 15c2-12

Upon request of the City, the Signatory Airlines shall provide the City with such information with respect to the Signatory Airlines as the City may request in writing in order for the City to comply with its continuing disclosure obligations under Securities and Exchange Commission ("SEC") Rule 15c2-12 (the "Rule"), as it may be amended from time to time. To the extent that an Airline is an "Obligated Party" with respect to the Airport Revenue Bonds as per the Rule, the Signatory Airline agrees to execute the Continuing Disclosure Agreement incident to such financing. Currently, American Airlines is the only "Obligated Party".

Bond Documents Flow of Funds

All Project Revenues shall be deposited, maintained and paid as set forth in the Bond Documents.

Establishment of Bond Redemption and Improvement Account, O&M Account and Discretionary Account

The Signatory Airlines and the City have agreed under the Airline Agreement to establish the Bond Redemption and Improvement Account, O&M Account and Discretionary Account pursuant to the Ordinances and the Airline Agreement, which accounts shall have the uses described in the Official Statement under the caption "SECURITY FOR THE BONDS – Flow of Funds and Application of Project Revenues".

RATES, FEES AND CHARGES

Terminal Rentals, Ramp Area Rentals and Landing Fee Rates

For purposes of developing rentals, fees and charges under the Airline Agreement, the Airport System has been divided into the following cost centers to which all revenues, expenses, and debt service on Airport Revenue Bonds are allocated. Under the Airline Agreement, each Signatory Airline agrees that, pursuant to the Authorizing Legislation (as defined therein), which includes the General Ordinance, the City shall impose, charge and collect and the Signatory Airline agrees to pay such rental charges and fees as may be required pursuant to the Authorizing Legislation (including the Rate Covenant).

Terminal Area. Revenues from the Terminal Building consist of concession revenues, Terminal Rentals, International Common Use Area Revenues, and miscellaneous revenues.

Airfield Area, Other Buildings and Areas, and Northeast Airport. Revenues from the Airfield Area, Other Buildings and Areas, and Northeast Airport consist of landing fees, site rentals, fuel flowage fees, concession fees and other direct charges.

Ramp Areas. Revenues from the Ramp Areas consist of charges for use of aircraft parking ramps.

Outside Terminal Area. Outside Terminal Area revenues comprise net parking revenues, certain rental car revenues, certain ground transportation revenues, and revenues from a hotel.

Airport Services. Revenues from Airport Services consist of revenues not directly accounted for in the other Cost Centers. Expenses associated with Airport Services are allocated to the other Cost Centers based on the proportionate share of Operating Expenses and Non-Airline Revenues directly allocated to each such Cost Center.

Adjustment of Rentals, Fees, and Charges

The Terminal Rentals, Ramp Premises Rate and Landing Fee Rate are subject to adjustment as of July 1, 2016, and each July 1 thereafter during the Term of the Airline Agreement. Signatory Airline rates, fees and charges will be recalculated annually for each Fiscal Year and made effective as of July 1 of each such Fiscal Year.

Terminal Rentals. Terminal Rentals are calculated to ensure that all debt service requirements, operating expenses and fund requirements allocable to the Terminal Building are recovered according to a cost-center residual rate calculation methodology. The Terminal Area Requirement for each Fiscal Year is the amount in the Annual Budget equal to: (1) the sum of (a) Operating Expenses, Debt Service and Fund Requirements allocated to the Terminal Area Cost Center and (b) any deficit or credit estimated in the Annual Budget for operation of the Terminal Area during the then-current Fiscal Year or any adjustment carried over from the preceding Fiscal Year to reflect any difference between the actual versus estimated surplus or deficit, less (2) the sum of (a) all Non-Airline Revenues allocated to the Terminal Area Cost Center, and (b) the Airline Revenue Allocation allocated to the Terminal Area Cost Center.

For use of the international terminal facilities, the City collects from the Signatory Airlines Federal Inspection Services ("FIS") Area charges, departure and arrival gate use fees, and space rentals for leased areas. The FIS Area includes space for customs, border protection, and immigration inspection offices; inbound baggage and international baggage claim facilities; and a pro rata share of public space. FIS Area

charges are calculated by dividing the total cost of FIS space by the number of deplaning passengers using the FIS facilities.

Ramp Area Rentals. Ramp Area Rentals are calculated to ensure that all debt service requirements, operating expenses, and fund requirements allocable to the Ramp Area are recovered according to a cost-center residual rate calculation methodology. The Ramp Area Requirement for each Fiscal Year is the amount in the Annual Budget equal to: (1) the sum of (a) Debt Service and Fund Requirements allocated to the Ramp Area Cost Center and (b) any deficit or credit estimated in the Annual Budget for operation of the Ramp Area during the then-current Fiscal Year or any adjustment carried over from the preceding Fiscal Year to reflect any difference between the actual versus estimated surplus or deficit, less (2) all Non-Airline Revenues allocated to the Ramp Area Cost Center.

Landing Fee Rates. Signatory Airline Landing Fees are calculated according to a modified cost-center residual rate calculation methodology to recover the net costs of the Airfield Area, Other Buildings and Areas, and Northeast Airport cost centers. The Airfield Area Requirement is equal to: (1) the sum of (a) Operating Expenses, Debt Service and Fund Requirements for the Fiscal Year allocable to the Airfield Area, Other Buildings and Areas and Northeast Airport, and (b) any deficit or credit estimated in the Annual Budget for operation of the Airfield Area, the Other Buildings and Areas and the Northeast Airport during the then-current Fiscal Year or any adjustment carried over from the preceding Fiscal Year to reflect any difference between the actual versus estimated surplus or deficit, less (2) the sum of (a) all Non-Airline Revenues allocated to the Airfield Area, Other Buildings and Areas and Northeast Airport, (b) all Non-Signatory Landing Fees, and (c) the Airline Revenue Allocation allocable to the Airfield Area, if any.

Annual Adjustment. The Aviation Operating Fund budget is developed annually by the City to provide sufficient appropriations for the payment of all operating expenses and debt service payments projected for the Airport System for the ensuing Fiscal Year and satisfaction of the Rate Covenant. The budget, together with all other operating budgets of the City, is submitted by the Mayor to City Council for adoption at least 90 days prior to the beginning of such Fiscal Year. On the basis of the Aviation Operating Fund budget and the applicable Rate Covenants prescribed in the General Ordinance, the City computes the rates and charges which it regards as necessary for the ensuing Fiscal Year. Under the Airline Agreement, the City must provide such computations to the Signatory Airlines no less than 45 days, and hold a consultation meeting no less than 30 days, prior to implementation of the adjustment.

Mid-Year Adjustment. Additional provisions permit adjustments during any Fiscal Year in the event the City estimates a substantial (10% or more) decrease in revenues or increase in expenses. Under the Airline Agreement, the City must hold a consultation meeting with the Signatory Airlines no less than 30 days prior to any such mid-year adjustment.

Accommodation of Signatory Airlines

The Airline Agreement provides the basis for the use and lease of the Airport's terminals, aprons, and other areas. Under the Airline Agreement, to promote the high utilization of gates, all gates are being leased on a preferential-use basis or assigned on a common-use basis.

The Airline Agreement contains provisions obligating each Signatory Airline to accommodate the proposed operations of another airline at such Signatory Airline's preferential-use premises under certain circumstances if (i) the City cannot accommodate the existing or proposed operations of the requesting airline (either a Signatory Airline or Non-Signatory Airline) on a common-use gate, and (ii) the use by the requesting airline would not interfere with a Signatory Airline's operations.

If the requesting airline's operations cannot be accommodated at a Signatory Airline's preferential-use premises, the Airline Agreement also provides for the reallocation of leased gates and other terminal areas to provide facilities for lease to a requesting airline or for additional common-use gates. The City may reallocate a portion of any Signatory Airline's leased premises according to specified procedures if such Signatory Airline does not maintain certain minimum use requirements. The minimum use requirement ranges between 4.25 departures per gate per day

for a Signatory Airline leasing only one gate to 5.75 departures per gate per day for Signatory Airlines leasing more than three (3) gates.

Passenger Facility Charges

The City has the right to assess Airline passengers a PFC for the use of the Airport and the Signatory Airlines shall collect on behalf of and remit to City on a timely basis any such charges, including but not limited to holding any charges collected by the Signatory Airline, pending remittance to the City, in trust for the benefit of the City. The Signatory Airlines shall remit PFC to the City, and must include an itemized statement with its payment supporting the calculation of the PFC remittance.

Default Rates

If the City shall, at any time or times, accept any payments of Rents after they shall become due and payable, such acceptance shall not excuse subsequent delays, or constitute, or be construed to be a waiver of any or all of City's rights hereunder. The Signatory Airlines shall pay interest at the Default Rate on all payments which are unpaid as of the first day after the day on which such payment is due to the City, or such other maximum allowable interest rate should the Default Rate violate any applicable laws or regulations.

CAPITAL EXPENDITURES

Majority-in-Interest Approval of Capital Expenditures

Beginning July 1, 2015, under the Airline Agreement, the Signatory Airlines approved $173.25 million in Capital Expenditures and, as described in the Official Statement under the caption "SOURCES OF PROJECT REVENUES UNDER THE GENERAL ORDINANCE." The City has executed the Airline Agreement with the fifteen airlines at the Airport: Aer Lingus, Air Canada, Alaska Airlines, American Airlines, British Airways, Delta Airlines, FedEx, Frontier Airlines, JetBlue Airways, Lufthansa, Qatar Airways, Southwest Airlines, Spirit Airlines, United Airlines, and UPS. The Airline Agreement is effective through June 30, 2022. The Airline Agreement does not limit or restrict the right of the City to implement Capital Improvement Projects within the Airport System at any time; the lack of approval of the Capital Improvement Project by a Majority-in-Interest of the Signatory Airlines ("MII Approval") after consultation with the City (other than certain exempted projects that do not require approval) prevents the City from including the cost of such Capital Improvement Project in the applicable rate base for the Airline Cost Centers during the Term of the Airline Agreement.

Under the Airline Agreement, Capital Expenditures are deemed approved by the Signatory Airlines unless they are specifically disapproved by a Majority-in-Interest. For any additional projects affecting only Terminal Area rentals, fees, and charges, Majority-in-Interest is defined as no less than 50% plus one of the number of Eligible Signatory Passengers Signatory Airlines representing more than 50% of the Signatory Passenger Airline Enplaned Passengers, including passengers from Affiliates for the most recently reported twelve-month period for which data are available. For any additional projects that will impact the rates, fees and charges of the Airfield, the Other Buildings and Areas, or the Philadelphia Northeast Airport Cost Centers, Majority-in-Interest is defined as no less than (i) 50% plus one of the number of Eligible Signatory Airlines, and (ii) more than 50% of the Total Maximum Landed Weight for the most recently reported twelve-month period for which data are available.

Application of Airport Expenses for Capital Improvement Projects

Approved Projects. The Airport Expenses for Capital Improvement Projects that are exempt from a Signatory Airline Consultation Process or deemed approved by the Eligible Signatory Airlines shall be included in the applicable Airline Cost Center rate base upon the Substantial Completion Date of such Capital Improvement Project.

Disapproved Projects. The Airport Expenses for Capital Expenditures or Capital Improvement Project funding variances that are disapproved by the Eligible Signatory Airlines may not be included in an Airline Cost Center rate base unless and until a subsequent Signatory Airline Consultation Process approves the Capital Expenditure or funding variance, as applicable.

Bankruptcy

Notwithstanding any provision contained in the Airline Agreement and to the extent consistent with Federal bankruptcy law, any party to the Airline Agreement which seeks protection under the Federal bankruptcy code, or is currently operating under the protection of the Federal bankruptcy code, herein called "Debtor", shall be prohibited from conveying its interest under the Airline Agreement to any other entity without prior approval of City. In the event that such a Debtor intends to assume the Airline Agreement, or assume and assign the Airline Agreement pursuant to 11 U.S.C. Section 365, Bankruptcy-Executory Contracts and Unexpired Leases, the Debtor shall be required to immediately cure any and all defaults and provide adequate assurance of future performance under the Airline Agreement which shall include, but not be limited to (i) adequate assurance of the reliability of the proposed source for the rentals, fees and charges due under the Airline Agreement upon the assumption of the Airline Agreement, and (ii) adequate assurance that all other consideration due under the Airline Agreement shall be forthcoming upon the assumption of the Airline Agreement.

DEFAULT AND RIGHTS AND REMEDIES UPON DEFAULT

Events of Default

The occurrence of any of the following, subject to rights to cure and other terms and conditions set forth in the Airline Agreement, shall constitute a material breach of the Airline Agreement by the Signatory Airline and an Event of Default:

(a) Signatory Airline's abandonment or constructive abandoning of the Signatory Airline's Terminal Area Leased Premises as determined in the Airline Agreement;

(b) Signatory Airline's failure to pay any Monthly Rents, Passenger Facility Charge payments or any other payment due under the Airline Agreement;

(c) Signatory Airline's failure to pay, when due, any installment of Additional Rents or other sum required to be paid under the Airline Agreement;

(d) Signatory Airline's failure to observe and comply with the requirements of the Airport Security Program, Environmental Compliance, Insurance Requirements, Local Requirements, and provisions of the Airline Agreement regarding Certification of Non-Indebtedness and the Northern Ireland Provision where such failure continues for thirty (30) days, after notice thereof to the Signatory Airline; provided, however, that if the nature of the default is such that the same cannot reasonably be cured within such thirty (30) day period, the Signatory Airline shall not be deemed to be in default if the Signatory Airline shall within such period commence such cure and thereafter diligently prosecutes the same to completion, and advises the City of same, but in no event for longer than sixty (60) days after notice to Signatory Airline without the consent of the City, or for such shorter cure period as may be specifically prescribed in the Airline Agreement;

(e) Signatory Airline's failure to observe and perform any other provision or covenant of the Airline Agreement to be observed or performed by Signatory Airline, where such failure continues for thirty (30) days, after notice thereof to the Signatory Airline; provided, however, that if the nature of the default is such that the same cannot reasonably be cured within such thirty (30) day period, the Signatory Airline shall not be deemed to be in default if the Signatory Airline shall within such period commence such cure and thereafter diligently prosecutes the same to completion, and advises the City of same, but in no event for longer than sixty (60) days after notice to Signatory Airline without the consent of the City;

(f) The filing of a petition by or against Signatory Airline for relief in bankruptcy or insolvency or for its reorganization or for the appointment pursuant to any local, state or federal bankruptcy or insolvency law of a receiver or trustee of any part of Signatory Airline's property; or, an assignment by Signatory Airline for the benefit of creditors; or the taking possession of the property of Signatory Airline by any local, state or federal governmental officer or agency or court-appointed official for the dissolution or liquidation of Signatory Airline or for the operating, either temporarily or permanently, of Signatory Airline's business,

provided, however, that if any such action is commenced against Signatory Airline the same shall not constitute a default if Signatory Airline files a motion to dismiss such action within thirty (30) days after its filing and such action is dismissed or discharged within ninety (90) days after the action against Airline was commenced;

(g) Any failure occurring after City has sent two (2) notices within a twelve (12) month period; and, in any event, more than six (6) Events of Default in any twelve (12) month period will render the next default an automatic Event of Default; and

(h) A default by a Signatory Airline which is not cured within the applicable cure period in any other Airline Agreement entered into with City relating to the Airport System.

Remedies of City

Upon the occurrence of any Event of Default set forth in the Airline Agreement, the City, at its option, subject to the terms and conditions set forth in the Airline Agreement, may take all or any of the following actions:

(a) Perform any obligations of Signatory Airline which Signatory Airline has failed to perform in a timely manner, after reasonable notice, in which case Signatory Airline shall pay to the City, upon receipt of invoice, the City's costs incurred therefor, plus a fifteen percent (15%) administrative fee,

(b) Terminate the Airline Agreement and, until such time as the City has relet the space leased to another Airline thereunder, recover (i) all unpaid Rents which have accrued prior to the date of said Event of Default and which are then due and payable, (ii) damages for the period following the termination of the Term, based upon any and all amounts which Signatory Airline would have been obligated to pay for the balance of the Term, and the City may declare such sums to be immediately due and payable, and (iii) any and all sums due under the Airline Agreement;

(c) The City, at any time after the occurrence of any Event of Default whether or not the Airline Agreement has been terminated as aforesaid, may reenter and repossess, the Signatory Airline's Terminal Area Leased Premises and any part thereof with or without process of law, provided no undue force shall be used, and shall have the option, but not the obligation either in its own name, as agent for Signatory Airline if the Airline Agreement has not been terminated or for its own behalf if the Airline Agreement has been terminated, to give rights and privileges to or lease to other Airlines or users, all or any part of the Signatory Airline's Terminal Area Leased Premises;

(d) In the event that the City elects to terminate the Airline Agreement, the City at its option, may serve notice upon Signatory Airline that the Airline Agreement and the then unexpired Term hereof shall cease and expire and become absolutely void on the date specified in such notice,

(e) Signatory Airline further expressly authorizes and empowers (which power is coupled with an interest) the City, upon the occurrence of an Event of Default, to exercise the remedy of self-help with respect to the Proprietary Equipment and to enter upon the Signatory Airline's Terminal Area Leased Premises, distrain upon and remove therefrom all inventory, equipment, machinery, trade fixtures and personal property of whatsoever kind or nature, whether owned by Signatory Airline or by others;

(f) The City shall have the right of injunction, in the event of a breach or default or threat thereof by Signatory Airline of any of the Airline Agreements, conditions, covenants or terms hereof, to restrain the same and the right to invoke any remedy allowed by law or in equity;

(g) The Signatory Airlines expressly waive the benefits of all laws, now or hereafter in force, exempting any of Signatory Airline's property on the Signatory Airline's Terminal Area Leased Premises or elsewhere from distraint, levy or sale in any legal proceedings taken by the City to enforce any rights under the Airline Agreement.

(h) The City shall have the right, upon any uncured Event of Default thereunder, to cancel the security badge access to the Airport of all employees of Signatory Airline.

Neither the Airline Agreement nor any rights or privileges thereunder shall be an asset of a Signatory Airline in any bankruptcy, insolvency or reorganization proceeding. If the City shall not be permitted to terminate the Airline Agreement because of the provisions of the United States Bankruptcy Code, the Signatory Airline or any trustee for it shall, within fifteen (15) days upon request by the City to the Bankruptcy Court, assume or reject the Airline Agreement, provided however, that such Signatory Airline may not assume the Airline Agreement unless all defaults thereunder shall have been cured, the City shall have been compensated for any monetary loss resulting from such default and the City shall be provided with adequate assurance of full and timely performance of all provisions, terms and conditions of the Airline Agreement on the part of Signatory Airline to be performed.

City's Right to Cure

The City may perform, in whole or in part, any obligation of which a Signatory Airline is in default, either prior to (provided such Signatory Airline is not in the process of curing its default) or following the maturation of such default into an Event of Default, and such Signatory Airline shall pay on demand as Rents any expenditures made pursuant hereto and the amount of any obligations incurred in connection herewith, plus per annum interest at the Default Rate from the date of any such expenditure, and the City's performance shall not constitute a cure of such default by such Signatory Airline.

DAMAGE OR DESTRUCTION

Partial Damage

If all or any portion of the Signatory Airline's Leased Premises (but specifically excluding any Airline Improvements, Airline Equipment, or personal property, fixtures, equipment or other installations provided by a Signatory Airline in and to the Signatory Airline's Leased Premises), is partially damaged by fire, explosion, the elements, act(s) of war or terrorism, or other casualty, but not rendered untenantable, the same will be repaired with due diligence by City at its own cost and expense, to the extent and only to the extent of insurance proceeds received by City, and there shall be no abatement of Signatory Airline payments, provided, however, that if any damage is caused by the act or omission of a Signatory Airline, its Affiliates, sublessees, agents, or employees, such Signatory Airline shall be responsible at its expense for making the necessary repairs for which it is responsible as approved by the City. If a Signatory Airline fails to make the necessary repairs in a timely manner as determined by the City, then the Signatory Airline shall reimburse the City for the costs and expenses incurred in such repair, plus a fifteen percent (15%) administrative fee.

Damage Suitable for Repair

If damages referred to in the Airline Agreement shall be so extensive as to render part or all of the Signatory Airline's Leased Premises untenantable, but capable of being repaired in one hundred and twenty (120) days, the same shall be repaired with due diligence by the City at its own cost and expense, to the extent and only to the extent of insurance proceeds received by City, and Signatory Airline payments payable under the Airline Agreement shall abate, in proportion to the portion of the Signatory Airline's Leased Premises rendered untenantable, from the time of such damage until such time as the Signatory Airline's Leased Premises are fully restored and certified by the City's engineers as ready for occupancy; provided, however, that if any damage is caused by the act or omission of a Signatory Airline, its Affiliates, sublessees, agents, or employees, such Signatory Airline shall be responsible, at its expense, for making the necessary repairs as approved by the City. If the Signatory Airline fails to make the necessary repairs for which it is responsible in a timely manner as determined by the City, then the Signatory Airline shall reimburse the City for the costs and expenses incurred in such repair, plus a fifteen percent (15%) administrative fee.

Complete Damage

In the event the Signatory Airline's Leased Premises are completely destroyed by fire, explosion, the elements, act(s) of war or terrorism, or other casualty or so damaged that they are untenantable and cannot be replaced except

after more than one hundred and twenty (120) days, the City shall be under no obligation to repair, replace, and reconstruct said Signatory Airline's Leased Premises and such Signatory Airline payments shall abate as of the time of such damage or destruction and shall cease until such time as said Signatory Airline's Leased Premises are fully restored, or until the City provides substitute facilities, acceptable to the Signatory Airline, for use by the Signatory Airline. If within twelve (12) months or such other time as may be mutually agreed to by the City and the Signatory Airline after the time of such damage or destruction said Signatory Airline's Leased Premises shall not have been repaired or reconstructed, and the City has not supplied substitute facilities, acceptable to the Signatory Airline, the Signatory Airline may give City notice of its intention to cancel this Airline Agreement in its entirety as of the date of such damage or destruction.

Airline Acts or Omissions

Notwithstanding the foregoing, if said Signatory Airline's Leased Premises are completely destroyed as a result of the negligence of Signatory Airline or its Affiliates, sublessees, agents, or employees, applicable fees and charges shall not abate and City may, in its discretion, require Signatory Airline to repair and reconstruct said Signatory Airline's Leased Premises within twelve (12) months or such other time as may be mutually agreed to by City and Signatory Airline of such destruction and pay the costs therefor; or City may repair and reconstruct said Signatory Airline's Leased Premises within twelve (12) months of such destruction and Signatory Airline shall be responsible for reimbursing City for the costs and expenses incurred in such repair, plus a fifteen percent (15%) administrative fee.

INSURANCE AND INDEMNIFICATION

Insurance Requirements

During the Term and any extension thereof, each Signatory Airline shall, at its sole cost and expense, obtain and maintain in full force and effect, and promptly pay all premiums, when due, for, the following types of insurance: (1) All Risk Property Insurance, (2) Boiler and Machinery, (3) Automotive Liability, (4) Worker's Compensation and Employer's Liability, (5) General Liability Insurance/Aviation Liability, (6) Aircraft Liability, (7) Contractors', (8) Commercial General Liability insurance policy for premises operations, products/completed operations, personal and advertising injury, broad form property damage, contractual liability, (9) Automotive liability insurance covering liability arising from the ownership, maintenance, and/or use of all owned, non-owned and hired, leased and rented trucks and/or automobiles, (10) Professional liability insurance shall be maintained when any architect or engineer performs, directly or indirectly, work for or on behalf of Signatory Airline at Airport or involving Signatory Airline's operations and/or the Total Airline Leased Premises, (11) Environmental Impairment or Pollution Liability Insurance, and (12) Liquor Liability Insurance if alcoholic beverages are served or sold on the Signatory Airline's Leased Premises, liquor liability insurance coverage shall be maintained in an amount of $5,000,000; provided, however, that no alcoholic beverages shall be served or sold unless approved in writing by the City.

Indemnification

General. To the fullest extent provided by law, each Signatory Airline shall indemnify, defend and hold harmless the City, its officials, agents, employees, representatives, successors and assigns (the "Indemnified Parties") from and against all liability for claims, suits, causes of action, liabilities, losses, costs and expenses (including reasonable attorneys' fees), for which the Indemnified Parties may be held liable by reason of injury (including death) to any person (including Signatory Airline's employees) or damage to any property whatsoever kind or nature except to the extent caused by City's sole negligence or willful misconduct of every kind relating to or arising in connection with: (1) Any act or negligent omission of the Signatory Airline, its agents, directors, officers, employees, contractors or sublessees arising out of or in any manner connected with the Total Airline Leased Premises (including, but not limited to, Signatory Airline's use or occupancy of Total Airline Leased Premises, ingress or egress to Total Airline Leased Premises, access or use of parking lots, walkways or common areas and any alterations or work done in or about the Total Airline Leased Premises by the Signatory Airline or on the Signatory Airline's behalf); (2) Any breach, violation or nonperformance of any covenant, term or condition of this Airline Agreement to be performed or observed by the Signatory Airline, or of any restrictions of record or of any applicable laws, ordinances, statues, rules, codes or regulations, affecting the Total Airline Leased Space, Proprietary Equipment (unless such Proprietary Equipment was purchased or constructed by City in contravention of such applicable laws and/or regulations) or Airline Equipment,

or any part of the Total Airline Leased Space, Proprietary Equipment or Airline Equipment, or the ownership, occupancy or use thereof; (3) Any encroachment of improvements made by Signatory Airline upon property adjoining the Total Airline Leased Premises.

Said indemnification does not apply to City-maintained equipment or property, unless caused by Signatory Airline's negligence. Nothing herein shall prevent the Signatory Airline(s) to which City has tendered a matter covered by any indemnification provision of its/their Airline Agreement from joining as a defendant any Air Transportation Company to the extent permitted by applicable law.

Condemnation / Eminent Domain

Total Taking. During the Term of the Airline Agreement, if the whole, or, if such a portion of the Signatory Airline's Leased Premises as will materially interfere with Signatory Airline's conduct of its business be taken or acquired or be sold to a government in lieu thereof under threat of such a taking (each event hereinafter called a "taking") for any public or quasi-public use or purpose under any power of eminent domain or condemnation, then, and in any of such events, the Term of the Airline Agreement shall cease and terminate on the date that title vests in the condemning authority pursuant to such proceedings or under such sale in lieu thereof. Signatory Airline shall pay all required payments apportioned to the date of such termination and shall promptly vacate the Signatory Airline's Leased Premises. All sums representing prepaid rents, fees or charges, if any, shall be promptly repaid to Signatory Airline.

Partial Taking. If the taking of the Signatory Airline's Leased Premises is not the whole and not such a portion as will materially interfere with Signatory Airline's conduct of its business, then the Airline Agreement shall expire as to that portion of the Signatory Airline's Leased Premises taken but shall continue in full force and effect as to that portion of the Signatory Airline's Leased Premises not taken.

(This Page Intentionally Left Blank)

APPENDIX VI
FORM OF APPROVING OPINION OF CO-BOND COUNSEL

(This Page Intentionally Left Blank)

[FORM OF OPINION OF CO-BOND COUNSEL]

_____, 2021

$302,040,000
THE CITY OF PHILADELPHIA, PENNSYLVANIA
Airport Revenue and Refunding Bonds, Series 2021
(AMT/Private Activity)

To the Purchasers of the Within-Described Series 2021 Bonds:

We have acted as Co-Bond Counsel in connection with the authorization, issuance and sale by the City of Philadelphia, Pennsylvania (the "City") of its $302,040,000 Airport Revenue and Refunding Bonds, Series 2021 (AMT/ Private Activity) (the "Series 2021 Bonds"). The Series 2021 Bonds are being issued under and pursuant to the First Class City Revenue Bond Act of the Commonwealth of Pennsylvania, Act No. 234 of October 18, 1972, P.L. 955, as amended (the "Act"), and the Amended and Restated General Airport Revenue Bond Ordinance approved June 16, 1995 (the "Original Ordinance"), as supplemented and amended, including, by the Sixteenth Supplemental Ordinance (Bill No. 170308 approved by the Mayor on May 17, 2017) (the "Sixteenth Supplemental Ordinance") and the Eighteenth Supplemental Ordinance (Bill No. 190433 approved by the Mayor on June 26, 2019) (the "Eighteenth Supplemental Ordinance," together with the Sixteenth Supplemental Ordinance and the Original Ordinance, the "General Ordinance"). The proceeds of the Series 2021 Bonds, along with other available monies, are being issued to: (i) fund a deposit to the Aviation Capital Fund to finance certain capital projects as described in the final Official Statement dated June 29, 2021 (the "Official Statement"), (ii) finance capitalized interest on a portion of the Series 2021 Bonds, (iii) refund all of the City's Outstanding Airport Revenue Refunding Bonds, Series 2011, consisting of the Series 2011A (AMT) Bonds (the "2011A Bonds") and the Series 2011B (AMT) Bonds, (iv) pay the costs of a bond insurance policy; and (v) pay the costs of issuance of the Series 2021 Bonds. The Series 2021 Bonds are issued in fully registered form and are dated, are in such denominations, bear interest, mature and are subject to redemption prior to maturity as set forth in the form of the Series 2021 Bonds. The Series 2021 Bonds are payable as to principal or redemption price at the principal Philadelphia corporate trust office of U.S. Bank National Association (successor fiscal agent to Wachovia Bank, National Association) (the "Fiscal Agent").

The Series 2021 Bonds, together with outstanding issues of Airport Revenue Bonds and all other Airport Revenue Bonds hereafter issued for the purposes and upon the terms and conditions prescribed in the General Ordinance are equally and ratably secured to the extent provided in the General Ordinance, as the case may be, and the Act, by a pledge of Pledged Amounts. In accordance with Section 4.02 of the Original Ordinance and pursuant to the Sixteenth Supplemental Ordinance and the Eighteenth Supplemental Ordinance, Pledged Amounts, with respect to the Series 2021 Bonds, also include certain pledged passenger facility charges, as provided in the Bond Committee Determination dated June 29, 2021.

As Co-Bond Counsel for the City, we have examined the Act and such Constitutional provisions, statutes and regulations of the Commonwealth of Pennsylvania and such other records and documents of the City as we deemed necessary for the purposes of this opinion. We have also examined the Original Ordinance, the Sixteenth Supplemental Ordinance and the Eighteenth Supplemental Ordinance; the transcript of proceedings filed by the City with the Court of Common Pleas of Philadelphia, together with evidence of the filing thereof, and certain statements, certifications, opinions, agreements, reports, affidavits, receipts and other documents which we have considered relevant, including, without limitation, an opinion of the City Solicitor of the City and a certification of officials of the City having responsibility for issuing the Series 2021 Bonds given pursuant to Section 103 of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations promulgated thereunder.

In rendering the opinions set forth below, we have relied upon the genuineness, accuracy and completeness of all documents, records, certifications and other instruments we have examined, including, without limitation, the authenticity of all signatures appearing thereon.

On the basis of the foregoing, we are of the opinion that:

1. Under the Constitution and laws of the Commonwealth of Pennsylvania, including the Act, the Original Ordinance, the Sixteenth Supplemental Ordinance and the Eighteenth Supplemental Ordinance, the City is authorized to issue the Series 2021 Bonds, and the terms thereof comply with the requirements of the Act and the General Ordinance.

2. The Sixteenth Supplemental Ordinance and the Eighteenth Supplemental Ordinance have been duly enacted and the covenants and agreements of the City contained therein, including, specifically but not by way of limitation, the pledge of the Pledged Amounts, as therein described, constitute legal, valid and binding obligations of the City with respect to the Series 2021 Bonds and are enforceable against the City in accordance with their respective terms except as the enforceability thereof may be limited by bankruptcy, insolvency or other similar laws, or by legal or equitable principles affecting creditors' rights generally.

3. The Series 2021 Bonds have been duly authorized and issued and are valid and binding obligations of the City, are enforceable against the City in accordance with their terms and are limited obligations of the City, payable solely out of Pledged Amounts, as provided in the General Ordinance for the timely payment of the principal thereof, at their maturities or redemption dates, and the interest thereon when due.

4. The Series 2021 Bonds do not pledge the credit or taxing power, nor create any debt or charge against the tax or general revenues of the City, nor do they create any lien against any property of the City other than the revenues, monies and funds pledged in the General Ordinance.

5. The issuance of the Series 2021 Bonds does not cause the debt of the City to exceed Constitutional debt limitations.

6. Interest on the Series 2021 Bonds is not includable in gross income for purposes of federal income taxation under existing statutes, regulations, rulings and court decisions, except for interest on any Series 2021 Bond during any period such Series 2021 Bond is held by a person who is a "substantial user" of the facilities financed or refinanced by the Series 2021 Bonds or a "related person" within the meaning of Section 147(a) of the Code. The opinion of Co-Bond Counsel is subject to the condition that the City complies with all applicable federal income tax law requirements that must be satisfied subsequent to the issuance of the Series 2021 Bonds in order that interest thereon continues to be excluded from gross income. Failure to comply with certain of such requirements could cause the interest on the Series 2021 Bonds to be so includable in gross income retroactive to the date of issuance of the Series 2021 Bonds. The City has covenanted to comply with all such requirements.

Interest on the Series 2021 Bonds is treated as an item of tax preference for purposes of computing the federal alternative minimum tax on individuals.

We express no opinion regarding other federal tax consequences relating to the Series 2021 Bonds or the receipt of interest thereon.

7. Under the laws of the Commonwealth of Pennsylvania, as enacted and construed on the date hereof, interest on the Series 2021 Bonds is free from taxation for state and local purposes within the Commonwealth of Pennsylvania, but such exemption does not extend to gift, estate, succession or inheritance taxes or any other taxes not levied or assessed directly on the Series 2021 Bonds or the interest thereon.

We express no opinion with respect to, and assume no responsibility for, the accuracy or completeness of the Preliminary Official Statement or the Official Statement prepared in respect of the offering of the Series 2021 Bonds, and make no representation that we have independently verified the contents thereof.

Finally, we call to your attention that the rights of the holders of the Series 2021 Bonds and the enforceability thereof and of the General Ordinance may be subject to bankruptcy, insolvency, reorganization, moratorium and other laws or equitable principles affecting creditors' rights generally.

Very truly yours,

(This Page Intentionally Left Blank)

APPENDIX VII
FORM OF CONTINUING DISCLOSURE AGREEMENT

(This Page Intentionally Left Blank)

CONTINUING DISCLOSURE AGREEMENT

$302,040,000
THE CITY OF PHILADELPHIA, PENNSYLVANIA
AIRPORT REVENUE REFUNDING BONDS,
SERIES 2021 (AMT/PRIVATE ACTIVITY)

This Continuing Disclosure Agreement (this "Agreement") dated as of July 7, 2021, by and between the City of Philadelphia, Pennsylvania (the "City") and Digital Assurance Certification, L.L.C., as dissemination agent (the "Dissemination Agent") and acknowledged by American Airlines, Inc. ("American Airlines") in connection with the issuance and sale by the City of its $302,040,000 aggregate principal amount of Airport Revenue Refunding Bonds, Series 2021 (AMT/Private Activity) (the "Series 2021 Bonds").

The Series 2021 Bonds are being issued and secured under the provisions of The First Class City Revenue Bond Act, Act No. 234 of the General Assembly of the Commonwealth of Pennsylvania approved October 18, 1972 (the "Act"), the Amended and Restated General Airport Revenue Bond Ordinance, approved June 16, 1995 (Bill No. 950282), as amended and supplemented (collectively, the "General Ordinance"), including by the Eighteenth Supplemental Ordinance (Bill No. 190433), approved by the Mayor on June 26, 2019 (the "Eighteenth Supplemental Ordinance", and together with the General Ordinance, the "Ordinances"). Certain matters concerning the Series 2021 Bonds have been determined pursuant to the Ordinances by the 2021 Bond Committee of the City, consisting of the Mayor, the City Controller, and the City Solicitor ("Bond Committee"), in an authorization for the Series 2021 Bonds dated June 29, 2021 ("Bond Authorization," and together with the Act and the Ordinances, the "Authorizing Acts"). Capitalized terms used in this Agreement but not defined herein shall have the meanings ascribed to such terms in the Official Statement, including the Appendices attached thereto.

In consideration of the mutual covenants, promises and agreements contained herein and intending to be legally bound hereby, the parties hereto agree as follows:

ARTICLE I

The Undertaking

Section 1.1. Purpose. This Agreement is being executed and delivered by the City solely to assist the Underwriters in complying with subsection (b)(5) of the Rule.

Section 1.2. Annual Financial Information.

(a) Commencing with the Fiscal Year ended June 30, 2021, the Disclosure Representative, as hereinafter defined, shall deliver to the Dissemination Agent no later than February 28, 2022, and no later than each succeeding February 28 thereafter, Annual Financial Information with respect to each Fiscal Year of the City. The Dissemination Agent shall promptly upon receipt thereof file the Annual Financial Information with EMMA (as defined herein).

(b) The City agrees to use its reasonable best efforts to cause any Obligated Person (to the extent such entity is not otherwise required under federal law to do so) to make annual financial information available as required by the Rule. The City takes no responsibility for the accuracy or completeness of such filings by any Obligated Person. The City's obligations under this paragraph are limited to and satisfied by the City's transmitting a notice to such Obligated Person that it has become an Obligated Person under this Agreement, by enclosing a copy of this Agreement and the Rule, and by

requesting that such person transmit back to the City an acknowledgement and acceptance of such person's obligations under the Rule with regard to the Series 2021 Bonds. The City agrees to notify the Dissemination Agent of any changes in the identity of any Obligated Person.

(c) The Dissemination Agent shall provide, in a timely manner, notice of any failure of the City to provide the Annual Financial Information by the date specified in subsection (a) hereof.

Section 1.3. Audited Financial Statements. If not provided as part of Annual Financial Information by the date required by Section 1.2(a) hereof, the Disclosure Representative shall provide Audited Financial Statements, when and if available, to the Dissemination Agent. The Dissemination Agent shall promptly upon the receipt thereof file such Audited Financial Statements with EMMA.

Section 1.4. Notice Events.

(a) If a Notice Event occurs, the Disclosure Representative shall provide through the Dissemination Agent, in a timely manner not in excess of ten (10) business days after the occurrence of such Notice Event, notice of such Notice Event to EMMA.

(b) Any notice of a defeasance of the Series 2021 Bonds shall state whether the Series 2021 Bonds have been escrowed to maturity or to an earlier redemption date and the timing of such maturity or redemption.

(c) Each Notice Event notice relating to the Series 2021 Bonds shall include the CUSIP numbers of the Series 2021 Bonds to which such Notice Event notice relates or, if the Notice Event notice relates to all bond issues of the City including the Series 2021 Bonds, such Notice Event notice need only include the CUSIP number of the City.

(d) The Dissemination Agent shall promptly advise the City whenever, in the course of performing its duties as Dissemination Agent under this Agreement, the Dissemination Agent has actual notice of an occurrence which, if material, would require the City to provide notice of a Notice Event hereunder; provided, however, that the failure of the Dissemination Agent so to advise the City shall not constitute a breach by the Dissemination Agent of any of its duties and responsibilities under this Agreement.

Section 1.5. Additional Information. Nothing in this Agreement shall be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in this Agreement or any other means of communication, or including any other information in any Annual Financial Information or notice of Notice Event hereunder, in addition to that which is required by this Agreement. If the City chooses to do so, the City shall have no obligation under this Agreement to update such additional information or include it in any future Annual Financial Information or notice of a Notice Event hereunder.

Section 1.6. Additional Disclosure Obligations. The City acknowledges and understands that other state and federal laws, including, but not limited to, the Securities Act of 1933 and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, may apply to the City and that, under some circumstances, compliance with this Agreement without additional disclosures or other action may not fully discharge all duties and obligations of the City under such laws.

ARTICLE II

Operating Rules

Section 2.1. Reference to Other Filed Documents. It shall be sufficient for purposes of Section 1.2 hereof if the City or the Obligated Person provides Annual Financial Information by specific reference to documents (i) available to the public on the MSRB Internet Web site (currently, www.emma.msrb.org), or (ii) filed with the SEC. The provisions of this Section shall not apply to notices of Notice Events pursuant to Section 1.4 hereof.

Section 2.2. Submission of Information. Annual Financial Information may be set forth or provided in one document or a set of documents, and at one time or in part from time to time.

Section 2.3. Dissemination Agent. The City has designated the Dissemination Agent as its agent to act on its behalf in providing or filing notices, documents, and information as required of the City under this Agreement. The City may revoke or modify such designation. Upon any revocation of such designation, the City shall comply with its obligation to provide or file notices, documents and information as required under this Agreement or may designate another agent to act on its behalf.

Section 2.4. Transmission of Notices, Documents and Information.

(a) Unless otherwise required by the MSRB, all notices, documents and information provided by the MSRB shall be provided to the MSRB's Electronic Municipal Markets Access ("EMMA") system, the current Internet Web address of which is www.emma.msrb.org.

(b) All notices, documents and information provided on EMMA shall be provided in an electronic format as prescribed by the MSRB and shall be accompanied by identifying information as prescribed by the MSRB.

Section 2.5. Fiscal Year.

(a) The City's current Fiscal Year begins July l and ends June 30, and the City shall promptly file a notification on EMMA, through the Dissemination Agent, of each change in its Fiscal Year.

(b) Annual Financial Information shall be provided at least annually notwithstanding any Fiscal Year longer than twelve (12) calendar months.

ARTICLE III

Effective Date, Termination, Amendment and Enforcement

Section 3.1. Effective Date; Termination.

(a) This Agreement shall be effective upon the issuance of the Series 2021 Bonds.

(b) The City's and the Dissemination Agent's obligations under this Agreement shall terminate upon a legal defeasance, prior redemption, or payment in full of all of the Series 2021 Bonds.

(c) This Agreement, or any provision hereof, shall be null and void in the event that the City (i) receives an opinion of Counsel to the effect that those portions of the Rule which require this

Agreement, or such provision, as the case may be, do not or no longer apply to the Series 2021 Bonds, whether because such portions of the Rule are invalid, have been repealed, or otherwise, as shall be specified in such opinion, and (ii) delivers copies of such opinion to the MSRB.

Section 3.2. Amendment.

(a) This Agreement may be amended, by written agreement of the parties, without the consent of the holders of the Series 2021 Bonds (except to the extent required under clause (4)(B) below) if all of the following conditions are satisfied: (1) such amendment is made in connection with a change in circumstances that arises from a change in legal (including regulatory) requirements, a change in law (including rules or regulations) or in interpretations thereof, or a change in the identity, nature or status of the City or the type of business conducted thereby, (2) this Agreement as so amended would have complied with the requirements of the Rule as of the date of this Agreement, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances, (3) the City shall have delivered to the Dissemination Agent an opinion of Counsel, addressed to the City and the Dissemination Agent, to the same effect as set forth in clause (2) above, (4) either (A) the City shall have delivered to the Dissemination Agent an opinion of Counsel or a determination by an entity, in each case unaffiliated with the City (such as bond counsel or the Dissemination Agent), addressed to the City and the Dissemination Agent, to the effect that the amendment does not materially impair the interests of the holders of the Series 2021 Bonds, or (B) the holders of each of the Series 2021 Bonds and the Disclosure Representative consent to the amendment to this Agreement, in each case, in the same percentages and pursuant to the same procedures as are required for amendments to the Ordinances as in effect at the time of the amendment; and (5) the Disclosure Representative shall have delivered copies of such opinion(s) and amendment to the Dissemination Agent. Such amendment shall be promptly filed by the Dissemination Agent on EMMA and sent to each Registered Owner.

(b) This Agreement may be amended, by written agreement of the parties, without the consent of the holders of the Series 2021 Bonds, if all of the following conditions are satisfied: (1) an amendment to the Rule is adopted, or a new or modified official interpretation of the Rule is issued, after the effective date of this Agreement which is applicable to this Agreement, (2) the City shall have delivered to the Dissemination Agent an opinion of Counsel, addressed to the City and the Dissemination Agent, to the effect that performance by the City and the Dissemination Agent under this Agreement as so amended will not result in a violation of the Rule, and (3) the Disclosure Representative shall have delivered copies of such opinion and amendment to the Dissemination Agent. Such amendment shall be promptly filed by the Dissemination Agent on EMMA and sent to each Registered Owner.

(c) This Agreement may be amended by written agreement of the parties, without the consent of the holders of the Series 2021 Bonds, if all of the following conditions are satisfied: (1) the City shall have delivered to the Dissemination Agent an opinion of Counsel, addressed to the City and the Dissemination Agent, to the effect that the amendment is permitted by the Rule, order or any other official pronouncement, or is consistent with any interpretive advice or no-action positions of staff, of the SEC, and (2) the Disclosure Representative shall have delivered copies of such opinion and amendment to the Dissemination Agent. Such amendment shall be promptly filed by the Dissemination Agent on EMMA and sent to each Registered Owner.

(d) To the extent any amendment to this Agreement results in a change in the type of financial information or operating data provided pursuant to this Agreement, the first Annual Financial Information provided thereafter shall include a narrative explanation of the reasons for the amendment and the impact of the change in the type of operating data or financial information being provided.

(e) If an amendment is made pursuant to Section 3.2(a) hereof to the accounting principles to be followed by the City in preparing its financial statements, the Annual Financial

Information for the Fiscal Year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. Such comparison shall include a qualitative and, to the extent reasonably feasible, quantitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information.

Section 3.3. Benefit: Third-Party Beneficiaries: Enforcement.

(a) The provisions of this Agreement shall constitute a contract with and inure solely to the benefit of the holders from time to time of the Series 2021 Bonds, except that beneficial owners of Series 2021 Bonds shall be third-party beneficiaries of this Agreement. The provisions of this Agreement shall create no rights in any person or entity except as provided in this subsection (a) and in subsection (b) of this Section 3.3.

(b) The obligations of the City to comply with the provisions of this Agreement shall be enforceable at the direction of the holders of not less than 25% in aggregate principal amount of each of the Series 2021 Bonds outstanding. The holders' rights to enforce the provisions of this Agreement shall be limited solely to a right, by action in mandamus or for specific performance, to compel performance of the City's obligations under this Agreement. In consideration of the third-party beneficiary status of beneficial owners of Series 2021 Bonds pursuant to subsection (a) of this Section 3.3, beneficial owners shall be deemed to be holders of Series 2021 Bonds for purposes of this subsection (b).

(c) Any failure by the City or the Dissemination Agent to perform in accordance with this Agreement shall not constitute a default under the Authorizing Acts, and the rights and remedies provided by the Authorizing Acts upon the occurrence of a default shall not apply to any such failure.

(d) This Agreement shall be construed and interpreted in accordance with the laws of the Commonwealth, and any suits and actions arising out of this Agreement shall be instituted in a court of competent jurisdiction in the Commonwealth; provided, however, that to the extent this Agreement addresses matters of federal securities laws, including the Rule, this Agreement shall be construed in accordance with such federal securities laws and official interpretations thereof.

ARTICLE IV

Definitions

Section 4.1. Definitions. The following terms used in this Agreement shall have the following respective meanings:

(a) "Airport System" means the Philadelphia International Airport and the Northeast Philadelphia Airport, both of which are currently owned by the City and operated by the Division of Aviation of the City's Department of Commerce (the "Division of Aviation").

(b) "Annual Financial Information" means, collectively, (i) a copy of the Comprehensive Annual Financial Report ("CAFR"), which contains the Audited Financial Statements, (ii) the information regarding amendments to this Agreement required pursuant to Sections 3.2(d) and (e) of this Agreement, and (iii) to the extent such information is not contained in the CAFR, an update of the information in the Official Statement contained in - Table 3 - Annual PFCs, Table 5 - Historical Enplaned Passengers, Table 6 - Historical Total Enplaned Passengers, Table 8 - Summary of Historical Project Revenues and Expenses of the Airport System, and Appendix II - Financial Statements of the Division of

Aviation Fiscal Year Ended June 30, 2020. As set forth in clause (i) above, Annual Financial Information shall include Audited Financial Statements, if available, or Unaudited Financial Statements, if Audited Financial Statements are not available.

Annual Financial Information shall be delivered at least annually pursuant to Section 1.2(a) hereof. In connection with Section 4.1(b) hereof, it is the City's intention to satisfy all or a portion of the obligations set forth therein by submitting to EMMA (A) its CAFR, (B) Financial Statements of the Division of Aviation, (C) to the extent not otherwise updated in the CAFR or the Financial Statements of the Division of Aviation, annual updates to the Tables specified in clause (iii) above. If at any time the City deletes, for the purposes of a then-current Appendix, certain financial information or operating date from such Appendix as attached to the Official Statement that is included in one of the Tables specified above, such deleted information will be submitted separately from the updated Appendix.

When such descriptions include information that no longer can be generated because the operations to which it related have been materially changed or discontinued, a statement to that effect shall be provided in lieu of such information. Any Annual Financial Information containing modified financial information or operating data shall explain, in narrative form, the reasons for the modification and the impact of the modification on the type of financial information or operating data being provided.

(c) "Audited Financial Statements" means the annual financial statements, if any, of the City and the Division of Aviation, audited by such auditor as shall then be required or permitted by Commonwealth law or the City Charter. Audited Financial Statements shall be prepared in accordance with GAAP; provided, however, that pursuant to Sections 3.2(a) and (e) hereof, the City may from time to time, if required by federal or Commonwealth legal requirements, modify the accounting principles to be followed in preparing its financial statements. The notice of any such modification required by Section 3.2(a) hereof shall include a reference to the specific federal or Commonwealth law or regulation describing such accounting principles, or other description thereof.

(d) "City Charter" means the Home Rule Charter authorized by the General Assembly in the First Class City Home Rule Act (Act of April 21, 1949, P.L. 665, Section 17) and adopted by the voters of the City, as amended and supplemented.

(e) "Commonwealth" means the Commonwealth of Pennsylvania.

(f) "Counsel" means any nationally recognized bond counsel or counsel expert in federal securities law.

(g) "Disclosure Representative" means the Director of Finance of the City, the City Treasurer or such other official or employee of the City as the Director of Finance or the City Treasurer shall designate in writing to the Dissemination Agent.

(h) "GAAP" means generally accepted accounting principles as prescribed from time to time for governmental units by the Governmental Accounting Standards Board, the Financial Accounting Standards Board, or any successor to the duties and responsibilities of either of them.

(i) "MSRB" means the Municipal Securities Rulemaking Board established pursuant to Section 15B(b)(l) of the Securities Exchange Act of 1934, or any successor thereto or to the functions of the MSRB contemplated by this Agreement.

(j) "Notice Event" means any of the following events with respect to the Series 2021 Bonds, whether relating to the City or otherwise:

(i) principal and interest payment delinquencies;

(ii) non-payment related defaults, if material;

(iii) unscheduled draws on debt service reserves reflecting financial difficulties;

(iv) unscheduled draws on credit enhancements reflecting financial difficulties;

(v) substitution of credit or liquidity providers, or their failure to perform;

(vi) 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 of determinations with respect to the tax status of the Series 2021 Bonds, or other material events affecting the tax status of the Series 2021 Bonds;

(vii) modifications to rights of Bondholders, if material;

(viii) Bond calls, if material, and tender offers;

(ix) defeasances;

(x) release, substitution, or sale of property securing repayment of Series 2021 Bonds, if material;

(xi) rating changes;

(xii) bankruptcy, insolvency, receivership or similar event of the City;

(xiii) the consummation of a merger, consolidation, or acquisition involving the Airport or the sale of all or substantially all of the assets of the Airport, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

(xiv) appointment of a successor or additional trustee or the change of name of a trustee, if material;

(xv) the incurrence of a Financial Obligation of the Obligated Person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the Obligated Person, any of which affect securities holders, if material; and

(xvi) a default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the Obligated Person, any of which reflect financial difficulties.

(k) "Obligated Person" means the City and any airline or other entity using the Airport System pursuant to an agreement (for more than one (1) year from the date in question) that includes debt service on the Series 2021 Bonds as part of the calculation of rates and charges, under which agreement such airline or other entity has paid amounts equal to at least twenty percent (20%) of the Project Revenues (as defined in the Ordinances) of the Airport System for each of the two (2) prior Fiscal Years of the Airport System.

(l) "Official Statement" means the Official Statement of the City relating to the Series 2021 Bonds dated June 29, 2021.

(m) "Registered Owner" or "Registered Owners" means, for so long as the Series 2021 Bonds shall be registered in the name of the Securities Depository or its nominee, and includes, for the purposes of this Agreement, the owners of book-entry credits in the Series 2021 Bonds evidencing an interest in the Series 2021 Bonds; provided, however, that the Dissemination Agent shall have no obligation to provide notice hereunder to owners of book-entry credits in the Series 2021 Bonds except those who have filed their names and addresses with the Dissemination Agent for the purposes of receiving notices or giving direction under this Agreement.

(n) "Rule" means Rule 15c2-12 promulgated by the SEC under the Securities Exchange Act of 1934 (17 CFR Part 240, §240.15c2-12), as amended, as in effect on the date of this Agreement, including any official interpretations thereof issued either before or after the effective date of this Agreement which are applicable to this Agreement.

(o) "SEC" means the United States Securities and Exchange Commission.

(p) "Securities Depository" shall mean The Depository Trust Company, New York, New York, or its nominee, Cede & Co., or any successor thereto.

(q) "Unaudited Financial Statements" means the same as Audited Financial Statements, except that they shall not have been audited.

(r) "Underwriters" means the financial institutions named on the cover of the Official Statement.

[Remainder of page left blank intentionally]

ARTICLE V

Miscellaneous

Section 5.1. Duties, Immunities and Liabilities of the Dissemination Agent.

The Dissemination Agent shall have only such duties under the Agreement as are specifically set forth in this Agreement, and the City agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct in the performance of its duties hereunder. The obligations of the City under this Section 5.1 shall survive resignation or removal of the Dissemination Agent and payment of the Series 2021 Bonds.

Section 5.2. Counterparts. This Agreement may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

[SIGNATURE PAGES FOLLOW THIS PAGE]

IN WITNESS WHEREOF, THE CITY OF PHILADELPHIA, has caused this Agreement to be executed by the Director of Finance and DIGITAL ASSURANCE CERTIFICATION, L.L.C., as Dissemination Agent, has caused this Agreement to be executed by one of its authorized officers, all as of the day and year first above written.

CITY OF PHILADELPHIA

By: _____
Name: Rob Dubow
Title: Director of Finance

DIGITAL ASSURANCE CERTIFICATION, **L.L.C.,** as Dissemination Agent

By: _____
Name:
Title:

ACKNOWLEDGEMENT AND AGREEMENT:

American Airlines, Inc. ("American Airlines") hereby acknowledges its current status as an Obligated Person hereunder and the City's undertaking to provide information in accordance with the Rule as described herein. So long as it is an Obligated Person, American Airlines agrees to make available, within one hundred and twenty (120) days after the end of its fiscal year (December 31), its Annual Report filed pursuant to the Securities Exchange Act of 1934, completed on Form 10-K.

AMERICAN AIRLINES, INC.

By: _____
Name: Amanda Zhang
Title: Authorized Officer

APPENDIX VIII
BOOK-ENTRY ONLY SYSTEM

General

The information set forth herein concerning The Depository Trust Company, New York, New York ("DTC") and the book-entry system described below has been extracted from materials provided by DTC for such purpose, is not guaranteed as to accuracy or completeness and is not to be construed as a representation by the City, the Fiscal Agent or the Underwriters. The websites referenced below are included for reference only and the information contained therein is not incorporated by reference in this Official Statement.

DTC will act as securities depository for the Series 2021 Bonds under a book-entry system with no physical distribution of the Series 2021 Bonds made to the public. The Series 2021 Bonds will initially be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee), or such other name as may be requested by an authorized representative of DTC. One fully-registered bond certificate will be issued for each maturity of the Series 2021 Bonds, each in the principal amount of such maturity, and will be deposited with DTC.

DTC, the world's largest 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, as amended. 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 2021 Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Series 2021 Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Series 2021 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 2021 Bonds, except in the event that use of the book-entry system for the Series 2021 Bonds is discontinued.

To facilitate subsequent transfers, all Series 2021 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 2021 Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee does not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Series 2021 Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Series 2021 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 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

Series 2021 Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Series 2021 Bonds, such as redemptions, defaults and proposed amendments to the bond documents. For example, Beneficial Owners of Series 2021 Bonds may wish to ascertain that the nominee holding the Series 2021 Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Fiscal Agent and request that copies of the notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Series 2021 Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity of the Series 2021 Bonds to be redeemed.

Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the Series 2021 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 City 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 2021 Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments of principal and redemption price of, and interest on, the Series 2021 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 City or the Fiscal Agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by Direct and Indirect Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Direct and Indirect Participants and not of DTC (or its nominee), the City or the Fiscal Agent, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and redemption price of, and interest on, the Series 2021 Bonds to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the City or the Fiscal Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

THE CITY, THE FISCAL AGENT AND THE UNDERWRITERS CANNOT AND DO NOT GIVE ANY ASSURANCES THAT DTC WILL DISTRIBUTE TO ITS PARTICIPANTS OR THAT DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL DISTRIBUTE TO BENEFICIAL OWNERS OF THE SERIES 2021 BONDS (A) PAYMENTS OF PRINCIPAL OR REDEMPTION PRICE OF, OR INTEREST ON, THE SERIES 2021 BONDS, OR (B) CONFIRMATION OF OWNERSHIP INTERESTS IN THE SERIES 2021 BONDS, OR (C) REDEMPTION OR OTHER NOTICES, OR THAT THEY WILL DO SO ON A TIMELY BASIS, OR THAT DTC, DIRECT PARTICIPANTS OR INDIRECT PARTICIPANTS WILL SERVE AND ACT IN THE MANNER DESCRIBED IN THIS OFFICIAL STATEMENT. THE CURRENT "RULES" APPLICABLE TO DTC ARE ON FILE WITH THE SECURITIES AND EXCHANGE COMMISSION AND THE CURRENT "PROCEDURES" OF DTC TO BE FOLLOWED IN DEALING WITH ITS PARTICIPANTS ARE ON FILE WITH DTC.

NONE OF THE CITY, THE FISCAL AGENT OR THE UNDERWRITERS WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO DTC PARTICIPANTS, BENEFICIAL OWNERS OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS FOR: (A) SENDING TRANSACTION STATEMENTS; (B) MAINTAINING, SUPERVISING OR REVIEWING THE ACCURACY OF ANY RECORDS MAINTAINED BY DTC OR ANY DTC PARTICIPANT OR OTHER NOMINEES OF SUCH BENEFICIAL OWNERS; (C) PAYMENT OR THE TIMELINESS OF PAYMENT BY DTC TO ANY DTC PARTICIPANT, OR BY ANY DTC PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNER, OF ANY AMOUNT DUE IN RESPECT OF THE PRINCIPAL OR REDEMPTION PRICE OF, OR INTEREST ON, THE SERIES 2021 BONDS; (D) DELIVERY OR TIMELY DELIVERY BY DTC TO ANY DTC PARTICIPANT, OR BY ANY DTC PARTICIPANT OR OTHER NOMINEES OF BENEFICIAL OWNERS TO ANY BENEFICIAL OWNERS, OF ANY NOTICE (INCLUDING NOTICE OF REDEMPTION) OR OTHER COMMUNICATION WHICH IS REQUIRED TO BE GIVEN TO HOLDERS OR OWNERS OF THE SERIES 2021 BONDS; (E) THE SELECTION OF THE BENEFICIAL OWNERS TO RECEIVE PAYMENT IN THE EVENT OF ANY PARTIAL REDEMPTION OF SERIES 2021 BONDS; OR (F) ANY ACTION TAKEN BY DTC OR ITS NOMINEE AS THE REGISTERED OWNER OF THE SERIES 2021 BONDS.

Discontinuation of Book-Entry Only System

DTC may discontinue providing its services as depository with respect to the Series 2021 Bonds at any time by giving reasonable notice to the City or the Fiscal Agent. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The City 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.

(This Page Intentionally Left Blank)

APPENDIX IX
SPECIMEN MUNICIPAL BOND INSURANCE POLICY

(This Page Intentionally Left Blank)

MUNICIPAL BOND INSURANCE POLICY

ISSUER:

Policy No: -N

BONDS: $ in aggregate principal amount of

Effective Date:

Premium: $

ASSURED GUARANTY MUNICIPAL CORP. ("AGM"), for consideration received, hereby UNCONDITIONALLY AND IRREVOCABLY agrees to pay to the trustee (the "Trustee") or paying agent (the "Paying Agent") (as set forth in the documentation providing for the issuance of and securing the Bonds) for the Bonds, for the benefit of the Owners or, at the election of AGM, directly to each Owner, subject only to the terms of this Policy (which includes each endorsement hereto), that portion of the principal of and interest on the Bonds that shall become Due for Payment but shall be unpaid by reason of Nonpayment by the Issuer.

On the later of the day on which such principal and interest becomes Due for Payment or the Business Day next following the Business Day on which AGM shall have received Notice of Nonpayment, AGM will disburse to or for the benefit of each Owner of a Bond the face amount of principal of and interest on the Bond that is then Due for Payment but is then unpaid by reason of Nonpayment by the Issuer, but only upon receipt by AGM, in a form reasonably satisfactory to it, of (a) evidence of the Owner's right to receive payment of the principal or interest then Due for Payment and (b) evidence, including any appropriate instruments of assignment, that all of the Owner's rights with respect to payment of such principal or interest that is Due for Payment shall thereupon vest in AGM. A Notice of Nonpayment will be deemed received on a given Business Day if it is received prior to 1:00 p.m. (New York time) on such Business Day; otherwise, it will be deemed received on the next Business Day. If any Notice of Nonpayment received by AGM is incomplete, it shall be deemed not to have been received by AGM for purposes of the preceding sentence and AGM shall promptly so advise the Trustee, Paying Agent or Owner, as appropriate, who may submit an amended Notice of Nonpayment. Upon disbursement in respect of a Bond, AGM shall become the owner of the Bond, any appurtenant coupon to the Bond or right to receipt of payment of principal of or interest on the Bond and shall be fully subrogated to the rights of the Owner, including the Owner's right to receive payments under the Bond, to the extent of any payment by AGM hereunder. Payment by AGM to the Trustee or Paying Agent for the benefit of the Owners shall, to the extent thereof, discharge the obligation of AGM under this Policy.

Except to the extent expressly modified by an endorsement hereto, the following terms shall have the meanings specified for all purposes of this Policy. "Business Day" means any day other than (a) a Saturday or Sunday or (b) a day on which banking institutions in the State of New York or the Insurer's Fiscal Agent are authorized or required by law or executive order to remain closed. "Due for Payment" means (a) when referring to the principal of a Bond, payable on the stated maturity date thereof or the date on which the same shall have been duly called for mandatory sinking fund redemption and does not refer to any earlier date on which payment is due by reason of call for redemption (other than by mandatory sinking fund redemption), acceleration or other advancement of maturity unless AGM shall elect, in its sole discretion, to pay such principal due upon such acceleration together with any accrued interest to the date of acceleration and (b) when referring to interest on a Bond, payable on the stated date for payment of interest. "Nonpayment" means, in respect of a Bond, the failure of the Issuer to have provided sufficient funds to the Trustee or, if there is no Trustee, to the Paying Agent for payment in full of all principal and interest that is Due for Payment on such Bond. "Nonpayment" shall also include, in respect of a Bond, any payment of principal or interest that is Due for Payment made to an Owner by or on behalf of the Issuer which has been recovered from such Owner pursuant to the

SPECIMEN

United States Bankruptcy Code by a trustee in bankruptcy in accordance with a final, nonappealable order of a court having competent jurisdiction. "Notice" means telephonic or telecopied notice, subsequently confirmed in a signed writing, or written notice by registered or certified mail, from an Owner, the Trustee or the Paying Agent to AGM which notice shall specify (a) the person or entity making the claim, (b) the Policy Number, (c) the claimed amount and (d) the date such claimed amount became Due for Payment. "Owner" means, in respect of a Bond, the person or entity who, at the time of Nonpayment, is entitled under the terms of such Bond to payment thereof, except that "Owner" shall not include the Issuer or any person or entity whose direct or indirect obligation constitutes the underlying security for the Bonds.

AGM may appoint a fiscal agent (the "Insurer's Fiscal Agent") for purposes of this Policy by giving written notice to the Trustee and the Paying Agent specifying the name and notice address of the Insurer's Fiscal Agent. From and after the date of receipt of such notice by the Trustee and the Paying Agent, (a) copies of all notices required to be delivered to AGM pursuant to this Policy shall be simultaneously delivered to the Insurer's Fiscal Agent and to AGM and shall not be deemed received until received by both and (b) all payments required to be made by AGM under this Policy may be made directly by AGM or by the Insurer's Fiscal Agent on behalf of AGM. The Insurer's Fiscal Agent is the agent of AGM only and the Insurer's Fiscal Agent shall in no event be liable to any Owner for any act of the Insurer's Fiscal Agent or any failure of AGM to deposit or cause to be deposited sufficient funds to make payments due under this Policy.

To the fullest extent permitted by applicable law, AGM agrees not to assert, and hereby waives, only for the benefit of each Owner, all rights (whether by counterclaim, setoff or otherwise) and defenses (including, without limitation, the defense of fraud), whether acquired by subrogation, assignment or otherwise, to the extent that such rights and defenses may be available to AGM to avoid payment of its obligations under this Policy in accordance with the express provisions of this Policy.

This Policy sets forth in full the undertaking of AGM, and shall not be modified, altered or affected by any other agreement or instrument, including any modification or amendment thereto. Except to the extent expressly modified by an endorsement hereto, (a) any premium paid in respect of this Policy is nonrefundable for any reason whatsoever, including payment, or provision being made for payment, of the Bonds prior to maturity and (b) this Policy may not be canceled or revoked. THIS POLICY IS NOT COVERED BY THE PROPERTY/CASUALTY INSURANCE SECURITY FUND SPECIFIED IN ARTICLE 76 OF THE NEW YORK INSURANCE LAW.

In witness whereof, ASSURED GUARANTY MUNICIPAL CORP. has caused this Policy to be executed on its behalf by its Authorized Officer.

ASSURED GUARANTY MUNICIPAL CORP.

By _____
Authorized Officer

A subsidiary of Assured Guaranty Municipal Holdings Inc.
1633 Broadway, New York, N.Y. 10019
(212) 974-0100

Form 500NY (5/90)

SPECIMEN

(This Page Intentionally Left Blank)

Printed By
TheMuniGroup